

The Rise of Connectivist Leadership

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Abstract

This study reviews the available leadership literature on collective leadership efficacy and connectivism to determine its relevance to the evolution of leadership. A content analysis was applied to published peer-reviewed articles bound by collective leadership and connectivist learning theory. The paper explores how emergent themes associated with collective and connected leadership open up new perspectives for leadership through a reorientation of leadership away from the actions of an individual leader to shared success driven by members of the collective itself. Findings indicate that while the leadership literature increased steadily since the start of the century, it reached a peak in 2015, and has since been on a steady decline. In contrast, search terms for “collective leadership” have continued to rise. Furthermore, the analysis revealed the presence of common characteristics between the efficacy traits of collective leadership and connectivism learning, including open communication, increased engagement, distributed knowledge, and collaboration. Further research is recommended to ascertain if interest in leadership is diminishing or if leadership as a concept is evolving with the emergence of a new language and the rise of more collective and connected leadership practices the authors characterize as “Connectivist Leadership.”

Keywords: Collective leadership, Connectivism, Connectivist leadership, Leadership, Leadership Efficacy

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Introduction

Background

Recently, the discourse on leadership has been fueled by the changing nature of technology and its impact on how people live, learn, and lead. As the logic of networked information technology for understanding how learning theory and social sciences advances, it is equally topical that researchers and practitioner should apply its principles to provide a new perspective in the ontology and a re-examination of leadership's definition and efficacy. Unsurprisingly, the rise of web 5.0, social networks, and crowd-based effects have influenced the emergence of new leadership models and decentralized management and organizational governance such as holacracy. In the last decade, leadership scholars have been calling for a new focus on non-hierarchical, connected and collectivist leadership enabling more horizontal and distributed modes of influence for increased effectiveness through inclusiveness and participation. Recognizing this change, some leadership theories and components are now considered outdated. Dinh, Lord, Gardner, Meuser, Liden, and Hu (2014) have called for additional research to evaluate a new leadership phenomenon.

The rise of globalization, cross-cultural fluidity, and third generation collaborative technologies offer an appropriate context where leadership can be increasingly distributed across geographic lines and organizational levels, follower and manager-driven, anonymous, and even automated and artificially generated. As Benham and Militello (2010) highlighted "what remains conspicuously absent from the leadership evaluation literature is a more inclusive diversity of voices that empowers multiple groups (not just individuals) to make meaning of leadership (beliefs) and to engage in collaborative leadership activities (action)" (p. 620).

The purpose of this paper is to trace the trends in the literature on "leadership" and to explore the relationship between leadership and a connected and collective approach. The authors took the point of view of reviewing the literature from an analysis of the efficacy of collective leadership to further determine their relevance to, and impact on, leadership practitioners and researchers. In addition, this paper aimed to take the chosen content analysis topic areas and encourage a critical inquiry into the ways each search term could inform and redefine leadership understanding. Furthermore, the paper explores how emergent themes associated with collective and connected leadership can open up new perspectives for leadership efficacy through a reorientation of leadership away from the actions of an individual leader to shared success driven by members of the collective.

Theory And Prior Research

Much has been written on the concepts of leadership and the dynamics of different leadership theories and style. Carlyle, in 1841, theorized on the "Great Man" theory, describing how leaders are born and not made. This concept became to be known as trait theory (Mann, 1959), which detailed the importance of certain personalities traits, including intelligence, effectiveness and, personality (Judge & Bono, 2000). Other

factors that affect leader effectiveness, including the success of the organization and readiness of the follower, were published (Avolio, Walumbwa & Weber, 2009). Leader-Member exchange contrasted the effectiveness of the follower acceptance with the leaders in-group (Graen & Uhl-Bien, 1995). Bass, in 1997, discussed the impacts of charisma for the success of the transformational leader. As a result, most organizations still envision the primary source of leadership, being that of the leader, with the object of leadership being the associated followers. In recent years, more research in the genre of collective leadership has taken place. Understanding what collective leadership is and how it is different from other forms of leadership is essential. Furthermore, gaining an understanding of if and how collective leadership builds organizational capacity for efficacy is essential to pursue leadership excellence.

Collective leadership is an environment where the dynamic movement of the leader is in flux given the situation or current opportunity. Both the formal leaders and followers are exercising leadership simultaneously, either in parallel or simultaneously as the situation requires, by divesting or enabling themselves into the leadership role. Once collective leadership is established, people are both internally and externally motivated, toward a shared vision and using their unique perspectives, talents, and skills to contribute to success. A key advantage for collective leadership is the diverse perspectives and contributions brought by the group. A collective leadership process is dependent on the relationships among the components in the system, whether those components are a classroom, sports team, board of directors, organization or a strategic initiative. The group works differently in this genre when compared to a traditional leadership structure. How the group works differently in sharing the leadership role is what brings the unique results. In collective leadership, there is a shared responsibility in the decision-making, with mutual accountability and an awareness of the leadership dynamical changes. Everyone is involved and fully engaged with intention in the process, working toward the vision or goal of the group's work. The primary assumption is that everyone can and will lead. Team environment needs to consist of mutual accountability, trust, transparency, communication, shared learning and willingness for shared power (Brookfield & Preskill, 2008, p. 9). Collective leadership success depends on the interdependencies of the entire group. Mary Parker Follett wrote about power “with others” rather than power “over others” (Fox & Urwick, 1973, p. 25). The success of the group is not dependent on the heroic skills of any one individual to the capabilities of the organization, rather the sharing of the leadership role to the individual that has the most knowledge is best. New thinking by calling the leader a “host” rather than “hero” shifts the leadership genre (Frieze & Wheatley, 2011, p.2).

Many studies have researched the dynamics of collective efficacy which much focus in the education system (Goddard, 2002). Models have been created, and as the confidence of teachers and faculty improved, student achievement was observed as well (Goddard, Hoy, & Woolfolk Hoy, 2004; Adams & Forsyth, 2006). Collective efficacy is at the root of collective leadership, and as a result, the effectiveness of a team should improve as the desired effects are produced. Albert Bandura, a psychologist at Stanford University during the 1970's, uncovered a unique pattern in working-group dynamics. Bandura observed (1977) that the higher a group's

confidence in its abilities, the greater success experienced with the group's goal (p. 191). Groups are more effective when a shared belief exists that any challenge can be overcome and ultimately produce the intended results. Similarly, in schools, when the educators and staff believed in their combined effort to positively influence students, significant academic achievement was experienced (Bandura, 1993). Bandura called this new human behavior pattern "collective efficacy" defined as "a group's shared belief in its conjoint capability to organize and execute the courses of action required to produce given levels of attainment" (Bandura, 1997, p. 477).

Beyond the leadership literature, a specific learning theory - connectivism - provides valuable insights into the evolution of knowledge and new ways of leading. George Siemens (2004) first introduced connectivism in a seminal online article where he called connectivism "a learning theory for the digital age" (p. 1). He firmly anchored his theory against other traditional learning theories whom he described as inadequate in the face of new, revolutionary social networking technologies affecting searching, research, teaching, and learning, and all aspects of daily life. Siemens (2004) noted that "over the last twenty years, technology has reorganized how we live, how we communicate, and how we learn. Learning needs and theories that describe learning principles and processes, should be reflective of underlying social environments" (p. 1). Context primed the introduction of connectivism with an analysis of technology trends, the evolution of learning, changes in organizations, and the nature and source of knowledge. Siemens described connectivism "as an integration of principles explored by myriad theories" (Dunaway, 2011, p. 676) which integrated previous thinking such as social constructivism (Vygotsky, [1933]1978) and then more modern theories such as network theory (Barabási., 2005).

In a later paper entitled *Connectivism: Learning as Network-Creation*, Siemens (2005) expanded on his initial concept providing more in-depth information on what is a network, the process of network formation, the definition of network nodes and presenting learning definitely as "a connection-forming (network-creation) process" (p. 3). The following year, Siemens published a book entitled *Knowing Knowledge* (Siemens, 2006a) which aimed to firmly establish connectivism as a learning theory by providing a full historical analysis on the evolution of knowledge, a review of trends guiding the move toward new forms of learning, an implementation model for his proposed theory, and the Connectivism Development Cycle (CDC) to help transform instructional and organizational designs based on the changed context of knowledge. Another author, Stephen Downes, greatly contributed to the conversation around connectivism. In 2007, he wrote *An Introduction to Connective Knowledge*, where he determined to "introduce the reader to this new, connective, form of knowledge" (p. 1) and gave an even more technical perspective on different types of knowledge, the structure of connections in networks, and how knowing networks function. Similar to Siemens, Downes aimed to depart from traditional learning theories with the added perspective of the connected age and a desire "to find a new renaissance" (Downes, 2007, p. 19) for knowledge.

While connectivism might have been radical, shocking, controversial and somewhat nebulous ten years ago, there is greater understanding, if not acceptance, of its merits

and efficacy today. “Connectivism acknowledges the role of information technology in the process of accessing information from multiple sources and the development of skills for evaluating connections between different information sources in a dynamic information network” (Dunaway, 2011, p. 675). According to Kop and Hill (2008), “where connectivism draws its strength is through using Web-based activity as an example of learning looking through the connectivist lens. The analogy is intuitive and powerful because of the ubiquitous use of the Internet in today’s world” (p. 4).

In his original paper, Siemens (2004) posited that connectivism would have dramatic implications on management and leadership. Unfortunately, none of these ideas were outlined in great detail. This provides a rich opportunity for researchers to apply connectivism as “a learning theory for the digital age” (p. 1), to leadership in the digital age. If to a large extent, generations have evolved concurrently with the technologies that enabled them, it is fair to assume that leadership could equally evolve the way of learning with networked technologies such as social networks and crowd-based approaches, thus creating a new form of leadership that may be informed by the learning theory of connectivism. Technology changes described by Siemens (2004) and Downes (2006) have accelerated in the last decade. Not only has the increased accessibility of information forced educators to adapt their teaching techniques, but it has also shifted the habits of students, creating a new generation of workers who are conversant and demanding of technology. The pervasiveness of networking in all aspects of student and daily life, and the emergence of newer technologies such as augmented and virtual reality, voice recognition, and artificial intelligence have radically affected organizations and their staff. New digitally savvy learners are arriving in the workplace with different expectations of work and of leadership. The connectivist lens on technology and metaphor applied from learning to leading is particularly timely, since the means by which information, knowledge, and influence are increasingly being dispensed via networking technologies and provide a reference point for Siemens’ and Downes’ assertions. As Natt och Dag (2017) noted, “leadership development professionals can be inspired to apply connectivism as a lens to further understand adult learning theories in the era of information and technology as well as apply to the development of leadership programs aimed at highly skilled professional groups” (p. 295).

Methods And Procedures

In an effort to contribute and advance the thinking on modern approaches to leadership, the authors addressed the following research questions with this paper:

- What are the patterns in the academic literature on leadership, collective leadership, and connectivism?
- How can literature on connectivism and collective leadership be categorized in terms of objectives, formats, authors, dates, language, topic areas, and major themes?
- What implications can be made from merging the literature on “connectivism” and “collective leadership” to redefine a new concept of leadership called “connectivist leadership?”

Using standardized search terms in the Pepperdine Libraries Worldwide, the authors identified and collected books and articles on the topic of connected and collective leadership. The search was not bound by any time limit or specific period. It traced the trends in the literature on “leadership” OR “collective leadership” OR “collective leadership efficacy” OR “team efficacy” OR “group efficacy” OR “connectivism” OR “connectivist leadership.”

To better focus the research, the underlying dynamic of interest was on leadership efficacy as it relates to the influences of a collective environment. Results were plotted and analyzed them by search volume, format, author, year, language and topic. The number of citations was then recorded, studied and analyzed for emerging thematic patterns, with a specific review of their contributions toward understanding leadership efficacy and transformation. An additional search was conducted to determine if any keyword correlation would exist within the discussions between the efficacy of collective leadership and efficacy of connectivism learning. The search was bounded to publications within the 2010’s, associated abstracts and keyword terms. Results were plotted and analyzed the top ten highest frequency word groupings.

Conclusion

Main Findings

The content analysis search resulted in the following citation results:

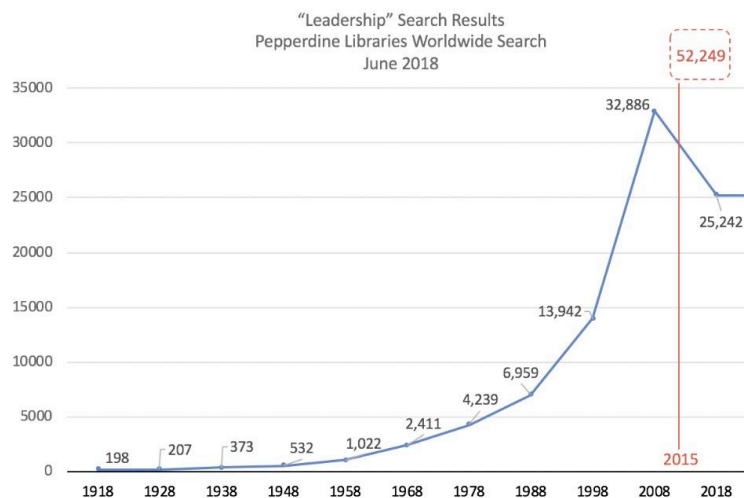
- 1,233,342 total search returns on “leadership”
- 344,449 total search returns on “collective leadership”
- 57,101 total search returns on “collective leadership efficacy”, 85,768 on “collective efficacy”, 122,337 on “team efficacy”, and 233,540 on “group efficacy”
- 1,880 total returns on “connectivism”
- 166 total returns on “connectivism efficacy”
- 0 returns on “connectivist leadership”

As expected, the topic of “leadership” returned prolific results with over a million entries. Stogdill (1974) remarked that definitions of leadership were numerous and could vary as much as those who tried to define it. Similarly, in his content analysis of leadership from 1900 to 1990, Rost (1991) found more than two hundred definitions of leadership. This content analysis revealed that the format of the articles (711,211) comprised 56 percent of the total leadership literature with peer-reviewed articles (289,043) accounting for 40 percent of articles, and chapters (129,254) and downloadable articles for the rest (79,578). A countless number of books have been also written on leadership (386,130) contributing to a third of the literature, as well as thesis and dissertations (105,155) accounting for just under ten percent of the total search volume.

A great number of authors were credited for leadership literature, thus the list of contributors was spread out and it was impossible to draw conclusions on who, most directly or indirectly, contributed to the development of leadership theory and practice the most. Interestingly, the author with the most search results was the United States with 2,229 search results. Contributors included the United States Coast Guard, the United States Army, the United States Air Force, the United States Department of Education, the United States Military Leadership Diversity Commission, and the United States Congress. Analyzing the nature of these authors and contrasting them to the evolution of leadership theory was very revealing. In his overview of leadership literature, Peter Northouse (2013) described how leadership evolved from the early part of the century when leadership “emphasized control and centralization of power with a common theme of domination” (p. 2) to the 1980’s when leadership became more of a transformational process involving motivation and morality. With the United States military as the main author of leadership literature, does this confine leadership to more American and a power-based interpretation of influence? Reviewing the top search results from the United States Coast Guard (1990) *Leadership news*, the definition of leadership is as follows: “Leaders are individuals who guide or direct in a course by showing the way” (para. 1). The content analysis from these main authors points to leadership being firmly anchored in an individual hierarchical approach rather than a distributed shared and technology-informed process.

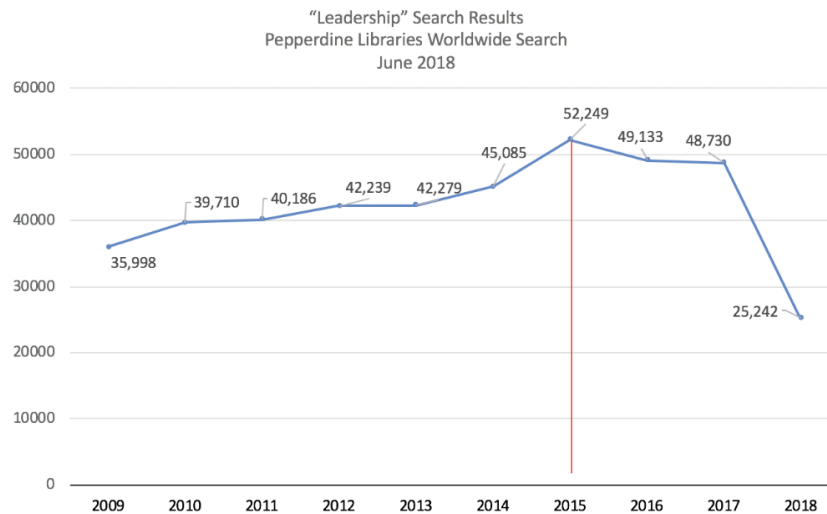
Citations for leadership started at the turn of the century until today. Reviewing the search terms from 1900 until 2018, we were able to pinpoint that leadership literature increased steadily during the period, from 198 citations in 1918 to 25, 242 in 2018. Each decade, citations steadily grew to reach a peak in 2015 with 52,249 citations (See Graph 1).

GRAPH 1
CITATION ANALYSIS: “LEADERSHIP” (1918-2018)



Furthermore, during the last ten years, new patterns emerged. While the leadership literature increased the most during the period of 1998 to 2008, from 2009 onwards growth staggered. After the peak of 2015, leadership citations started a steady decline with a rapid fall of 27 percent between 2017 and 2018 (See Graph 2).

GRAPH 2
CITATION ANALYSIS: “LEADERSHIP” (2009-2018)



From a language perspective, most of the literature on leadership came from the English language (638,801) comprising more than half (52 percent) of the entire search volume. The second language informing leadership was “undetermined” (44,615) followed by German (16,204), French (9,944), and Chinese (7,870). Given the significance of language and culture in driving thinking and leadership behaviors globally (Dorfman, Javidan, Hanges, Dastmalchian, & House, 2012), it is important to remember that studying leadership primarily through the English language cannot produce neutral results in terms of ideas and approaches.

Most of the content produced on leadership was from non-fiction (873,869), followed by peer-reviewed content (153,025) and far behind by biographies (11,701) and fiction (3,144), catered to an audience who was primarily non-juvenile (873,447). Topics addressed with leadership were widely distributed, and “business and economics” which returned the top search results (55,044) only comprised four percent of the total literature on leadership. Leadership topics included:

- Education (38990)
- Philosophy and Religion (25310)
- History & Auxiliary sciences (23264)
- Sociology (18028)
- Political Science (17359)
- Government Documents (6666)
- Psychology (6471)
- Medicine (5902)

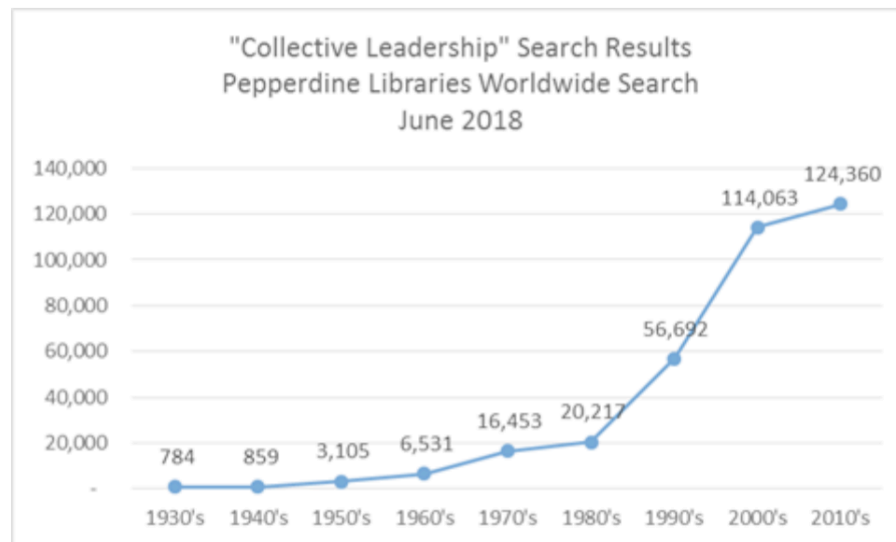
- Language, Linguistics (4675)

While many of the literature on leadership may, or may not have addressed efficacy, search results specifically calling for “Leadership AND efficacy” returned few entries with a total of 3,903 representing a minuscule area of focus - less than 1 percent - of the total search volume. This is ironic considering leadership’s primary concern, no matter the definition, is to influence outcomes toward achieving a common goal (Northouse, 2013).

As a subset of leadership, a refined search to identify the frequency when the words collective and leadership are independently referenced in publications, revealed a steady increase. However, when bound together as “collective AND leadership”, similar declining trends are observed as well. It is also interesting to note that describing collective leadership as an emerging new genre may be a misnomer as the collective leadership genre was written in the context of the “collective mind” referring to group dynamics in a given situation over eighty years ago (Price, 1915, p. 1). The vast majority of writing (64 percent) have taken place in the last twenty years (See Graph 3).

GRAPH 3

CITATION ANALYSIS: “COLLECTIVE LEADERSHIP” (1930-2010)



Taking a micro-perspective on the last eight years, similar to the leadership trends discussed previously, a peak in 2014 was observed, which may support a general shift in the procreation of leadership discussions in academia (See Graph 4).

GRAPH 4

CITATION ANALYSIS: "COLLECTIVE LEADERSHIP" (2010-2018)



In both collective leadership and collective leadership efficacy searches, educational research dominated the frequency of studies (See Graph 5 and Graph 6).

GRAPH 5

CITATION ANALYSIS: "COLLECTIVE LEADERSHIP" (Topic Areas)



GRAPH 6

CITATION ANALYSIS: "COLLECTIVE LEADERSHIP EFFICACY" (Topic Area)



Rachel Eells's (2011) conducted a meta-analysis studying the relationship of collective efficacy to student achievement. Her research confirmed that teacher beliefs on the schools' abilities "strongly and positively associated with student achievement across subject areas and in multiple locations" (p. 110). Another study identified that collective efficacy as the primary factor that influenced student achievement (Hattie, 2016). According to Hattie's Visible Learning research, collective teacher efficacy was in excess of three times more effective of student achievement than socioeconomic status. Twice the effect of prior achievement and three times more effective than home life and parent involvement. Collective efficacy was also a significant contributor to school culture (Bandura, 1993) and a shared language existed amongst the educators as opposed to regulatory compliance. The educator placed value in solving problems together and challenged what they are not doing to obtain the desired results (Hattie & Zierer, 2018).

So how does an organization build collective efficacy? To support this understanding, an additional search was administered. Taking the collective efficacy research results, two filters were established to create a database of manageable data. The first filter was to search only the last eight years of data. Next, only peer-reviewed journal articles were selected. This resulted in 1,294 journal articles. The journal article abstract was downloaded from each article and a word phrase analysis was conducted. A total of 344,673 words were analyzed for key phrases and then grouped in common genres. To provide substance to thematic trends, only ten categories were allowed for identification and the phrases were sorted into these categories (See Graph 7).

GRAPH 7

CITATION ANALYSIS: “COLLECTIVE LEADERSHIP EFFICACY”



Organizational leaders can influence the collective efficacy through expectation establishment of increased collaboration through being consistently engaged and working together as a team. It is critical to believe that the group is stronger together and to increase positive group motivations through constant self-reflection. Similarly, leaders need to drive the desire to be self-directed and work tirelessly to ensure sustainability. The group must foster empathy and effective interaction among its members, including an awareness of the undercurrents that may derail joint problem-solving (Marzano, Waters, & McNulty, 2005, p. 54). When members have awareness of the emotional tone of team dynamics, they can maneuver away from pitfalls during collaboration, sense rising tensions and address the issue in a respectful way ensuring all viewpoints are heard. The confidence of the team and their capabilities is key to success, so is the strength of believing that together, the group is more successful.

Following a review of search terms on leadership in totality and through a collective approach, our search then focused on considering leadership as an emergent network of connections leveraging the learning theory of connectivism which has best documented the phenomenon of networked learning in the digital age. The total search results on “connectivism” showed that the literacies were very limited with 1,880 total returns. The majority came from articles (1,616) with very few books (30 in print, 24 e-books, 1 audiobook), and a limited number of dissertations on the topic (32). The search query showed that the primary period of publishing on connectivism was from 1990-2019. Most entries were recent, with the greatest volume in 2016 and 2017. The primary language of citations was English with most of the entries related to education which is not surprising given connectivism is proposed as a learning theory. The main authors of connectivism were conspicuously absent from the search results. The originator of connectivism George Siemens who first introduced connectivism in an online article in 2004 did not appear in the search results at all. This can most likely be explained as most of his writings were published in online

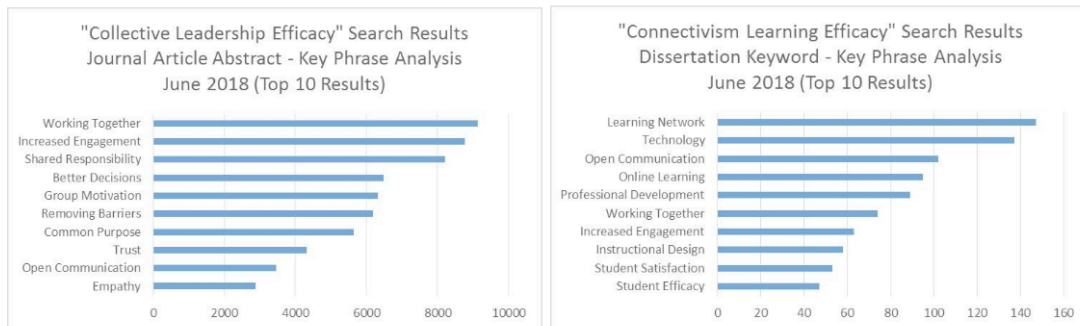
open forums and blogs, such as the *elernspace.org* blog. Siemens has deliberately shied away from academic publishing and chosen publishing platforms that match his theory of connected shared knowledge. The second main author of connectivism was Stephen Downes who only appeared three times in the search results. His writings listed focused entirely on open and distributed learning, connective knowledge and Massive Open Online Courses (MOOCs) which were invented by Siemens and Downes to put into practice connectivism. Authors most mentioned in the search query had primarily written about the applied use of connectivism for MOOCs. Thomas Cochrane (10 entries) had not written on the learning theory of connectivism but he provided thinking on transforming pedagogy using mobile web 2.0 and MOOCs. Equally, Jon Baggaley and Ebba Ossiannilsson (9 entries each) wrote about MOOCs. This provided interesting insights into the focus of connectivism which has been primarily concerned with the practical applications of networked learning.

“Connectivist leadership” returned zero search results indicating that applying the concept of connectivism, usually used for online learning, to leadership is novel and could result in thought-provoking new definitions and approaches. When looking at “connectivism efficacy” a total of 166 search results came back. The primary author in this field is Dr. Ebba Ossiannilsson who is the Vice-President of the Swedish Association for Distance Education (SADE) and a researcher at the Lund University in Sweden. Dr. Ossiannilsson has focused her cited works on the relationship between connected learning and the need for new leadership in education. *Leadership: In a Time When Learners Take Ownership of Their Learning*, Ossiannilsson (2018) notes the rapid advancements in the digitization of society leading to the fourth industrial revolution and the fundamental change that is needed in the way we think about leadership, particularly in education. In *Leadership in Global Open, Online, and Distance Learning*, Ossiannilsson (2017) discussed how new trends in digitization, global online learning call into focus innovative approaches to distributed leadership, and management practices and explained “why we have to rethink leadership and why the demands of leadership in global open, online, and distance learning have to innovate, change and be rethought” (Chapter 19, abstract).

Contrasting the research results between collective leadership efficacy and connectivism learning efficacy, three common themes became apparent: open communication, increased engagement, and working together (See Graph 8).

GRAPH 8

CITATION ANALYSIS: COMPARISON BETWEEN “COLLECTIVE LEADERSHIP EFFICACY” AND “CONNECTIVISM LEARNING EFFICACY”



As the connectivist leadership genre continues to develop, the above commonality between collective and connectivism efficacies may be a focused area for further research to confirm if the text analysis has provided consistent results. This could lead to understanding the underlying fundamentals required for connectivist leadership implementation and help to increase the effectiveness of the associated efficacy.

Implications

Patterns from this academic literature search on leadership, collective leadership, and connectivism revealed that leadership is going through a profound transformation. Leadership has garnered massive interest over the years with scholars as demonstrated by the plethora of citations in academic peer-reviewed journals which hold great authority. The topic has also fascinated the general public with many books for, and by, practitioners. However, during the last ten years, new patterns have emerged. While leadership literature increased steadily since the start of the century, it reached a peak in 2015 and has since been on a steady decline. In contrast, search terms for “collective leadership” have continued to rise. Further research is recommended to ascertain if interest in leadership is diminishing, or if leadership as a concept is evolving with a new language (including non-English) and morphing through new search terms into unexplored areas of inquiry, such as collective leadership expressions.

Implications from this paper allow for new perspectives on leadership, its definition, practices, and efficacy. Early indications, to be further validated, would suggest that leadership is evolving from a singular approach to a collective one. The most recent citations point to new directions where leadership is conceived as a multilevel phenomenon resulting in distributed processes with team-based practices. With

networked technologies, leadership can create better outcomes through collaborative work, increased engagement, shared responsibility, and group motivation. While the idea of “connectivist leadership” is nascent, applying the principles of connectivism to leadership to look at it through a connected, distributed and networked approach can be groundbreaking. “Connectivist leadership” as a form of leadership that is *connected* (inspired by the learning theory of connectivism) and *collective* (anchored in literature dating back to the early 1900’s) is a new, undefined concept that promises to open up new perspectives on the age-old paradigm of leadership which has not ceased to evolve since the birth of humanity. For centuries, leadership has mediated how groups learn, evolve, and survive in their environment (Schein & Scheiner, 2016).

Future research to apply connectivism to leadership would be of high value. Connectivism may offer a significant contribution to evolving the conventional views of leadership from understanding the actions of individual leaders to determining the emergent dynamics of a connected collective. Given the pervasive nature of social networking and a new generation of learners entering in the workplace, there is a need to re-conceptualize leadership by advancing its understanding from an individual influence on others to a collective and connected shared process. By sharing how leadership is transforming, both theoretical and empirical contributions can be made towards a new genre of leadership that would show the significant advantages of how modern organizations could be organizing leadership approaches within team-based connected groups and leveraging new technologies that promote networked connections, cultural affinity, constant learning and shared situational leadership. The exploration of this process for collective and connected leadership is one of the greatest opportunities ahead to contribute to a vast body of work in leadership studies and extend the opportunity for the reinvention of leadership dynamics in the future.

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