

Online Instructor Transformational Leadership and Student Engagement in Higher Education: A Literature Review

YIN Jiabing^{[a],*}

^[a]School of Foreign Languages, Taizhou University, Taizhou, China.
*Corresponding author.

Supported by the Educational Reform Project “A Correlational Study of Instructor Transformational Leadership and Student Engagement in Online Courses” (Grant No. 2020JGC11), Taizhou University, China.

Received 21 March 2021; accepted 28 May 2021
Published online 26 June 2021

Abstract

Transformational leadership offers a new theoretical framework to examine the correlation between online instructors and student engagement, a crucial indicator of students’ academic performance. This literature review sought to provide an updated picture of instructor transformational leadership and its impact upon student engagement in the context of higher education online courses in order that its readers can be informed of the relevant prior studies so far, which hopefully can inspire future research efforts regarding the topic in question. This review also justifies further investigation into the correlation between online instructor transformational leadership and student engagement.

Key words: Instructor transformational leadership; Student engagement; Higher education; Online courses

Yin, J. B. (2021). Online Instructor Transformational Leadership and Student Engagement in Higher Education: A Literature Review. *Cross-Cultural Communication*, 17(2), 8-18. Available from: <http://www.cscanada.net/index.php/ccc/article/view/12142>
DOI: <http://dx.doi.org/10.3968/12142>

INTRODUCTION

As a highly valued commodity, leadership and leadership study can be traced back to Aristotle (Northouse, 2016). Leadership has been applied and studied in various contexts, including, for example, corporations, military,

politics, etc. Education can learn and benefit from these settings; educational leadership has received considerable research attention in the early 21st century (Bush, 2007). In the context of educational settings, research emphasis has been frequently placed on two concepts: administrator leadership and instructor/teacher leadership.

As part of the “New Leadership” paradigm (Bryman, 1992), transformational leadership (TL) has stood out from among numerous leadership theories and occupied the central place in leadership research since the early 1980s (Northouse, 2016). Studies have revealed that TL is applicable in higher education settings (Balwant, 2016). An increasing number of scholars and researchers are captivated by the idea of translating TL from traditional face-to-face (f2f) classrooms into the context of online courses in HEIs (Balwant, 2016; Bogler et al., 2013; Chang & Lee, 2013; Jameson, 2013). These research efforts have provided a solid foundation for and justified the necessity of a closer study into the impact of instructor TL upon student engagement in online courses. This literature review will address several subtopics, including the theoretical construction of TL, educational TL, TL in online courses, as well as student engagement in online courses.

1. THEORETICAL CONSTRUCTION OF TRANSFORMATIONAL LEADERSHIP

1.1 Origination and Conceptualization

A plethora of scholars and researchers have contributed to the theoretical construction of TL. However, TL did not come into the focus of research until the publication of a seminal work entitled *Leadership* (Burns, 1978), in which the author provided a new perspective by linking the roles of leadership and followership and started a new era of leadership paradigm. Burns wrote of transformational leaders as people “inducing followers to act for certain

goals that represent the values and motivations—the wants and needs, the aspirations and expectations—of both followers and leaders” (Burns, 1978, p. 19).

Burns (1978) identified and distinguished between two leadership styles: transactional and transformational. While transactional leadership places its emphasis on the exchange between leaders and followers, TL focuses on the needs and motives of followers. As Burns (1978) stated, TL “occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation” (p. 20). Burns (1978) referred to this dynamic process as transcendental and described the transformational leader as a moral agent. He contended that the transformational leader seeks to raise the consciousness level by appealing to higher moral values.

1.2 Charismatic Leadership

Prior to the publication of Burns’ *Leadership* (1978), House (1976) advocated his theory of charismatic leadership. Based on a detailed evaluation of charismatic leadership and TL, Miner (2015) found that both theories have their roots in the concept of charisma as articulated by Weber and have much in common. Northouse (2016) contended that TL is a process that often incorporates charismatic leadership. House’s theory of charismatic leadership elaborates on personality characteristics, charismatic behaviors, and charismatic effects.

House (1976) described charismatic leaders as people who have charismatic effects on followers to an unusually high degree. These charismatic effects include “devotion, trust, unquestioned obedience, loyalty, commitment, identification, confidence in the ability to achieve goals, and radical changes in beliefs and values” (Miner, 2015, p. 339). According to House (1976), the personality characteristics that distinguish charismatic leaders from other leaders include dominance and self-confidence, desire to influence, and strong conviction of moral values. Charismatic leaders are more likely to exhibit specific types of behaviors to followers: acting as strong models, creating the impression of competence and success, articulating ideological goals, communicating high expectations of, and confidence in followers, and arousing motives relevant to the accomplishment of the mission (Miner, 2015). Shamir, House and Arthur (1993) extended House’s theory of charismatic leadership by contending that charismatic leadership tries to link followers’ identity to the collective identity of the organization. Charismatic leaders value the intrinsic motivation of work over extrinsic rewards and focus on follower development to forge the link between followers and the organization.

1.3 Bass’s Model of TL

Bass (1985) drew heavily on the prior works of Burns (1978) and House (1976) and constructed an extended version of TL theory. One of his contributions is the construction of the model of TL. According to Bass (1985),

transformational leaders motivate followers “(1) by raising our level of awareness, our level of consciousness about the importance and value of designated outcomes, and ways of reaching them, (2) by getting us to transcend our own self-interest for the sake of the team, organization, or larger polity, and (3) by altering our need level on Maslow’s (or Alderfer’s) hierarchy or expanding our portfolio of needs and wants” (p. 20).

Bass (1985) extended Burns’s TL theory by viewing the transactional and transformational leadership as complementary constructs rather than two polar constructs. He offered a model describing transactional and transformational leadership as a single continuum (Yammarino, 1993). Bass and Avolio (1993) conducted factor analysis and identified seven leadership factors (namely, idealized influence/charisma, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, management-by-exception, and *laissez-faire*). These seven factors were further grouped into three categories: transformational factors (4 factors), transactional factors (2 factors), and non-leadership factor (1 factor) (Bass & Avolio, 1993).

This full-range model establishes a factor hierarchy along the leadership continuum extending from non-leadership factor to passive transactional factor, to active transactional factor, to contingent reinforcement, to the transformational factors, also referred to as the four I’s (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration). Miner (2015) found that this hierarchy is positively related to the ineffective-effective and passive-active dimension. The TL factors/components (the four I’s) lie at the effective/active end of this dimension. First, transformational leaders are charismatic. They are role models and win admiration, respect, and trust from followers. Second, transformational leaders motivate followers to a higher moral level and inspire them to commit to and be part of the organizational vision. Third, they stimulate followers to be innovative and creative. Fourth, transformational leaders act as coaches and advisers, considering individualized support and follower development (Bass, 1998; Printy, Marks, & Bowers, 2009).

Bass (1985) developed an instrument, the Multifactor Leadership Questionnaire (MLQ), to assess the leader behaviors in his proposed model and further examine the relationship between the leader behaviors and outcome variables (effectiveness and satisfaction). Northouse (2016) considered individualized consideration and inspirational motivation to be the most indicative of strong TL. Lowe, Kroeck, and Sivasubramaniam (1996) conducted a meta-analytic review of the MLQ literature to investigate the relationships between leadership behaviors and work unit effectiveness. The authors found through the meta-analytic literature review that TL factors significantly predicted work effectiveness. The findings revealed that idealized influence, or charisma,

was the factor that was most strongly related to leader effectiveness regardless of organization type or the level of the leader. Lowe et al. (1996) found that individualized consideration was strongly associated with follower perceptions of leader effectiveness and intellectual stimulation was more highly associated with leader effectiveness in public organizations than in private ones. In conclusion, researches of TL have reached a consensus that TL has a significantly positive impact on a variety of outcome variables.

2. TRANSFORMATIONAL LEADERSHIP IN EDUCATIONAL SETTINGS

Bass and Riggio (2006) stated that TL is an effective approach despite situational circumstances. Since its inception, TL has been extensively investigated in various contexts and its popularity is still on the rise with a continuous increase of citations and works in the recent decade (Álvarez, Castillo, Molina-García, & Balague, 2016). According to Antonakis (2012), besides traditional areas (management and social psychology), TL has been extensively applied in other areas, including nursing, military, athletics, industrial engineering, as well as education. Weaver and Qi (2005) regarded a HEI course/classroom as a quasi-organization by asserting that the HEI course is “a social organization where power is asserted, tasks are assigned and negotiated, and work is accomplished through the interplay of formal and informal social structures” (p. 579). Their assertion may serve to justify the application of TL in educational settings. With a particular interest in HEIs, this literature review addresses two major lines of research at both the administrator level and the instructor level: administrator TL and instructor TL. The interplay of both is believed to promote positive outcomes for all educational stakeholders.

2.1 Administrator Transformational Leadership

TL is heralded as one of the most influential leadership models in the field of education administration (Bush, 2014). In educational institutions, various leadership functions are distributed to multiple individuals at the administrator level. In HEIs, administrators at both departmental and institutional levels have formal leadership positions. School distributed leadership contributes significantly to school effectiveness and improvement through two basic functions: supervision and support (Hulpia, Devos, & Rosseel, 2009). The supportive leader role is mainly manifested through such leader behaviors as setting and promoting a collective school vision, as well as motivating and stimulating teachers and students in the institution. These are the typical TL behaviors as elucidated by Bass (1985). Hulpia, Devos, and Rosseel (2009) stated that a transformational school leader can provide support to teachers, engage teachers in school vision, and provide feedback to teachers.

Leithwood and Jantzi (2006) established an integrated model of four distinct TL behaviors (setting directions, developing people, redesigning the organization, and improving the instructional program). While the first two are typical of TL factors, the latter two are school-specific behaviors (Boberg & Bourgeois, 2016). According to Boberg and Bourgeois (2016), these school-specific behaviors include discussion of instructional topics, oversight and coordination, classroom observation, and monitoring student progress. They held that administrator TL may indirectly improve student engagement through direct effects on teachers by promoting teachers' cooperation, commitment and capacity. That is, school leaders need to influence student outcomes by devoting to the emotional and cognitive engagement of their teachers.

Numerous studies indicated that there is a significantly positive relationship between administrator TL behaviors and teacher performance as well as teacher efficacy (Hipp, 1996; Walker & Slear, 2011). Thomas, Tuytens, Devos, Kelchtermans and Vanderlinde (2018) confirmed this result by exploring the interplay of administrator TL, professional collegial support, and teacher/instructor self-efficacy. Their findings also demonstrated that administrator TL is positively related to teachers' job attitudes and is likely to lead to followers' high work engagement. Stein, Macaluso and Stanulis (2016) conducted eleven embedded case studies to examine how administrator leadership style influences teacher efficacy. They found that transformational administrators not only provide support, advice, and guidance directly, but also take this support a step further by empowering teachers, thereby boosting their sense of ownership, level of success, and level of efficacy. Eliophotou-Menon and Ioannou (2016) conducted a review of studies published after 2000 on the effects of administrator TL on teacher-related educational outcomes and the findings indicated a positive relationship between administrator TL and teacher job satisfaction, motivation to learn, trust in the leader, and commitment to the organization.

Previous studies also explored how administrator TL influence institutional level culture. McCarley, Peters, and Decman (2014) analyzed the relationship between teacher perceptions of the degree to which an administrator demonstrates TL behaviors and the perceived school climate and found a positive correlation between TL and the supportive school climate. Based on an “impact study” that investigated the association between the work of administrators and student outcomes, Day, Gu and Sammons (2016) argued that administrators exercised transformational and instructional leadership by progressively shaping the culture and work of their schools in building the commitment and capacities of staff, student, and community during different development phases. They contended that both transformational and instructional leadership are necessary for school success.

Prior literature has indicated that administrator TL has an extensive influence on teacher-related performance and school-level outcomes. However, to exhibit its influence on student outcomes, administrator TL must work to promote instructor TL.

2.2 Instructor Transformational Leadership

Though studies have indicated the positive indirect effect of administrator TL on student performance, satisfaction, and learning outcomes, instructor TL is more effective in classroom due to the direct instructor-student interaction (Treslan, 2006). Based on his definition of instructor-leadership, Balwant (2016) referred to the TL in higher education teaching as transformational instructor-leadership with instructors as transformational leaders and students as followers.

As Bass (1985) stated, two constructs, out of the TL 4 I's, are more related to emotions: charisma inspires loyalty and devotion in followers; and inspiration motivates followers to act. The other two components are more associated with intellect: individualized consideration involves responsibility and shared decision-making; and intellectual stimulation focuses on problem-solving, innovation and creativity. Bass (1985) posited that teachers were natural transformational leaders in their capability of intellectual stimulation. Transformational instructors encourage and support students toward a shared goal, build their confidence, raise their self-efficacy, provide them with intrinsic motivation rather than extrinsic rewards like a good test grade, and engage students in fostering a school culture of trust and respect (Butler, 2017). The study by Leithwood and Jantzi (1999) reported that instructor TL has a significant overall effect on student engagement and students would demonstrate a higher level of engagement with transformational instructors. Balwant (2016) analyzed how HEI instructor can apply the TL 4I's in course instruction. He claimed that the HEI courses seem conducive to the exercise of charisma and intellectual stimulation. However, the effects of individualized consideration and inspirational motivation might be minimized because of the distant and temporary qualities of the classroom settings, especially in courses of large sizes or online courses (Balwant, 2016).

A growing body of research provides ample evidence supporting the notion that instructor TL is effective in educational settings and most of the studies show a positive correlation between instructor TL and student outcomes. A study through a correlation analysis by Pounder (2008) reported that classroom TL incurs extra effort on the part of students, raised students' perception of teacher effectiveness, and their satisfaction with the teacher. Bolkan and Goodboy (2009) maintained that instructor leaders who display TL behaviors have a positive influence on student learning outcomes by providing support and encouragement and building trust. They reported positive relationships between

TL components and instructional outcomes including cognitive learning, affective learning, and instructor credibility (Bolkan & Goodboy, 2011). A meta-analytic review by Balwant (2016) confirmed that transformational instructor-leadership in higher education settings is positively correlated with six outcomes: motivation, perceived instructor-leader credibility, satisfaction with leaders, academic performance, affective learning, as well as cognitive learning. He took a step further by suggesting that HEIs should train and hire transformational instructors because transformational instructor-leaders turn ordinary students into extraordinary students (Balwant, 2016). Later, Balwant et al. (2018) extended the previous study by investigating student engagement as a mechanism that mediates between instructor TL and students' academic performance. According to Balwant et al. (2018), student engagement functions as a bridge between instructor TL and student outcomes and enhances the understanding of the causal relationship between them.

As mentioned before, administrator TL has indirect influence upon student engagement and student outcomes through its work on instructor leadership (Boberg & Bourgeois, 2016; Treslan, 2006). On the other hand, weak administrator leadership can hamper the effectiveness of instructor TL (Harris & Muijs, 2005). Thus, there arises a trend of advocating the integration of both administrator TL and instructor TL as an integral part that collaborates in keeping education on the right track (Day, Gu, & Sammons, 2016; Stein, Macaluso, & Stanulis, 2016). Therefore, a model of dual TL in HEIs may work to contribute to the accomplishment of the overall goal of the organization.

3. TRANSFORMATIONAL LEADERSHIP IN ONLINE COURSES

The infusion of the Internet and ICT (Information and Communications Technology) into the field of education has revolutionized the traditional f2f instruction and enabled the rapid growth of hybrid and online courses (Redmond, 2011). Allen, Seaman, Poulin, and Straut (2016) reported that the past few years have witnessed a year-to-year steady increase in student enrollment in online courses. Most HEIs have welcomed online courses as critical for their long-term strategies (Allen & Seaman, 2015). The ongoing popularity of online courses in HEIs has brought considerable research attention from researchers and scholars in relation to the concomitant challenges as well as the corresponding instructor role transition. This section investigates the prior literature regarding the challenges, instructor role changes, and effective instructional practices, as well as the preparation of online instructors to be transformational leaders in the implementation of online courses.

3.1 Instructor Roles and Effective Practices

Despite the increasing popularity of online courses in HEIs, problems and challenges have caught the attention of scholars and researchers. According to Best Colleges (2017) report, among the top challenges faced by launching online courses are meeting cost and management demands and selecting content sources or third-party content providers. The report further pointed out that the challenges at the management level include technology infrastructure, help desk, faculty training, and administrative functions (Best Colleges, 2017). Online instructors may feel emotionally exhausted, depersonalized, and frustrated when confronted with complex and demanding tasks of preparing and implementing online course instruction (Hogan & McKnight, 2007). It remains one enduring challenge in the implementation of online courses “to systematically explore the integration of pedagogical ideas and new communication technology that will advance the evolution of higher education as opposed to reinforcing existing practices” (Garrison, Cleveland-Innes, & Fung, 2010, p. 31). The transition from f2f teaching to online teaching and the challenges coming with this transition require online instructors to reexamine their roles and adapt their approaches and practices of teaching in a virtual environment to achieve expected outcomes.

With increased online course offerings, faculty are being required to reconceptualize their roles as online instructors (Baran, Correia, & Thompson, 2011) as a result of the changed mode of communication from oral into written and diminished paralinguistic cues common in traditional f2f classrooms (Coppola, Hiltz, & Rotter, 2002). This role shift is described as from “Sage on the Stage” to the “Guide on the Side” (Coppola, 1997), or from facilitators of student learning to moderators of student collaboration activities (Collis & Nijhuis, 2000). Huang and Chou (2015) examined the previous literature regarding the roles of online instructors and categorized the roles into four distinct dimensions: pedagogical, social, managerial, and technical. Through a confirmatory factor analysis of students’ perceptions, Huang and Chou (2015) specified the roles of online instructors into five categories (respectively course designer and organizer, discussion facilitator, social supporter, technology facilitator, and assessment designer). Based on prior studies, Richardson et al. (2016) outlined four specific roles of online instructors (facilitating learning, designing curricular materials, managing the learning process and environment, and providing a social presence to overcome a feeling of disconnect or isolation among students). Due to the lack of physical interaction and presence in online courses, the social and facilitating roles are most emphasized among the online instructor roles (Richardson et al, 2016). The social dimension of online instructor role is mainly manifested through instructor presence in online courses. Instructor presence, according to Richardson et

al. (2015), refers to a comprehensive concept involving “specific actions and behaviors taken by the instructor that projects him/herself as a real person...” (p. 259). The social role emphasizes online instructors’ behaviors closely related to building and improving instructor-student relationship in the implementation of online courses (Guasch, Alvarez, & Espasa, 2010).

Previous studies have explored and well documented effective practices of the implementation of online instruction. Quality online course delivery is generally considered to be more difficult and more time-consuming than traditional f2f instruction mainly because online instructors are responsible for creating virtual learning community environment and must adjust to limited physical social interaction (Dykman & Davis, 2008). Baran and Correia (2014) went further by considering successful online instruction as the outcome of complex interplay of support activities at various levels such as teaching, community and organization. Support at the teaching level include technology support, pedagogical support, and design and development support (Baran & Correia, 2014). Support at the community level involves promoting a collaborative professional community, peer support, and peer observation (Baran & Correia, 2014). Common practices include building a collaborative professional community, nurturing a mentoring relationship, observing and providing constructive peer feedback on other online instructors’ courses (Rovai & Downey, 2009). Support at the organization level aims to create a culture that respects and rewards online instruction (Baran & Correia, 2014).

The fulfillment of instructor role transition and best online instruction practices on the three levels of teaching, community, and organization entail the involvement of instructors and administrators as transformational leaders.

3.2 Online Instructors as Transformational Leaders

As mentioned above, leadership theories are applicable in higher education context mainly because a course possesses major organizational characteristics with instructors as leaders and students as followers (Balwant, 2016). However, little existing research has attempted to examine leadership theories via the now increasingly pervasive communication channel–virtual instructor-student interaction (Bogler et al., 2013). Jameson (2013) echoed this idea by asserting that e-leadership issues in the context of higher education have been more or less overlooked in the research literature in the past 40 or so years and advocated that “considerably more attention is needed on research and development in e-leadership” (p.891).

Studies in the past two decades have indicated the significance of instructor leadership in online courses. Eom (2009) argued that virtual environments provide instructors with unique opportunities to act as leaders

in terms of “achieving goals, facilitating collaboration, and establishing strategic relationships, in addition to overcoming traditional barriers such as cost, location, time, and space” (as cited in Harrison, 2011, p. 94). Online instructors are ideal leaders because of their ability to couple technical and conceptual skills while working collaboratively (Shaw, 2012). A successful online course depends heavily on the vision of leadership in higher education institutions and online instructors can provide the leadership to facilitate goal attainment that is necessary in the implementation of an online course (Wang & Berger, 2010).

An increasing number of scholars have begun to turn their research attention to the application of TL behaviors in online courses. Bogler et al. (2013) noted that “the instructor’s online leadership behavior is exhibited in a number of ways that are characteristic of the transformational leadership” (p. 5). Online instructors are found to demonstrate TL when they enable students to share a vision, help create new ideas and promote innovative change (Marcus, 2004). Relevant studies mainly focus on the correlations between online instructor TL and learning outcomes or students’ satisfaction.

First, many studies have revolved around the relationship between instructor TL and student learning outcomes in online courses. Based on the TL theory and social learning theory, a study conducted by Harrison (2011) tested the relationship between TL behaviors and learning outcomes in online courses. Harrison (2011) reviewed a preponderance of prior literature and proposed hypotheses concerning the relationship between online instructor TL and students learning outcomes. Students report high cognitive outcomes in online courses taught by transformational instructor leaders who employ TL behaviors (Harrison, 2011). Harrison (2011) also found that there exists a positive correlation between instructor TL and student affective learning outcomes, such as emotion and attitude toward the online course subject.

Second, the correlation between instructor TL and student satisfaction is another focal point of online course research. Student satisfaction can be understood as one important factor which leads to student success. Studies revealed that instructor TL behaviors are positively correlated with student satisfaction in online courses (Harrison, 2011; Bogler et al., 2013). The more online instructors are attributed to TL style, the more satisfied the students are (Bogler et al., 2013). Students’ satisfaction implies that instructor leadership behaviors and instruction methods are satisfactory, and the instructor-student relationship are conducive to the facilitation of goal attainment in the implementation of online courses (Livingston, 2010). Livingston (2010) found that TL is strongly correlated with satisfaction as well as another MLQ variable, extra effort.

With an increased awareness of the positive impact of transformational instructor behaviors on students’

satisfaction and learning outcomes (affective and cognitive), researchers have been realizing the necessity and significance of training transformational instructor leaders in the implementation of online courses (Balwant, 2016; Baran & Correia, 2014; Bogler, et al., 2013; Shaw, 2012). Lack of professional development that prepares online faculty to become transformational instructor leaders leads to online instructions that are replicated from traditional teaching modes and are of low efficacy and low quality, which falls far behind students and faculty expectation.

Training instructors as transformational instructor leaders has been explored from various perspectives: technological, pedagogical, and transformational instructor behaviors (Coppola, et al., 2002; Baran, et al., 2011; Harrison, 2011). As mentioned earlier, Baran and Correia (2014) included technological and pedagogical support in a professional development framework at the teaching level. Preparation at the teaching level involves training and development programs to improve online instructors’ technological skills and the ability to incorporate these skills in online course instruction (Schifter, 2000). Appropriate training and development on virtual pedagogical skills must be provided to online instructors to better prepare them for instructional delivery and course management in the implementation of online courses (Baran & Correia, 2014).

However, training and professional development programs in online instructor leadership skills are lagging far behind the corresponding preparation efforts invested in online instruction technology and pedagogy (Jameson, 2013). Training online faculty to be transformational instructor leaders should not be conducted separately but be incorporated in the training and professional development programs. Online instructors are trained to integrate the TL behaviors by using motivational language in the syllabus, articulating a vision of the learning outcomes, creating assignments reflective of intellectual stimulation (Harrison, 2011). Harrison (2011) argued that online instructors should be trained to display TL components in their interactions with students.

4. STUDENT ENGAGEMENT IN ONLINE COURSES

The modality of online instruction delivery has emerged as an innovative and transformative force in education for its inherent technological advantage. Most HEIs have claimed online courses as their long-term critical strategy (Allen & Seaman, 2015). However, as with any other newly emergent thing, online courses stepped onto the stage of higher education with their concomitant risks. One potential risk is the challenge of declining student engagement when compared with traditional f2f courses (Henthorne, 2019). The success of the implementation

of online courses (educational technique and instruction best practices) depends largely on student buy-in and participation, i.e., student engagement. According to social constructivism, student engagement (social presence and meaningful interaction) is necessary for both online and offline learning (Bigatel, Ragan, Kenan, May, & Redmond, 2012). Guo, Kim, and Rubin (2014) concurred that student engagement is a prerequisite for learning in online courses. An examination of prior literature revealed three major research lines in relation to student engagement, i.e., how educational technology, instructor presence, and learner interactions influence student engagement in online courses.

4.1 Impact of Educational Technology on Student Engagement

With the adoption of the Internet and ICT into the educational arena, numerous studies have examined how these educational technologies affect student engagement in online learning. Richey, Klein, and Tracey (2011) examined the role of technology in the implementation of online courses and concluded that online media serves as mediator in the process of student engagement by facilitating student online interaction activities. Bernard, Borokhovski, Schmid, Tamim, and Abrami (2014) found that the integration of technology in hybrid courses yields improvement in student learning outcomes when technology facilitates cognitive or social scaffolding by promoting student interaction with learning content, other students, and instructors. Chen, Boenink, and Guidry (2010) identified three factors influencing student engagement: collaboration, academic challenge and instructor-student interaction. A positive correlation was found between the use of educational technology, student engagement, and academic gains in online learning (Chen, Boenink, & Guidry, 2010). The adoption of popular online social media tools (e.g. Twitter and Facebook) can greatly promote online student engagement by establishing social community and making communication more effective (Heiberger & Harper, 2008; Junco, Heiberger, & Loken, 2011). Learning Management Systems (LMSs), such as Blackboard and Canvas, provide online instructors and students a virtual learning environment that better engages students in online courses through asynchronous interactions that help promote higher order thinking skills (HOTS) such as critical thinking and reflexivity (Robinson & Hullinger, 2008). For example, one way to assess student engagement is analyzing students' posts and responses on discussion boards.

4.2 Impact of Instructor Presence on Student Engagement

Moore (2014) found that strong instructor presence successfully facilitates student engagement. Gray and DiLoreto (2016) suggested several ways of enhancing instructor presence in online courses, such as consistent

feedback, regular communication with students, and critical discourse. The essential role of instructor presence in promoting effective student engagement demonstrates itself in guiding students how to effectively initiate and participate in online discussion (Cho & Tobias, 2016). Swan et al. (2008) claimed that online instructor presence includes three components: social presence, cognitive presence, and teaching presence. The social aspect of instructor presence encourages students to establish social ties and feel connected in a virtual learning community via technology tools. The cognitive aspect facilitates and engages students in knowledge construction through sustained reflection and critical discourse in the learning community (Garrison, Anderson, & Archer, 2001). Anderson et al. (2001) referred to teaching presence as "the design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (p.5). All instructor presences (social, cognitive, and teaching) work on student engagement in online courses through student-content, student-student, and student-instructor interactions (Mucundanyi, 2019). Due to the lack of instructor-student f2f communication, establishing instructor presences in online courses is challenging when compared with that in traditional f2f classroom settings (Bowers & Kumar, 2015).

4.3 Impact of Online Interactions on Student Engagement

To overcome the challenges of not being online at the same time and not being in the same geographical location, Bigatel et al. (2012) recommended that instructors be encouraged to design and create online courses with three characteristics: instructor social presence, sense of learning community, and enhanced interaction activities.

The aspects of student engagement involve skills, emotion, interaction, and performance (Mandernach, 2009; Handelsman, Briggs, Sullivan, and Towler, 2005). For the purpose of this study, this literature review focuses on the online learning experience of learner participation and interaction. Moore (1993) identified three factors that influence student engagement in online courses: student-student interaction, student-instructor interaction, and student-content interaction. Swan et al. (2000) specified two factors strongly associated with online course design and student learning outcomes: frequent and quality interactions with instructors and dynamic interactions with peer learners. A literature review conducted by Henrie, Halverson, and Graham (2015) focuses on student interaction with the system, i.e., the interaction of the learner with instructors, classmates and learning contents in online courses. Their measurement focuses on the whole online course learning experience mediated by technology without f2f interaction with other students and instructors.

Dixon (2010) identified two categories of interaction activities in online course learning experience: active (online discussions, online lab activities, and problem-solving activities) and passive (test taking, reading, and watching videos). The findings revealed that students demonstrate higher level of engagement when they are involved in interaction activities with learning content, other students, and online instructors (Dixon, 2010). Ma, Han, Yang, and Cheng (2014) conducted an analysis of student and instructor log data in a web-based learning platform and their findings revealed the importance of instructor's role in promoting student engagement by designing curriculum materials, planning and monitoring effective learning activities, offering guidance and scaffolding, and providing timely feedback.

Student-student interaction reflects how students work collaboratively and engage in online courses by sharing and critically constructing knowledge (Woodley, Mucundanyi, & Lockard, 2017). The online instructor serves as a designer as well as a facilitator in establishing student-student interaction (Mucundanyi, 2019). Student-student interaction in online courses is an important indicator that predicts student learning outcomes. According to Jaggars, Edgecombe, and Stacey (2013), "students in low-interaction courses earned nearly one letter grade lower than students in high-interaction courses" (p.2). Young and Bruce (2011) developed a 5-point Likert scale survey (Online Community and Engagement Scale) to measure the factors of student engagement in online courses. Community building with classmates for measuring student-student interactions include items like student participation and collaboration, connecting and interacting with classmates, asking questions, helping classmates, and sharing personal concerns (Young & Bruce, 2011).

According to Sher (2009), student-instructor interaction "can take the form of instructor delivering information, encouraging the learner, or providing feedback. In addition, this can include the learner interacting with the instructor by asking questions or communicating with the instructor regarding course activities" (p. 104). Student-instructor interactions in online courses positively contribute to students' sense of connectedness and belonging in the online learning community and are therefore essential to student satisfaction and learning outcomes. Community building with the instructor (Factor 1) for measuring student-instructor interactions include items like instructor contact, instructor response time, instructor response to inappropriate interactions, instructor rule enforcement and course monitoring, instructor presence, and instructor course organization (Young & Bruce, 2011).

Besides constructing knowledge in collaboration with peer learners, online students need to internalize the knowledge through individualized learning. This process is referred to as student-content interaction (Moore,

2014). According to Sher (2009), "the content can either be in the form of text, audio or videotape, CD-ROM, computer program, or online communication" (p. 104). Online students prepare themselves for student-student and student-instructor interactions by gaining information from the course materials. Young and Bruce (2011) included items in Factor 3 (engagement with learning) to measure student-content interactions, including reading and doing assignments, learning platform visits, course expectation, intrinsic motivation, and learning efforts.

CONCLUSION

The intuitive appeal of TL has made it a hotspot of current research. Intrinsic motivation and follower development are in consistent with society's popular notion of leadership. Furthermore, the conceptualization of TL as a dynamic process as well as an interplay between leaders and followers has invested extra energy into the study and research of TL (Northouse, 2016). The development of a maturing model by the forerunners (Bass, 1985; Bass & Avolio, 1990) made TL a convenient and effective tool applicable and replicable in various contexts. Numerous research efforts have been found and proved valuable in management, social psychology, nursing, military, athletics, and education.

The application of TL in traditional f2f classroom/course, as a quasi-organization, has received considerable research attention from two major lines: administrator TL and instructor TL. Administrator TL has been explored from the administrators' role as supportive leaders. However, the influence of administrator TL is assumed to be achieved through its work in the facilitation of preparing instructors to be transformational leaders. Meanwhile, instructor TL appears to be a more favored research topic due to the instructors' direct social presence and influence upon students. With the emergence of online courses as an alternative to f2f courses and a long-term strategy in HEIs, research attention has been increasingly devoted to exploring instructor role transition and effective instruction practices based on pedagogical, social, managerial, and technical dimensions. Extant literature has revealed positive influence of instructor TL behaviors on student learning outcomes (cognitive and affective) and student satisfaction.

There exists the potential decline in student engagement when the educational setting has moved from f2f classrooms to online. Student engagement serves as the working mechanism that meditates between instructor TL and students' academic performance (Balwant et al., 2018). An increasing number of studies have focused on how such factors as educational technology, instructor presence, and student interactions influence student engagement in online courses. Despite the ample body of literature describing educational TL and student engagement, the correlation between them in the context

of higher education online courses remains relatively unexplored. Future studies should consider conducting correlational analyses to fill in this gap.

REFERENCES

- Allen, I. E., & Seaman, J. (2015). *Grade level: Tracking online education in the United States*. Retrieved from Rabson Survey Research Group and Quahog Research Group, LLC website: <https://www.onlinelearningsurvey.com/reports/gradelevel.pdf>
- Allen, I. E., Seaman, J., Poulin, R., & Straut, T. T. (2016). 2015 Online Report Card: Tracking Online Education in the United States. *The Sloan Consortium, January*.
- Álvarez, O., Castillo, I., Molina-García, V., & Balague, G. (2016). Transformational leadership on the athletic field: An international review. *Revista de psicología del deporte, 25*(2), 319-326.
- Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks, 5*(2), 1-17.
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *Leadership Quarterly, 14*, 261-295.
- Balwant, P. T. (2016). Transformational instructor-leadership in higher education teaching: A meta-analytic review and research agenda. *Journal of Leadership Studies, 9*(4), 20-42. doi: 10.1002/jls.21423
- Balwant, P. T., Birdi, K., Stephan, U., & Topakas, A. (2018). Transformational instructor-leadership and academic performance: A moderated mediation model of student engagement and structural distance. *Journal of Further and Higher Education, 1-17*. doi:10.1080/0309877x.2017.1420149
- Baran, E., Correia, A. -P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education, 32*(3), 421-439.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1998). *Transformational leadership development: industry, military, and educational impact*. Mahwah, NJ: Erlbaum.
- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership: A response to critiques. In M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions* (pp. 49-80). San Diego, CA: Academic Press.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Bernard, R. M., Borokhovski, E., Schmid, R. F., Tamim, R. M., & Abrami, P. C. (2014). A meta-analysis of blended learning and technology use in higher education: From the general to the applied. *Journal of Computing in Higher Education, 26*(1), 87-122. doi:10.1007/s12528-013-9077-3
- Best Colleges. (2017). *2017 Online Education Trends Report*. Retrieved from <https://www.bestcolleges.com/wp-content/uploads/2017-Online-Education-Trends-Report.pdf>
- Bigatel, P. M., Ragan, L. C., Kenan, S., May, J., & Redmond, B. F. (2012). The identification of competencies for online teaching success. *Journal of Asynchronous Learning Networks, 16*(1), 59-77.
- Boberg, J. E., & Bourgeois, S. J. (2016). The effects of integrated transformational leadership on achievement. *Journal of Educational Administration, 54*(3), 357-374. doi:10.1108/jea-07-2014-0086
- Bogler, R., Capsi, A., & Roccas, S. (2013). Transformational and passive leadership: An initial investigation of university instructors as leaders in a virtual learning environment. *Educational Management Administration & Leadership, 1-21*. doi: 10.1177/1741143212474805
- Bolkan, S., & Goodboy, A. K. (2009). Transformational leadership in the classroom: Fostering student learning, student participation, and teacher credibility. *Journal of Instructional Psychology, 36*(4).
- Bolkan, S., & Goodboy, A. K. (2011). Behavioral indicators of transformational leadership in the college classroom. *Qualitative Research Reports in Communication, 12*(1), 10-18.
- Bowers, J., & Kumar, P. (2015). Students' perceptions of teaching and social presence: A comparative analysis of face-to-face and online learning environments. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT), 10*(1), 27-44.
- Bryman, A. (1992). *Charisma and leadership in organizations*. London: Sage.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Butler, A. M. (2017). *Transformational leadership in online education: Cyber charter school teachers' perceptions of their administrators' leadership* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database.
- Bush, T. (2007). Educational leadership and management: Theory, policy, and practice. *South African Journal of Education, 27*(3), 391-406.
- Bush, T. (2014). Instructional and transformational leadership: alternative and complementary models? *Educational Management Administration & Leadership, 42*(4), 443-444. doi:10.1177/1741143214526830
- Chang, W. L., & Lee, C. Y. (2013). Virtual team e-leadership: The effects of leadership style and conflict management mode on the online learning performance of students in a business-planning course. *British Journal of Educational Technology, 44*(6), 986-999. doi: 10.1111/bjet.12037
- Chen, P. D., Boenink, A. D., & Guidry, K. R. (2010). Engaging online learners: The impact of Web-based learning technology on college student engagement. *Computers & Education, 54*(4), 1222-1232.
- Cho, M. H., & Tobias, S. (2016). Should instructors require discussion in online courses? Effects of online discussion on community of inquiry, learner time, satisfaction, and achievement. *International Review of Research in Open and Distributed Learning, 17*(2), 123-140.

- Collis, B., & Nijhuis, G.G. (2000). The instructor as manager: Time and task. *The Internet and Higher Education*, 3, 75-97.
- Coppola, N. (1997). Sage on stage or mentor in MUD: Changing roles for teachers of technical communication. *INTERCOM*, 44(1), 6-9.
- Coppola, N. W., Hiltz, S. R., & Rotter, N. G. (2002). Becoming a virtual professor: Pedagogical roles and asynchronous learning networks. *Journal of Management Information Systems*, 18(4), 169-189.
- Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly*, 52(2), 221-258. doi:10.1177/0013161x15616863
- Dykman, C. A., & Davis, C. K. (2008). Online education forum: Part two—teaching online versus teaching conventionally. *Journal of Information Systems Education*, 19(2), 157-164.
- Eliophotou-Menon, M., & Ioannou, A. (2016). The link between transformational leadership and teachers' job satisfaction, commitment, motivation to learn, and trust in the leader. *Academy of Educational Leadership Journal*, 20(3), 12-22.
- Garrison, D. R., Cleveland-Innes, M., & Fung, T. S. (2010). Exploring causal relationships among teaching, cognitive and social presence: Student perceptions of the community of inquiry framework. *The Internet and Higher Education*, 13(1-2), 31-36.
- Gray, J. A., & DiLoreto, M. (2016). The effects of student engagement, student satisfaction, and perceived learning in online learning environments. *International Journal of Educational Leadership Preparation*, 11(1), n1.
- Guasch, T., Alvarez, I., & Espasa, A. (2010). University teacher competencies in a virtual teaching/learning environment: Analysis of a teacher training experience. *Teaching and Teacher Education*, 26(2), 199-206. doi: 10.1016/j.tate.2009.02.018
- Handelsman, M. M., Briggs, W. L., Sullivan, N., & Towler, A. (2005). A measure of college student course engagement. *The Journal of Educational Research*, 98(3), 184-192.
- Harris, A. & Muijs, D. (2005). *Improving schools through teacher leadership*. New York, NY: Open University Press.
- Harrison, J. L. (2011). Instructor transformational leadership and student outcomes. *Emerging Leadership Journey*, 4(1), 91-119.
- Heiberger, G., & Harper, R. (2008). Have you Facebooked Astin lately? Using technology to increase student involvement. *New Directions for Student Services*, 2008(124), 19-35.
- Henrie, C. R., Halverson, L. R., & Graham, C. R. (2015). Measuring student engagement in technology-mediated learning: A review. *Computers & Education*, 90, 36-53.
- Henthorne, E. E. H. (2019). *Retaining Online Students: Engagement Indicators that Contribute to the Retention of Undergraduate Students in Online Programs at Traditional 4-Year Institutions* (Doctoral dissertation, Union University).
- Hipp, K. A. (1996, April). *Teacher efficacy: Influence of administrator leadership behavior*. Paper presented at the American Educational Research Association, New York. Retrieved from <http://files.eric.ed.gov/fulltext/ED396409.pdf>
- Hogan, R. L., & McKnight, M. A. (2007). Exploring burnout among university online instructors: An initial investigation. *The Internet and Higher Education*, 10(2), 117-124.
- House, R. J. (1976). A 1976 theory of charismatic leadership. In J. G. Hunt & L. L. Larson (Eds.), *Leadership: The cutting edge* (pp.189-207). Carbondale: Southern Illinois University Press.
- Hulpia, H., Devos, G., & Rosseel, Y. (2009). The relationship between the perception of distributed leadership in secondary schools and teachers' and teacher leaders' job satisfaction and organizational commitment. *School Effectiveness and School Improvement*, 20(3), 291-317. doi:10.1080/09243450902909840
- Jaggars, S. S., Edgecombe, N., & Stacey, G. W. (2013). *What we know about online course outcomes: Research overview*. Community College Research Center, Columbia University, New York, NY.
- Jameson, J. (2013). e-Leadership in higher education: The fifth "age" of educational technology research. *British Journal of Educational Technology*, 44(6), 889-915.
- Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27(2), 119-132.
- Leithwood, K., & Jantzi, D. (1999). Transformational School Leadership Effects: A Replication. *School Effectiveness and School Improvement*, 10(4), 451-479.
- Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17(2), 201-227.
- Livingston, R. K. (2010). *An investigation of transformational leadership in a virtual learning environment*. Capella University, Minneapolis.
- Lowe, K. B., Kroeck, K., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the mlq literature. *The Leadership Quarterly*, 7(3), 385-425.
- Mandernach, B. J. (2009). Effect of instructor-personalized multimedia in the online classroom. *The International Review of Research in Open and Distributed Learning*, 10(3).
- Marcus, S. (2004). Leadership in distance education: Is it a unique type of leadership? *Online Journal of Distance Learning Administration*, 7(1).
- McCarley, T. A., Peters, M. L., & Decman, J. M. (2014). Transformational leadership related to school climate: A multi-level analysis. *Educational Management Administration & Leadership*, 44(2), 322-342.
- Miner, J. B. (2015). *Organizational Behavior 1: Essential Theories of Motivation and Leadership*. London, England: Routledge.
- Moore, R. L. (2014). Importance of Developing Community in Distance Education Courses. *TechTrends*, 58(2), 20-24. doi:10.1007/s11528-014-0733-x

- Mucundanyi, G. (2019). *College student engagement in online courses*. Unpublished doctoral dissertation. Las Cruces: New Mexico State University.
- Northouse, P. G. (2016). *Leadership: Theory and practice* (7th ed.). Thousand Oaks, CA: SAGE Publications.
- Printy, S. M., Marks, H. M., & Bowers, A. J. (2009). Integrated leadership: How administrators and teachers share transformational and instructional influence. *Journal of School Leadership, 19*(5), 504-532.
- Redmond, P. (2011). From face-to-face teaching to online teaching: Pedagogical transitions. In G. Williams, P. Statham, N. Brown & B. Cleland (Eds.), *Changing Demands, Changing Directions*. Proceedings ascilite Hobart 2011. (pp.1050-1060).
- Richardson, J. C., Besser, E., Koehler, A., Lim, J., & Strait, M. (2016). Instructors' perceptions of instructor presence in online learning environments. *The International Review of Research in Open and Distributed Learning, 17*(4). doi:10.19173/irrodl.v17i4.2330
- Richardson, J.C., Koehler, A., Besser, E., Caskurlu, S. Lim, J., & Mueller, C. (2015). Conceptualizing and investigating instructor presence in online learning environments. *International Review of Research in Open and Distributed Learning, 16*(3), 256-297.
- Richey, R. C., Klein, J. D., & Tracey, M. W. (2011). *The instructional design knowledge base: The theory, research, and practice*. New York: Routledge.
- Robinson, C. C., & Hullinger, H. (2008). New Benchmarks in Higher Education: Student Engagement in Online Learning. *Journal of Education for Business, 84*(2), 101-109. doi:10.3200/joeb.84.2.101-109
- Rovai, A., & Downey, J. (2009). Why some distance education programs fail while others succeed in a global environment. *The Internet and Higher Education, 13*(3), 141-147.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory. *Organization Science, 4*(4), 577-594. doi:10.1287/orsc.4.4.577
- Shaw, K. (2012). Leadership through instructional design in higher education. *Online Journal of Distance Learning Administration, 12*(3).
- Sher, A. (2009). Assessing the relationship of student-instructor and student-student interaction to student learning and satisfaction in web-based online learning environment. *Journal of Interactive Online Learning, 8*(2), 102-120.
- Stein, K. C., Macaluso, M., & Stanulis, R. N. (2016). The Interplay between Administrator Leadership and Teacher Leader Efficacy. *Journal of School Leadership, 26*(6), 1002-1032. doi:10.1177/105268461602600605
- Swan, K., Shea, P., Richardson, J., Ice, P., Garrison, D. R., Cleveland-Innes, M., & Arbaugh, J. B. (2008). *Validating a measurement tool of presence in online communities of inquiry. E-mentor, 2*(24), 1-12.
- Thomas, L., Tuytens, M., Devos, G., Kelchtermans, G., & Vanderlinde, R. (2018). Transformational school leadership as a key factor for teachers' job attitudes during their first year in the profession. *Educational Management Administration & Leadership, 174114321878106*. doi:10.1177/1741143218781064
- Treslan, D. L. (2006). Transformational leadership in the classroom: Any evidence? *Education Canada, 46*(2), 58-62.
- Wang, V. C., & Berger, J. (2010). Critical analysis of leadership needed in higher education. *International Forum of Teaching and Studies, 6*(2). 3-12.
- Weaver, R. R., & Qi, J. (2005). Classroom organization and participation: College students' perceptions. *The Journal of Higher Education, 76*(5), 570-601.
- Woodley, X. M., Mucundanyi, G., & Lockard, M. (2017). Designing counter-narratives: Constructing culturally responsive curriculum online. *International Journal of Online Pedagogy and Course Design (IJOPCD), 7*(1), 43-56.
- Yammarino, F. J. (1993). Transformational leadership studies: Bernard Bass' leadership and performance beyond expectations. *Leadership Quarterly, 4*(3), 379-382.
- Young, S., & Bruce, M. A. (2011). Classroom community and student engagement in online courses. *Journal of Online Learning and Teaching, 7*(2), 219-230.