



Substitutes for Leadership in Learning Environments

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Abstract

Although the literature evidences leadership's many influences on followers' outcomes, much less theory has been applied to leadership between instructors as leaders and students as followers, especially regarding what substitutes for such leadership in the classroom. In this theoretical paper, we argue that substitutes for organizational leadership operate in learning environments. Instructors (leaders) and students (followers) who interact in a learning environment (situation) create opportunities for learning leadership, defined as leadership that occurs when it moderates learning. In business organizations, various substitutes for leadership have been shown empirically to lessen and neutralize the influence of leadership. Drawing from leadership theory and research, substitutes for leadership in learning environments are discussed, along with practical implications regarding designing pedagogy at both classroom and program levels.

Keywords: substitutes for leadership, learning environment, education

Substitutes for Leadership in Learning Environments

Kerr and Jermier's (1978) substitutes for leadership theory influenced leadership research greatly, and it has become a topic to which much literature is dedicated (P. M. Podsakoff et al., 1996). Substitutes for leadership theory includes thirteen variables within three broad categories—individual, task, and organizational—that substitute for leadership in leader-follower relationships. The most significant contribution that the theory offers to leadership research is that factors other than leadership affect followers' outcomes, and that these factors lessen or even eliminate leadership's influence. Before introduction of the theory, leadership research conflicted, and little variance in outcome variables could be attributed to leader behaviors. Kerr and Jermier (1978) argued that "conclusions have had to be based on statistical rather than practical significance, and hypothesis support has rested upon the researcher's ability to show that the trivially low correlations obtained were not the result of chance" (p. 375). Substitutes for leadership thus filled a gap in discovering criterion validity in leader-follower relationships. The three substitute categories comprise a broad range of variables found commonly in organizations, and they explain lack of relationships between leader and follower outcomes.

Follower characteristics as substitutes for leadership include four variables—(a) ability, experience, training, and knowledge, (b) professional orientation, (c) need for independence, and (d) indifference toward organizational rewards. These substitutes relate to the follower because they represent individual differences that followers bring with them to an organization. Ability, experience, training, and knowledge refer to the capabilities a follower possesses to achieve outcomes. When followers are already capable of doing a task, the need for guidance lessens to the possible extreme of autonomy. Professional orientation refers to the extent that a follower maintains horizontal rather than vertical relationships, emphasizing peer, sometimes informal, rather than leader or hierarchical evaluations. Need for independence refers to the need a follower has to remain autonomous when completing tasks, and to behaviors that

associate with sustaining independence from others, including leaders. Indifference toward organizational rewards refers to the extent to which a follower places no value on rewards for tasks completed, deriving from the perception that there is no causal relationship between effort and reward, or valuing strongly things that cannot be obtained at work.

Task characteristics include three variables—(e) intrinsically satisfying tasks, (f) unambiguous, routine, and methodologically invariant tasks, and (g) task-provided feedback concerning accomplishments. When completing a task is its own reward, the need for anyone to lead a follower to outcomes reduces, defining intrinsically satisfying tasks. This is especially true when followers derive a great deal of satisfaction from the work that they do. In comparison, when there is only one way to complete a task, or when a follower's job is simple, the unambiguous nature of tasks reduces the need for, or the effects of, leadership. When results of completing a task are immediately apparent, or when mistakes are easily fixed or hidden, task-provided feedback substitutes for leadership.

Organizational characteristics include six variables—(h) organizational formalization, (i) organizational inflexibility, (j) close-knit, cohesive, interdependent work groups, (k) advisory and staff functions, (l) organizational rewards not within the leader's control, (m) spatial distance between leader and follower. Organizational formalization represents a substitute for leadership when an organization defines its employees' duties and processes finely. Similarly, when an organization enforces rules inflexibly, the need for leadership reduces or is eliminated. When employees work closely with co-workers, relying on them for feedback, information, guidance, and informal advice, a leader's influence when providing these same resources reduces. When work groups are interdependent and function, to at least some degree, without input from a leader, that leader's influence is substituted with interdependence. Advisory and staff functions refer to supportive people who or groups that provide information and paths to completing assignments, or parts of them. Such people and groups reduce reliance on a leader for these functions. One aspect of leadership is providing a path from outcomes to rewards, but when

rewards lie outside of a leader's control, followers seek paths other than those that a leader initiates to achieve rewards. Physical distance between a leader and follower makes communication sporadic, and it weakens leadership messages, resulting in followers seeking other leadership or substitutes for it, including self-leadership and leadership from alternate sources.

Leadership in Learning Environments Between Instructors and Students

Extant organizational leadership literature evidences that leadership predicts a variety of outcomes across contexts, including charismatic (Bass, 1988; Conger & Kanungo, 1987; Schneider & Schröder, 2012), transformational (Bass & Avolio, 1994; Breevaart et al., 2014; Jackson, 2021), and self-leadership (Demir, 2021; Manz, 1986). Conceptualizations of organizational leadership also include various theories about the level (e.g., individual, dyad, group, and organizational) at which such leadership theories operate (Dansereau & Yammarino, 2005). These leader behaviors and their levels operate in a learning environment when an instructor (leader) influences, motivates, and inspires students (followers) to achieve outcomes (learning, grades, certification, work experience, etc.). For example, transformational instructors motivate students by emphasizing lofty goals, beyond immediate and tangible rewards of learning, and create visions of the future by behaving in ways that emphasize the greater purpose of learning. Students identify strongly with such an instructor and are inspired by the very nature of his/her behaviors. Transactional instructors motivate students by providing structure and paths to rewards. Meeting standards is the means by which students earn rewards, and the instructor monitors progress toward those rewards for deviations from standards that the instructor has defined. Transactional instructors focus on students achieving a minimum of standards rather than achieving goals beyond expectations. Students under a transactional instructor understand the paths to goals more clearly, but since progress is monitored for deviations, they are rarely allowed off the path. Laissez-faire instructors refuse to engage in leader behaviors, and they provide students with the minimum required to achieve

learning. Such instructors provide little to no useful feedback to students concerning learning, and they do not engage in behaviors beneficial to achievement of student learning or other outcomes. The laissez-faire instructor is essentially doing his/her job as if students were not a part of learning.

The descriptions above demonstrate that leadership plays a role in a learning environment, be it a traditional higher-education classroom, online learning platform, apprenticeship, or service-learning. However, leadership literature calls for research that considers the context in which a leadership theory is expected to operate (Belchetz & Leithwood, 2007; McLaughlin & Kunk-Czaplicki, 2020; Osborn et al., 2002; Porter & McLaughlin, 2006). In learning environments, students are influenced by factors other than the instructor, including individual differences and characteristics of both tasks and the learning organization. zzzThis paper suggests that that these factors operate as substitutes for instructor leadership, lessening the influence instructor leadership on student learning.

Leadership encompasses many characteristics and behaviors, such as collaboration, open-mindedness, respect for disparate perspectives, enthusiasm, confidence, perseverance, flexibility, and decisiveness (Dickerson et al., 2021; Schott et al., 2020; Stein, 2020). When considering the role that teachers, professors, and other instructors play, those individuals, by nature of their positions as instructors, engage in many leadership behaviors daily. Procuring collegial support, achieving consensus among diverse people and opinions, and proposing improvements, while simultaneously instructing and finding ways to enhance student learning, all occur in classrooms, departments, schools, and beyond, extending into broader areas of academia (Dickerson et al., 2021; Romanovski et al., 2019). Students' perceptions of professors as mentors are similar to how employees view a manager. Stark (2019) argues that optimal learning and development in a classroom derives from an atmosphere of support and challenge, and this works both ways, from instructor to student and from student to instructor. Students who view themselves as leaders begin with their own conceptualizations, and the

more students engage in leadership—the more they identify as leaders, increase their ability to lead, and increase their efficiency in doing so—the more involved they become in the practice of leadership (Jones et al., 2016). Many studies explore whether teachers are leaders, and the assumption that only administrators engage in leader behaviors and thus can be seen as leaders is incorrect. Schott et al. (2020) and Stein (2020) argue that teachers play roles regarding their job responsibilities that represent leadership. Job specializations, autonomy, the capability to provide direction, and the ability to influence a classroom, as attributes of a complete leader, support the view of instructors as leaders. Establishing projects, supervising, and setting goals are leader responsibilities, which instructors do in the classroom.

Moderators and Mediators

The distinction between moderators and mediators in behavioral research was not always clear or applied universally, and it took research to conceptualize how to theorize and test them (Baron & Kenny, 1986; James & Brett, 1984). A moderator is a variable that affects the magnitude of the relationship between a predictor variable (independent) and a criterion variable (dependent). When variable B is theorized or empirically found to affect when the relationship between variables A and C is significant, non-significant, reduced, increased, neutralized, etc., variable B moderates the relationship between A and C. In contrast, a mediator carries the relationship between two other variables. When variable B is theorized or empirically found to operate between variables A and C, and in doing so the direct relationship between A and C is non-significant, variable B mediates the relationship between A and C.

The traditional view in substitutes for leadership literature is to treat substitutes as moderators of leadership on criterion (outcome) variables, such as satisfaction with a leader, satisfaction with a task, or group cohesiveness. J. M. Jermier argued that “substitutes was introduced and intended as a generic term to allow for investigation of its potential as a moderated, mediated, or main effect” (as cited in Dionne et al., 2002, p. 454). Dionne et al. (2002) found little to no support for either moderated or mediated effects in a study of

substitutes for leadership, but Dionne et al. (2005) argue that data collection in many substitutes for leadership studies use either single-source (i.e., substitutes and outcomes collected from the same source) or two-source (i.e., leadership and substitutes collected from one source and outcomes from a second) collection methods. The potential for common-source bias (P. M. Podsakoff et al., 2003) increases the chances of making a Type I error (i.e., finding evidence of a relationship where none truly exists).

When studying leadership, substitutes for leadership, and outcomes in a learning environment, a common practice is to include items that measure these constructs on a survey and administer that survey to students. In both experimental and non-experimental designs, this practice yields a greater number of subjects in a shorter period at a lower cost. However, depending on how the constructs are used in a study of substitutes as moderators, mediators, or direct effects, the potential for common method bias is present, possibly confounding the study. Independent variables and the moderators constructed from them commonly correlate greatly (Frazier et al., 2004), but when the source of a correlation is due, or partially due, to common-source bias, incorrect conclusions might be drawn from the effects of leadership and substitutes for leadership on outcomes. Thus, research on substitutes for leadership in learning environments requires multi-source, multi-method data collection.

Multi-Level Research

During behavioral research, Dansereau et al. (1984) propose the *variant* (*variable* and *entity*) approach to theory formulation and hypothesis testing. The authors argue that when using the *variant* approach, researchers must explicitly identify relationships among both variables and the level of analysis (e.g., individual, dyad, group, or organization), or the categories or classification of entities at which variables are expected to operate. Suppose a researcher is assessing whether substitutes for leadership operate at the individual or group level of analysis in an educational context, and thus data are collected from multiple students per instructor. In this case, the individual represents the individual level of analysis, and

students in a class taught by an instructor represent the group level of analysis. Significant variability between but not within groups indicates a Wholes inference, which is synonymous with Average Leadership Style (ALS), where followers experience leader behaviors equally (Dansereau, et al., 1973). A Parts conclusion is inferred when significant variability exists within but not between groups, which is synonymous with Vertical Dyad Linkages (VDL), where followers are rank ordered in terms of the leader behaviors they experience (Dansereau, et al., 1975). A Null inference is indicated when significant variability is found neither between nor within groups, and the conclusion is that the source of variability of perceived leader behaviors is unknown. Significant variability both between and within groups indicates an Equivocal inference, where the source of variability of perceived leader behaviors derives from the individual. This inference is synonymous with Leader-Member Exchange (LMX), where inclusion in a group does not influence perceived leader behaviors (Dansereau et al., 1975).

P. M. Podsakoff and MacKenzie (1995) assess multi-level effects of leadership and its substitutes on various outcomes, including employee attitudes and role perceptions, finding that substitutes for leadership operate at both individual and group levels. In a critique of these findings, Murry (1998) argues that “it is imperative that researchers explicitly align their theoretical formulations with their empirical testing” (p. 267), and that since the original substitutes for leadership framework identifies the level of analysis *a priori* (i.e., individual characteristics at individual levels of analysis, task characteristics at the group level, and organizational characteristics at the organizational level), “...it does not make theoretical sense to specify...these constructs at any other level than their original *a priori* designation” (p. 263).

In a study of higher-education contexts, Garger and Jacques (2008) found that instructors’ intellectual stimulation and individualized consideration behaviors operate at the individual level of analysis, suggesting that variability in perceptions of some transformational leader behaviors are attributable to students’ individual differences, rather than to instructors’ leadership. This finding suggests that researchers, instructors, and administrators cannot

assume that students are receiving the same leadership in education environments simply because students are led by the same instructor. Instead, perceptions of education leadership might be a function of the individual, not the group (e.g., students in a class).

The emerging levels-of-analysis paradigm is changing the conceptualization of constructs in empirical and theoretical literature as specifications of levels become more prevalent while constructing and testing behavioral theories. Jung and Sosik (2003) found that group potency, a construct theorized to operate at the group level (L. E. Parker, 1994), operates at varying levels of analysis depending on context. Jung and Sosik (2003) found that group potency operates as an individual-level construct at the middle of teams' lifecycles, before teams received feedback, and as a group-level construct near the end of the lifecycles, after performance feedback was received. This finding suggests that specifying a level of analysis correctly depends on both context and a construct's theoretical grounding.

It is easy to argue that student knowledge, as a substitute for leadership, operates at the individual level. However, as individuals in groups work together, knowledge is shared and interspersed among team members who are working toward a common goal. Over time, individuals in groups become homogenous regarding knowledge and the abilities required to complete tasks, and they then become statistically and practically indistinguishable within groups. When this occurs, knowledge and abilities operate at the group level of analysis, where there exists significant variation in terms of knowledge and abilities between groups, but not within them. Therefore, specifying the level of analysis at which substitutes for leadership operate must include contextual, especially longitudinal, attention.

Leadership as an Instrument of Learning

Leadership as an instrument of learning in a classroom environment has not received much attention, likely due to the misperception that instructors are givers of knowledge rather than as part of a learning process. One classic conceptualization is that leadership is the union of leaders, followers, and situations, and thus leadership is a process, not a person (Hollander,

1978). When instructors (leaders) work with students (followers) to construct learning (situation), extant leadership theories predict outcomes as they do in other contexts. Just like leaders in a business organization, the context in which leadership is most commonly studied, instructors initiate structure, inspire, motivate, develop standards, intellectually stimulate, and act as role models and mentors to students; these behaviors mirror the leadership constructs found in the Full Range Leadership Model (Avolio & Bass, 1995).

Learning leadership is defined here as the degree to which leadership constructs learning in followers. We argue that just as leadership in business contexts can be substituted and/or neutralized by individual, task, and organizational variables, so do both leadership and its substitutes influence learning. Instructors aware of substitutes for learning leadership can structure pedagogies to emphasize leadership qualities that they believe are instrumental to learning outcomes. Instructors can additionally exploit substitutes that free up time and other resources to engage in other leadership behaviors.

Substitutes for Learning Leadership

This section discusses how the substitutes for leadership that Kerr and Jermier (1978) identified are found and operate in education environments. The distinction between this setting and the traditional setting discussed above is that perceptions of leadership effectiveness occur in a context (Antonakis et al., 2003; Derler & Weibler, 2014; Plachy & Smunt, 2021; Vroom & Jago, 2007; Willis et al., 2017; Yukl, 2010). Determinants of leadership effectiveness are contextually based, and since the context is transitory, leadership that occurs in a classroom is different than what occurs in traditional settings. We argue that the classroom environment represents a special dynamic and form that is irreplicable in a traditional setting. For example, a greater power difference is evident in classrooms versus organizational settings. Leadership in the classroom thus warrants a separate discussion, and this section explores unique characteristics that leadership substitutes influence in education contexts.

Although many levels can be identified in education environments, we confine discussion to individual (i.e., student), group (i.e., a class and instructor teachers), and the collective (i.e., department or university) levels of analysis. Other levels include work groups in a class, students' majors or minors, a university system, or even all universities within a region or country. It is thus the responsibility of each researcher to define levels of analysis in subsequent studies of substitutes for leadership in learning environments.

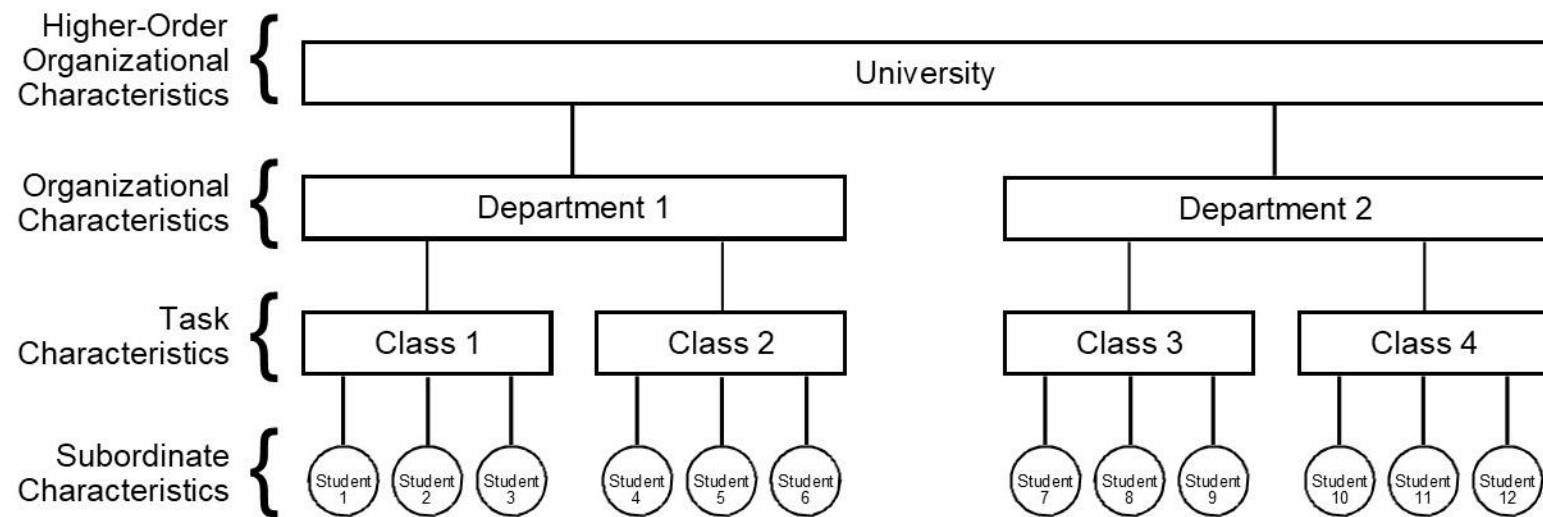
We assume that follower characteristics operate at the individual level, and that they pertain solely to students. Such characteristics include skills, perceptions, and beliefs that students possess before entering the educational environment. Task characteristics are those that students in the same class or educational environment share in common, including tests, assignments, learning processes, and classroom requirements that students must accomplish to complete a course. Organizational characteristics are college or departmental aspects, and any requirements that affect students equally at that level, including departmental attributes such as structures, processes, and support. These multiple levels of substitutes for learning leadership are illustrated in the Figure. For the purpose of this paper, university-level substitutes also represent organizational characteristics, in addition to departmental ones, but they additionally represent higher-order substitutes that take the form of general policies, processes, or systems.

Followers' Characteristics as Substitutes for Leadership in the Classroom

Students who possess knowledge in a subject area of a course are likely to perceive that learning leadership plays a role in their learning. This issue has been addressed, for example, in one-year, or fast-track, MBA programs for students who are already proficient in business and management. However, no pedagogy can address all variations in the experience students already possess when entering a course, and the only sensible way to address such variation is categorically. The more student ability and knowledge diverge from course material, the more instructor leadership plays a role in perceived learning leadership.

Figure

Sources of Substitutes for Leadership in Learning Environments



Students who look to horizontal rather than vertical linkages for feedback and validation of accomplishments lessen perceived contributions of learning leadership. When students work in groups and take advantage of university resources (e.g., writing centers), they create horizontal linkages. As class size increases and interactions between individual students and instructors decrease, students seek horizontal relationships and perceive instructor leadership as less instrumental to learning. Tutors who provide one-to-one learning leadership have the opportunity to create deeper relationships with students, lessening the influence of learning leadership from the instructor of record.

Students with a high need for independence behave in ways commensurate with taking responsibility for both the processes and outcomes of learning. Such students not only avoid taking advantage of instructor leadership, they do not perceive it as valuable. Low need for independence students seek leadership from instructors, and in the extreme they seek it beyond what an instructor is able or willing to offer. Students with a high need for independence view active leadership styles as unnecessary, preferring transactional, especially passive, leader behaviors. When students do not value the rewards associated with learning, including grades, accumulation of knowledge, and practical experience, leadership reduces as an instrument of learning. This phenomenon derives from a belief that effort is not a path to reward, or when grade distribution, for example, is seemingly random. Students not intrinsically motivated to learn or earn rewards associated with learning might be the result of disparities regarding values. For example, a student who believes that there are more important aspects to life than earning grades or learning perceives leadership, as an instrument of learning, as less necessary than do students more intrinsically motivated to earn learning rewards.

Learning Characteristics as Substitutes for Leadership in the Classroom

The tasks students complete while learning can be an enjoyable journey that transcends rewards, and thus the journey itself is the reward, and learning is inevitable. Such students do

not need motivations afforded by leadership, and thus the effects that a leader's behaviors have on learning are discounted. In this situation, students lose track of requirements needed to earn rewards, which commonly represent a measurement of learning (e.g., grades). Transactional learning leadership is particularly frustrating to students who find learning tasks intrinsically satisfying, since they feel constrained by learning leadership, rather than free to choose their own paths to learning.

When learning is routine, learning leadership's effects reduce, which occurs when pedagogies rarely deviate from a lecture–testing–reward cycle, repeated several times during a course. Lectures delivered by an instructor without variation leads students to perceive the instructor as part of an invariant learning process, rather than as a motivator within it. Consequently, students can develop the perception that leadership behaviors are unnecessary and, to extreme, a hindrance to learning.

Leadership includes collaboration, open-mindedness, respect for disparate perspectives, enthusiasm, confidence, perseverance, flexibility, and decisiveness (Dickerson et al., 2021; Stein, 2020), and instructors engage in these behaviors in ways that reinforce learning leadership. Garnering support from diverse people and groups who hold disparate opinions, while simultaneously instructing and finding ways to enhance student learning, are behaviors in which instructors engage across classrooms, departments, schools, and even to broader educational entities, such as university systems (Dickerson et al., 2021). Students' perceptions of instructors as mentors are similar to those that employees hold of managers. Stark (2019) argues that optimal learning and development in a classroom derives from an atmosphere of support and challenge, and this works both ways, from instructor to student and from student to instructor. Students who view themselves as leaders begin with their own conceptualizations, and the more they engage in leadership—the more they identify themselves as such, increasing their abilities and efficiencies at doing so—the more involved they become in leadership (Jones et al., 2016).

Stein (2020) explores the argument of whether instructors are leaders, including the common assumption that only administrators are leaders, arguing that instructors perform roles in their job responsibilities that are part of leadership. Job specialization, autonomy, the capability to provide direction, and the ability to influence a classroom's situation, all attributes of a complete leader, support instructors as leaders. Establishing projects, supervising, and setting objectives and goals, again all leader responsibilities, make instructors leaders in the classroom.

Pedagogy that requires students to learn by trial-and-error makes feedback self-evident when completing assignments. Suppose students in an engineering course are tasked with building a structure, without supervision, that supports 100kg by using as few toothpicks, or some other improbable material, as possible. In this situation, students are able to hide or reduce the effects of mistakes, and fix mistakes, as a part of learning. Although this method of learning is effective, the necessity of learning leadership lessens as the saliency of task-provided feedback increases, especially when rewards depend on resulting performance, not supervised learning.

Students work in groups to complete class assignments, work at service-learning, and study for tests. During interactions with other students, the opportunity for peer feedback and informal communication increases, resulting in greater reliance on such communication for affirmation of performance, idea generation, and sounding-board relationships. When these relationships exist, leadership from an instructor as an alternative source reduces or is substituted.

Institutional Characteristics as Substitutes for Leadership in the Classroom

When departments are highly structured, with great attention spent defining relationships between instructors and students, less ambiguity exists regarding the roles that instructors play in delivering education to students, and regarding the roles students play in the process. For example, if an education department has strict guidelines that define grievance processes, including external mediation between instructors and students, such guidelines represent

substitutes for leadership because students have recourses that lessen the need for deeper relationships with instructors. Instructors, who also enjoy the benefits of such guidelines, are freed from creating similar guidelines independently or for each class, the result of which is less instructor-student interpersonal conflict resolution.

A department that strictly enforces its own rules reduces the need for learning leadership because the department itself has a system in which deviations from the rules are prohibited. In such an environment, students have less need to engage in communication with instructors, further lessening the frequency, influence, and opportunity for instructors to engage in softer, interpersonal communication with students regarding learning and goals. Strict enforcement of rules leaves little room for the individuality of an instructor, as leader, to deliver course content in ways that extend beyond traditional classroom learning. Transformational leadership, for example, requires breaking free from the conventionalism initiated by a leader. Strict enforcement of rules leads students to perceive few differences across instructors, lessening the influence of learning leadership.

Departments and universities often have support people and organizations, such as writing assistant centers, ombudspersons, and academic counselors. A student with clear understanding of the requirements for graduation has less need for leadership from an advisor or records office to know what courses to take and when. Career development provides students with résumé-writing and job-search assistance, and a student with a full-time job has less need for leadership than one who has little or no experience working. Expectations of an undergraduate versus graduate student also dictate the amount leadership needed. Those enrolled in graduate programs are expected to operate at a higher self-learning level than undergraduates are. The needs, degree of experience, maturity, and emotional intelligence of each student also dictate how much leadership is required to have a satisfactory experience.

Spatial distance between instructor and student is similar to that of employees who work remotely, or virtually. Just as employees must engage in self-leading behaviors, such as time

management, organization, and perseverance, so too do students learning in a virtual environment. Assignments have due dates, material assigned must be read and processed, and commitment to completion must be established. A student's self-leadership is imperative to completing a course absent a collocated instructor. An example is an online course during which a student participates remotely and yet remains part of a larger group; the instructor is not present physically, but the student proceeds through the course to completion by following the material outlined without direct leadership from the instructor. Another example is student teams. Such teams have the same need for self-leadership when working on projects independent from the classroom, whereby expectations, values, and rewards are self-managed among members, with little input from an instructor.

Discussion

Many leadership substitutes operate in learning environments. Beginning in the classroom and moving to higher institutional levels, many characteristics found across these levels act as substitutes for leadership, and they derive from disparate places, serving to facilitate processes and outcomes associated with learning. From a multi-level perspective, administrators and their personal styles of leadership, academic mission statements, academic strategic initiatives, resource availability, personalities, and appeal processes represent just some of these sources of substitutes. Add to those student demographics, the number of tenured versus adjunct professors, and online courses, and many more variables affect who acts as leader and how leadership is delivered. The materials, projects, and tasks assigned during a course might be completed with little to no instructor presence, and instructors also influence the effectiveness of leadership substitutes.

Individuals and Substitutes for Learning Leadership

Instructors must determine the type of leadership that students need based on a variety of student characteristics, and for instruction to be successful, an instructor must also identify the degree of leadership that students need. If a student demonstrates high performance,

maturity, work experience, or other similar characteristics, an instructor should allow for greater self-leadership. Such a student possesses the capacity to handle the responsibilities and expectations that a course demands. In every classroom, instructors teach students who have varying needs. By remaining flexible as a learning leader, an instructor affects leadership that depends on the courses taught and what students are being taught. For example, daytime students are commonly different from nighttime students regarding age, maturity, responsibility, and intent; an instructor cannot teach and lead the same way across classes and semesters because the variables are many and within limited control of the instructor. Methods for controlling some of these variables include addressing expectations and requirements on the syllabus, which itself addresses disparate expectations from students based on class year (i.e., freshman, sophomore, etc.). Requiring students to work in teams during the semester is another method that could be used because individuals working in teams might not have the self-leadership skills to substitute for an instructor's leadership. To address varying skills, an instructor could require team members to agree on a team contract to provide leadership during the instructor's absence.

Degrees of the leadership substitutes of knowledge, feedback, independence, and rewards in relation to students' individual characteristics need to be assessed by the instructor at the start of each course. By gauging the emotional maturity of a student, an instructor can determine the style and degree of leadership needed in the classroom, and the more accurately this is done, the better the course experience for both student and instructor.

Tasks and Substitutes for Learning Leadership

Students are motivated by rewards (i.e., grades) and learning (i.e., the experience). Among students who are task focused, task leadership works well for them, but among those who are more interested in learning as a process, that leadership style would be prohibitive. Depending on what reward a student is seeking—grades or experience—an instructor needs to deliver leadership differently, and depending on the subject being taught (e.g., math versus

organizational behavior), an instructor must adjust the style and amount of learning leadership. A math class lends itself to unchanging formulas and rules, but organizational behavior addresses people's differences and idiosyncrasies, and rewards might be different for each. Grades are certainly important to both groups, but understanding behavior is likely more important to students in an organizational behavior course, thereby allowing for greater leadership substitutes. The experience, knowledge, and perspectives of those in the class also play a more important role during discussions, allowing more opportunities for transformational leadership. One leadership substitute that applies to all topics of study is posting of assignment rubrics. Although such rubrics provide an instructor with reliable grading schemas for assignments, they also provide students with clear expectations related to them. Cox et al. (2015) argue that rubrics provide students with a feed-forward system, allowing them to regulate their focus of energy toward goals and performance.

Online learning platforms such as Connect, Mindtap, MyLab, and Sage Campus use artificial intelligence to help students learn concepts. Weak performance is strengthened with visual, verbal, and active instruction methods, and if a student is sufficiently motivated, the process associated with a learning module can be repeated until mastery is achieved, prior to formal grade assessments. Using online learning platforms is straightforward; students log into a platform where they are reminded of pending due dates, choose from among available assignments, monitor their own progress, identify persistently problematic concepts, and initiate contact with instructors when clarification is needed. The syllabus represents another source of student guidance in the absence of an instructor's direct presence. To serve this purpose, instructors can dedicate a portion of the syllabus to address expectations regarding student-student interactions, instructor-student interactions, academic integrity, assignment formats, assignment late policies, class attendance, and student resources that apply to the course. Instructors can use peer learning groups to assess independence from the instructor, while leveraging the positive interdependence present when group goals on common tasks align

(Brame & Biel, 2015). Another advantage of peer learning groups is that the peer-learning model is scalable to accommodate classes of any size.

Instructors should offer students greater independence by establishing the norm that students bear some responsibility for their own learning (Pandolpho, 2018). Instructors should give assignments that have realistic scenarios, and invite plausible, relatable responses to non-trivial challenges during an assignment. Instead of structuring assignments that have clear and scripted answers, instructors should design assignments that reflect real-world uncertainties, thus encouraging dialogues and debates between students and student teams. By adopting this model, learning is transformed from a passive form to one that engages students in active learning. Positive outcomes associated with this approach are numerous, including increases to self-perceptions, and attitudes toward the course, instructor, and majors, leading to greater student retention (Assor et al., 2002; F. Parker et al., 2017).

Organizations and Substitutes for Leadership

An instructor needs to be aware of the learning institution's mission, vision, philosophy, and structure, as any employee does, the importance of which is creating consistency between the institution and those who deliver its services. A highly structured institution, with many rules, policies, and procedures, is less likely to develop self-leadership among its instructors. The expectation and resulting rewards are then based on compliance, affecting what occurs in the classroom. If an instructor knows the rules and procedures, and the administration's preferred approach, it is less likely that the instructor will conduct classes dissimilarly. When autonomy and creativeness are encouraged, the instructor is more likely to seek and encourage the same among students. Instructors thus need to be mindful of the institution's priorities and style, and remain flexible to deliver education in a way that accords with the institution.

The Figure illustrates learning leadership substitutes and how they operate in higher-education, with both top-down and bottom-up discussions warranted. Higher-level organizational characteristics influence schools, influencing how a department operates, which

in turn affects how an instructor delivers education to students. Other levels above the university are also possible, such as federal, state, and local laws that determine the inclusion and acceptance of leadership substitutes. One contrast lies in students' needs and abilities, and thus instructors must determine the degree and type of leadership required, which subsequently influences the broader ways that departments address students' needs overall. Departmental decisions prompt the institution to make decisions that consider recommendations and requests from students and instructors. Administrators, in turn, react to what is being pushed up, reacting sometimes with leadership that makes other levels successful. A complex, multi-level interaction occurs with leadership that needs to be amenable to change. When the entire institution operates similarly, whether positive or negative, no room exists for students to do so differently.

Future Research

Leadership is studied abundantly across various topics and literature, but the study of leadership in educational contexts at the instructor level has been limited. Future research should assess the levels at which learning leadership occurs, especially considering the variety of schools within colleges, colleges within universities, public versus private institutions, undergraduate versus graduate programs, and majors. At the classroom level, assessment of sources and categories of sources of leadership substitutes should be assessed to determine which have the most influence. Individual students' ability to organize, interpret assignments, work in groups, and complete tasks should be evaluated regarding when and which substitutes matter. Regarding instructors, future research should focus on single types of leadership styles and their associated behaviors to determine their effects on students. At the instructor level, whether using learning management systems with student teams increases or decreases learning leadership substitutes should be assessed. Instructors' clarity and degree of comfort with autonomy should also be studied regarding effects on students' willingness to use substitutes during learning.

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