

Making sense of adaptive leadership: Elevating sensemaking to help students learn leadership

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Abstract

This qualitative study explores how the communicative process of sensemaking can help equip students to lead. Combining evidence from literature on adaptive leadership and sensemaking, a semi-structured interview protocol was developed. Following five days of observer-participant data collection, 32 participants engaged in semi-structured interviews with students ($n = 12$), facilitators ($n = 11$), and expert leadership practitioners ($n = 9$) and data was analyzed using the phronetic iterative approach (Tracy, 2019). Findings offer insights into how leadership facilitators and experts can help students make better sense of adaptive leadership to then more effectively tackle adaptive challenges in their communities and organizations. This study contributes to the growing body of empirical research on adaptive leadership and extends our current understanding of how sensemaking manifests in leadership contexts. Findings show sensemaking is a necessary and crucial component and should be framed as a leadership skill within the teaching of adaptive leadership. This study found that sensemaking is both an individual and collective endeavor which requires intentionality and does not happen by accident. Facilitators and experts of adaptive leadership teaching and training should seek to include significant, purposeful time for sensemaking through a variety of mechanisms including debriefs, small groups, reflection assignments and practical application. Intentionality when including sensemaking as part of leadership curriculum makes teaching adaptive leadership less risky and mitigates uncertainty experienced by students. This study also extends existing metaphors for understanding the inherent uncertainty and disequilibrium present within adaptive leadership by including a metaphor of a barometer to both attend to pressure and make predictions about future needs within adaptive leadership learning environments. Facilitators and experts of leadership should pay close attention to the pressures students feel within adaptive

leadership classrooms and trainings, and seek to engage wholeheartedly to offer both challenge and support. Sensemaking is a key communicative ingredient to solidify learning and productive application of adaptive leadership concepts and should be elevated in adaptive leadership scholarship and pedagogy.

Keywords: Adaptive leadership, sensemaking, leadership teaching, leadership education

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Chapter 1: Rationale

With economic and systemic pressures in organizations mounting, and challenges including the effects of a global pandemic still looming, one could ask, is the leadership currently being executed by both those with and without formal authority sufficient to meet the challenges of today and tomorrow? The global demand for leadership is present in a variety of sectors, but confidence in acts of leadership is low (Adame et al., 2021). Many businesses contend leadership is a high priority, which is demonstrated by increasing investment in leadership development (Wakefield et al., 2016). Adame et al. (2021) describes this need: “given the current leadership crisis and the failure of most educational interventions to produce effective leadership, innovative approaches to leadership education are critical” (p. 287). This study embraces adaptive leadership as an innovative approach to help move the needle on some of the most daunting challenges of today. Leadership facilitators, in particular, are tasked with preparing college students to effectively lead when facing present and future challenges. Sensemaking, or the process of understanding uncertain contexts and revealing clearer perspectives, is a necessary leadership skill that is rarely taught or explored (Ancona, 2012).

But how exactly do leadership facilitators, including front-of-room facilitators, one-on-one coaches, and small group facilitators, create the conditions necessary for students to learn and practice adaptive leadership? Leadership is more than a cognitive process; it is also often felt in people’s hearts and guts (Hufnagel, 2015). Scholars adopting the adaptive leadership perspective, one of the main theoretical frameworks for this study, agree that leadership is difficult to teach, but most certainly can be learned (Parks, 2005). Because adaptive leadership can be learned, the classroom becomes an important site to study. This process of teaching also trains students to be equipped to engage in leadership beyond a collegiate context. Adaptive

leadership scholarship argues leadership can be learned, but that experiential practice is more important than simply learning leadership theories. Green and Fabris McBride (2005) frame the leadership learning process as dynamic and creating conditions that mirror settings outside a classroom saying, “leadership, although difficult to teach, can be learned in a dynamic classroom setting where learners experience the very conditions that make exercising leadership challenging in the public and organizational spheres” (p. 37). This study focuses on the leadership classroom as the context for leadership learning. Understanding how students learn leadership could help scholars and facilitators better understand how leadership should be taught. Teaching adaptive leadership places facilitators on display as one who is actively learning as they practice leadership in ways that can be observed by students. As Hufnagel (2015) states, teaching adaptive leadership utilizing an experiential learning environment, is “in effect breathing life into theory through the unfolding narrative in the room...the method seizes the opportunities alive in the classroom to both discern and dissect vital leadership thinking and strategy” (p. 52).

Leadership is taught in a variety of ways, but adaptive leadership is best taught and learned through an experiential model (Hufnagel, 2015). *Adaptive leadership* is defined as, “the process of mobilizing people to tackle tough challenges and thrive” (Heifetz et al., 2009, p. 14). Much is still unknown about how students make sense of leadership and how facilitators can effectively create the conditions necessary for experiential learning to take place (Hufnagel, 2015; Parks, 2005). In this study the communicative functions of sensemaking and sensegiving will be explored to understand the experience of learning adaptive leadership by facilitators and students in a leadership course. *Sensemaking* is a process of turning novel contexts into situations that can be easily explained to help people appropriately move to action (Weick et al., 2005).

Sensegiving is an iterative process where individuals help others and collectively sensemake to enable action (Gioia & Chittipeddi, 1991).

Sensemaking and sensegiving are most often needed when uncertainty and chaos exist, and an understanding of the world becomes incomprehensible in some way (Weick, 1995), as is the case with adaptive challenges. Ancona (2012) argues sensemaking is an essential leadership skill, but “while leadership literature and leadership training tend to concentrate on interpersonal skills, negotiating, visioning, execution, decision-making, charisma and collaboration, sensemaking is seldom on the list” (p. 13). A better understanding of the relationship between sensemaking and adaptive leadership is needed as it is a tool leadership facilitators can use to help students make sense of and more effectively engage in adaptive leadership. This increase in clarity of understanding is useful when determining next steps to engage in acts of leadership leading to more productive progress on challenges facing organizations and communities. Further, this study seeks to add sensemaking to the list of necessary adaptive leadership skills. Acknowledging that adaptive leadership requires additional learning to move forward to productive action bolsters the communicative process of sensemaking. Gaining a better understanding of how sensemaking and sensegiving take place within an adaptive leadership context, this study seeks to explore how people sensemake and navigate the adaptive challenges they face in their organizations and communities.

Adaptive leadership blends modern approaches to leadership and positions communication and collective action as critical to leadership practice and progress. In this study, I argue that helping people navigate the uncertainty of constantly shifting realities through the communicative process of sensemaking is an act of leadership. This study introduces *adaptive leadership*, the process of mobilizing people to make progress on adaptive challenges (Heifetz et

al., 2009), then proposes the communicative functions of *sensemaking*, how we interpret as well as author situations (Weick, 1995), and *sensegiving*, how we frame possible interpretations and viable paths forward (Gioia & Chittipeddi, 1991), to offer insights about how adaptive leadership can be taught and learned. Sensemaking and sensegiving are particularly well suited for helping people to make sense of chaos and change including the adaptive nature of adaptive leadership (Ancona, 2012).

In the chapters that follow, I offer a framework for an empirical understanding of adaptive leadership as a sensemaking process. The second chapter begins by presenting the history of leadership. Next, overviews the essential elements of adaptive leadership as a theory and practice. Third, presents sensemaking theory and finally provides comparisons and connections between adaptive leadership and sensemaking/sensegiving. Chapter three presents a method to explore these relationships; specifically, I present both the observer-participant and interview data collection and detail the phronetic iterative analysis to better understand how the processes of sensemaking and sensegiving can help facilitators and students of adaptive leadership better navigate the uncertainty and chaos inherent in adaptive challenges. Chapter four presents the findings of this study including the relationship between sensemaking and adaptive leadership (RQ1), the process of how sensemaking takes place within adaptive leadership teaching (RQ2), and how the function of sensemaking helps manage the disequilibrium and uncertainty inherent within adaptive leadership contexts (RQ3). Chapter five highlights the implications of this study. The findings reveal that sensemaking needs to be intentionally included within adaptive leadership contexts for productive learning outcomes; sensemaking itself is a leadership skill; a significant allotment of time needs to be devoted to sensemaking

along with different modalities including small groups, debriefs, reflection assignments and both individual and collective times of sensemaking, were found to be useful.

Chapter 2: Review of Literature

History of Leadership Development

Leadership, or a way of action to change the trajectory of circumstances, has become widely used and broadly defined. While leadership is present within curriculum both across the United States and around the world, leadership is not a cohesive discipline (Hufnagel, 2015). Hufnagel claims discipline status occurs “when there is something of a consensus about what is known and how we should research and teach” (p. 52). The language and theories used to understand and teach leadership are disparate. For scholars and facilitators to move closer to claiming a discipline status of leadership, understanding the history of leadership and choosing a theory to ground the teaching of leadership becomes important (Parks, 2005). This study positions *leadership* as “the practice of mobilizing people to tackle tough challenges and thrive” (Heifetz et al., 2009, p. 14). An overview of relevant theory of adaptive leadership is useful to better understand how adaptive leadership is positioned within this study. A review of more contemporary approaches to leadership including trait-based, situational leadership, and contingency theories will be highlighted prior to moving to more modern approaches including transformational, discourse, and finally, adaptive leadership. This historical background showcases why adaptive leadership is a particularly useful lens when trying to understand the utility and function of sensemaking and sensegiving within modern leadership classrooms.

Contemporary Approaches to Leadership

Trait-based Leadership. The earliest and most traditional views of leadership point to leaders as those in power with authority to drive change and make decisions (Burns, 1978). This perspective views leadership as a privilege for the elite few at the top of an organizational flowchart including chief executive officers, presidents, and board members (Chrislip &

O'Malley, 2013; Heifetz, 1994). The great man [sic] theory argues that leadership is generated from inherited traits (Carlyle, 1841). This trait-based theory contends certain people, specifically men, have the necessary qualities to effectively lead (Borgatta et al., 1994; Heifetz, 1994).

Stogdill (1948) tested this 'great man' theory of leadership and found in order to be great at leadership, one must possess traits including being assertive, socially acceptable, persistent, self-confident, responsible, and intelligent. This trait-based approach to leadership emphasizes the attributes that set apart effective leaders from ineffective ones based on the qualities they (inherently) possess, which contrasts with a more modern belief that leadership can be learned (Northouse, 2013). Trait based leadership is significantly different from other approaches to leadership in that it places focus solely on the leader and not on followers or people the leader engages when leading. It also holds the assumption that organizations need to have the correct people in positions of authority to lead an organization effectively. One of the dominant critiques of this approach is that it assumes that people inherently possess leadership qualities and go on to become great leaders. This is not always the case, and this theory is unnecessarily exclusive in nature.

Situational Leadership. The next iteration of leadership theory moved to a situational approach and considered the context leadership takes place within (Northouse, 2013). A situational perspective emphasizes that leadership is much more about what is going on around the person leading and much less about their inherited traits as an antecedent of one's suitability to engage in leadership (Blanchard et al., 1993). Heifetz (1994) explains, "what an individual actually does when acting as a leader is in large part dependent upon characteristics of the situation in which he [sic] functions" (p. 17). Situational leadership requires that the leader or person in authority match their leadership style to each subordinates' needs. This includes

varying degrees of the functions of delegating, supporting, coaching, and directing based on the leader's leadership style and development level of subordinates (Blanchard et al., 1985).

A situational approach to leadership focuses on the behavioral patterns of a leader who is seeking to influence others and includes both supportive (relational) and directive (task) behaviors (Northouse, 2013). Supportive behaviors assist in creating a comfortable and supportive organizational culture. A high priority of this leadership theory is consideration of the role of communication and how to support people socially and emotionally within organizations (Blanchard et al., 1985). Directive behaviors are also included within situational leadership and are centered on task completion and providing clarity to the work that needs to be accomplished within an organizational context, including behaviors that can be classified as delegating and directing (Blanchard et al., 1985). The situational leadership approach is prescriptive in nature, but unlike trait-based theory calls on leaders to embrace a stronger degree of flexibility due to situational theory calling for leaders to respond to the specific needs of each subordinate (Northouse, 2013). A few critiques of situational leadership include that it is focused on more short-term than long-term gains, that it depends on the leader's relationship with subordinates, and assumes a leader can accurately assess situations which provides a limited perspective on organizational challenges.

Contingency Theory. Contingency theory centers leadership around what is needed within a particular context. Contingency theory expanded the field of leadership development to look at how leaders influence followers and how a leader's leadership capacity is obtained (Fiedler, 1964). Champions of this theory argue that rather than traits of great men or components of ideal situations, the interaction of both is more interesting (Northouse, 2013). Contingency theory believes the characteristics of a leader are less important than acting with

appropriate leadership based on the context (Fiedler & Garcia, 1987). The theory is called contingency theory because it argues a leader's effectiveness depends on how well the leader's style fits the context. Therefore, contingency theory is most concerned with situations and styles of leadership (Northouse, 2013). Situations are assessed utilizing a few factors including the dynamics of the relationships between leaders and organizational members, how clear the tasks at hand are spelled out for organizational members to understand, and the amount of authority or power a leader has over followers (Fiedler, 1964). Contingency theory has broadened an understanding of leadership by asking for the consideration of how various situations and contexts interact with a leader's traits. This moves leadership beyond a focus on the characteristics of a particular leader person to a more collaborative, relational model of leadership (Northouse, 2013). Two potential limitations to contingency theory are that it is more reactive than proactive in nature, and it lacks flexibility for changes within organizational contexts.

Each of the contemporary theories described hold the assumption that leadership is enacted in large part due to the traits, inherent qualities, and actions of people, most of whom hold positions of authority. Easterling (2013) bolsters this assumption saying, "virtually all efforts to strengthen leadership focus on individual leaders" (p. 51). Moving beyond a strong focus on individual leaders to consider leadership as an activity that implicates and involves others. Three modern approaches to leadership will be explored next.

Modern Approaches to Leadership

Discursive Leadership. At the intersection of leadership and communication, discursive leadership studies the discourse shared by leaders to influence progress and moves leadership beyond a strictly individual orientation. Fairhurst (2008) defines discursive leadership as

“[being] exercised when ideas expressed in talk or action are recognized by others as capable of progressing tasks or problems which are important to them” (p. 6). A discursive view of leadership is helpful in how as it expands the definition of leadership to include broader, more systemic issues. Discursive leadership searches for patterns and considers a long-term trajectory, while not ignoring a focus on the individual leading. Fairhurst (2008) also emphasizes dynamics related to power and influence and provides a more inclusive view of leadership, seeing it as needing to be shared by many people, not just those with a formal role or title of authority. Robinson (2001) builds on this idea and defines discursive leadership stating, “leadership is exercised when ideas expressed in talk or action are recognized by others as capable of progressing tasks or problems which are important to them” (p. 93).

This shift to seeing leadership as action showcases four things as outlined by Fairhurst (2008). First, that leadership is a process involving influence and meaning making among people to advance a task or goal (Robinson, 2001). Second, leadership has an ‘eye of the beholder’ quality in that those observing leadership may each view it differently. Third, discursive leadership begins to move toward focusing on leadership processes versus individual traits, which helps stop the tendency to ‘valorize’ leaders. Finally, influence and meaning making related to leadership should be shared and distributed to many people, not just one person in a particular role or position of authority (Fairhurst, 2008; Kramer & Crespy, 2011). Discursive leadership’s modern approach to leadership moves beyond an individual orientation and further toward an emphasis on collective action, which is also shared by other modern theories including transformational and adaptive leadership. Discursive leadership has strong merits for addressing organizational challenges and change, which has made it popular among

communication scholars. But discursive leadership falls short in recognizing the adaptive/continuously shifting realities of the work of making progress in organizations.

Transformational Leadership. Burns (1978; 2003) proposes transformational leadership and asks other leadership scholars to consider how leaders can encourage followers to serve others for the common good. Transformational leadership stems from this focus on leadership for the common good and is grounded in “mobilizing people for participation in processes of change, encouraging a sense of collective identity, and efficacy which in turn brings stronger feelings of self-worth and self-efficacy...described as an enhanced ‘sense of meaningfulness’ in their work and lives” (Burns, 2003, p. 25-26). Transformational leadership also gets to the values and heart behind the work of leadership that requires people to change to make progress.

According to Burns (1978), leadership is a process in which people engaging in leadership help each other to move to a higher level of motivation and morale. Those engaging in transformational leadership have been idealized in a sense because they highlight a moral exemplar for the benefit of a team, organization, and/or community. Transformational leaders have been found to be characterized by high moral standards while also encouraging others to also value morality. Transformational leaders also foster ethical work environments, move company culture from individual interests to considering the common good, and value people showing up authentically with the ability to engage in open communication (Bass, 1999). A transformational leader is focused on the needs of followers and desires to help followers reach their fullest potential (Northouse, 2013). Transformational leadership is limited because it expects a leader/authority to cast a vision and drive outcomes and, thus deemphasizes seeking others’ perspectives to complex organizational challenges. Adaptive leadership seeks to address

these concerns and presents a model that is inclusive of voices at all levels of organizations regardless of authority.

Adaptive Leadership

While transformational leadership focuses on the higher calling of leadership for the common good, adaptive leadership is more concerned with how those exercising leadership can help people navigate ambiguity, uncertainty, and change. Heifetz (1994) says adaptive work “requires a change in values, beliefs or behavior” (p. 22). The theory of adaptive leadership extends other leadership theories including the more modern approaches of discursive and transformational leadership in its consideration of the context for leadership, collective process of leadership, and how progress happens on even the most daunting challenges (Steffensmeier & Chrislip, 2019). Previous literature and theories of leadership including transformational leadership, have ignored the importance of people being able to adapt to different contexts to effectively lead. Brown (2014) noted that, “leadership is highly contextual and what is appropriate or possible in one situation may be inappropriate or unattainable in another” (p. 25). Successfully engaging in adaptive leadership requires people to be able to respond appropriately based on what the context for leadership requires.

There is also an overwhelming focus on leaders and followers within previous leadership literature that fails to account for the ability and need for social systems, including organizations, to be able to collectively and effectively respond to challenges (Steffensmeier & Chrislip, 2019). Pares et al. (2017) describe this need stating, “leadership emerges from the complex interplay of individuals in a group or organization, taking into account the particular context and producing adaptive outcomes” (p. 14). Steffensmeier and Chrislip (2019) echo the importance of the collective nature of adaptive leadership that is missed in other

models noting adaptive leadership “is a process of shared meaning making and is itself a social construction. Rather than emphasizing leaders and followers, leadership becomes a function of a social system and a relational activity exercised by people within that system”

(p. 63). Progress related to the collective, systemic model of adaptive leadership becomes possible through collective rather than individual action. Unlike contemporary approaches to leadership, which focus on characteristics of leaders, or modern approaches to leadership, which focus on how leaders influence followers, adaptive leadership views leadership as an activity that requires the engagement of many people at all levels of an organization to make progress.

Adaptive leadership theory is the foundational premise for this study focused on helping facilitators of leadership to help students make greater progress on what they care about most. An ability to adapt to change will help create more progress within communities and organizations. The focus on the change and uncertainty inherent in adaptive leadership along with the collective need for meaning making prior to making progress, marries adaptive leadership to the necessity of the communicative functions of sensemaking and sensegiving, detailed in the next section. While sensemaking is well suited to add greater clarity to chaos, the process of adaptive leadership, unlike other leadership theories, helps people hold steady when facing change and uncertain contexts (Heifetz et al., 2009).

Adaptive leadership is unique in how it focuses on the dynamics of mobilizing people to effectively address change (Chrislip & O’Malley, 2013; Northouse, 2013). Adaptive leadership moves beyond leader-follower dynamics to consider leadership as a behavior that anyone can utilize to make progress (Heifetz et al., 2009). Adaptive leadership emphasizes the importance of engaging multiple stakeholders, coming to a common purpose, and collectively working to make

progress on tough challenges (Chrislip & O'Malley, 2013). According to Pares et al. (2017), "leadership involves the collective efforts of multiple individuals to learn, adapt, and innovate in response to changing conditions" (p. 16). Utilizing this framework, adaptive leadership moves beyond a managerial, hierarchical view of leadership, to conceptualize leaders as anyone directing followers to a collective activity that engages others (Steffensmeier & Chrislip, 2019).

Key Assumptions of Adaptive Leadership

To understand more about the theory of adaptive leadership, a greater understanding about the core tenants and key assumptions is necessary. While many components make-up the theory of adaptive leadership, five are central to know and practice. These five key components are (1) distinguish technical versus adaptive challenges, (2) separate authority from leadership, (3) get on the balcony to observe, interpret, and intervene, (4) embrace an experimental mindset, and (5) carefully manage distress. These five components of adaptive leadership were detailed next.

Distinguish Technical Problems Versus Adaptive Challenges. The first key assumption of adaptive leadership is that leaders must be able to distinguish technical problems from adaptive challenges. Specifically, a common struggle within adaptive leadership is treating adaptive challenges as technical problems (Heifetz et al., 2009). *Technical problems* are easy to identify, have an authority figure or expert who can solve the problem, and often do not take much time for solutions to make an impact. These problems also can often be solved quickly and simply (O'Malley et al., 2014). For example, within a college course, students might struggle with understanding the requirements of a particular assignment. Typically, there are technical details including page count, prompts on what to write, and a rubric to assign a grade. A student can also ask an expert, in this case their instructor, for clarification on the expectations of what

was assigned. This is a clear example of a technical problem where someone with expertise can help solve the problem relatively quickly.

Adaptive challenges, on the other hand, live in people's hearts and guts (Green & Fabris McBride, 2015). They often require learning to understand the challenge and more time to make progress than technical problems. Adaptive challenges also require many people at all levels of authority to determine the best path forward and may require these same people to change their values, beliefs, and common ways of operating (Green & Fabris McBride, 2015; Heifetz et al., 2009). Many challenges have both technical and adaptive elements, but a common mistake is treating all challenges as technical problems, which diminishes the complexity and learning required to make progress (O'Malley et al., 2014).

Imagine the scenario where students and instructors began reintegrating to campus, many who had largely been working from home during the COVID-19 pandemic. Students and instructors who were asked to come back into the office or physical classroom likely had strong beliefs, values, and life circumstances related to this change. While those in authority determined the technical components of returning to campus, including setting dates for return and new campus health safety norms, re-establishing the classroom and organizational culture are more adaptive and require people at all levels of the organization to engage in conversation. Re-integrating as students meet in person versus online via Zoom, getting into new routines, and potentially mourning the loss of studying or teaching from home in more casual work attire with greater flexibility, are all adaptive in nature and require collective learning versus rigidity from authority. Helping people understand this difference along with distinguishing what change is best to move organizations forward is some of the most challenging work of adaptive leadership. Table 1 offers an overview of the difference between technical problems versus adaptive

challenges:

Table 1:

Distinguishing Technical Problems versus Adaptive Challenges

Kind of challenge	Problem definition	Solution	Locus of work
Technical	Clear	Clear	Authority
Technical and adaptive	Clear	Requires learning	Authority and stakeholders
Adaptive	Requires learning	Requires learning	Stakeholders

Note: Source: Adapted from Linsky and Lawrence (2011)

Separate Functions of Authority from Leadership. The second key assumption of adaptive leadership is that leadership is not synonymous with holding a title or position of authority. Adaptive leadership proposes the art of leading is different from executing your job well, does not require you to hold a particular position or title of authority, and allows people at all levels of an organization to actively engage. Leadership within the adaptive leadership framework is viewed as an activity not a role. As leadership facilitators and coaches, a position of authority may be useful in mobilizing students to engage in leadership, but positional authority alone is insufficient. Heifetz et al. (2009) explain:

People have long confused the notion of leadership with authority, power and influence. We find it extremely useful to see leadership as a practice, an activity that some people do some of the time. We view leadership as a verb, not a job. Authority, power and influence are critical tools, but they do not define leadership. That is because the resources of authority, power and influence can be used for all sorts of purposes and tasks that have little or nothing to do with leadership, like performing surgery or running an organization that has long been successful in a stable market. (p. 24)

Helping students to understand this distinction between leadership and authority is essential to adaptive leadership. Specifically, a primary objective of adaptive leadership teaching is that authority, although important, is insufficient for tackling the tough challenges of adaptive leadership (Parks, 2005).

When teaching adaptive leadership within a classroom setting, student expectations are often upset as facilitators or coaches model the shared work of adaptive leadership. Facilitators intentionally position themselves in a less traditional teaching role and more as a trained facilitator shepherding the collective practice of leadership within the classroom. While at first the collective environment of shared leadership between facilitators and students can feel disorienting to students, many express the empowering nature in feeling greater agency compared with experiences they have previously had with leadership training (Parks, 2005).

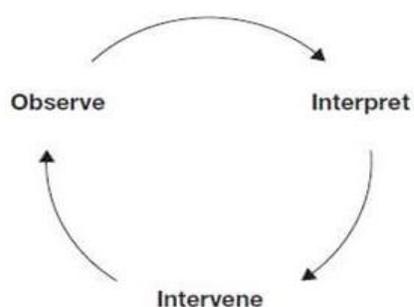
Adaptive leadership relies on evidence from stakeholder theory to make an argument for flattened hierarchies which do not focus on formal or informal authority. Stakeholder theory argues individuals are not a means to an end, but rather have voices imperative to making progress (Dawkins, 2014). This model diminishes power dynamics and values inclusion, inviting any participant with a stake in the outcome to participate. Stakeholder theory also breaks down traditional leader-follower orientations to minimize authority structures. Maak and Pless (2006) argue, “in a stakeholder society, leadership has to reach beyond traditional leader-follower concepts. Here the leader becomes a coordinator and cultivator of relationships toward different stakeholder groups” (p. 109). Efforts that focus on engaging stakeholders are more collaborative and interconnected, but also can be challenging in the work required to help others embrace the framework of “leveling the playing field” between authority levels (Maak, 2007, p. 108). Adaptive leadership instructors must carefully manage the uncertainty that comes from the new

experience of a classroom environment designed for students to practice leadership. Students have specific expectations of those with formal authority such as facilitators and coaches, including protection, direction, and order (Heifetz et al., 2009). Managing these expectations along with the ability to disappoint students for the purpose of helping them to engage in adaptive leadership, is part of the facilitation work required when teaching and modeling adaptive leadership (Green & Fabris McBride, 2015).

Get on the Balcony: Observe, Interpret, Intervene. The third key assumption of adaptive leadership is that adaptive leadership is a process of observing, interpreting, and intervening. Adaptive leaders must develop the ability to engage in a cyclical process where they first observe, second make multiple interpretations, and finally intervene in acts of leadership. “*Getting on the balcony,*” a metaphorical term used within adaptive leadership pedagogy, refers to making observations about what is going on within a system and circumstance (Heifetz et al., 2009). Leadership requires starting with observations before generating interpretations and then finally intervening in productive action. Figure 1 presents a visual representation of the adaptive leadership process.

Figure 1:

The Adaptive Leadership Process



Note: Source: Heifetz et al. (2009, p. 32)

For example, students may observe patterns and demographics of who engages most frequently

within the classroom, how the physical room is set-up, what relationships are forming, who is talking to who, who the facilitators positively acknowledge, who gets ignored, and other relevant cues. This process of gathering data through observation is a critical first step within adaptive leadership (Heifetz et al., 2009).

Students have a tendency to want to remain on the *dance floor*, a metaphor for a desire to be in the action. This action includes constantly trying different ways of engagement such as asking questions, challenging other students with a different interpretation, or asking for clarity from facilitators. While acting and engaging in the dance of leadership is necessary, if students fail to step back to get the distanced perspective needed to see the full picture of what is really happening, they will miss the broader context that is useful in collectively determining how to make progress (Heifetz et al., 2009). Moving from a dance floor perspective to a balcony perspective allows for both individual and systemic dynamics to be considered. Thus, asking students to move beyond a metaphorical “dance floor” to take a seat in the “balcony,” helps change the leadership-learner’s perspective from one of active participant to a more perceptive observer.

Generating multiple interpretations is the next step after observation in the cyclical process of observe, interpret, and intervene (Heifetz & Laurie, 1997). Making multiple interpretations asks students to hypothesize what the observations they see potentially mean. People are all wired to make meaning of what is observed (Weick, 1995); however, often people stop with the first interpretation rather than getting curious about what else might be at play. To effectively engage in adaptive leadership, people first must take the time to ponder the multiple interpretations of what is being observed before moving to action (Heifetz et al., 2009).

Interpretations are inherently linked to observations and interventions, as detailed in the

final step. For example, imagine an adaptive leadership classroom where Noah, a student, tends to jump to action, being encouraged by a facilitator to first observe what is happening in the room and then being asked to consider two to three interpretations related to the observations prior to jumping in to intervene. The observations or data Noah gathers will be helpful in allowing him to consider potential reasons for why what is happening in the classroom is taking place to then create more informed interventions. Noah may recognize through this time generating observations and interpretations that he is getting in the way of other students having the chance to practice acts of leadership. He may then choose to remain silent for a few minutes as an intentional intervention based on his observations and interpretations.

The third and final step of the observe, interpret, and intervene loop is where most people, including Noah in this previous example, have the tendency to start: jumping to action and intervening. It is human nature to want to fix a problem and jump to making progress without first fully understanding the landscape of the challenge (Heifetz et al., 2009). Interventions should stem from interpretations and should tie to a purpose beyond oneself—adaptive leadership is fundamentally social. For example, Genevieve, a student in an adaptive leadership course, might make the observation that another student, Robert, rarely speaks. Genevieve may interpret that Robert is not engaged or does not care about this course, or Robert has a fear of speaking in a large group, or that the adaptive nature of the class is not well-suited for introverted students like Robert. After making an observation and considering multiple interpretations, Genevieve has a few options on how to act. These may include verbally inviting Robert into the conversation, speaking to Robert to encourage him privately in the hall on a break, or devising a way to partner with Robert to engage more vocally within the course. While this may be a trivial example, the act of learning how to effectively engage others including in an

adaptive leadership classroom requires experimentation rooted in observations, interpretations, and finally interventions/actions.

Thinking of an intervention as experimental and framed with a purpose of learning something previously unknown by trying something different is also important to consider when intervening to exercise leadership (Heifetz et al., 2009). In the previous example of Genevieve experimenting to engage Robert, Genevieve could try the experiment of asking Robert what his thoughts are on the topic being discussed in class and see how this experiment changes the dynamic of the classroom context. Within this experiment, Genevieve would repeat the observe, interpret, intervene cycle after acting to observe what can be physically observed within the classroom, generating interpretations about what the observations may mean, and finally devising the next experiment to try. Adopting an experimental mindset is discussed next.

Leadership is Experimental. The fourth key assumption when facilitating adaptive leadership is that leadership is experimental (and benefits from skillful intervention). Since the nature of adaptive leadership is that it is adaptive with constantly shifting contexts, there is no one clear solution or path forward. This requires facilitators and learners of adaptive leadership to be open to the improvisatory act of experimentation both in how leadership is taught and practiced (Green & Fabris McBride, 2015). Intervening skillfully means to engage with intentional and purposeful actions often through repetitive experimentation. Since the nature of adaptive challenges requires change, adopting a mindset of being open to not knowing what intervention will stick until it is tried is helpful (Heifetz et al., 2009; O'Malley & Cebula, 2015).

Experimentation within leadership, then, is useful in gaining additional knowledge that would have been unknown prior to intervening. Interventions are based on both observations and interpretations prior to engaging in intervening (Heifetz, et al., 2009). Heifetz et al. explain

regarding acting experimentally, “in the realm of adaptive leadership, you have to believe your intervention is absolutely the right thing to do at the moment you commit to it. But at the same time, you need to remain open to the possibility that you are dead wrong” (p. 37). Adopting this experimental mindset offers leadership facilitators and students permission to try something without definitively knowing the outcome; and, therefore, some protection if they fail. For students, this may look like sharing a relevant story or personal experience from a place of greater vulnerability or the act of raising a more provocative interpretation about what is happening within the classroom when they are someone who regularly avoids conflict. This experiential orientation to a classroom environment will feel different for students and may require encouragement as they push the limits of what they are used to doing within an educational setting (Nichols, 2016).

Carefully Manage Distress. The final key assumption of adaptive leadership is that in order to effectively engage in adaptive work, people must be able to carefully manage distress. Typically, people avoid conflict and crave comfort. Adaptive challenges lack ready-made outcomes, have high stakes, and require change, all of which are a recipe for making people uncomfortable (O’Malley & Cebula, 2015). The disequilibrium and distress of navigating adaptive work can prompt conflict, frustration, confusion, and sometimes the fear of losing something deeply valued (Heifetz et al., 2009). Disequilibrium is often referred to as “heat” within adaptive leadership classrooms, which can be a byproduct of conflict happening within a classroom environment, or the discomfort happening within students’ internal bodies as they navigate a new environment that may be beyond their comfort zone.

When a difficult issue or deep value conflict is raised that those in the classroom care about, students often move beyond their comfort zone and raise the heat (Heifetz et al., 2009).

Heifetz and colleagues state, “People do not resist change, per se. People resist the loss associated with change” (p. 10). This loss associated with change can manifest in elements of identity (both individual and organizational) and deeply held beliefs and values (Parks, 2005). Discomfort is both a collective and individual outcome often generated when tough questions are asked, uncertainty lingers, and people are asked to do more than what their current role requires (Heifetz et al., 2009). Because adaptive leadership happens when adaptive change is needed in broader communities and systems, helping students to manage the discomfort associated with change is a key function of a leadership facilitator. Within a classroom, this may look like frequently checking in with students to assess learning and application of what is happening related to challenges students are facing within and beyond the classroom context. Keeping a focus on purpose, including each student’s purpose for becoming better equipped to lead, helps make the temporary discomfort seem worthwhile (O’Malley & Cebula, 2015).

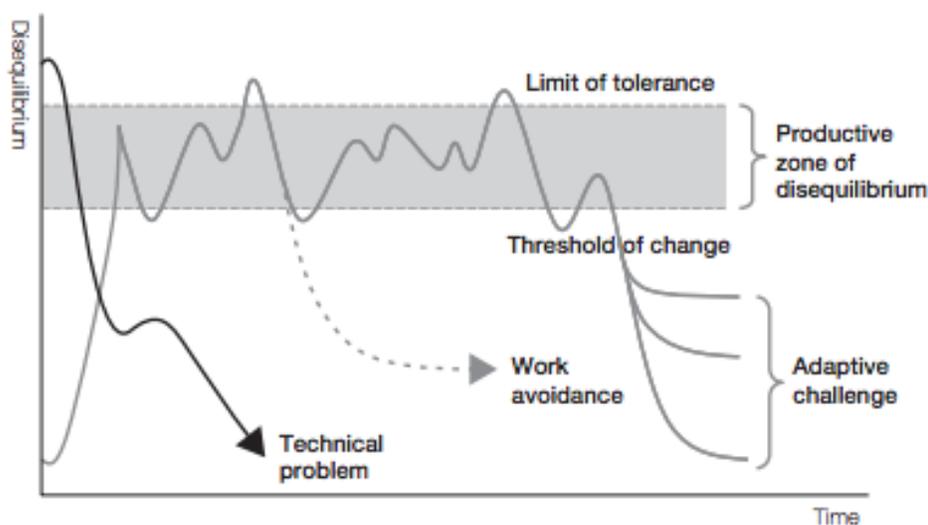
Facilitators of leadership, then, need to be able to both manage themselves within the context where they are exercising leadership and help others tolerate discomfort they are feeling. Within a classroom this may include resisting the urge to be a peacemaker, not taking things said personally, and treating every situation as an opportunity to learn. Facilitators can carefully manage distress by consciously working to not take things personally and focusing more on observations or objective pieces of data before moving to interpretations. When the discomfort level within a classroom gets to a place that is not productive, facilitators can call for intentional breaks to help students stay actively engaged (O’Malley & Cebula, 2015). Facilitators of leadership have to continually keep their proverbial hand on the thermostat to see how much heat or discomfort the classroom culture can tolerate and what helps individuals and those within the system to productively engage in the challenging work of adaptive leadership. Knowing that

students will face discomfort, facilitators need to be able to manage themselves within the environment and help others tolerate the disequilibrium they are experiencing (Heifetz et al., 2009). The goal as a leadership facilitator is to create a classroom environment that keeps students within what is called the *productive zone of disequilibrium*. Heifetz and colleagues (2009) define the productive zone as having “enough heat generated by your intervention to gain attention, engagement, and forward motion, but not so much that the organization (or your part of it) explodes,” (p. 17). See Figure 2 below:

Figure 2:

The Productive Zone of Disequilibrium

The productive zone of disequilibrium



Note: Source: Adapted from Heifetz and Laurie (1998).

Optimal conflict in this model contains the presence of relentless frustration and a clear problem created for someone to truly feel the limits of their current knowledge. The conflict also contains values one holds deeply and provides an environment with adequate support to help people not become too overwhelmed by the conflict (Kegan & Lahey, 2009). Students may face

a technical problem such as a facilitator ignoring them when their hand is raised (a well-established norm within most classrooms). Being ignored by a facilitator may lead to disappointment with authority and intolerable discomfort for the student. This sense of internal disequilibrium and frustration by a student may continue to increase until they realize they can speak without first being called on within this classroom context which should then quickly decrease any internal discomfort. For adaptive problems often the disequilibrium at the beginning is low (as shown in Figure 2). Upon an intervention, such as stating a provocative interpretation about what a group is avoiding or raising a question to highlight the adaptive challenge, the disequilibrium rises. Often people will want to avoid addressing the adaptive challenge because progress is more ambiguous in nature, so resilience and patience are needed (Heifetz et al., 2009). Framing adaptive challenges as challenges which do not follow linear pathways, supports the need to create safe holding environments for students to experience conflict in a constructive way.

A certain level of distress is often present within an adaptive leadership classroom and requires a teaching team to have patience and persistence to help others endure the conditions necessary for adaptive work (Heifetz et al., 2009). Heifetz and Laurie (1997) outline three key steps facilitators should practice when helping to manage distress: (1) Create a holding environment by regulating the appropriate level of pressure on the system, (2) Provide direction by framing the adaptive challenge including key questions and issues, and (3) Maintain poise and presence. Leadership requires facilitators to hold steady, actively managing their own vulnerabilities and triggers to stay physically and emotionally present within the classroom as they help students do the same (Heifetz & Laurie, 1997). Additional strategies to carefully regulate the distress may include raising the temperature by facilitators or students bringing

conflicts to the surface, accepting provocative comments, or naming systemic dynamics going on in the room (Heifetz et al., 2009).

A facilitator may raise the temperature by challenging a student's first interpretation and ask, "What else is going on within the system?" They also may choose to highlight a pattern that is happening within the classroom such as some students' frequent interruptions of other students and ask what might that symbolize about who this class values? When the temperature needs to be lowered, providing structure by breaking problems into parts, telling a joke or story, or calling for a break are all effective strategies (Heifetz et al., 2009).

A facilitator may sense that the heat within the classroom is too high for students to actively be engaged in productive work by observing students shifting in their seats, checking their phones or watches, or avoiding eye contact. One approach to reorient students would be to call for a short break and then providing a debrief to recenter the class around how what is happening in the room applies to leadership. This approach helps students to replay what just happened within the classroom and allows the facilitator the opportunity to more clearly tie the action of what is happening within the classroom to tangible leadership lessons and learning. This work of carefully managing distress is challenging because of the nuances required of facilitators to both appear confident while being open to the improvisation required in a more adaptive learning environment. For the purpose of this study, the leadership classroom represents a holding environment where facilitators seek to provide equal levels of challenge and support through a complex meaning making process (introduced in the Sensemaking section below) and by utilizing a teaching pedagogy called Case-in-Point, which is detailed in the Teaching Adaptive Leadership section next.

Teaching Adaptive Leadership

Creating the conditions ripe for teaching including developing students to mobilize others to tackle tough adaptive challenges, often becomes an act of leadership itself (Green & Fabris McBride, 2015). Modern approaches to leadership accept the assumption that leadership is learned and therefore can be taught (Parks, 2005; Whitaker & Arensdorf, 2018). One common approach within adaptive leadership courses is to mimic the conditions students would face out in society when working to exercise leadership within the classroom (Hufnagel, 2015). This study will evaluate an experiential learning teaching pedagogy utilized within adaptive leadership classrooms called Case-in-Point. This section provides a background of experiential learning before presenting Case-in-Point pedagogy along with the art of the debrief, which helps ground acts of leadership that happen within times of Case-in-Point teaching to lessons of leadership through intentional times of reflection and sensemaking.

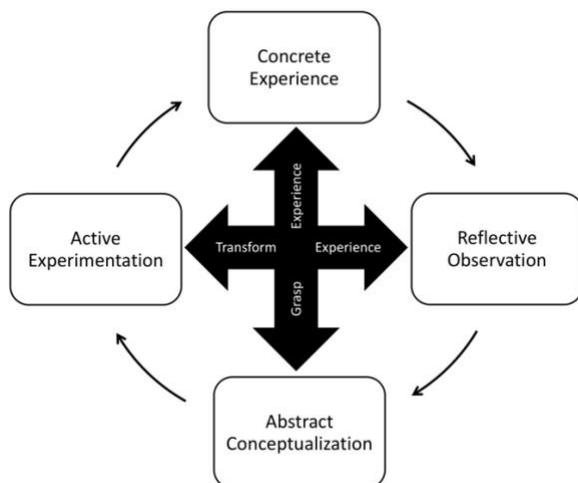
Experiential Learning

Case-in-Point pedagogy, a highly experiential approach to teaching adaptive leadership, is compatible with much of the research on experiential learning in higher education.

Experiential learning is a pedagogical approach that is distinct in how it requires students and facilitators to view learning as an active process rather than one where students are passive recipients. This active process of learning also often takes place through “systematized reflection upon the practice of doing” (Valiente-Riedl et al., 2022, p. 231). Kolb’s (1984; 2015) model of experiential learning specifically, neatly mirrors and reflects how adaptive leadership is taught within classrooms. The major tenants of Kolb’s experiential learning theory (pictured in Figure 3 below) include a cyclical process of concrete experience, reflective observation, abstract conceptualization, and active experimentation where learners “touch all the bases” (Kolb, 1984,

p. 41).

Figure 3:
Kolb's Experiential Learning Theory
 Source: Adapted from D.A. Kolb (1984)



When considering this model within an adaptive leadership classroom, students bring their own lived experience along with how they are engaging within the leadership classroom context (concrete experience); are encouraged to reflect and observe (reflective observation); make interpretations based on new information gathered from their observations and reflections (abstract conceptualization); and then design experiments or how they would like to try engaging next as they continue engaging in acts of leadership (active experimentation).

Previous literature also emphasizes how crucial reflection is to the experiential learning process. Learning was described like breathing including taking in and processing information and breathing out expressions of what has been learned (Kolb & Kolb, 2005). Both experiential learning and reflection are iterative processes with learning being supported by further reflection upon actions by students. Students are active participants in both the action and the reflection of learning within experiential learning models which aligns with trends of where higher education

is focused (Cantor, 1995; Kolb & Kolb, 2005). Case-in-Point, a primary pedagogy utilized in the teaching of adaptive leadership, is highly experiential in nature and requires both learning and reflection by both facilitators and students.

Case-in-Point Pedagogy

Thirty years ago, Ron Heifetz and Marty Linsky created the methodology and teaching pedagogy called Case-in-Point (CIP) to help people practice adaptive leadership (Heifetz, 1994). Case-in-Point is a teaching method that “uses a group’s own interactions to learn concepts. CIP makes it possible to more fully experience the challenge of leading in a classroom” (Hufnagel, 2015, p. 51). A facilitator utilizing CIP must view the group as a system rather than a group of individuals. Leadership learners explore the systemic dynamics which tend to mimic patterns out in the broader society. One reason facilitators embrace this pedagogy is because CIP creates an intensity that mirrors engaging in civic life (Green & Fabris McBride, 2015). The work of CIP is difficult because both facilitators and students can feel disoriented as traditional expectations of facilitator-student, leader-follower, and authority-learner are disrupted (Heifetz, 1994). Rather than lecturing, a facilitator engaging in CIP pedagogy calls out questions, observations, and interpretations along with taking provocative actions to help a class understand leadership concepts happening in the room (Hufnagel, 2015). Because this approach requires being attentive to what is happening live within the classroom, it requires a team of facilitators to commit to personally engage in the improvisatory act of leadership as they teach leadership (Green & Fabris McBride, 2015).

The CIP pedagogy asks facilitators to give-up significant control and authority for the purpose of allowing students to work on issues happening in the room. This approach to sharing authority is one of the fundamental tenants of CIP and can greatly frustrate students who are used

to facilitators and those in authority providing direction, protection, and order (Hufnagel, 2015).

Green and Fabris McBride (2015) describe the primary role of a facilitator utilizing CIP as:

...not to provide answers or closure; rather, your job is to stimulate deeper thinking and create the environment in which learners can work productively together to practice new approaches to leadership. At its simplest, Case-in-Point is the process of directing a group's attention to teachable moments and then holding collective focus on those moments long enough for individuals to engage themselves and one another in new and productive ways. (p. 43)

Facilitators who engage in CIP are modeling leadership with their conscious choices about when, how, and if they should intervene. If an outside observer was watching a facilitator engaging in CIP, they may see observations being made, questions being asked, interpretations being offered, and provocative actions taking place. Heifetz and Linsky (2002) refer to these as the "straightforward tactics of leadership" (p. 134). See Table 2 below for more description on how facilitators utilizing CIP can choose to intervene for the purpose of helping others learn about leadership:

Table 2:

Case-in-Point Straightforward Tactics of Leadership

Observations "Here's exactly what I saw happen."	Questions "What is going on here?"
Interpretations "One interpretation of what just happened is..."	Provocative action Pauses, Requests, Interrupting, Ignoring, Silence

Note: Source: Green & Fabris McBride (2015, p. 53)

Case-in-Point pedagogy rejects the status quo and stretches expectations students have of

front-of-room methods of teaching/learning with the goal of creating more dynamic spaces to learn and practice leadership. The experiential nature of the pedagogy calls both facilitators and students to let go of what is comfortable and familiar “in service to a larger aim: igniting and sustaining powerful leadership development in our students...and the world we all share,” (Hufnagel, 2015, p. 59). While many studies have focused on what is happening within leadership classrooms from a participant or student perspective, few studies have considered the experience of a facilitator and how they create the conditions ripe to both learn about leadership while facilitators tangentially experiment with leadership through teaching, coaching, and supporting others. This study seeks to gather perspectives from facilitators, experts and students to best understand the mechanisms and experiences for helping students make sense of adaptive leadership.

Art of a Debrief. To help students connect what is happening within the action of CIP to leadership lessons, facilitators should engage in debriefs. Green and Fabris McBride (2015) define a debrief as “a short timeout from the action of Case-in-Point or other experiential learning session” (p. 208). These timeouts which are typically around thirty-minutes and are utilized as times to allow students to reflect and make sense of what just happened within an experiential CIP session (Green & Fabris McBride, 2015). A few examples of the types of questions that might be asked in a debrief are detailed in Table 3 below:

Table 3:

Examples of Debrief Questions

What thoughts, reflections, or observations do you have?
How have we modeled (or not) the leadership ideas we are exploring?
What hidden issues may be affecting learning?

How does what's happening here reflect processes outside this classroom?
What concerns you the most about trying these ideas outside this classroom?
What assumptions of yours are being challenged?

Note: Source: Green & Fabris McBride (2015, p. 209)

The purpose of a debrief is to take intentional time to reflect and solidify lessons about leadership as well as how these lessons will apply to students' lives outside a leadership classroom. A good debrief helps the learner reflect on their experience including “the song beneath the words” but does not repeat the conversation that was happening during the more experiential time of CIP. Facilitators should use this time to help students think differently and challenge them to try new leadership behaviors (Green & Fabris McBride, 2015). This study considers how the intentional time spent debriefing within leadership classrooms contributes to functions of sensemaking and sensegiving. I next detail sensemaking and sensegiving and then present the case for a strong connection between adaptive leadership and sensemaking.

Sensemaking

Introduced by Karl Weick in 1969, sensemaking has been studied extensively in organizational contexts and is useful for understanding leadership communication. Weick's (1995) explanation of the construct has been cited more than 30,000 times according to Google Scholar. Maitlis and Christianson (2014) define *sensemaking* as “the process through which people work to understand issues or events that are novel, ambiguous, confusing or in some other way violate expectations” (p. 57). Sensemaking involves creating meaning, pursuing understanding, and framing events to give meaning to experiences (Weick, 1995). This theory represents the cognitive process of forming meaning and deciding future action (Weick et al.,

2005). Sensemaking is also seen as a process that helps people organize and understand information and experiences inconsistent with their prior beliefs (Weick et al., 2005).

The Sensemaking Process

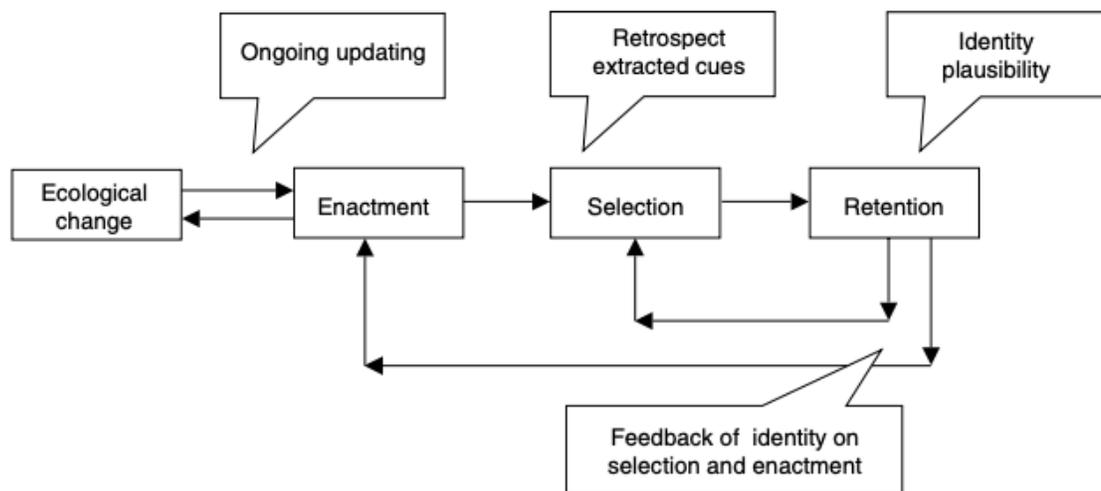
Though sensemaking has never been simplistic, the initial model had only three steps: enact, select, and retain (Weick, 1995). Sensemaking begins with an event or context that disrupts one's routine actions. *Enact* means to perceive and act on the disruptive change. Enactment is a way of seeing things or working to observe and define a situation. *Select* refers to interpreting what is happening and what the disruptive, sensemaking event may mean. *Retain* refers to the intentional storing of new perceptions and interpretations to utilize when sensemaking is needed in the future (Weick, 1995). In 2005, Weick and colleagues presented an updated version of the theory which includes seven steps in the process. These steps are explicated in greater detail alongside Figure 3 below. Formally, the definition of sensemaking was expanded to "the ongoing retrospective development of plausible images that rationalize what people are doing" (Weick et al., 2005, p. 409).

In seeking to understand and make sense of chaos and uncertainty, scholars who study sensemaking emphasize the importance of the sensemaking process to navigate uncertainty and obtain greater clarity. The communicative process of sensemaking begins by noticing chaos. This often raises the question, "What is going on here?" (Weick et al., 2005, p. 416). After noticing the chaos, a person engaged in sensemaking then tries to interpret what is going on including using the question what could be the story here? This process then moves to active *bracketing* of information and *labeling* it as a form of organizing potential interpretations related to understanding the reality, based on both past experiences and anticipated future events. Bracketing and labeling call on knowledge gained previously from lived experience. When

engaging in sensemaking, people ‘fill in the gaps’ with presumption, which is inherently a subjective process.

Sensemaking is retrospective, grounded in past experiences, and prospective, considering plausible future selves that may come from a given situation. Knowing that people consider their previous experiences to make sense of current contexts shows the utility of past experiences to gain clarity on current uncertain realities (Weick et al., 2005). Bracketing and labeling serve as a form of organizing what one is seeing and interpreting, then the question becomes ‘what should I do as the result of this new knowledge?’ (Weick, 1995). This often involves the engagement of others within a system and a process of collectively deciding what is best, utilizing the information gained to follow through on a decided action. Weick et al.’s (2005) model is illustrated in Figure 4 below. As shown in Figure 4, following an ecological change or disruption to expectations, sensemaking requires the ability to enact, select, and then retain.

Figure 4:
Relationship Between Phases of Sensemaking
Note: Source: Weick et al. (2005, p. 414)



Elaborating Sensemaking Theory

Hall (2011) argues that organization leaders should seek to encourage the use of sensemaking to help staff both trust the organizational process, but also to trust those in authority

positions who often drive the organization's vision. Sensemaking as organizing could support the challenging work of adaptive leadership by helping organizations feel less chaotic and more cohesive both in outcomes and clear operational processes (Hall, 2011; Heifetz & Laurie, 1999). To better understand the connections of sensemaking to leadership, seven principles of sensemaking are important: (1) ongoing, (2) updating, (3) retrospective/prospective, (4) focused on extracted cues, (5) favors plausibility over accuracy, (6) grounded in identities, and (7) social. Below I organize these seven principles within the foundational pillars of sensemaking: enactment, selection, and retention. As I do, I introduce the overlap between sensemaking and adaptive leadership. It is important to point out that the sensemaking process is cyclical and does not progress linearly through a series of steps (Weick, 1995).

Enactment. Sensemaking begins with an ecological change. This change is often an unforeseen circumstance within an organization or community (Maitlis & Christianson, 2014). When people are asked to make sense of information that is new to them or an environment that feels different (e.g., an adaptive leadership classroom or situation requiring change), they often need to continuously revise their understanding based on information being gathered.

Ongoing and Updating. Sensemaking is an *ongoing* process that requires the frequent *updating* of perspectives as more information is learned. People are continuously acting and reacting to the contexts they face and continuously seeking to organize the information as they experience any given event (Weick et al., 2005). Adaptive leadership is centered on a similar principle of an ongoing practice of observing and interpreting contexts prior to jumping to action to make progress on daunting challenges (Heifetz et al., 2009). Facilitators within an adaptive leadership course encourage students to continuously practice the process of observing, interpreting, and intervening (a parallel to enact, select, and retain albeit in a different order).

Students seek to make sense of the classroom environment and how the learning applies to their actions beyond the course. How do leadership facilitators support students in this ongoing process of updating their perspective and ability to lead when facing adaptive challenges? What helps students engage in this continuous process? These questions and others are important to better understand how facilitators of leadership help students to first notice, second make sense of, and third act toward progress on adaptive challenges, which this study seeks to help answer.

Selection. The selection portion of the sensemaking process is focused on making interpretations and sense of what is happening and what it means (Weick et al., 2005). This includes the ability to reflect retrospectively (based on past experiences), prospectively (forecasting future realities), and in tune with extracted cues or data from the context that can help inform a person's perspective. The selection process also includes understanding that interpretations are more driven by plausibility than accuracy as sensemaking requires people to be nimble to understand chaos. These components will be overviewed in greater detail next.

Retrospective and Prospective. Reflection in the form of retrospection aids in sensemaking (Dunford & Jones, 2000). While sensemaking is both *retrospective* and *prospective*, Matthias and Pies (2018) argue, "sensemaking is, by nature, a more retrospective [than prospective] process because individuals use their existing experiences, knowledge, mental models etc., to make sense of unfamiliar events" (p. 296). While more emphasis within sensemaking literature is placed on the retrospective nature or utilizing what a person knows from past experiences to make sense of what is presently happening, a prospective approach is also important (Weick et al., 2005). A prospective approach to sensemaking needs to be proactively managed to allow students the opportunity to consider the past, present, and the future. This future-tense thinking could especially be useful in times of change (Brown et al.,

2015; Matthias & Pies, 2018). This study seeks to better understand how students and facilitators utilize both retrospective and prospective views to help them make sense of adaptive leadership, including the change often called for when making progress on adaptive challenges. Having the ability to take a prospective view of the situation is also particularly helpful when considering values and beliefs held by other people involved with an adaptive challenge that might be affecting change and progress forward (Matthias & Pies, 2018).

Focus on Extracted Cues. In working to make progress, especially when facing situations requiring change, people *focus on extracted cues* from their environments to decide what information is relevant and how to explain what is happening. For example, when a student is in either the process of sensemaking or adaptive leadership, they are focused on two things: (a) the situational or context cues present (i.e., how people react to an intervention, who is engaged, who is uncomfortable etc.) and (b) experiences (i.e., retrospective or previous knowledge students have gained in different courses or situations requiring leadership). How a student feels, or the emotions present as they navigate the uncertainty inherent in an adaptive leadership course are more prospective and could lend valuable insights as to what work they may be avoiding or embracing. Students could benefit from a leadership facilitator's encouragement to challenge their deeply held perspectives to consider the viewpoints of others within the classroom as students collectively work to make progress on adaptive challenges. O'Malley and Cebula (2005) describe this capability saying, "exercising leadership requires us to generate numerous ways to understand an issue and multiple paths forward" (p. 50). The practice of being intentionally focused on the extracted cues could also help with the testing of multiple interpretations and points of view within an adaptive leadership context.

Driven by Plausibility Over Accuracy. Sensemaking is also *driven by plausibility over accuracy*. That means when considering possible interpretations of what is going on in a constantly shifting world, people focus on what they consider possible or plausible rather than what is accurate. Weick (1995) emphasizes that people are cognitive misers—that is, they expend as little mental energy and effort to make sense of a situation as they deem necessary. Sensemaking allows people to reduce dissonance and discomfort by focusing on plausible explanations, with less concern for accuracy (Weick & Roberts, 1993). Often sensemaking is about drafting and re-drafting what Weick et al. (2015) describe as “an emerging story so that it becomes more comprehensible, incorporates more of the observed data, and is more resilient in the face of criticism” (p. 415). This drafting of narratives not only includes interpretations about what is happening within a certain context, but also the role people play within a particular system.

Within adaptive leadership literature, this concept is defined as reframing truths as assumptions (Heifetz et al., 2009). Heifetz et al. (2009) elaborate, “treating stories as truths blinds us to the possibility of alternative versions of reality. That in turn prevents us from connecting with other people where they are and generating the widest set of options for action” (p. 254). Ancona (2012) echoes the importance of plausibility rather than accuracy in leadership saying, “stories and maps that explain and energize, that invite people to discuss, act, and contribute ideas trump those that are more exclusively focused on trying to achieve the best possible picture of a reality that is changing and elusive” (p. 7). The practice of viewing stories about reality as just stories or as assumptions rather than Truth opens space for revisions and testing of these assumptions to see which are useful in making sense of a particular adaptive challenge.

Grounded in Plausible Identities. Sensemaking is also *grounded in plausible identities*. People's perception of their identity determines their behavior. Who people think or feel they are within a particular context helps shape what they do and how they perceive interpretations about what is happening. Individual identity construction influences how people perceive themselves along with what they observe and interpret (Weick et al., 2005). For example, students entering a leadership classroom may have signed up for the course because they perceive that they are adept at leadership and want to showcase their abilities. However, within the adaptive context, students may find themselves making sense of the course environment in different ways than other environments (i.e., student groups, traditional classrooms or work contexts) where they excel at leadership.

People's perceptions of others often are nebulous and changing and therefore, also grounded in the plausibility rather than certainty inherent in sensemaking (Gioia et al., 2000). Within a leadership context, this identity construction is defined as, "knowing the story others tell about you" (O'Malley & Cebula, 2015, p. 80). O'Malley and Cebula (2015) describe the importance of this leadership practice saying, "knowing how others perceive you – or being able to imagine how they might perceive you – helps you be more effective. You can better adapt to the situation and experiment more wisely" (p. 83). Considering interpretations about the context where a person is seeking to lead along with potential perceptions others have of them, provides a more holistic picture of the environment and translates into more productive action.

Retention (For Future Action). The retention portion of the sensemaking process is focused on the intentional storing of new perceptions and interpretations to utilize when sensemaking is needed in the future (Weick, 1995). This portion of the sensemaking process is

also concerned with engaging others to collectively make better sense of contexts prior to moving to action.

Social. The process of sensemaking is fundamentally a social and communicative process where people interpret their environments by interacting with others and creating accounts to help them make sense of the world (Weick & Roberts, 1993). In organizations and communities that focus on action, “sensemaking provides a precursor to more effective action” (Ancona, 2012, p. 6). That is, the sensemaking process naturally guides future actions taken by the sensemaker (Weick et al., 2005). The processes of both sensemaking and adaptive leadership start with an individual but implicate others. Thus, sensemaking is a *social* process that involves more than just the self. Sensemaking involves narratives that are an “evolving product of conversations with ourselves and others,” (Currie & Brown, 2003, p. 565). The social nature of sensemaking also accounts for a person’s socialization including their upbringing, previous experiences, and culture which influence how they make sense of the world (Weick, 1995).

Within an adaptive leadership course context, students are asked to consider how their interventions and behaviors affect others. Heifetz et al. (2009) state:

Exercising adaptive leadership is about you (an individual system) making interventions in a social system of which you are a part. You must understand not only the larger system you step into but also yourself in its full complexity, multiplicity, and inconsistency. And then consider how the two systems interact (p. 183).

This need for considering both individual and organizational systems along with the social nature of engaging in leadership, calls people to see themselves as complex with multiple identities and roles they can play when engaging in acts of leadership. Sensemaking involves not only

experimenting in new ways, but consciously reflecting to understand “your impact on a system as you try to change it” (Ancona, 2011, p. 11).

Sensegiving and Adaptive Leadership

Along with Case-in-Point pedagogy as a strategy to teach adaptive leadership, this study will explore how sensemaking and sensegiving may be helpful in creating the conditions for students to learn and practice adaptive leadership. Sensemaking is a process that focuses on turning contexts into explanations which help people engage in future action (Weick et al., 2005). *Sensegiving* is an iterative process where individuals *help others* make sense of information to enable action. Sensegiving is a cyclical process where one person helps another understand a situation, but also adapts through interaction with individuals engaged in their own sensemaking. Thus, personal sensemaking and instructive sensegiving impact one another (Gioia & Chittipeddi, 1991). Specifically, sensegiving *is* the sensemaking process with a keen focus on social sharing of meaning from one person to another individual or group seeking understanding. Understanding the processes of both sensegiving and sensemaking can help inform how they are useful when teaching and learning leadership.

Successful sensegiving results in shared interpretations of change and how to make progress (Mantere et al., 2012). For example, within a leadership classroom, a facilitator may recognize that concepts are not clear, or the level of uncertainty is too high for students to be able to effectively engage in leadership. A facilitator may then seek to reframe what is happening within the classroom or pose a question to see where additional clarity is needed prior to resetting the space for students to experiment. Facilitators in this sense are privileged related to sensegiving due to the authority that comes with their role (Ravasi & Schultz, 2006). Facilitators play a crucial role in helping students to make sense on confusion and ambiguity happening

within the classroom that mirrors chaos and ambiguity that takes place outside the walls of the classroom when people are working to tackle hairy adaptive challenges.

Differences Between Sensemaking and Sensegiving

Understanding the differences between sensemaking and sensegiving is helpful in both determining which most commonly occurs within adaptive leadership classrooms and how to distinguish between the two in theory and practice. Sensegiving is defined as “attempting to influence the sensemaking and meaning construction of others towards a preferred redefinition of organizational reality” (Gioia & Chittipeddi, 1991, p. 442). The term is specific to understanding authority’s or management’s role in the sensemaking process (Catasús et al., 2009). The process of sensegiving *is* sensemaking framed and shaped by a person in authority within an organization and runs the risk of “shutting down alternative interpretations of reality, constraining sensemaking and limiting who can participate in the sensemaking process” (Voronov, 2008, p. 201).

Sensegiving is highly related to the act of influencing, whereas sensemaking is about collective understanding. In contrast to sensegiving, sensemaking is also accessible and engaged in by everyone within an organization or system regardless of title or position of authority. Within an adaptive leadership classroom, the distinction shows-up as a question of whose work is it to engage in the work of sensemaking? Most often within the teaching and learning of adaptive leadership the work of sensemaking is shared by both facilitators and students which aligns more closely with the practice of sensemaking, rather than more authority or facilitator directed influence, which would reflect more sensegiving.

Adaptive Leadership as Sensemaking

Sensemaking and adaptive leadership both call for a person to exhibit courage because people desire to know and understand what is happening in the world. However, calling for change is unpopular (Ancona, 2012). The ability to understand the world is needed most when the environment is rapidly changing. Ancona describes this saying, “adaptive challenges—those that require a response outside our existing repertoire—often present as a gap between an aspiration and an existing capacity—a gap that cannot be closed by existing modes of operating” (p. 4). Due to the nature of adaptive challenges requiring more learning prior to acting by people engaging in leadership, additional framing and interpretations of the context are necessary (Heifetz et al., 2009). Heifetz et al. defines this saying “adaptation requires learning new ways to interpret what is going on around you and new ways to carry out work” (p. 105). Adaptive leadership facilitators encourage practicing this learning and interpretation within safe environments such as a leadership classroom versus within a person’s organizational context where the stakes will be higher. Leading on adaptive challenges often requires people to step beyond their default behaviors or normal ways of being which inherently risks them appearing incompetent. Gaining a better understanding of how sensemaking takes place within an adaptive leadership context, this study seeks to explore how people sensemake and navigate the adaptive challenges they face in their organizations and communities.

Sensegiving also serves as an educational tactic to help give concepts meaning and could provide some evidence for why engaging in sensemaking within a leadership classroom could be powerful (Hall, 2011). Combining the functions of leadership and sensemaking is important as exercising leadership holds implicit and explicit learning (Ancona, 2012). To help deal with chaos and ambiguity as they relate to the change often required to make progress in leadership, people have a natural tendency to search for meaning. Making progress on adaptive challenges,

including those with no clear solutions is complicated (Heifetz et al., 2009). The ability to deploy sensemaking including naming what is happening prior to moving to productive action is a useful strategy when teaching and learning leadership. This study answers the call to examine this combination of leadership and sensemaking to better understand their relationship (Ancona, 2012).

Within adaptive leadership classroom environments, sensemaking often takes place through formalized times to ‘get on the balcony’ and debrief what just happened; in other words, adaptive leadership education focuses on opportunities to enact, select, and retain through engaging with and reflecting about adaptive challenges. The goal of a debrief is a moment for sensemaking where participants take a quick timeout from the action of CIP or another experiential learning session to more intentionally reflect and make sense of leadership lessons happening within the classroom. Green and Fabris McBride (2015) argue the purpose of the debrief “is disciplined reflection, an opportunity for learners to solidify lessons about leadership and consider how they will apply them to challenges in the outside world” (p. 208).

One way facilitators of leadership can help students engage in sensemaking is by helping them to recognize other options for leadership than what was readily apparent when engaging in the action of CIP experiential learning (Green & Fabris McBride, 2015). By pushing a pause button of sorts to reflect on what took place as students actively experimented within the classroom and what can be learned about leadership, students can consciously make sense of leadership and how it might manifest beyond the walls of a classroom (Heifetz, 2004). Having the ability to engage in both retrospection and prospection to continue to learn about the adaptive nature of the challenges being faced, is a beneficial use of a leadership classroom environment (Heifetz et al., 2009). Beyond the time of a formal debrief, this could look like intentional

reflection at the end of each day on their actions and places where students desire to move beyond default behaviors. Students may also reflect on what is confusing or not clear as another area where sensemaking could be helpful within an adaptive leadership course context. While dedicated time to debrief is one place where sensemaking and sensegiving may occur, understanding what these two processes look like in real time and how facilitators and students experience them warrants further exploration.

Overlapping Processes in Adaptive Leadership and Sensemaking

The sensemaking process of enact, select, and retain maps on to the observe, interpret, and intervene process within adaptive leadership. While not perfectly synonymous, these processes could help inform each other and bolster the equipping of students to effectively lead. Enact, or bracketing and labeling experiences in a context, is similar to observing or taking note of the data within adaptive leadership. Select, or the act of interpreting what is happening and what the change may mean, is a similar process to the work of generating multiple interpretations within adaptive leadership (Heifetz et al., 2009; Weick, 1995). Both processes have a definitive starting point, observe and enact (Heifetz et al., 2009; Weick, 1995). Where these processes diverge slightly is between the retain step within sensemaking and the intervene step of adaptive leadership. Retain, or the intentional storing of the new learnings to use in future times, differs from intervening within adaptive leadership, which is designing an intervention or action to try presently within an adaptive leadership classroom or context calling for leadership. The intervene step of adaptive leadership is somewhere between retain and enact in the sensemaking process. Where sensemaking is a reflective process that informs action, adaptive leadership draws on reflective processes, but is in essence nonexistent if no action takes place (Heifetz et al., 2009; Weick, 1995).

Overlapping Values in Adaptive Leadership and Sensemaking

More evidence of the value of sensemaking in adaptive leadership process is shown by the overlap in what these theories value. Both consider identity, social interaction, and the importance of cues in a particular context by utilizing intentional observations and reflections to get a more accurate picture of reality (Heifetz et al., 2009; Weick et al., 2005). Both models also value the act of experimentation. Although not explicitly labeled this way within the sensemaking model, the intentional engagement and repeat engagement in different facets of the sensemaking process is imperative to gain greater clarity (Weick et al., 2005). The same encouragement of repeat engagement and actions to try to make progress after gaining greater clarity is present within adaptive leadership (Heifetz et al., 2009). While neither process is linear, but rather cyclical and repeated, both do have specific components of their process to consider.

Both adaptive leadership and sensemaking are focused on helping people to productively manage uncertainty, chaos, and distress. The disequilibrium and distress of navigating adaptive work is often rooted in a desire to maintain the status quo and not change. Adaptive challenges are also inherently messy with no clear solution and sometimes no clear identification of the actual problem requiring people to hold steady for longer periods of uncertainty than a problem that is more technical in nature (Heifetz et al., 2009). Discomfort is both a collective and an individual outcome generated when people fear that the things they value, who and what they are loyal to, and what they stand to lose, outweigh what they perceive will improve if progress is made (Heifetz et al., 2009). This study is interested in how the communicative process of sensemaking with its desire to add clarity to uncertainty can help students carefully manage the distress inherent within adaptive leadership to increase engagement and productive action. Both sensemaking and sensegiving theory are focused on helping people to better understand a

broader range of perspectives and opportunities, which could include opportunities for more leadership and warrants further exploration (Ancona, 2012).

Inflection Points in Adaptive Leadership and Sensemaking

Though adaptive leadership includes many components of sensemaking, the theories offer several points of divergence or inflection points, which make their combination ripe for a rich qualitative exploration. Juxtaposing the broader models of sensemaking and adaptive leadership more clearly showcases how they diverge but could still inform each other. Adaptive leadership theory is also focused on both distinguishing adaptive challenges from technical problems and the functions of leadership from authority (Heifetz et al., 2009). Upon making these distinctions adaptive leadership facilitators help students to engage effectively within a context where there are no easy answers or experts who have prescriptive answers. These two distinctions are different than what is highlighted in processes of sensemaking and sensegiving, but elevate the need for having greater clarity prior to engaging in acts of leadership. Researchers and leadership facilitators will benefit from seeing more specifically how models of sensemaking and sensegiving inform practices of adaptive leadership and how they can be used to navigate the uncertainty and distress inherent in engaging in adaptive leadership (Ancona, 2012). This leads to the following research questions:

RQ1: How do facilitators, students, and experts co-construct an understanding of the relationship between sensemaking and adaptive leadership?

RQ2: In what ways do processes of sensemaking and sensegiving take place within adaptive leadership trainings?

RQ3: How does sensemaking help manage the disequilibrium and uncertainty inherent within adaptive leadership contexts?

Chapter 3: Methods

Overview

The review of literature supports the need for a better understanding of how leadership facilitators help students make sense of and apply adaptive leadership. The purpose of this study is to explore how the components of sensemaking and sensegiving may be useful in helping students understand and enact adaptive leadership. Initially this study sought perspectives of leadership facilitators ($n = 11$) and students ($n = 12$) actively participating in an adaptive leadership course at an urban Midwestern university. During recruitment, I also interviewed nine ($n = 9$) additional leadership experts who teach adaptive leadership for a variety of audiences globally. In studying a subset of leadership facilitators, leadership experts, and students through qualitative research valuable insights related to adaptive leadership and what communicative functions contribute to sensemaking were uncovered. This chapter details the methodology chosen for this study, a phronetic iterative approach (Tracy, 2019), beginning with an overview of how co-researchers were selected, how data was collected, the process for analysis, and steps I took for ensuring trustworthiness and credibility of the findings.

I chose Tracy's (2019) phronetic iterative approach because I desire to better understand leadership facilitators', leadership experts', and students' lived leadership experiences. A phronetic iterative approach focuses on creating practical wisdom by examining contextual knowledge about a particular phenomenon (Huffman & Tracy, 2018). While much is known about the theories of adaptive leadership, sensemaking, and sensegiving, further exploration into how these theories play out in situated training interactions could help scholars and practitioners better facilitate leadership experiences for students equipped to lead. A phronetic iterative analysis does not seek to create generalizable findings, but rather is interested in a deep exploration and detailed depiction of the lived experience of others. This approach also seeks to

take a problem, in this case how facilitators help students make clearer sense of the practice of adaptive leadership and provide practical findings that can then inform tangible action (Huffman & Tracy, 2018; Tracy, 2019).

Research Setting and the Selection of Co-Researchers

A mid-size urban Midwestern university was selected as the research setting for this study. The university offers an adaptive leadership course to help students become better equipped to lead within their future career contexts and current organizational, college, and community endeavors. This class has been taught at this university for 14 years. An average of ten volunteer facilitators instruct between 20-30 students per course. This class is a one-week pre-semester course offered in an in-person format. Students take the course for a variety of reasons. Some of these include because some majors require a leadership course, others take it because of the timing of the course, and some other students may take it to become more effective at exercising leadership. Regardless of their reason for taking the course, students are asked to consider two ideas when entering the classroom. The first is that each student is required to bring a personal leadership challenge they are currently facing that they care about to apply lessons learned within the classroom. Second, students are asked to adopt the idea that leadership is an activity, not a title or position of authority with the expectation that students practice leadership live within the classroom (O'Malley et al., 2015).

A teaching team of volunteers work to deliver this course as a pre-session course before the fall and spring semesters. The teaching team consists of people from a variety of backgrounds including former students who previously took this course, traditional university faculty/instructors, trained leadership coaches, and other consultants who are skilled at both challenging and supporting students through formal teaching engagement and informal check-

ins. Within this study *students* often refers to participants who took this course and agreed to be interviewed, but also can reference any adaptive leadership learner. Leadership *facilitators* within this study were defined as those who facilitate an adaptive leadership experience at the collegiate level. *Leadership experts* within this study are those who engage in teaching adaptive leadership experiences for a wide variety of audiences primarily within communities and organizations.

Facilitators, leadership experts, and students were chosen to be participants for this study in order to understand a variety of perspectives related to the functions of sensemaking and sensegiving within adaptive leadership classrooms. The term *co-researchers* highlights the importance of participants in the research process. In a qualitative study such as this one, co-researchers are asked to share their personal experiences and are involved in providing feedback on the results of data analysis to ensure the conclusions are an accurate representation of their experiences. Their engagement throughout the process makes their shared experiences critical to the phronetic iterative research process (Moustakas, 1994; Tracy, 2019).

Throughout this study, co-researchers were asked to share about their unique experiences and, later, to provide feedback on the analysis to confirm accurate findings were drawn from their experiences. Because an iterative approach to analysis seeks to provide a rich description of a particular experience, it is necessary for co-researchers to have adequate experience with the phenomenon being studied (Creswell, 2007). Facilitators were chosen from a team of twelve volunteer facilitators. Students were chosen from a roster of twenty. During data collection, I was concerned I would not reach data saturation with facilitators and students. Further, through informal conversations it became clear that leadership experts whom I knew were (1) interested in contributing to this study and (2) invested in learning what I found, so I added a third group.

Experts included people from around the world who facilitate adaptive leadership participant experiences. Consistent with other qualitative research studies, this study leverages *in situ* observer-participant observation and a saturated sample of in-depth interviews to get a detailed view of lived experiences (Creswell, 2007). The observer-participant observations focused on gathering background knowledge to better understand the course context and experience of co-researchers. The purpose for the interviews was to gain a deeper understanding of participants voices and lived experience with sensemaking within an adaptive leadership context (Tracy, 2019).

Qualitative research does not have the goal of generalizing information collected, but rather deeply understanding phenomenon and lived experiences of people (Creswell, 2007). Due to this deep explorative nature, a small sample size is utilized for many qualitative studies (Tracy, 2019). All facilitators and students in the Fall 2021 adaptive leadership course were identified as interview prospects and asked via email and an in-person visit to the classroom to participate in this study. Eleven facilitators and 12 students responded and agreed to participate. Additionally, nine leadership experts were also interviewed. The co-researchers included a diverse group including 18 women, 13 men, and one non-binary participant. Data saturation or “the point in data collection and analysis when new information produces little or no change to the codebook” was reached with 11 facilitators, nine experts, and 12 students or 32 total interviews (Guest et al., 2006, p. 65). The facilitators (presented using pseudonyms in Table 4), students (Table 5), and experts (Table 6) were a diverse group with a wide range of teaching/coaching experience as facilitators and experts and academic majors for the students. Below I explain data collection, management, and analysis, then I detail how I ensured trustworthiness in the analysis, and finally present my position as a researcher.

Table 4:*List of Facilitator Co-Researchers*

Pseudonym	Gender	Racial/Ethnic Identity	Age Range	Field of Work	Role
Andrew	Male	White/Caucasian	18-24	Military	Facilitator
Claire	Female	White/Caucasian	25-34	Consulting	Facilitator
Diego	Male	Hispanic/Latino	25-34	Leadership Development	Facilitator
Jane	Female	White/Caucasian	55-64	Business Owner	Facilitator
Joe	Male	White/Caucasian	65 or over	Education	Facilitator/Coach
Josh	Male	White/Caucasian	35-44	Education	Facilitator
Joy	Female	White/Caucasian	55-64	Executive Coaching	Facilitator/Coach
Lou	Nonbinary	White/Caucasian	18-24	Education	Facilitator
Stephen	Male	White/Caucasian	45-54	Education	Facilitator/Coach
Tatum	Female	White/Caucasian	45-54	Leadership Development	Facilitator
Whitney	Female	Black/African American	65 or over	Education	Facilitator/Coach

Table 5:*List of Student Co-Researchers*

Pseudonym	Gender	Racial/Ethnic Identity	Age Range	Major	Year in School
Amy	Female	White/Caucasian	18-24	Nursing/Health Science	Senior
Anne	Female	White/Caucasian	18-24	Health Science	Sophomore
Cassidy	Female	White/Caucasian	18-24	Nursing	Junior
Emily	Female	White/Caucasian	18-24	Math Education 5-8	Senior
Heaven	Female	White/Caucasian	18-24	Health Management	Junior
Ivan	Male	Hispanic/Latino	25-34	Health Management	Senior
Mary	Female	White/Caucasian	18-24	Health Sciences	Junior
Molly	Female	Black/African American	18-24	Criminal Justice	Senior
Olga	Female	White/Caucasian	18-24	Health Management	Sophomore
Sarah	Female	White/Caucasian	18-24	Biomedical Engineering	Senior
Ticie	Female	Black/African American	18-24	Biomedical Engineering	Junior
Vincent	Male	Asian	18-24	Biology	Senior

Table 6:
List of Expert Co-Researchers

Pseudonym	Gender	Racial/Ethnic Identity	Age Range	Field of Work	Years of Experience
Andre	Male	White/Caucasian	65 or over	Education/Consulting	35
Connor	Male	White/Caucasian	65 or over	Leadership Consulting	36
Eric	Male	White/Caucasian	45-54	Leadership and Change	20
Heather	Female	White/Caucasian	65 or over	Leadership Development	25
Louise	Female	White/Caucasian	45-54	Leadership Development/Training and Consulting	13
Mickey	Female	White/Caucasian	65 or over	Leadership Education	35
Scott	Male	White/Caucasian	55-64	Leadership Development	43
Theo	Male	White/Caucasian	45-54	Education/Faculty	11
Tom	Male	White/Caucasian	55-64	Consulting	25

Process for Data Collection

Observer-Participant Observation

The observer-participant observation for this phronetic iterative study included 50 hours of participant observation (Groenewald, 2004; Loftland & Loftland, 1999; Tracy, 2019). The benefit of participant observation or taking a participant as observer role, is that the goal of the research and the timeframe is clearly defined. My role as a researcher was also clear to those participating in the study. The vantage point of participant observation allows a different perspective than if I were to only conduct interviews (Tracy, 2019). Observation took place both during teaching team meetings and classroom hours of the weeklong in-person course experience during the week of August 2 to August 7, 2021. Time spent in the classroom, resulted in 185 pages of field notes and memos. I took notes in three categories following each day of participant-observation: *Observational notes* detailing what happened, *theoretical notes* or

“attempts to derive meaning,” and *analytical memos* or summaries of what took place each day (Groenewald, 2004).

Thick Description.

The observation fieldwork was utilized for the purpose of triangulating with the co-researcher interviews to gain a more holistic and accurate picture of the phenomenon being studied. Triangulation, a process within qualitative research that assumes if two or more types of data being collected reach the same conclusion, adds to the credibility of this study (Creswell, 2007; Tracy, 2010). I also coded my own notes along with interview transcripts to provide a thick description of the research context (Geertz, 1973; Lincoln & Guba, 1985). Functions of sensemaking and sensegiving were also gathered from the analysis of course materials including emails, handouts, course syllabus, and a facilitator course orientation guide. I also had access to de-identified student reflection assignments. Triangulation of data from the three methods including participant observation, interviews, and course artifacts collected, helped ensure the trustworthiness and rigor of the qualitative analysis conducted through this study (Tracy, 2019). The observer-participant observation and analysis of course artifacts helped to create thick description and give me emic understanding prior to conducting interviews.

Primary Interview

During this week-long course experience and in the two subsequent months, I recruited facilitators, leadership experts, and students to participate in one-on-one interviews. Recruitment took place verbally during the course and via phone and email follow-ups after the course. I used a variety of criteria for choosing co-researchers. Key co-researchers were familiar with adaptive leadership either as facilitators of the course, leadership experts who teach adaptive leadership, or as students who participated in this most recent course experience.

I interviewed 11 course facilitators who played a variety of roles, including front of the room facilitators, small group facilitators, and/or individual coaches. A desire to hear the voices of facilitators provided the perspective of leadership practitioners on how sensemaking and sensegiving happens in the creation and execution of this leadership course experience.

Additionally, I interviewed 12 students who actively participated in the course experience to gain the perspective of a student participant on what the experience of adaptive leadership learning and application was like and what contributed to their ability to make sense of and apply the course material. Finally, I interviewed 9 leadership experts who facilitate adaptive leadership experiences for a variety of audiences around the world. Deidentified demographic data and pseudonyms of the facilitator, expert and student participants can be found in Table 4, Table 5 and Table 6, respectively.

Semi-structured interviews took place face-to-face or via Zoom and were audio recorded. I used Zoom's integrated artificial intelligence transcription for line-by-line copies of the interview, I also accessed the audio recordings to verify and correct any errors. Recorded interviews were used to check and correct any issues with the transcripts. The transcripts served as the raw data for analysis. Each of the transcripts includes a pseudonym chosen by each co-researcher that is not their actual name to protect their identity. The file containing co-researchers' emails and names was kept as a separate file from the transcript files, which included only the de-identified alias names (Tracy, 2019).

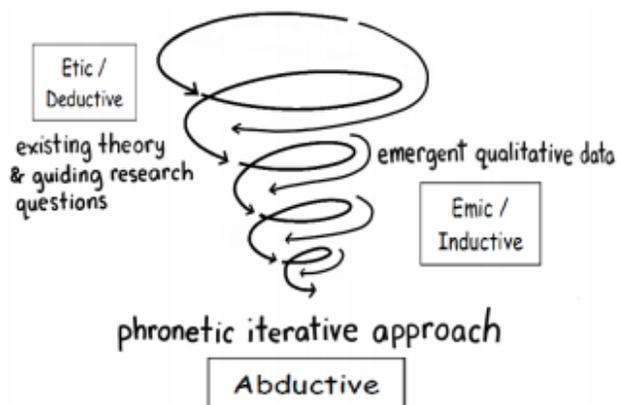
One of the goals of the interviews is to elicit a deeper understanding of the co-researchers experience of the phenomenon under study. Semi-structured interviews helped gather more specific information I could not gather through participant observation (Hatch, 2002). Some co-researchers required more probing to provide a fuller description of their experience, while

others needed less questioning. On average, interviews lasted 40 minutes (range: 30 minutes to 60 minutes). Primary questions were asked of all co-researchers with additional probing questions being used as needed for gathering a more complete understanding of each co-researcher's experience. See Appendix A for the interview guide utilized in this study. Verbal consent was received from all co-researchers prior to beginning each interview. Each participant received a copy of the informed consent letter via email before their scheduled interview. See Appendix C for IRB approval of this study.

Data Analysis: Organizing and Analyzing the Data

A phronetic iterative approach was chosen as the method for this study due to the ability to build on existing theory, but to do so in a way that is iterative and exploratory in nature. An *iteration* is cyclical and repetitive and is neither a fully grounded theory nor fully *a priori* (Huffman & Tracy, 2018). An iterative approach draws on grounded theory (Glaser & Strauss, 1967) moving fluidly between inductive data analysis but also allowing the deductive considerations of existing theory, in this study considering adaptive leadership and sensemaking theories (Charmaz, 2014; Huffman & Tracy, 2018; Tracy, 2019). Phronetic research is defined by Tracy (2019) as “concerned with contextual knowledge that is interactively constructed, action oriented and imbued with certain values” (p. 209). The focus of phronetic iterative research alternates between emic, or emergent analysis of the data, and etic, or drawing on existing theories and models, understandings (Huffman & Tracy, 2018). I spent time engaging data collected for its own merits, but also consistently reviewed scholarly literature and applied it to the findings. Figure 5, developed by Tracy (2018), shows how a phronetic iterative approach moves between considering existing theory and research questions while also paying close attention to emergent qualitative data.

Figure 5:
Phronetic Iterative Approach
Note: Source: Tracy (2018, p. 63)



An iterative analysis follows a few basic questions as outlined by Srivastava and Hopwood (2009, p. 78). These questions and a few examples specific to this study are below in Table 7:

Table 7:
Questions for Phronetic Iterative Analysis

Question	Study-Specific Examples
Q1: What is the data telling me? (Consider theoretical, ontological, epistemological and field understandings).	Ex: Take a close look at the transcripts and field notes from co-researcher interviews and time spent within the adaptive leadership classroom.
Q2: What is it I want to know? (Ground this exploration in the research questions, objectives and theory).	Ex: Evaluate sensemaking, sensegiving and adaptive leadership theories to elevate unanswered questions and dilemmas.
Q3: What is the dialectical relationship between what the data is telling me and what I want to know? (Narrow the focus and link back to research questions).	Ex: Uncover how this study can help facilitate practical and useful functions of sensemaking and sensegiving within adaptive leadership classrooms.

Note: Source: Adapted from: Srivastava & Hopwood (2009, p. 78)

For the data analysis phase, I engaged in a three-step process which included management of the data, data reduction, and thematic development. The process of data analysis was reflective, iterative, and non-linear at times. The process I followed for a phronetic iterative approach included organizing the data, primary-cycle coding, followed by second-level coding, creating a codebook, synthesizing memos, and finally creating a loose analysis outline (Tracy, 2018).

Step 1: Organize the Data

The phronetic iterative approach encourages the careful organization of data including files stored electronically on a password-protected computer (Tracy, 2018). Tracy (2018) cautions that “researchers should be mindful that their organization process is part of the analysis” (p. 64). For this study, I organized both de-identified transcripts of interviews and field notes from observer-participant observation and course artifacts chronologically by date as to not prematurely influence data analysis.

Step 2: Primary-cycle Coding

The phronetic iterative approach suggests beginning with descriptive primary cycle coding after organizing the data (Tracy, 2019). I used standard Word processing, spreadsheet tools, and QSR NVivo 7, a qualitative management software, to help with first and second rounds of coding. I initially coded the data within NVivo by looking for meaningful facets of learning, significant experiences, and communicative functions of sensemaking and sensegiving within an adaptive leadership classroom. This process is also referred to as open coding, line-by-line coding, or initial coding, (Charmaz, 2014; Glaser & Strauss, 1967). During this time, I worked to stay open to multiple interpretations and potential meanings (Tracy, 2018).

These first-level codes included simple descriptions to summarize the ‘basic ingredients’ of the content evaluated (Tracy, 2019). Throughout the coding process, I used the constant

comparative method (Charmaz, 2006) to compare data to each code, and each code to existing codes, and modified code names and definitions to fit the new data. Utilizing a constant comparative method is “circular, iterative, and reflexive” (Tracy, 2019, p. 220).

Step 3: Second-cycle Coding

During this phase I began grouping codes, a process called axial coding (Charmaz, 2014; Tracy, 2019). Additionally, I invited another researcher to weigh-in on alternative groupings and how the connections being made by the groupings link to existing theoretical understandings (Tracy, 2018). This part of the process was done manually by placing many exemplars of each code on a piece of paper and sorting them into groupings. Second-cycle coding moves to trying to more clearly analyze, explain, and organize the data (Tracy, 2019). This part of the coding process included interpretation and looking for patterns while also looking back at previous literature on adaptive leadership, sensemaking, and sensegiving.

Step 4: Creating a Codebook

The phronetic iterative approach suggests that after open coding about 20% of the data, researchers can make choices about what codes are most relevant to answering the research questions and purpose of the study (Tracy, 2018). After choosing these relevant codes, I created a codebook which helped guide the rest of my analysis. This codebook included key codes, corresponding definitions, and examples of the data. See Appendix B for the codebook used. The codes were compared with another researcher who also helped confirm second-cycle codes to check for additional interpretations or salient codes I missed. Upon completion of an initial codebook, codes were compared against additional data collected. A final iteration of the codebook was then utilized to complete the remaining analysis of data.

Step 5: Synthesizing Memos

While coding the in the moment memos (i.e., participant observations) and interview data, I worked to intentionally attend to the process of how I was coding and jotted down memos about the coding and analysis process within a separate physical journal. The phronetic iterative approach encourages the use of analytic memos as a function of creating “conversation with ourselves about our data” (Clarke, 2005, p. 202). During this phase, I also sought conversations with others, including friends, family, and other researchers as an opportunity to express my thinking regarding the coding process.

Step 6: Creating a Loose Outline

To help continue to focus and organize the findings throughout the analysis process, I also engaged in the creation of a loose outline to make connections in the data. This brainstorming of potential emerging directions of the analysis was iterative in nature, but helped to ground the findings in the purpose of the study by relying heavily on the study’s research questions (Tracy, 2018). This loose outline then helped with the write-up of the final findings for this study.

Ensuring Trustworthiness of the Analysis

In contrast with quantitative research, which places a strong focus on reliability and validity, qualitative research works to ensure trustworthiness of the data along with credibility of the research study (Creswell, 2007; Tracy, 2019). This study utilized four of Creswell’s (2007) validation strategies (Tracy, 2010). Creswell recommends adopting at least two of the eight outlined validation strategies.

This study utilized *triangulation* or using multiple sources of data and diverse methods of data collection in order to get a fuller picture of what is happening related to the phenomenon

under study (Creswell, 2007; Tracy, 2019). This study had three methods of data collection, including fieldwork observations, in-depth interviews, and analysis of leadership course artifacts.

Throughout the analysis process I engaged in *peer debriefing* with an outside researcher to help ensure trustworthiness of the findings and the enactment of considering multiple interpretations when reviewing the data (Creswell, 2007). Regular meetings with an outside researcher were held to check-in on the coding and analysis processes and to discuss alternative perspectives and points of view that could be gleaned from the data. Any disagreements within the findings were discussed until consensus was reached.

The co-researchers of this study played a major role in ensuring the trustworthiness and credibility of the data. Three co-researchers who were all facilitators had the opportunity to review the primary themes and findings based on the transcript data from all co-researchers. These co-researchers had the chance to participate in member-checking by providing feedback on the accuracy of the data in relation to their individual experience. Member checking involves showing participants data and analyses so they can judge the accuracy of the account (Creswell, 2007). Member checking is a technique considered by many qualitative researchers to be, “the most critical technique for establishing credibility” (Lincoln & Guba, 1985, p. 314). They were also asked to provide any additional insights that might be missing from the summary of findings. The three co-researchers who participated in member checking, through outreach post interviews, all confirmed accuracy and their feedback was utilized for the final phonetic iterative analysis.

Finally, the use of *thick, rich description* was used to help future researchers determine whether findings from this study will transfer to other settings including leadership classrooms and trainings (Creswell, 2007). Reviewers of this study can view these rich descriptions from

direct quotes captured as part of the interview process to see transparency in the process of determining salient themes. The importance of trustworthiness and credibility were considered throughout the entire study from the process of securing co-researchers to creating a final codebook and completing the write-up of the research findings.

Role of the Researcher

In an effort to intentionally practice reflexivity, the researcher's background is important to understanding the analysis (Jensen et al., 2020). Prior to performing this research study, I evaluated my own perceptions about the phenomenon of this study. Creswell (2007) calls this process bracketing which helps to allow the researcher to set aside biases prior to conducting research. My previous experience involves ten years spent as a volunteer facilitator for this leadership course along with experience facilitating other similar leadership course experiences. I also previously worked for five years at the Kansas Leadership Center, a primary contributor for the curriculum utilized within the course studied. I currently do not have any formal or informal affiliation with the mid-size university where this study took place and have not been affiliated for six years. I am also a white, cis-gender, heterosexual female with an invisible disability.

I believe in the utility of the course studied to help students more effectively exercise leadership but had little to no prior knowledge of how sensemaking and sensegiving may show-up within this context. When in the field observing the course, I introduced myself as a PhD candidate and researcher from another Midwestern university. Students may have perceived me as an authority on leadership or communication which could have impacted the responses to interview questions. Observations and interviews were performed with a sincere and concentrated focus on only what co-researchers shared and not on any of my prior experiences or knowledge about the course concepts.

Summary

This chapter highlighted the process and methods utilized to conduct this study. 11 facilitators, nine experts, and 12 students participated in this study which led to 32 completed in-depth interviews. In addition to the interviews, in-person fieldwork observations of the classroom context along with review of artifacts from the course took place to help create a more holistic and complete view of the phenomenon being studied. Upon completion of the interviews, a verbatim script was completed for each interview and an executive summary was sent to each of the co-researchers for review and feedback on the core findings.

A phronetic iterative approach to analysis was followed including two rounds of coding and the creation of a codebook to assist in analyzing data. Trustworthiness and credibility of the data were conferred utilizing triangulation, peer review, member checking, and rich, thick description throughout the findings of this study. Chapter Four will present the findings of this phronetic iterative analysis.

Chapter 4: Findings

Overview

The analysis of thirty-two qualitative interviews revealed findings relevant to evaluating how facilitators of adaptive leadership help students sensemake, including how sensemaking is utilized in the teaching of adaptive leadership. These included the relationship between sensemaking and adaptive leadership (RQ1), the process of how sensemaking takes place within adaptive leadership teaching (RQ2), and how the function of sensemaking helps manage the disequilibrium and uncertainty inherent within adaptive leadership contexts (RQ3). An overview of the RQ's and themes is presented in Table 8 below:

Table 8:
Overview of Themes

RQ1: <i>Sensemaking Related to Adaptive Leadership</i>	Theme 1: Overlapping Components of Sensemaking and Adaptive Leadership.	<i>Subtheme 1: The Long Game of Leadership.</i>
		<i>Subtheme 2: Sensemaking as a Collective Undertaking.</i>
		<i>Subtheme 3: A Continual Redrafting of an Emerging Narrative.</i>
	Theme 2: Necessity of Sensemaking.	<i>Subtheme 1: Sensemaking Critical to Teaching Adaptive Leadership.</i>
		<i>Subtheme 2: Sensemaking Viewed as a Leadership Skill.</i>
		<i>Subtheme 3: It's Risky to Teach Adaptive Leadership Without Sensemaking.</i>
RQ2: <i>Sensemaking as a Process</i>	Theme 1: Intentionality in the Process of Sensemaking.	<i>Subtheme 1: Sensemaking Does Not Just Happen.</i>
		<i>Subtheme 2: Ruminant and Reflect.</i>
	Theme 2: Adaptive Leadership: "Work of the Heart"	<i>Subtheme 1: Values, Beliefs, and Worldviews.</i>
		<i>Subtheme 2: Work of the Heart.</i>
	Theme 3: Mechanisms to Build Sensemaking	<i>Subtheme 1: Small Groups Create a "Safe Haven."</i>
		<i>Subtheme 2:</i>

	Into Adaptive Leadership Education.	<i>The Art of the Debrief/ "Getting on the Balcony."</i>
		<i>Subtheme 3: Self-reflection an Important Tool and Reoccurring Practice.</i>
		<i>Subtheme 4: Learning more Powerful with Practical Application.</i>
RQ3: <i>Sensemaking to Manage Uncertainty or Disequilibrium</i>	Theme 1: Students Move Beyond Their Comfort Zones.	
	Theme 2: Inviting Uncertainty as the Way of 'Doing Business.'	
	Theme 3: Facilitators Balance Tension of Offering Challenge and Support.	<i>Subtheme 1: Caution Needed Regarding the Potential Misuse of Power.</i>

RQ1: Sensemaking Related to Adaptive Leadership

To better understand how sensemaking is related to adaptive leadership, I asked participants in this study how they see sensemaking within an adaptive leadership context. Sensemaking theory is focused on how people organize information and includes an “interplay of action and interpretation” (Weick et al., 2005, p. 409). Sensemaking begins with the question of (1) “what’s going on here and then asks, (2) what do I do next?” (p. 410). The recipe for sensemaking also asks the question of “how can I know what I think until I see what I say,” (p. 412). Communication is central to sensemaking (Weick, 1995). Participants in this study described the overlap of adaptive leadership and sensemaking including that each of the components of sensemaking theory were present within adaptive leadership. They described the communicative process of sensemaking within an adaptive leadership context as including every component of the theory: retrospective[prospective], ongoing, social, iterative, related to identity and plausibility, relying on extracted cues, and centered around the act of change. They next

shared how sensemaking is a necessary component in the understanding and practice of adaptive leadership. Participants also described how sensemaking itself is an act of leadership. Thus, my first theme focuses on describing how elements of sensemaking theory overlap with adaptive leadership teaching.

Theme 1: Overlapping Components of Sensemaking and Adaptive Leadership.

Sensemaking theory within adaptive leadership teaching and learning included overlapping components of sensemaking theory. The overlap was overt in this course, specifically that “sense making circles” were on the course agenda and part of the built-in curriculum for this course. “Sense making circles” were optional times at the start of each day where students could gather with a facilitator to ask clarifying questions and one component of efforts to embed sensemaking into the adaptive leadership course experience. I distinguish sensemaking theory and sense making circles subtly using the space between sense and making. These sense making circles were a new development in the course that I only found out about via observer-participant observation. Facilitators also utilized the verbal use of the term sensemaking throughout the course to signify times for intentional reflection on the action of learnings within the classroom. I was surprised to find the overt connection to sensemaking as that was not known prior to the observer-participant portion of this study. I expected sense making and sensemaking to be different. Specific terms and principles varied between what was observed in the course and sensemaking theory—the process is more clearly described in the findings.

Subtheme 1: The Long Game of Leadership. Participants described how learning about adaptive leadership as sensemaking was an ongoing or lifelong process where they were consistently updating with new experiences and information learned. Josh (Leadership Facilitator) described his learning and teaching of leadership as ongoing, saying, “I’m still very

much in that process of every time I get up there, and have an experience of teaching in this way, continuing to try to make sense of it [adaptive leadership], it's like an ongoing process.” One helpful metaphor provided to describe this ongoing, retrospective, and prospective process is to consider it as building a train track one piece of track at a time. Andre (Leadership Expert) shared:

If you're on an adaptive journey you're always interpreting moment to moment. Where are we now and what's next and what's the gap between, you know, the aspiration we have for a better future and what's showing up permanently and how do we make sense of what's blocking progress? So, you're always meaning making. I use the metaphor of we're on a train track. And we've come so far, but we have no more track. So, it's moment to moment figuring out what's the next piece of track and making sense that way.

The questions Andre posed to help people evaluate the next step or way to move forward down the track parallels some of the questions posed within the sensemaking model. The moment by moment figuring out first how to make sense of what is going on before next determining how to make progress within Andre's description was continuous, ongoing, and based on extracted cues that were present while navigating an adaptive challenge.

The leadership concepts taught in the course were challenging for some students to grasp and some explained that they felt their learning would extend well beyond the course experience. Olga (Student) believed that the practice of sensemaking and application of leadership concepts will continue saying, “sensemaking is a never-ending process.” Whitney (Leadership Expert) agreed with Olga about the lifelong, ongoing nature about both sensemaking and the learning of adaptive leadership saying, “I think it's a lifelong process. And maybe it's like golf. You never really conquer it, but each time you might learn a little bit more.” Whitney had been teaching for

many years and a participant within several adaptive leadership course experiences, she shared that she was still learning and making sense of leadership even after years of application and practice. Learning and applying adaptive leadership includes the sensemaking process of extracting cues to make plausible sense both retrospectively and prospectively while bringing order to ongoing circumstances. Joy (Leadership Facilitator) who also has years of experience said this sensemaking of adaptive leadership learning often happens over a long time horizon.

Joy said:

Sometimes sensemaking happens over years. There is something about experiencing this kind of class that I think opens ideas and space to continually learn about leadership. And a space to experiment with leadership. And I think just by those words alone of experiment and what can I learn from that. We don't say it, you know you're going to be making sense for the next few years of your life, but I think that's what people do.

The longer term and ongoing sensemaking required to make sense of adaptive leadership was a helpful realization both for facilitators of adaptive leadership and students who described this taking some pressure off them to understand and apply everything immediately within their shorter-term classroom learning experience.

Subtheme 2: Sensemaking as a Collective Undertaking. While the sensemaking process includes times of individual self-reflection, participants in this study described the often collective or social nature of sensemaking. Anne (Student) felt that sensemaking was more of a collective activity done collaboratively with others saying, “I feel like just in general, like you do sensemaking all the time at work, school, with roommates, any of the like life aspects. I feel like it's more used collaboratively than it is individually.” Anne described how it was helpful within the course context to hear the perspectives of her peers to help her make sense of the learning

about leadership. Students within this class utilized a variety of mechanisms for collective sensemaking. These were both formal times built into the class (i.e., debriefs, small groups, self-reflection assignments) and more informal times of sensemaking (i.e., eating lunch together, hallway conversations, texting classmates questions outside of class time). Facilitators and leadership experts agreed with students that sensemaking can take a variety of forms and that they are also highly implicated in the work of creating the conditions and environment necessary to successfully teach and make sense of adaptive leadership. Tatum (Leadership Facilitator) described this saying:

I think it's important that they hear from a variety of people in the class not just the front of the room teaching team, but they get some sensemaking from their peers. Because peers, I think, are significant contributors to that sensemaking process now because they've been in the middle of that experiment or experience with them. What I love about this course, whether it's in the 'sense making sessions,' or in the sessions that we're delivering, sometimes it's the students themselves that help their fellow student get the idea. I think providing sensemaking with a variety of people and allowing students to be a part of that sensemaking equation makes sense. It feels right and necessary.

Students shared sensemaking as a collective undertaking was helpful because they felt supported and less alone in the course when they engaged in reflection with their peers. Time for reflection and sensemaking was both intentionally built in to the course schedule of the adaptive leadership course observed, but also took place more informally as previously described with students sharing lunch or texting each other. While individual times of reflection were also important, students, facilitators, and experts argued that collective sensemaking was imperative to

solidifying leadership lessons within the classroom and beyond to the context where students live, work, and play.

Andre (Leadership Expert) agreed with the need for sensemaking to be collective and defined sensemaking within an adaptive leadership context saying, “sensemaking is the capacity to surrender assumptions and connect with everyone in the system. To collectively come to some sense of what reality is.” Andre shared that he works to create space within learning experiences for people’s different perspectives to be heard and for the group to collectively help each other make sense of what they are learning. Other leadership experts agreed with Andre in sensemaking being a collective or social process. Tom (Leadership Expert) shared, “ultimately the process of leadership is a communicative process of sensemaking. It’s a process of collective sensemaking.” Theo (Leadership Expert) extends this thinking to describe what the process of collective sensemaking including the need for labeling and bracketing within an adaptive leadership experience sharing:

It's not just an individual activity so we're making sense together through a process, and I think that process involves a stimuli or data. I think it involves reflection, and I think it also involves using symbols...what to name things, what to call things, what to label things...what am I going to call it, how am I going to reduce an experience, or a person, you know to a word or to a label or to some sort of expression, that then collectively, we can kind of look at and say oh yeah that's what I think that thing is that we just gave a name to. And that process of sensemaking is fundamental to the adaptive leadership model. Without it you're not going to get a good diagnosis and then you're not going to have any sense of how to intervene, particularly if the intervention is to mobilize more

people to do the work. You're going to end up doing it by force or violence or avoidance not you know making some progress with others.

The process of bracketing and labeling was one that was done both collectively and individually within adaptive leadership contexts. This process often takes place during the observation and interpretation phases of the process of adaptive leadership as participants seek to make meaning of what they are individually and collectively experiencing. This intentional time of diagnosis through bracketing helps inform action related to change within the classroom, organization, or context where people are trying to make progress.

Subtheme 3: A Continual Redrafting Based on an Emerging Narrative. In addition to sensemaking within adaptive leadership being a collective or social process, participants described it as iterative, based on identity and plausibility and centered on action and change. Josh (Leadership Facilitator) describes this sharing:

Sensemaking just feels like a necessary part of the equation. It's iterative. Making progress on adaptive challenges is an iterative process. You can't iterate without reflection. You can't iterate without making sense of the last iteration that just happened to figure out what the next iteration is going to look like. That reflection piece or that diagnosis piece or sensemaking piece is about getting to the next step. There's value in it in and of itself but it's also a means to an end. Which is to go back to the start of that cycle and observe more and interpret more and intervene more.

The cyclical nature of sensemaking is consistent with previous literature. Sensemaking theory proposes that sensemaking is about plausibility not about "getting it right" but instead is a "continued redrafting of an emerging story so that it...incorporates more of the observed data," (Weick et. al., 2005, p. 415). Josh made the connection that the sensemaking process overlaps

with a process within adaptive leadership teaching which asks students to first observe what is going on, next make multiple interpretations based on their observations, before finally, intervening within a system to try to make progress (Heifetz et al., 2009; Weick, 1995). He commented on how the reflection and diagnosis was to aid in determining how to best continue to intervene and experiment to make progress on adaptive challenges.

Facilitators and students also provided questions that are helpful to consider during this iterative process of both learning about leadership and engaging in sensemaking. Emily (Student) when thinking about the iterative process said, “it was just kind of like asking how is this useful, how do we feel about it, where can we go from here?” Emily shared that this process repeated itself throughout the course related to times of pausing to reflect on the action to more clearly solidify learnings. These questions also drive toward action and change which is consistent with the sensemaking framework. In sensemaking and adaptive leadership “the talk that leads to a continual, iteratively developed” diagnosis that leads to action in cyclical and starts with questions of reflection (Weick et. al., 2005, p. 412).

Tatum (Leadership Facilitator) describes how exercising leadership is a process that is consistently changing. She shared, “exercising leadership doesn't look like doing the exact same thing every single time. The variables are changing so frequently, and sometimes so quickly, or sometimes so slowly.” Due to this shifting and changing nature of adaptive leadership, facilitators and students surfaced the need to ask questions to pause to reflect prior to jumping in to additional action. Lou (Leadership Facilitator) echoed Emily's framing of the questions posed within the learning experience saying, “sensemaking is much more about where am I now? What has happened? What can I learn and then going forward how can it inform? Sensemaking is sort of a pause to let me make sure I know what's happening.” Claire (Leadership Facilitator)

connected these questions to the assumption within adaptive leadership saying that you are “always iterating and learning. You’re experimenting and learning and so sensemaking is the vital moment and opportunity to reflect on what did we do; how did it work and what can we do differently?” Within this iterative and cyclical process Claire and Lou focused both on effectively making progress in addition to creating clear application to solidify student learning about leadership. This application they hoped would help students to determine what Lou framed as “what can I take out with me?” to apply learnings and exercise leadership within contexts beyond the leadership course. In the reflection type of questions Claire, Lou, and Emily raised, were also questions grounded in identity. How am I being perceived within this system, and how I can deploy myself more effectively to help the group make progress were additional questions shared by participants?

Evidence that adaptive leadership is iterative, related to plausibility and identity, and centered on action and change were present within both what I as a researcher observed and what participants shared. These components along with each of the principles of sensemaking (ongoing, updating, retrospective[prospective], based on extracted cues, collective, social, bracketing and labeling, iterative, feedback, identity, plausibility, centered on action and change) permeate the subsequent themes I present throughout the rest of this study.

Theme 2: Necessity of Sensemaking. Participants in this study shared how sensemaking is valuable in the process of teaching/learning adaptive leadership along with what would happen if sensemaking components were not present. Facilitators and leadership experts described the value in integrating sensemaking to help participants more effectively make progress on adaptive challenges. They also shared how value can be lost for participants if sensemaking and application is not present within the learning. Students, leadership experts, and facilitators

expressed how it is risky to not include space for sensemaking in contexts that teach adaptive leadership because the experimental style of learning causes confusion, at best, and at worst discourages learners from engaging in adaptive leadership due to emotional turmoil.

Subtheme 1: Sensemaking Critical for Teaching Adaptive Leadership. Within an adaptive leadership context, Connor (Leadership Expert) described how learning about adaptive leadership would be valueless without sensemaking. He shared, “I think it's a critical part. If you can't help people do sensemaking, whatever else you're doing is diminished to almost valueless.” Reflecting on her experience learning adaptive leadership for the first time, Sarah (Student) agreed with Connor saying:

[The learning experience] would not have been nearly as good [without sensemaking] and I wouldn't have taken away nearly as much information. I would probably be a little confused and disappointed and I would kind of group it with the past leadership experiences that I've had where it's like okay I learned one or two things that are useful, but I'm not going to remember this. No, it definitely would have been a wasted experience.

The words “valueless” and “wasted experience,” are likely not what facilitators of leadership experiences would want placed on post-course evaluations. While sensemaking is not unique to an adaptive leadership context, leadership experts, facilitators, and students interviewed agreed that it is critical to include within the teaching and practice of adaptive work.

Eric (Leadership Expert) framed sensemaking as a unique contribution adaptive leadership offers compared to other leadership teaching models: “We just have a particular way of framing it and holding space for it. In a sense, it's what we have, like the sensemaking is our strongest you know, for better and for worse and somewhat unique contribution.” Joe

(Leadership Facilitator) agrees with the belief that sensemaking is a unique contribution and one that is necessary in the teaching of adaptive leadership. He said:

I don't think you can practice adaptive leadership. And again, by practice, I mean also teaching, without ongoing sensemaking because you're always, you're scanning, you're always taking in information and observing and making interpretations and interventions. You just don't intervene. I think what happens in traditional models of leadership is, you know, there's almost a script for what actions you should take, but what's different is there is not necessarily a meaning behind the impact of those actions.

Value was found in both the space for reflection, but also helping people understand the actions being taken in the room by themselves and others that lead to progress.

Connor (Leadership Expert) adds to the consensus with a call for facilitators to pay close attention to sensemaking that leads to action or progress which is consistent with previous research on sensemaking theory. Connor shared:

And to me, the only thing that's going to create value for people is sensemaking that leads them to progress. That's the basics of how adults learn. To get confronted with a situation that they're thinking they can't manage so they must learn. If you think about sensemaking as the engine of that realization, it's all that there is other than these slick ideas to give you a little framework to hang the work on. The work is really the sensemaking that drives people to say, 'shit I can't do this.' Without it [sensemaking] you're wasting your time. You might as well teach people how to make paper airplanes as that will have the same effect on the organization.

In this call to focus on progress, Connor shared that a lot of these pivotal learning moments happen when people find themselves acting in ways to, as Connor described, “accelerate their

own demise” related to progress on tough challenges within their professional context. The description of sensemaking being “an engine of this realization” is a helpful metaphor to consider when elevating the value of sensemaking within adaptive leadership teaching.

Subtheme 2: Sensemaking Viewed as a Leadership Skill. Previous literature on both adaptive leadership and sensemaking describe both processes as active and requiring participant action. Adaptive leadership frames leadership as an activity, something one does rather than a title they hold (O’Malley & Cebula, 2015). Sensemaking is also framed as active and requiring action. The second question of sensemaking, ‘what do I do next?’ is based on what’s going on here, highlights this need for action. Ivan (Student) described the distinction between adaptive leadership and sensemaking saying, “adaptive leadership would be more of the action and sensemaking with people is the reflection of the action.” Previous literature situates sensemaking as the talk “that leads to continual, iteratively developed, shared understanding of the diagnosis and the persuasive talk that leads to enlistment in action” (Weick et. al., 2005, p. 412). Sensemaking frames action and talk as cyclical rather than linear. Participants described this process, which is highlighted in greater detail within RQ2 of this study. Participants also described an overlap between the action of sensemaking and acts of leadership saying sensemaking is an act of leadership or a leadership skill/behavior. Josh (Leadership Facilitator) shared:

To me it's a teach piece, it's a leadership skill that we teach in the course but it's almost like an underlying or fundamental pedagogy. There's no right answer. There's no script for how to do these things, and so sensemaking just feels like a necessary part of the equation.

Leadership facilitators' felt sensemaking as a leadership skill was necessary due to the adaptive nature of the teaching and learning. Tatum (Leadership Facilitator) echoed Josh in the importance of integrating sensemaking as a leadership skill within adaptive leadership teaching saying:

Because there's no right or wrong or absolute. It's not a math equation. It's situational. It's environmental. It's fluid. You must deploy yourself differently to make progress or to get results. So, it feels like sensemaking is part of the process of teaching about adaptive leadership.

Facilitators agreed, they described how the fluid nature of adaptive leadership teaching and learning can be challenging for students because there is not one correct answer. The more ambiguous nature of this type of learning can be disorienting to students because it is situational and rooted within a particular context. Students were called to adapt to changes in a system and its context which is connected to enactment theory within the sensemaking model. Emily (Student) shared that sensemaking was necessary as she drew her own conclusions while learning leadership. She said:

I think sensemaking opens the door for us to make conclusions on our own and to use our own like internalized background and personal structure to figure it out. Whereas I think if it had been a setting where the teachers were like okay, this is what you were supposed to get out of it, it wouldn't have been as meaningful.

The structure of adaptive leadership teaching puts more ownership on students to engage in sensemaking and make their own interpretations about what they are learning. Stephen (Leadership Facilitator) described the benefit of this style of learning saying:

I think sensemaking is also important because it shines a light toward what some participants might want to take away or might be important for that participant's experience. And I think when it's done artfully, sensemaking doesn't tell people 'hey, here's what you learned.' But it does at least create a direction, so that people might be able to articulate that for themselves.

Facilitators and leadership experts described how allowing space for sensemaking within the teaching structure of adaptive leadership was an intentional choice.

Learning about adaptive leadership in this way is also iterative and requires students to consider their past experiences (retrospective) to determine the best path forward (prospective).

Diego (Leadership Facilitator) described sensemaking as a leadership behavior saying,

Sensemaking is a leadership behavior in that you're slowing down. You're doing the diagnosis where you're acknowledging the adaptive things that are happening in a space, and you know, especially the retrospective like oh that probably was more adaptive than I had considered. Sensemaking, I think you're able to gather that in retrospect, and kind of have that as a schema of like well I've seen this before. This looks very familiar. I'm going to try this behavior instead this time.

Considering previous circumstances, a student has encountered to make sense of their present reality also included evaluating what they need to let go of to move forward and make progress. Participants gave examples of this including limiting beliefs or behaviors that were getting in the way of participant progress. Scott (Leadership Expert) described this saying "the sensemaking is 'okay, what do I need to let go of?' And the sensemaking is 'what's emerging but I need to lean into?'" The process facilitators shared shows how participants engaged in the ongoing work of interpreting what was happening, retaining of extracted cues to make plausible sense of what

was emerging. With this information, they then determined the best way to engage in acts of leadership in the future—both within the classroom learning environment and beyond in their personal and professional contexts. Along with seeing an overlap between adaptive leadership and sensemaking, participants also described the necessity of including intentional times for sensemaking within adaptive leadership teaching.

Subtheme 3: It's Risky to Teach Adaptive Leadership without Sensemaking.

Participants were also asked to consider how adaptive leadership experiences might be influenced if sensemaking was not present. While answers varied, one signal of intersubjective agreement was the use of strong emotions and language in participant responses. Related to teaching or engaging in adaptive leadership without sensemaking, Tom (Leadership Expert) shared, “acting without sensemaking, it’s a recipe for disaster.” Tom believed in order to engage in society to make change happen, at a very basic level we need to first understand what is going on. Tom continues sharing how sensemaking is rare within traditional leadership teaching saying:

I can see why sensemaking is not present in much of leadership education because it assumes a certain degree of risk, a certain degree of depth, a certain degree of real engagement. And, unfortunately a lot of leadership programs do not have those as main purposes.

Although rarer within other leadership education contexts, facilitators, students, and leadership experts were in agreement that sensemaking needs to be included because adaptive leadership assumes a different level of risk, depth, and engagement. Josh (Leadership Facilitator) expressed even more emphatic emotions surrounding the exclusion of sensemaking from adaptive leadership teaching describing the move as dangerous. Josh said:

We're asking students to do very difficult work that we don't even always ask working professional adults to do. I think it's reckless quite honestly. Maybe unethical. And certainly, can be traumatizing to a lot of the students who are sitting in those classrooms. To bring them into these situations and turn up the heat on them and then to not help them process and make sense of it is all...it's reckless, it's traumatic, it's irresponsible, and dangerous.

Considering the risk associated with not including space for sensemaking including this move being described as reckless, traumatic, irresponsible, and dangerous was an unexpected but important finding of this study. The experiential nature of adaptive leadership teaching and learning can lead to much uncertainty for participants which is one way participants shared sensemaking is helpful. The next findings include the components of sensemaking theory participants described as part of their adaptive leadership learning experience.

RQ2: Sensemaking as a Process

Participants discussed how sensemaking happens within adaptive leadership classrooms and what teaching strategies are helpful in creating space for students to make sense of leadership. Sensemaking involves creating meaning, pursuing understanding, and framing events to give meaning to experiences (Gioia & Chittipeddi, 1991; Weick, 1995). Participants began by describing the importance of intentionality in providing time and space for sensemaking in adaptive leadership curricula. Next, participants described how sensemaking within adaptive leadership is a collective process of expanding worldviews among those learning the theory. Finally, participants in this study emphasized teaching tactics that foster sensemaking within adaptive leadership experiences including (a) small groups, (b) debriefs/ “getting on the balcony,” (c) self-reflection, and (d) practical application.

Theme 1: Intentionality in the Process of Sensemaking. Participants shared that sensemaking does not happen by accident, rather it happens intentionally through structured set-aside times. These purposeful teaching interventions ensure there is time for participants to solidify what they learn. There were both intentional times built in to the course for sensemaking to take place along with less structured/informal times for students to ruminate and reflect on learnings.

Subtheme 1: Sensemaking Does Not Just Happen. Facilitators, leadership experts, and students all emphasized the intentional, communicative process of sensemaking. Lou (Leadership Facilitator) explained:

There was thinking ahead of time about giving [the students] space and structure, creating spaces where sensemaking can happen. Understanding that sensemaking doesn't just happen. If you don't help people make sense of and come to an understanding, where they see what happened, it needs to be intentional and there needs to be structure behind it. It's not just going to spur of the moment happen in the hallways.

Tatum (Leadership Facilitator) agreed and described the balance between teaching adaptive leadership and allowing space for sensemaking stating, “delivery of content, it's content and process, and sensemaking is that process that helps these ideas become more alive. I guess yeah just more than words on a page.”

Adaptive leadership classroom facilitators and experts shared that sensemaking takes up a considerable portion of the teaching time. Louise (Leadership Expert) shared, “I probably spend 20% of a program in some kind of provocation or Case-in-Point, and 80% sensemaking.” The amount of sensemaking necessary within an adaptive leadership teaching experience facilitators

and experts attributed to the experimental nature of the learning experience. Tatum (Leadership Facilitator) describes this saying:

I think we have to provide that route, that amount, that frequency, and that level of sensemaking along the way. The greater the amount of experimentation we're asking for, probably means we have to build in a greater amount of sensemaking time.

Asking participants to experiment with the practice of adaptive leadership can involve confusion, uncertainty, and risk on behalf of participants.

Facilitators and leadership experts agreed this ambiguity can be managed with time allocated for sensemaking. Tatum (Leadership Facilitator) encouraged adaptive leadership practitioners to not be afraid to allocate significant time to sensemaking and sensegiving:

I would say: don't be afraid of allocating a lot of time to sensemaking or sensegiving. 15 minutes isn't sufficient you know. We spent a lot of hours that week sensemaking. If you don't do that then part of the work is missing.

Leaving participants adequate space and time to make sense of what they are experiencing within the teaching of adaptive leadership was built into the schedule of the course this study observed, and within the agendas of other adaptive leadership experiences facilitators and experts created for a variety of audiences.

In addition to allocating considerable time within adaptive leadership teaching to sensemaking, facilitators, and experts also shared how they built in sensemaking within their teaching practice. Louise (Leadership Expert) describes her process saying:

I might start with a pretty conventional teach piece, you know some scaffolding, some framing around a concept, and then a Case-in-Point element of like hearing now how might this show up? And then the third phase of that could look like a debrief.

Louise explained the debrief was where intentional time for sensemaking took place.

Josh (Leadership Facilitator) extends this process to include a call for a variety of elements of sensemaking built into the learning experience and teaching agenda. These various elements are described in greater detail within the findings below, but, broadly, Josh shared he designs the course in a way that is:

...purposeful and structuring in elements that allow for sensemaking. I think perhaps there is some value and even having different modes of doing that. That morning seven o'clock session is one way of helping to contribute, which is complemented by the debrief, which is complemented by a small group session, which is complemented by the other informal hallway conversations, and lunch discussions, and those types of things. I think that's valuable to have different kind of modes, for that to take place in because one (1) it's more opportunities to make sense and contribute to the process and two (2) it allows for students to respond to different approaches. For some students maybe a debrief contributes more to their sensemaking or a small group does. There's some variety in there that might speak to different ways the students learn or different approaches that resonate with them better. I think that intentionality of building in the sensemaking components and maybe some variety, I think those are strengths of this course that others could borrow from.

Participants also described in more detail a variety of methods of sensemaking including how helpful it was to have times of small group learning, debriefs, and also more informal times of sensemaking including over lunch and in hallway conversations with facilitators and other students. A specific time at the beginning of the day to ask questions and make sense of what was learned the day before was provided in the course observed in this study.

Subtheme 2: Ruminare and Reflect. But, intentionality was not always about scheduled, planned, or devoted sensemaking time: It also included unstructured time to ruminate or reflect. Students described sometimes needing time overnight or outside of class on their own to reflect and apply the learnings to their own personal contexts. Vincent (Student) shared, “sensemaking for me it sounds like reflection and learning after the fact. Most learning I think it’s personally done outside of class. Kind of thinking about what was taught and deep reflection or really applying yourself.” Cassidy (Student) agreed that time outside of class was useful in the learning about leadership saying, “it let me have some reflection time and actually put into words and not just have all these thoughts jumbled around in my head.” The process of reflection outside of class looked different for students including some saying they texted other students in the class while others made notes in their phone to reflect on later. The process each student described was intentional time set aside to think about what happened in the classroom and to connect it to tangible learning about leadership.

Tatum (Leadership Facilitator) also speaks to sensemaking happening at different paces for students saying:

And not everybody is going to process at the same pace, and some people need, you know, overnight thinking. And so that's why for me that morning optional sensemaking session is super important because of the chance for them to come in, and you know get clarification around some of the leadership ideas so that they can attach that to whatever it is they were struggling with the night before or attach that sensemaking to whatever it is that they think they want to experiment or kind of play around with as that day unfolds.

As shared in the introduction to the findings, a “sense making circle” was on the agenda for the course observed for this study was an optional time students could come to meet with course

facilitators to ask questions and seek clarity first thing in the morning before the next day of teaching began. In a field note taken on August 5, 2021, I observed that one student brought in multiple questions that she had been reflecting on overnight. The facilitator leading the sense making circle time in the morning before the class began answered her questions and also allowed space for individual journaling and reflection by the 3-7 students in attendance. The facilitator toggled between sensemaking at a systemic and individual level, and also asked about patterns of behavior being observed.

In my observations and in interviews, facilitators pointed out that sensemaking can take place at both an individual and systemic level. Tatum (Leadership Facilitator) argued sensemaking within adaptive leadership can be both an individual process of reflection, as is the case when students processed learning overnight, and one that is collective and communicative when making sense of key learnings alongside peers and facilitators within a classroom setting where feedback and clarity are provided. Students described how helpful it was for them to not only have moments of individual sensemaking but also collective times where they could lean on other students within the class to aid in their understanding.

Theme 2: Adaptive Leadership: “Work of the Heart.” Sensemaking is also seen as a process that helps people organize and understand information and experiences inconsistent with their prior beliefs or expectations (Weick et al., 2005). Participants describe the collective nature of sensemaking and how often it would help in expanding their previous held beliefs and worldviews. This was both direct, implicating values, beliefs, ideologies, and worldviews and metaphorically as the ‘work of the heart.’

Subtheme 1: Values, Beliefs, and Worldviews. Adaptive leadership also often leads to a broadening of students' perspectives. This includes a process of reframing as new perspectives are considered. Eric (Leadership Expert) describes this shifting of perspective:

What adaptive leadership does well, partly through the pedagogical Case-in-Point type experience but also importantly through the reframing of work as being more adaptive than technical and that kind of reframe invites a process whereby people begin to question the deeper stories, narratives, myths that they tell themselves, about who they are, about what their work is, about whose work it is, it's not just their own. It begins to shift in a very fundamental way people's worldviews. Step one is kind of a reframe, which is a reframe of not just the problem but every frame of the self within that system, and of course, others. And then from that is again an invitation, a desire, a curiosity to step into the unknown, if this is not what I thought it was (the world, myself, the work, my job), whatever is not what I thought or was taught to help me move forward.

The reframing process that Eric described often touches deeply held loyalties and values embedded within adaptive leadership teaching. Facilitators and leadership experts acknowledged allowing participants the space to struggle with learning concepts and changing deeply held values and behaviors is a different expectation than other leadership trainings or professional development experiences they may have previously attended. This work is difficult and requires facilitators to create an environment that encourages participants to engage in ways that expand their currently held viewpoints.

Andrew (Leadership Facilitator) described the importance of creating a holding space for complexities tied to adaptive leadership:

The classroom and leadership environments are holding spaces for difficult work. That involves people's values, loyalties, and losses. Facilitators attempt to create that holding space through being genuine, supportive, by asking questions, by presenting an attitude of belief in people's ability to create their worth as individuals.

The creation of a “holding space” facilitators and experts described as an intentional process of providing adequate space for students to express a variety of viewpoints, values, and worldviews and then work to connect the variance in opinions to what can collectively be learned about leadership. This process required students at times to make sense of viewpoints they did not agree with and work to come to a place where healthy dialogue could be engaged in to inform the question of where do we go next?

One belief of adaptive leadership is that to collectively make progress on tough challenges may require people to change their values, beliefs or common ways of acting (Green & Fabris McBride, 2015; Heifetz et al., 2009). Although challenging for most students to engage in this perspective shifting, practitioners of adaptive leadership believe showing up wholeheartedly and engaging with worldviews different than their own at times is essential to making progress on adaptive challenges.

Subtheme 2: Work of the Heart. A few experts studied shared adaptive leadership requires people to truly care about others and the challenges that lie ahead. Mickey (Leadership Expert) describes this process of leadership and sensemaking as work of the heart:

The process of sensemaking in leadership for me is the stuff of the heart. We get to see each other in the process of struggling, growing, learning, and all the mess that is there. But, above all, we see each other in hope. I do find myself in groups feeling and saying to people, in many ways leadership is love. It is an act of love to hold each other in these

places because we care about what's before us and where we are heading. The process seems to bring people to their best essence. That is what heart is for me.

Tom (Leadership Expert) also expressed the importance of heart when teaching adaptive leadership saying, "I don't think this work can be done without a big heart." He described a need for deep empathy within the work of adaptive leadership and expressed concern that many who approach the work of leadership are strong with their brain, but not with their heart. This, he argued, is not as effective of a posture when working with people who are engaging in change. Both adaptive leadership and sensemaking frameworks are seen as processes that help people organize, talk about and understand experiences at times that are different from their own lived experiences. Participants described the interplay of sensemaking and adaptive leadership as requiring students to engage wholeheartedly and with curiosity around viewpoints different than their own.

Beyond being able to engage wholeheartedly, a physical description of how learning needs to move from only within a person's head, but being experienced within their heart and gut was described. Joy (Leadership Facilitator) said students need to "be activated by the learning in some way." Joy pointed to her head before moving to point to her heart and gut saying the learning needs to move from being a cognitive in the head experience to being physically and emotionally experienced in students' hearts and guts to fully learn adaptive leadership. Louise (Leadership Expert) echoed this shift in where learning must land saying, "I now have some learning that's settled deep into my bones. It wasn't just a cognitive idea or passive learning experience, but there's something that happened below the neck." Emotion, work of the heart, settling lessons 'in the bones,' gut-feelings, and other embodied experiences also play an

important role in the second theme. Participants in this study also provided specific mechanisms for how to create space for sensemaking within learning environments that will be outlined next.

Theme 3: Mechanisms to Build Sensemaking into Adaptive Leadership Education.

A few ways of creating intentional time and space for sensemaking were highlighted including (a) small groups, (b) debriefs or times “on the balcony,” (c) self-reflection, and (d) practical application. These components were ones that were intentionally built in to the course experience by facilitators who designed the course observed for this study. Leadership experts and facilitators also described them as standard components of adaptive leadership learning experiences to help students make sense of adaptive leadership.

Subtheme 1: Small Groups Create a “Safe Haven.” In addition to the previously described “sense making circles,” small groups, or intentional time where students would gather with 6-8 of their peers during the course experience, was one mechanism utilized to offer additional support and sensemaking. Students felt the intentional time in a smaller group was helpful both to offer peer support, but also to solidify the learning taking place within the larger classroom setting. Vincent (Student) shared, “the small groups are a safe haven and individuals opened up and shared how they felt about things. That information and sharing how you feel are always beneficial.” Olga (Student) agreed and shared how the small groups led to greater vulnerability both within a smaller group of peers and within the larger classroom environment. Olga said, “In our small groups we were exposed to vulnerabilities, exposing us to deeper conversations and exposing us to asking stronger questions.” Based in course-documents, field notes, and interviews, facilitators in the course observed created these small groups with two main purposes: to offer support and to deepen the learning. Joy (Leadership Facilitator) shared, “[small groups] are a place where they can also likely be more bold, more open, and ask some of

those questions they might not want to ask in the class, so that they can feel like they're not being left behind.” Lou (Leadership Facilitator) agreed and shared the purpose behind the time for small groups:

The small groups are less about whatever facilitator is in the room and more about the students having a space to understand and support each other. They are called peer learning and support groups, and so you know the hope is that the students can learn from each other, because they have a different perspective than the facilitators do. The students need practice doing all of that stuff too, and the support that they give each other is going to be more useful than whatever I have to say.

The space for students to practice asking thoughtful questions, supporting each other through feedback and encouragement, and working to understand course content more deeply were some of the outcomes participants described small groups provided.

Participants said the small group setting also allowed them to open up in different ways and share more of the emotions they were experiencing while experimenting with adaptive leadership. Vincent (Student) explains:

I think the small groups at the end of the day, are a safe haven. I think that individuals are more likely to open up and share how they feel about things. I think that information and sharing how you feel are always beneficial and I think that it's there, especially for individuals, I feel like who were scared of the large group. I think that it's very beneficial for these individuals to get that kind of comfort and that support between us.

To have the opportunity to share in a smaller group was “a safe haven” where students “open up,” this was a different setting that was intentionally created as part of the learning experience to allow space for sensemaking in ways that felt more approachable and less scary.

Diego (Leadership Facilitator) also noticed a change in how students showed up within these small groups:

...to have that sensemaking space there in a small group or just a small group in general, was a different scene for them to work in where they felt more comfortable. And I just noticed that they felt more like themselves.

The ability to be themselves and share how students are feeling in the midst of an adaptive leadership experience was expressed as important to students both to feel supported and also to not become excessively frustrated with the learning experience. Amy (Student) described this saying “if we didn’t have those small groups, or if I wasn’t able to talk to a smaller group of people, it would be more frustrating because I wouldn’t have that time to talk or explain how I was feeling.” Sarah (Student) agreed that these small groups were helpful saying “[the small groups] were kind of like providing that safe space for me to talk and not be judged.” Time in small groups took place multiple times each day throughout the course. Small groups provided space for participants to build relationships with their peers that some students said helped them to feel more confident to experiment within the larger classroom setting, and were one important mechanism to provide sensemaking in the form of more personalized peer support.

Subtheme 2: The Art of the Debrief/ “Getting on the Balcony.” Consistent with previous literature, providing frequent times to debrief also referred to as “getting on the balcony” were considered necessary to make sense of adaptive leadership teaching. “Getting on the balcony,” is a metaphorical term used within adaptive leadership pedagogy and refers to making observations about what is going on within a system and circumstance (Heifetz et al., 2009, p. 126). A debrief is defined as “a short timeout from the action of Case-in-Point or other experiential learning session” (Green & Fabris McBride, 2015, p. 208). Time for debriefs were

utilized by facilitators to reflect on what just happened in the classroom, solidify learning about leadership, and work to apply the learning practically for each student. Andre (Leadership Expert) described why a debrief is helpful saying, “the value of a debrief is it allows you to slow it down. To replay the circus.” Andre also compared the exercise of “getting on the balcony” to “holding a mirror up.” He shared, “holding a mirror up for the group, the system to see what it can’t otherwise see [is helpful] because it gets swept away in the emotion of the moment.” This slowing down and making sense of the action that just occurred facilitators and experts shared was helpful to solidify learnings. Andrew (Leadership Facilitator) said:

I really believe that the debriefs are where students learn the most. Because when you're in the heat of the moment, when you're dancing on the dance floor, it's hard to distinguish your own thoughts from what's actually happening. And you get kind of caught up in the moment. But in the debrief you're able to have an outside perspective on what actually happened and make sense of that from a variety of different perspectives.

Getting “caught up in the action” and not being able to think clearly or to consider a variety of different perspectives was shared by a few participants on how debriefs were helpful. Claire (Leadership Facilitator) described them as an emotional cushion:

Maybe another answer is that because there's no right recipe for how to do adaptive leadership. There's risk involved with doing it and so sensemaking also serves as like an emotional cushion a little bit. So, let's say for participants you're in the thick of a confusing experience where you're learning stuff and you're trying stuff and you're not sure if you're picking up on the right lessons. And then when we go into a debrief and sensemaking you are taking a rest from that to reflect more than engage.

This rest or pause from the action helped to regulate the energy within the classroom and helped students to also manage their emotions including their self-described frustration and confusion. Emily (Student) shared how debriefs regulated the emotion in the room that happened in the heat of action saying, “it gave us time to like cool off and take an objective approach to it, rather than the very emotional in the moment approach.” This regulation of emotions students described helped them to both stay engaged in what was happening within the course and allowed them time to consider alternative perspectives as they paused from the action.

Facilitators and leadership experts described the toggle between being in reflection versus being engaged in action, and the importance of both within adaptive leadership learning. Participants agreed that it is easier for people to be in the action and is more foreign for people to pause the action to intentionally take time to reflect. Louise (Leadership Expert) describes the tension between being in the action and pausing the action during debrief:

...what I think they build is a capacity in all of us. Like there's action and then there's reflection on action. I think most of us, we really just think about action. It's a whole different idea to go “wait what just happened there? and how can we learn from that?” I mean, to do a good debrief says that the disruption was worth something, because I now have some learning that's like settled deep into my bones, because you know from the beginning, as I was saying it wasn't just a cognitive or a passive learning experience. But there's something that happened at the below the neck level that kind of imprints that concept if you can land it in the debrief.

Facilitators agreed debriefing what just happened within a classroom was important to settle learning “deep into [the] bones” of leadership participants. Facilitators and leadership experts also referred to this time of debrief as being “on the balcony” for a chance to look down at the

action of what just happened. Theo (Leadership Expert) describes how moving from being in the heart of action to getting “on the balcony” takes place and triggers moments of sensemaking:

So, we're stopping the action. We're asking the group to ...get up in [the] adaptive leadership...balcony and look down on themselves and what's happening. Something is happening in the room, hit pause, and I think at that moment you're asking somebody to sort of consciously make sense. We are interrupting patterns, we are helping people see that the plan they currently have is no longer sufficient in a particular situation or with particular people and that move from the habitual, the pattern kind of the unconscious part of the way our brains work or quick schemas that make our decisions to actually...I need to hold it up and see it from different viewpoints, which was like multiple interpretations. That's kind of the way that I've made sense of what our job is in adaptive leadership, and I think that lines up nicely with the sensemaking theory.

Including a debrief within adaptive leadership learning helped participants to refresh and reflect prior to getting back into the action. The debrief as a mechanism for sensemaking was coupled most often with Case-in-Point sessions or moments in the classroom calling for experimentation. Participants in this study shared that debriefs were around 30 minutes and came after a Case-in-Point session as a short pause from the action to make connections to key leadership learnings. The findings and description of this move between reflection and action was consistent with what previous literature recommends for how to effectively utilize Case-in-Point pedagogy to teach adaptive leadership.

Subtheme 3: Self-reflection an Important Tool and Reoccurring Practice. Students and facilitators commented that time for reflection and self-reflection was an important piece of making sense of adaptive leadership. This differs from time for reflection (Theme 2, subtheme 2)

in that this is a recurring practice, not a specific or dedicated time away to engage in sensemaking. Andrew (Leadership Facilitator) shared the value of self-reflection related to sensemaking saying, “reflection is a person's greatest tool for learning and that's what sensemaking is.” The individual act of reflecting participants shared was both to help make sense of the system or what was happening in the classroom as well as to reflect on how they were engaging as a participant within the collective system. Amy (Student) mentioned that this pausing to self-reflect was a new practice for her:

The most useful part I guess is self-reflection, for me. I didn't really take time to reflect on myself or like how I was feeling or about some of the choices I had made like the day before, or what I wanted to do that day. I don't think I really understood how much self-reflection can help you improve.

Amy discussed how she would take time in the evenings after the course was over each day to intentionally reflect on her own actions and how she wanted to engage differently the next day. This retrospective and prospective approach to self-reflection also includes a tie to considering identity and how students are viewed by their peers within a system. She and other students mentioned that this intentional practice of reflection was one they carried forward into other areas of their life.

Lou (Leadership Facilitator) agreed that being mindful and self-aware was both important in the exercise of leadership and to help students make sense of how they effectively engage in leadership. Lou shared: “we talked a lot about how important reflection and self-awareness and mindfulness can be to exercising leadership. Knowing yourself, knowing where you are, knowing how to engage with the system.” The practice of self-reflection was formally built into the leadership course observed for this study through written reflection papers that students

completed at night and turned in before the course began again each day. One example of the prompts for these reflection papers I noted in my field notes on August 2, 2021, asked students to reflect on this question: “Of all the things that you heard today, what resonated with you the most and why?” Each evening students had a reflection paper assignment where they were asked to write on a prompt like this one to engage in individual sensemaking about what they learned in the classroom environment that day.

Self-reflection is also useful more globally for participants engaging in adaptive leadership trainings. Eric (Leadership Expert) also shared how he practices self-reflection with participants in leadership trainings he facilitates and how sensemaking helps people not only understand systemic dynamics in the classroom, but also to understand themselves:

They are seeing that every action, including silence as we know, impacts a group in positive and or negative ways. From a sensemaking point of view, I might say that to the extent that sensemaking has to do with first and foremost, one sense of self who was doing the sensemaking. Not just one’s brain, but you know your heart, your gut, your mind, your body all that to an extent, the sensemaking depends on that connection to self that awareness of self.

Eric described that Case-in-Point adaptive leadership teaching pedagogy as particularly ripe for the inclusion of self-reflection as a necessary form of sensemaking. What adaptive leadership and Case-in-Point do well, Eric argued, was challenge people to question the deeper stories they tell themselves about who they are, about what their work is and about whose work it is. This reframes people’s worldviews both about the systems and organizations they influence, but also about themselves and their role within those systems. Andre (Leadership Expert), agreed with Eric about the value of self-reflection within adaptive leadership sharing, “I think crafting

interventions that promote that self-reflection is one of the very challenging creative aspects or capacity[ies] that is required for the effective leadership. It's very artful.” The ability to pause and self-reflect was considered necessary to be able to step back into the system (organization, classroom, etc.) to begin to make some collective progress on adaptive challenges and continue learning together.

Subtheme 4: Learning More Powerful with Practical Application. Finally, participants also discussed how adding practical application was helpful to learn adaptive leadership. The findings were two-fold: First an encouragement to provide examples on how the exercise of leadership looks in real life beyond the classroom; and secondly, allowing space for participants to practically apply and practice the ideas. Jane (Leadership Facilitator) said, “to me the process of sensemaking and leadership is more powerful with life application examples. People need to be able to see themselves in a situation to make sense of it.” Several leadership experts found sensemaking through life application examples to be a helpful approach. Joy (Leadership Facilitator) described how the learning of leadership is more powerful when engagement in lived experience is present. She said, “if you can't engage people in some sort of lived experience where they're activated by the learning in some way, then you're not really teaching about leadership.” Connor (Leadership Expert) shared the sequence and process he goes through to provide real and relevant examples and space for application:

I think that there's a process, you have to go through. You have to hold up the idea, you have to show people examples that they can relate to. Then this whole reflective practice again about the really profound ideas. That's all there, it is just cool ideas if we don't find some practical use and make some progress out of it and it's just a waste of money.

There's that first part is, you have to be able to articulate the cool ideas that are fairly

provocative in a way that people, you can invite people into rent these ideas. And then the examples part of that invitation, then there's a moment where they have to begin to use them in their world.

Facilitators and experts agreed that the final portion Connor described of applying the ideas to participant's own contexts was imperative to making use of the leadership ideas. A few facilitators considered the lack of practical application one of the major critiques of how adaptive leadership is sometimes taught and called for a greater focus on application for future adaptive leadership experiences.

While the participants in this study agreed that practical application is important when learning leadership, their perspective varied about how exactly to accomplish this goal. For example, Josh (Leadership Facilitator) said participants needed to find a way to “make this more practical, doable, implementable for people.” Josh’s critique of adaptive leadership teaching is that it is often too ambiguous which can be confusing for students. While Joy (Leadership Facilitator) also cautioned that the teaching should not become too intellectual or without intentional sensemaking. Specifically, Joy shared, “if you don't spend time sensemaking and in real life application, the words on the banner stay words on a banner. And they stay intellectual concepts that you can't apply very easily.” Leadership experts and facilitators placed the onus of practical application of adaptive leadership on those who create adaptive learning experiences. One facilitator voiced a concern that learning could be lost if there is too much for students to figure out themselves. Jane (Leadership Facilitator) explains:

Learning can be lost in trying to put too much responsibility on the learner to figure it out. They spend more time figuring it out than really thinking about how it can work in

real life. I find that a lot of people just can't figure out how to apply it, because they're trying to figure out what it is they're supposed to do right now in this class.

The need for some sort of assurance and certainty that the leadership learned within a classroom could be applied and be useful beyond in real world contexts was shared by leadership facilitators and experts.

One main disconnect for some students and facilitators was between the intellectual course concepts and how they were experienced beyond the classroom setting. Joe (Leadership Facilitator) described this saying:

The concepts, they're sort of counter-intuitive frankly, so I wouldn't say they all make sense. They can understand what this is, but until they experience some of these ideas in real time, in a real setting, I don't think it connects with them. I don't think it makes sense. I think they fight it. They fight the ideas, they fight the process, and it takes, I think somebody who can see you, see a story about you, that you can't see about yourself to help hold you.

For Joe there was a cost and warning to other facilitators of adaptive leadership work in not making this practical and available to everyone learning the concepts. He related this to how challenging it is for people to change their behaviors. Joe argued trying to change people's behavior through the teaching of adaptive leadership was insufficient without also making clear how the ideas and concepts implicate leadership learners. Joe goes on:

If teaching adaptive leadership is really about changing people's behavior from what they're currently doing or not doing, which isn't terribly effective. It's against human nature to change their behavior. My opinion, I'm a psychologist. I just don't think that happens. You can't just teach people an idea and do that sort of model I just described

and say, okay, now they're going to go change their behavior. We have to, as humans see how these things affect and impact us. So, you have to feel the pain yourself about either your incompetence or ineffectiveness. But you also have to care enough to want to do something different. You [as a facilitator] gotta figure out how to connect with each of the individuals in the class. What's important to them? What's critical to them? What's missing for them? What do they care about?

Facilitators and experts believe not only elevating practical implications and applications for students as useful but call for them to be a centerpiece to the set-up of adaptive leadership learning experiences. Participants agreed each mechanism for sensemaking within adaptive leadership (i.e., small groups, debrief, self-reflection, and practical application) was helpful, especially when used in tandem within adaptive leadership learning experiences. The intentional design of leadership courses should also include time for real-life examples that are relevant to students' experiences beyond the leadership classroom. Participants argued these approaches help ground the learning and aid in student understanding of leadership concepts.

RQ3: Sensemaking to Manage Uncertainty or Disequilibrium

Previous literature and participants' lived experiences show that uncertainty and disequilibrium are inherent to the teaching and practice of adaptive leadership. Typically, people are conflict averse and desire comfort and certainty (O'Malley & Cebula, 2015). Adaptive challenges lack prescriptive outcomes, have high stakes, and require change, a combination which makes people uncomfortable (O'Malley & Cebula, 2015). Sensemaking "starts with chaos," "uncertainty," or "ambiguity" and is rooted in change (Weick et. al., 2005, p. 411). In RQ3, I explored how participants effectively manage this uncertainty and disequilibrium within an adaptive leadership learning experience. First, as an observer-participant I studied how

students within an adaptive leadership classroom experience feelings of uncertainty or disequilibrium, and I asked students about their experiences with uncertainty. I also invited facilitators and leadership experts to describe how they invite participants to embrace or manage uncertainty. In analyzing the results, I found an emphasis on how to manage the disequilibrium and uncertainty intentionally within adaptive leadership experiences to ensure the best learning outcomes.

Theme 1: Students Move Beyond Their Comfort Zone. Students described what the feeling of uncertainty is like within an adaptive leadership classroom. For some this included accepting an invitation by leadership facilitators to move beyond their comfort zone. Moving out of their comfort zone led some students to have feelings of fear as they experimented with actions they did not expect themselves to undertake. Olga (Student) describes, “When you are stepping out of your comfort zone, you are kind of accepting the fact that you're stepping into the unknown and you're experimenting and it is nothing but scary to do the things you didn't expect yourself to do.” This stepping beyond Olga’s comfort zone included changing her major as the result of this course to more closely align with her purpose and passions.

Beyond just acting in ways that felt uncomfortable or out of character for students as they engaged in learning adaptive leadership, a few students described uncertainty related to feeling stuck or unsure about where the experience in the classroom was headed. Amy (Student) shared, “Uncertainty is always going to be there and a lot of people just kind of spin in that ‘I’m stuck’ phase. So, I feel like they have to also put in a lot of work to be able to move past that, so I think it's kind of difficult.” Through the teaching and set-up of the classroom, students were also aware that it was up to them to figure out how to move forward and the facilitator was either not able to or willing to reveal all the answers, as is often the case within more traditional didactic

classroom settings. Heaven (Student), described this feeling of not knowing exactly what was going to happen next within an adaptive leadership classroom as a puzzle:

Being uncertain about something is kind of like walking on the plank because when you're uncertain about one thing that's one thing that's missing and...the whole class is about all these puzzles you had to put together. And so, if you're uncertain about one thing a whole bunch of things can come crashing down and you can't learn because you weren't certain about the one thing, however big or small it is. I definitely think personally like it's super important to be able to manage and be able to help people who aren't certain about things in that kind of class because it's such a hard course to go into.

Heaven described a sentiment shared by many participants including leadership experts, leadership facilitators, and students in that efforts to carefully manage uncertainty to be able to learn the concepts of adaptive leadership is essential. Heaven went on to share that at the beginning of the course the uncertainty of not knowing how the learning within the classroom was going to unfold was almost too much for her to internally manage. In both field notes and interviews, some students described not knowing if they were going to be able to continue within the course at the beginning of the week and how relying on other students to hold them steady helped them stay present in the course experience. This holding each other steady took place informally through conversations via text, at lunch when a large portion of students studied ate together and beyond the classroom in personal reflections in the evening hours at home outside of class. When asking facilitators and leadership experts about the uncertainty and disequilibrium generated within adaptive leadership learning experiences, they said it is intentional in the design of the experiences. This was shared as both an invitation to students and holistically as a way of doing business.

Theme 2: Inviting Uncertainty as the Way of ‘Doing Business.’ Participants shared that an invitation to step into the ‘unknown’ was important to the experience of exercising leadership on adaptive challenges. As Heifetz et al. (2009) contend, adaptive challenges ask people to combine what is known with learning around what is still unknown. Eric (Leadership Expert) describes this opportunity stating:

There’s a temptation. A seduction in a lower pressure to use adaptive leadership as yet another technique or framework to reduce the unknown. To reduce the unknowable to some kind of rational clarity. Like there's an immense pressure to do that. Clients want deliverables — kind of pressure. Students want to learn something specific. The real opportunity of adaptive leadership is to integrate the unknown and to integrate the unknowable alongside the known and the knowable into a coherent whole within which we can discover or rediscover our own capacity for freedom, in our own capacity for love. That's the trick, and I, as an engineer by training, I really struggle with that one, because I, you know you can get enough of an answer from adaptive that you know you kind of feel good and people feel good and you move on, but do we really show the reverence and invite in the mystery, the unknowable of life. Mystery, in the sense that it's not that it's not understandable, but that it's infinitely understandable that we provide space for that and reverence you know, for that, because that's where the answers lie actually and that's what gives me hope you know on these big issues that we face.

Eric (Leadership Expert) welcomed this uncertainty and the unknown within adaptive leadership experiences and emphasized that allowing space for uncertainty within adaptive leadership experiences is part of the learning. He went on to offer a challenge to participants:

So, let's step into the unknown, this step into the unknowable and the realization that I can't do that alone. And then you kind of get into this, you know wonderfully nonlinear productive zone of disequilibrium process and we're not guaranteed to get through that, but if we get through it well, we realize through our own competence and through our courage to step into that space together actually, we can make some progress, we can learn something.

An explicit goal for adaptive leadership teachers is to create a classroom environment that keeps students within what is called the *productive zone of disequilibrium*. Heifetz and colleagues (2009) define the productive zone as having “enough heat generated by your intervention to gain attention, engagement, and forward motion, but not so much that the organization (or your part of it) explodes,” (p. 17). This careful management of the metaphorical heat or energy generated within a classroom setting facilitators and leadership experts studied said is imperative to the work of teaching adaptive leadership.

Facilitators, leadership experts and students all acknowledged that the environment of an adaptive leadership experience is different for a few reasons, but primarily because it asks participants to sit in this space of not knowing and uncertainty longer before engaging in sensemaking to solidify the learning. Louise (Leadership Expert) describes this type of an environment as a gift stating:

To be lost and to not know is such a great space to be in because you know the moment, you know that all of a sudden, all these possibilities —we shut all these doors, and so I think they both asked us to sit in a place of not knowing and take it as the gift that it is, and I think it's really hard I think it's really hard because we're impatient. I'm impatient. It

feels good to know and feel like you've cracked the code, but I think they both hold us in this place of uncertainty.

Louise is describing how adaptive leadership learners, both students and adult learners, like to know and at times experience an impatience in wanting to find the correct answer. But both the teaching and learning participants described as a collective undertaking of discovering answers together. This type of learning is often a process of holding steady in the ambiguity of the adaptive leadership teaching prior to structured times of sensemaking. Tatum (Leadership Facilitator) shared, “You can’t make them get to it sooner. You must sit in the uncertainty, in the ambiguity and confusion for a while in order for it to make sense later.” This process of allowing participants to sit in some uncertainty both facilitators and leadership experts described as unsurprising and a way that leadership course experiences were intentionally structured. Tatum goes on to describe the intentionality in creating space for uncertainty saying:

Well, I think, sometimes we created it on purpose to make them work through that confusion, you know, a way to simulate what happens in the real world. Like there isn't a day in the real world where everything's just you know cut and dry, and you know black and white so it's creating some confusion on purpose. And the purpose is to further their understanding or learning of the ideas. I think sometimes they experience confusion, because even those of us at the front of the room are having our own moments of uncertainty, which is part of Case-in-Point, not always knowing the exact right way forward. So, we created it on purpose. We stumbled into it accidentally but not surprisingly.

The chaos and uncertainty naturally generated by this type of learning experience was both welcomed, but also seen as inherent in the art and practice of adaptive leadership. Students,

facilitators, and leadership experts all described both how the space intentionally allowed for uncertainty, but also admitted that feelings of uncertainty or disequilibrium are not isolated to participants, but can also be felt by leadership facilitators.

The improvisatory act of experimentation both in how leadership is taught and practiced, and in how Case-in-Point pedagogy is deployed, was described by both leadership facilitators and experts (Green & Fabris McBride, 2015). Mickey (Leadership Expert) defined chaos and uncertainty as a “way of doing business” within adaptive leadership teaching and learning sharing:

So, pressure that is provocation leading to chaos and uncertainty, is the means, is our way of doing business. But it's only half the story. The provocation has to be balanced with support. The opportunity for sensemaking is one means of offering that support and without it we don't have a learning process. We're not actually I think doing a reasonable job of making it most likely that people can learn, and the risks are much higher. I don't believe this work can be done without sensemaking. It would be not only dangerous but really disrespectful because otherwise what's happening is we are imposing a way of being and thinking and doing. Sensemaking means again there's that word for me integration. What does it mean? And what's now present that wasn't present before? It begins to offer that notion of hang on, I'm losing something here. But each individual has to do that for themselves, and I have no way of knowing exactly what's going on, but I can hold and create that space.

Although chaos and uncertainty were found to be inherent in adaptive leadership, Mickey and others strongly emphasized the importance of carefully managing the chaos and tension participants feel by utilizing various approaches of sensemaking. Offering support lends to a

better learning experience which is echoed by many participants in their explanation of why adaptive leadership practitioners should manage the uncertainty of adaptive leadership.

Theme 3: Facilitators Balance Tension of Offering Challenge and Support. To restore comfort and manage moments of uncertainty and discomfort, participants reported it was necessary to be intentional to effectively teach adaptive leadership. First, participants described why managing uncertainty is important and then also illustrated why Case-in-Point teaching pedagogy, frequently utilized within adaptive leadership settings, requires additional mechanisms of structure and support. When asked why managing uncertainty might be important within adaptive leadership settings Stephen (Leadership Facilitator) said:

Learners, and particularly adult learners, are not used to being asked to voluntarily go to places of uncertainty and discomfort. And so, they react in ways to restore that level of comfort which usually involves somehow shutting out whatever learning is allegedly going on. If we're not doing an effective job of managing that [their discomfort] we're not accomplishing anything. And I wish it were true, that as adults and adult learners we were better able to withstand those moments, but we're just not...and we're kidding ourselves if we think that...just because they signed up for a course they are going to sit and stew. We have to manage it, or the learning doesn't happen.

Stephen illustrates an inherent behavioral characteristic of adult learners in not being used to being taught in ways that elicit discomfort. Knowing this reality, he called for additional intentionality in the management of classroom environments. A student shared the importance in the management of uncertainty more related to helping groups make progress. Emily (Student) said,

And so, if you don't manage it [uncertainty] well in either direction like there's not going to be enough emotion or passion, or whatever put into the project, so you have to be like guiding it, directing it, kind of funneling it towards what is necessary, or else you're going to have people who like are freaking out and people who are not caring at all, and so I think balancing the appropriate amount of uncertainty to make progress in the project or whatever is the most effective way.

This tension between emotions of “freaking out” versus not caring was shared by a few students and was related to how they were making sense of what was going on within an adaptive leadership context.

Emily also extended her understanding of the importance of being able to regulate uncertainty when thinking about other adaptive contexts beyond the leadership classroom including a future job and group projects that can have unclear answers and challenges working with others. The idea that this work is especially challenging for students new to adaptive leadership contexts evoked facilitators' desire to support students and help them get to a place where the lessons they were learning about leadership made sense. Lou (Leadership Facilitator) expressed this desire well:

But really for me at the end of the day, it is about supporting students and helping them get to a place where things start to make sense, where they're not so anxious and uptight and confused. And recognizing that this whole class we asked a lot of them, and we can only do that if we then back it up and support them, because otherwise it's just rude, it's just mean of us, to put a student through that if we're not going to help them actually get value out of it.

This balance and tension between providing challenge followed by support was shared by most facilitators and leadership experts studied in how adaptive leadership contexts ideally should function. Lou extends this understanding of how to provide support in allowing space and structure to create opportunities for students to make sense of what they are learning and wrestle with the questions of what does this mean personally for them and their own leadership experiences.

While one explanation regarding why this work is so confusing is related to the adaptive nature of the work, another is that one of the primary pedagogies utilized to teach adaptive leadership is provocative and new to most participants. This led many facilitators and experts to acknowledge an increased need for intentional sensemaking including Tatum (Leadership Facilitator) who stated:

You can't use Case-in-Point as the teaching methodology and raise the heat and create that sort of uncertainty and conflict without making sure that you provide the sensemaking on the back end. There has to be some setup there. You have to give them that place and space to practice and feel unsettled. And then come back and not tell them exactly what happened but give them the chance to help to figure out for themselves what just happened with some guidance and structure and support.

The literature review of this dissertation overviews the principles of both adaptive leadership and sensemaking, but these findings reveal a deep connection to the communicative functions of sensemaking and the management of uncertainty.

Louise (Leadership Expert) highlights this disorientation and offers a warning to those who facilitate adaptive leadership experiences to keep a firm grasp on the purpose of Case-in-Point and what it is in service to:

I think the Case-in-Point is an incredibly disturbing countercultural methodology and it's easy to get lost in the methodology and not take away what was that in service to? Again and again, I hear people say well 'why were we messed with' or 'what kind of an experiment was that?' And my sense is that's a responsibility that we who are doing this work in this way, like we're on the line, we are implicated there. So, for me that's one reason and the other is you know to learn again as adults, it almost requires your pants to be kind of be on fire. Again, it's easy to provoke, it's a lot harder...can people, then, can we create spaces, where they can begin to metabolize it and apply it so that as they're leaving they can begin to distill a practice, an 'Aha' that they can take with them.

The stress Louise placed on being firmly rooted in the purpose for using Case-in-Point to teach leadership is an important distinction in remaining focused on what is most in service to students learning. She emphasized that as practitioners utilizing the method of Case-in-Point which is provocative and often creates participant discomfort practitioners are implicated to not only provoke, but help others make sense of adaptive leadership. Louise shared that the largest portion of teaching adaptive leadership should be spent sensemaking (as shared in RQ1): "I probably spend 20% of a program in some kind of provocation or Case-in-Point, and 80% sensemaking." Intentionally setting aside the time to point back to lessons learned within the classroom experts and facilitators agreed can help regulate healthy levels of uncertainty and disequilibrium in the classroom. Pushing students beyond their comfort zones and inviting uncertainty as a "way of doing business" through Case-in-Point pedagogy both underscore the overarching need to include a heavy dose of sensemaking for students to feel supported and for learning to stick.

Subtheme 1: Caution Needed Regarding the Potential Misuse of Power. While this study did not explicitly look at the role of power within adaptive leadership, a few participants

noted the power dynamics inherent in teaching adaptive leadership. They raised concerns and a caution that power is something to pay careful attention to when using adaptive leadership teaching methods. Louise (Leadership Expert) noticed the implication of power potentially being abused if sensemaking is not intentionally included within the teaching set-up of adaptive leadership course experiences. She shared, “I think we also risk perpetuating all kinds of trauma and abuse of power that we see out there if we aren’t held accountable to make meaning now.” The “out there” described by Louise was in reference to the systems where participants live and work including communities, organizations, and society at large.

The responsibility of making meaning of what issues surface in the classroom Louise argued is shared by facilitators of adaptive leadership and participants taking part in the learning experience. However, Louise placed a particular emphasis on the facilitator being implicated in ensuring these conversations around adaptive challenges including power dynamics are healthy and productive. She shared that if adequate sensemaking does not take place within adaptive leadership teaching, students just “feel like they are being messed with.” To avoid this feeling by students, participants suggested facilitators make a concerted effort to connect what is happening within the classroom to leadership lessons and involve students in the process of making these connections.

The adaptive leadership model argues that the conditions and issues that are raised within a leadership course mimic the conditions students would face out in society (Hufnagel, 2015). Some of the issues students raised included adaptive challenges related to the inclusivity of diverse voices, identities, backgrounds, and worldviews. Eric (Leadership Expert) shares how this has been the case with leadership courses he has facilitated and the need to understand what students can handle when facilitating leadership experiences. He said,

It's really about us understanding what we are able to tolerate and take on in this moment, you know, so if you're for example, going into a session where someone says we have an agenda problem here or a racial issue here, yes, we probably always do. What is the capacity of this group, the holding environment, the quality of relationship to all to tackle that and do it justice and not do damage to people? To have yet another one of those conversations if they've been burned by them. And who makes that decision about what we can handle? Right, so that's the real heart, I think of managing and giving that work back to the group.

Louise and Eric both elevated the importance of sharing the work of tough conversations around adaptive challenges. However, Eric framed this as giving the work back to students and Louise discussed sharing the work. The question of "who makes the decision about what we can handle?" in reference to challenging conversations is particularly interesting in thinking about who determines when and how sensemaking should take place within an adaptive leadership course. This tension will be discussed in more detail within the discussion section.

The objective of not causing harm to participants in the use of adaptive leadership teaching methods was shared by those interviewed, but one participant said it was a concern and critique of adaptive leadership teaching which is a unique perspective within this study. Connor (Leadership Expert) said,

It was a great deal to concern among communities of color that this technique, predominantly taught by white males, is a really racist approach. And I think it has a lot to do with the misuse of power of the facilitator in trying to impose sensemaking on people when he's [sic] ready, not when they are. I have always tried to be very caring. But I feel badly about times when I missed moments. Which is why it's always good to

teach with somebody else because you can't see them all, you can't get them all and you know we're human. We get triggered and when you're triggered it is a terrible time to be in charge of adaptive leadership because there's lots of opportunities to vent your anger and none of them are good.

This concern regarding the potential misuse of power including in relation to imposing sensemaking when the facilitator is ready, not when students are is echoed by Eric and raises ethics and efficacy questions around when and how to use sensemaking within adaptive leadership teaching. Whether the work of both challenging conversations and the sensemaking involved is driven by the students or shared among the facilitators, intentionality remains important. This theme raises additional tensions and support for sensemaking potentially being helpful for facilitators and students of adaptive leadership. The implications of these findings and others within this study will be discussed in greater detail next within the discussion chapter.

Chapter 5: Discussion

The purpose of this study was to evaluate the theory of adaptive leadership to better understand how facilitators of leadership within a college adaptive leadership course help students sensemake. In addition, this study sought to better understand how the communicative processes of sensemaking and sensegiving take place within an adaptive leadership context and how sensemaking might help navigate the uncertainty inherent within adaptive leadership teaching and learning. This study centers communication as important to understanding how sensemaking elevates students understanding of adaptive leadership. Findings show communication is deeply embedded in adaptive leadership theory and practice. This project utilized phronetic iterative analysis, using semi-structured interviews and observer-participant observation, to answer the following research questions:

RQ1: How do facilitators, students, and experts co-construct an understanding of the relationship between sensemaking and adaptive leadership?

RQ2: In what ways do processes of sensemaking and sensegiving take place within adaptive leadership trainings?

RQ3: How does sensemaking help manage the disequilibrium and uncertainty inherent within adaptive leadership contexts?

Numerous themes emerged to address these research questions which are summarized below.

For the first research question, RQ1, evaluating the co-construction of sensemaking and adaptive leadership, two primary themes emerged. The first theme (1) Overlapping components of sensemaking and adaptive leadership, showed that each of the pieces of sensemaking theory were present within the experience of teaching adaptive leadership. These themes capture the component of sensemaking (Weick et al., 2005) and included (a) Ongoing, Updating,

Retrospective, Prospective, Based on extracted cues, (b) Collective, Social, Bracketing and labeling, and (c) Iterative, Feedback, Identity, Plausibility, Centered on action and change. Each of the components of sensemaking which participants described were present within adaptive leadership teaching and learning, and also permeated the rest of the themes presented.

The first theme helps make a case for the second theme presented in RQ1 the (2) Necessity of sensemaking within adaptive leadership teaching contexts which is. The leadership experts, facilitators and students studied described the (a) value in sensemaking when teaching adaptive leadership, how (b) it's risky to teach adaptive leadership without sensemaking and present (c) sensemaking as a leadership skill. The overlap of sensemaking theory and adaptive leadership teaching and practice showed that the learning of adaptive leadership often takes place over a long time horizon and is an ongoing process. The iterative, communicative process of sensemaking was one that took place both at an individual and system or collective level, and both time for self-reflection and sensemaking as a collective activity were both important.

The necessity of sensemaking being present within the learning/teaching of adaptive leadership was shared by students, leadership experts and facilitators who participated in this study. The leadership skill of sensemaking was seen as necessary to be included due to the experiential and fluid process of teaching adaptive leadership. Participants described the intentionality in creating space for sensemaking as imperative and raised a concern that it would be risky to teach adaptive leadership without sensemaking. Participants largely described the risky nature of not including sensemaking being due to the experiential nature of adaptive leadership teaching and how this leads to uncertainty for students. One way to help manage this uncertainty is to include intentional times for sensemaking to take place.

RQ2 was answered by multiple themes that illustrate sensemaking as a process. This research question sought to answer how sensemaking happens within an adaptive leadership context. The (a) intentionality in the communicative process of sensemaking, (b) description of adaptive leadership being “work of the heart,” and (c) ways or mechanisms to build in sensemaking to adaptive leadership experiences were all discussed. Participants shared that sensemaking requires intentionality and does not happen by accident. Purposeful time set aside to sensemake helped ensure that participants solidified learning. The balance between delivery of content and the communicative process of sensemaking was shared by facilitators with sensemaking taking up a significant portion of the teaching time. Sensemaking also helped participants understand and organize information that was different than their prior beliefs or worldviews. Participants also provided specific mechanisms for creating the intentional time and space for sensemaking including small groups, debriefs or times “on the balcony,” self-reflection, and practical application. These components were built-in to the course experience created by leadership facilitators and the combination contributed to student sensemaking.

Lastly, RQ3 considers how sensemaking helps students manage the uncertainty and disequilibrium inherent within adaptive leadership teaching. The themes included the (a) student experience of uncertainty and disequilibrium, how (b) inviting uncertainty is the way of ‘doing business’ within adaptive leadership teaching and learning, and (c) facilitators role in intentionally managing uncertainty. Sensemaking starts with chaos or uncertainty and is rooted in change (Weick et al., 2005). Adaptive leadership also subscribes to a focus on challenges that lack prescriptive solutions and require people to change (Heifetz et al., 2009). Students described feelings of uncertainty in invitations from facilitators to move beyond their comfort zone which sometimes also led to them feeling stuck regarding their next move. Facilitators and leadership

experts emphasized that allowing space for uncertainty within adaptive leadership is part of the learning. Although chaos and uncertainty were described as inherent within adaptive leadership teaching, providing support through sensemaking was seen as imperative. Pushing students beyond their comfort zones and seeing uncertainty as a “way of doing business” through Case-in-Point, a primary pedagogy often used when teaching adaptive leadership, both raised the need to include a significant dose of sensemaking for students to solidify learning.

Overall, this study contributes to communication, sensemaking, and adaptive leadership literatures through both theoretical implications and a practical roadmap for how to incorporate sensemaking within adaptive leadership teaching. The findings reveal that sensemaking needs to be intentionally included within adaptive leadership contexts for productive learning outcomes. Sensemaking itself was seen as a leadership skill and paralleled the process of adaptive leadership with sensemaking being described as the reflection on the action of adaptive leadership. A significant allotment of time devoted to sensemaking and different modalities including small groups, debriefs, reflection assignments, and both individual and collective times of sensemaking, were found to be useful. The specific theoretical and practical implications will be outlined next followed by limitations and future directions for study.

Theoretical and Scholarly Contributions

This study contributed to two primary bodies of literature: sensemaking theory and adaptive leadership. First, I outline how this study contributes to existing understandings of sensemaking (Weick, 1995; Weick et. al., 2005). Next, I show how this study builds upon existing knowledge about adaptive leadership theory (Heifetz et al., 2009).

Contributions to Sensemaking Theory

This study highlights how sensemaking was embodied or described as a work of the heart; shows sensemaking was favored over sensegiving in adaptive leadership classrooms; and finally challenges that sensemaking just happens, demonstrating intentionality is required.

Sensemaking was Embodied “Work of the Heart.” Though it was not anticipated, participants shared feelings of embodied knowing and learning within adaptive leadership. This study found sensemaking also happens in our hearts and guts. In line with the phronetic iterative method (Tracy, 2019), this finding prompted a review of previously excluded literature. Previous literature on embodied sensemaking defines this as making sense of our lived experience through “embodied (bodily) interpretations in our ongoing everyday interactions” (Cunliffe & Coupland, 2012, p. 63). The distinction of embodied sensemaking adds credence to “felt experiences, emotions and sensory knowing” of a person’s “lived experience” (Cunliffe & Coupland, 2012). Participants in this study described embodied sensemaking as work of the heart and gut including the importance of allowing space to process the complexities tied to adaptive leadership or “people’s values, loyalties and losses.” Engaging in conversations around deeply held values, loyalties and losses required participants to engage “wholeheartedly” and from a place of “vulnerability.” This process and wholehearted engagement in sensemaking within leadership was also referred to as “the stuff of the heart.” This heart work participants said was needed due to how adaptive leadership requires people to struggle, grow, learn, but also “see each other in hope” when working to make progress on tough adaptive challenges.

A call to engage wholeheartedly was not just for students of leadership, but also, facilitators and leadership experts. Participants shared that facilitators and experts cannot and should not do this work “without a big heart.” A need for deep empathy within adaptive

leadership was shared as a necessity for facilitators and experts who seek to engage in helping others learn adaptive leadership. A posture of approaching adaptive leadership from a head/knowledge/academic level was seen as less effective than when facilitators engage wholeheartedly from a place of curiosity by consciously working to connect from their hearts to the hearts of students. Participants noted this necessary posture shift is in large part due to working with people who are engaging in change. Facilitators and experts in adaptive leadership contexts should seek to engage wholeheartedly from a place of vulnerability and create space or a “safe haven” for students to do the same. This could include sharing examples and stories from their own life and experience, creating small groups where some students may feel safer to share, and frequently checking in on students and how they best feel supported in their learning.

Sensemaking Prioritized Over Sensegiving. Previous literature describes sensegiving as a process where an individual helps others make sense of a situation (Gioia & Chittipeddi, 1991). Within a classroom setting one might assume that sensegiving would be a primary centerpiece to teaching adaptive leadership. Surprisingly, but maybe unsurprisingly, sensegiving was not explicitly present within the experience participants described. Within a leadership classroom sensegiving might look like a facilitator seeking to reframe what is happening and clarify concepts that are not clear. Within the sensegiving model, facilitators are privileged due to the authority that comes with their role (Ravasi & Schultz, 2006). This study anticipated that facilitators would engage in sensegiving to help students make sense of the uncertainty and ambiguity that often surfaces within adaptive leadership contexts.

In contrast, findings show that sensegiving was missing in favor of creating space for sensemaking. Adaptive leadership teaching is more experiential in nature where students are encouraged to try a variety of interventions versus a teaching model that is more didactic or

prescriptive in telling students explicit expectations for their behavior/acts of leadership. A focus on the power of individual and collective sensemaking is underscored *against* a heavy use of sensegiving. This distinction highlights a unique difference of the pedagogy and structure of adaptive leadership teaching which creates space for experimentation and puts a larger onus of the work on students to both engage with leadership concepts and collaboratively share in the work of sensemaking. Participants suggested that facilitators and leadership experts did not facilitate times of structured sensegiving, but rather supported students in their own exploration and meaning making. Participants shared questions to help guide this support with encouraging facilitators/experts to consider “what’s important to them [students]?”, “What’s critical to them [students]?”, “What’s missing for them [students]?”, and “What do they [each individual student] care about?” Along with considering these questions for offering student support, facilitators and experts should step back and release a desire to drive sensegiving efforts in favor of more collective/student-led sensemaking (Green & Fabris McBride, 2015).

Intentionality is Required. Participants in this study stressed the importance of intentionally building in structured time for sensemaking. Within previous literature, sensemaking is generally seen as something that naturally happens (i.e., ‘enact’) rather than being framed as something requiring intentionality. Sensemaking in some ways is a not doing, but rather leaving space for reflections to surface. Weick (1995) discusses how sensemaking happens through disruptions to routine or times requiring action and change. This study extends the theory to argue that times of disruption may be *necessary* but may not be *sufficient* to prompt sensemaking. Participants shared that we need to understand that, at least within an adaptive leadership context, “sensemaking doesn’t just happen.” Instead, there needs to be some structure behind it as participants argued people do not come to an understanding of what happened within

the classroom or organizational context without some deliberate times of reflecting. There is a balance needed between the delivery of content and creating space for sensemaking.

Sensemaking was defined by participants as “the process that helps [adaptive leadership] ideas become more alive.” Within adaptive leadership specifically, some dedicated time to do the hard work of ‘intentional sensemaking’ is needed. Adaptive leadership learners and facilitators benefit from slowing down the action of adaptive leadership which may enable people to avoid a natural tendency to be quick to jump to action. Adding intentionality to the communicative process of sensemaking shows value in examining how students process along with allowing ample time and space for this processing to occur.

When asking facilitators and experts within the study about the communicative process of sensemaking, most of them had not labeled what they are up to within their teaching practice explicitly as ‘sensemaking’ (though this term ‘sense making’ was being used explicitly by instructors in the course observed), but shared that sensemaking resonates as what they are up to as part of their facilitation. Participants stressed that more explicitly naming and focusing on sensemaking as an *intentional* practice within adaptive leadership classrooms and contexts is and would be helpful. The intentional building in of sensemaking practically looked like placing times for sensemaking on course agendas and providing multiple mechanisms and a significant time investment to creating space for students to sensemake. Labeling sessions as ‘sensemaking’ on teaching agendas and sharing the explicit purpose for dedicated times of sensemaking are useful applications this study elevates to ensure intentionality in the communicative process of sensemaking within adaptive leadership.

Making sensemaking intentional and explicit is an addition to the theory (Weick et al., 2005). In addition to sensemaking being ongoing, updating, retrospective[prospective], social,

iterative, based on feedback, plausibility and identities, intentionality is also required in the process of sensemaking. Facilitators of adaptive leadership along with others seeking to integrate sensemaking theory into a learning environment should be thoughtful in creating frequent set-aside time for sensemaking to anchor student learning.

In summary, this study contributes to sensemaking theory by suggesting (a) sensemaking was embodied or described as a work of the heart; (b) sensemaking was favored over sensegiving; and (c) challenges that sensemaking does not just happen, rather intentionality is required. Next, contributions to adaptive leadership theory will be highlighted.

Contributions to Adaptive Leadership

Extending adaptive leadership theory, this study highlights how sensemaking within an adaptive leadership context is both a collective and individual exercise; the components of sensemaking are intrinsically understood in adaptive leadership; helps people move from chaos to greater clarity; and uncovered helpful metaphors for the abstract processes of sensemaking and adaptive leadership. Finally, this study extends and presents the common adaptive leadership metaphor of a thermostat, to also consider a ‘barometer’ as a unique and helpful metaphor reflecting the need to predict plausible patterns of behavior within adaptive leadership contexts. I conclude this section by arguing that the use of a barometer metaphor, coupled with the act of sensemaking, could help facilitators predict future patterns of behavior within adaptive leadership classrooms including when additional sensemaking is needed.

Sensemaking is an Individual and Collective Activity. The communicative process of sensemaking and adaptive leadership were both seen as individual and collective/social endeavors. Engaging in leadership and sensemaking involves individuals intervening within social systems (Heifetz et al., 2009). Adaptive leadership integrates the collective efforts of

individuals to adapt, experiment, learn, and respond to change (Pares et al., 2017). Sensemaking involves not only experimenting in new ways, but consciously reflecting to understand “your impact on a system as you try to change it” (Ancona, 2011, p. 11). The importance of the collective nature of leadership is often missed in other leadership models and one of the key arguments about the significance of adaptive leadership is that it includes “a process of shared meaning making and is itself a social construction. Rather than emphasizing leaders and followers, leadership becomes a function of a social system and a relational activity exercised by people within that system” (Steffensmeier & Chrislip, 2019, p. 63). This balance of both an individual and collective focus of sensemaking within adaptive leadership was echoed in the experiences of participants.

Students and facilitators described how a balance of both individual and collective times of sensemaking were both present and imperative to learning adaptive leadership. Sensemaking manifested both as times of individual reflection as was the case when students processed learning overnight, and a process that is collective when making sense of learnings within the classroom alongside students where feedback and clarity are provided by other students and facilitators. Sensemaking was described by participants as “collaborative” and “collective.” The ability to “hear from a variety of people in class, not just the front of the room teaching team” was also seen as significantly helpful in encouraging peer learning. Ensuring that students are part of the “sensemaking equation” was described as “right and necessary.”

Students specifically described a yearning to share the work of sensemaking collectively and collaboratively because it helped them to feel supported and less alone when engaging in times of purposeful reflection with their peers. Sensemaking itself was described by participants as a way to “collectively come to some sense of what reality is.” Space for a variety of

perspectives was a part of this collective and social process of meaning-making with participants also describing adaptive leadership itself as “a process of collective sensemaking.” The communicative process of sensemaking due to its collaborative nature was seen as “fundamental to the adaptive leadership model.” Without sensemaking participants argued you would not get the same diagnostic sense of what was happening within the classroom, organization or system and then would have less success intervening to mobilize more people to engage in the work of adaptive leadership. Facilitators and students of leadership should seek opportunities to create and engage in times of collective sensemaking to enhance the learning, interventions, and work of adaptive leadership.

The Components of Sensemaking are Intrinsicly Understood in Adaptive Leadership. As participants in this study described their experience of sensemaking within an adaptive leadership context, it became clear that there were many points of convergence between the two theories. Sensemaking as a theory was not explicitly presented, taught, or explained within the adaptive leadership course studied, however participants still articulated and intrinsicly understood the different components of the theory.

Subtheme 1: Ongoing/Updating/Retrospective [Prospective]/Based on extracted cues.

The process of sensemaking within learning adaptive leadership was described as an ongoing or lifelong process where understanding was updated based on extracted cues. Both the learning and teaching of adaptive leadership students, facilitators and experts shared were ongoing. The processes of learning and teaching were compared to the metaphor of “building a train track” one piece of track or information at a time. Students in particular discussed the challenge of learning and applying adaptive leadership concepts and felt they would benefit from extending the time horizon for learning well beyond the course experience. This realization that mastery of course

concepts would not happen within the one-week course took pressure off students and also helped them to shift their perspective to thinking about how they might apply learning to life beyond the course experience. Facilitators of adaptive leadership should be mindful and more explicit about the ongoing nature of the art and practice of both the teaching and learning adaptive leadership.

Subtheme 2: Collective/Social/Bracketing and labeling. Within an adaptive leadership context, participants in this study described the collective and social nature of the process of sensemaking. Sensemaking was described as “collaborative,” and a “collective” undertaking where “connection to everyone in the system” was important in learning about leadership. Interactions among fellow students both formally in the classroom setting and informally including during lunch and other breaks were described as significant contributors to the sensemaking process. The process of leadership was directly compared to the “communicative process of sensemaking.” Students and facilitators described an environment and classroom context where “we’re making sense together” as “fundamental to the adaptive leadership model.” Sensemaking as a social and collective endeavor was inherently understood and embraced within an adaptive leadership context. Facilitators and experts should acknowledge and create conditions ripe for collective and collaborative sensemaking to take place as part of adaptive leadership learning experiences.

Subtheme 3: Iterative/Feedback/Identity/Plausibility/Centered on action and change. In addition to sensemaking within adaptive leadership being a collective or social process, participants described it as iterative, based on identity and plausibility and centered on action and change. Sensemaking theory and adaptive leadership theory overlap in their shared iterative nature with a process within adaptive leadership teaching which asks students to first

observe what is going on, next make multiple interpretations based on their observations, before finally, intervening within a system to try to make progress (Heifetz et al., 2009; Weick, 1995). The process of reflection and diagnosis helped students to determine the best ways to continue to intervene and experiment as they sought to make progress on adaptive challenges. Sensemaking was described as “a pause to make sure [students] know what is happening.” Facilitators shared the realization that within adaptive leadership you are “always iterating and learning.” An intrinsic understanding of each of the components of sensemaking was a surprising and useful overlap this study presents. While the theories of adaptive leadership and sensemaking diverge in some ways, the similarities are worth noting and acknowledging to leverage the utility of both theories within the teaching of adaptive leadership.

Sensemaking Helps Move from Chaos and Confusion to Greater Clarity. Implicit within both adaptive leadership and sensemaking theory is a starting point of chaos, disruption, and/or a need for change. When considering the call for sensemaking within an adaptive leadership context, one primary benefit is in how sensemaking helps move people/systems from a state of chaos to increased clarity. Sensemaking within adaptive leadership is a heuristic not rational process so at times is difficult to quantify with its focus on people’s feelings and emotions. Participants shared that students within adaptive leadership courses often are forced to reflect on their actions (what they are doing and not doing) that is “accelerating their own demise.” Participants will often act in ways that impede progress on adaptive challenges within organizations and systems. Facilitators and experts in this study shared that pausing to reflect on this reality creates pivotal learning moments for students. Sensemaking was described as “an engine of this realization” of unproductive behaviors and actions people were engaged in within adaptive leadership contexts.

Adaptive leadership says disequilibrium is present always with an encouragement to keep a hand on the thermostat at all times to regulate heat to keep people engaged in the work of leadership.

Participants acknowledged that the environment of an adaptive leadership experience is different for many reasons, but primarily in that it asks people to be uncomfortable as they learn. The process of learning leadership within an adaptive leadership classroom also often takes longer and requires sitting in “uncertainty,” “ambiguity,” and “confusion” longer to “make sense later.”

A long line of research on uncertainty reduction (Berger & Calabrese, 1975) and uncertainty management theories (Kramer, 2010) suggests that uncertainty is a powerful motivational force. Uncertainty management theory also contends that people act in ways to seek comfort over discomfort and clarity over chaos (Kramer, 2004). Facilitators acknowledged the temptation in a classroom setting to “reduce the unknown” to “some kind of rational clarity.” Facilitators and leadership experts often feel immense pressure to do this, however participants in this study stressed the opportunity of adaptive leadership learning to “embrace the unknowable.” This space of not knowing mimics much of life and mirrors realities of students’ life outside the classroom. For this reason, and because uncertainty is a centerpiece of adaptive leadership theory (Heifetz et al., 2009; O’Malley & Fabris McBride, 2023). Uncertainty was welcomed and expected by facilitators and leadership experts. They also invited students to step into moments where they did not have clear answers to expand their capacity and stretch their competence as they learned alongside each other. The resolution from chaos to greater clarity was not an immediate process, but rather a slow simmer where students experienced “being pushed to their edge” before engaging in sensemaking to clarify learning. Facilitators and experts of leadership should seek to not immediately rescue students from feelings of incompetence or

stretching, but rather allow them to sit in the chaos a little longer before providing time for clarity through sensemaking.

Useful Metaphors for Abstract Processes. Participants described both their experience with sensemaking and learning adaptive leadership with a rich variety of metaphors. The metaphors were largely aimed at giving voice to the two abstract processes of sensemaking and adaptive leadership. Metaphors, jargon, and other framing tools were utilized to provide meaning to complex processes (Fairhurst, 2011). Participants would often slow down the engagement in adaptive leadership through intentional time to reflect and learn from metaphors. Examples of these metaphors included a distinction between a “dance floor” (when students were engaged in the action of leadership) and “balcony” (when students were engaged in the reflection or sensemaking of their actions). This language is common in adaptive leadership teaching and curriculum (Heifetz et al., 2009). Getting on the balcony was described using the metaphor of “holding a mirror up” to slow down and make sense of the action to also solidify learnings. Sensemaking within an adaptive leadership setting was also presented as being on a “train track” or continual determination of the next piece of track needed to continue making progress. While jargon and metaphors can at times add confusion to an already complex curriculum, they can also be a useful tool for sensemaking as they slow the process of reflection as students engage in the metaphor.

Temperature and Climate within Adaptive Leadership. Another common metaphor within adaptive leadership is related to regulating the “heat” in the room to generate enough energy for people to engage and progress on adaptive challenges. A few of these metaphors include “keeping a hand on a thermostat” to regulate temperature (Heifetz et al., 2009; O’Malley & Cebula, 2015) and a newer metaphor “a skillet of popcorn on a stovetop” (O’Malley & Fabris

McBride, 2023, p. 169). The temperature metaphor is presented as both a call to “take the temperature” and to “regulate or raise the heat” within a system (classroom, organization etc.). Taking the temperature and regulating the heat within a system are related to conflict or people’s ability to engage in conversations around adaptive challenges. Keeping the temperature or “intensity of the disequilibrium” high enough to move people to productive action, but not so high that they check out is part of the work of leadership (Heifetz et al., 2009). The metaphor of a skillet on a cooktop considers similarly that the heat needs to be high enough for people to be engaged, but not so high that a fight or flight response within people kicks in (O’Malley & Fabris McBride, 2023). This Goldilocks balance of a system being not too hot, but not too cold, is challenging to regulate and takes intentionality by everyone within the classroom or organization to help productively manage.

While it is common to utilize the metaphor of raising and lowering the heat and taking the temperature while teaching adaptive leadership, I argue the metaphor could be extended to address *whose* work is it to regulate heat using a metaphor that helps predict future patterns of behavior. Participants proposed, and I extend, a barometer metaphor as a comparison for productive sensemaking within adaptive leadership training to help to manage the pressure learners feel during the training process. One facilitator bolsters the need for sensemaking to manage the heat and uncertainty generated within adaptive leadership saying, “you can’t raise the heat or create uncertainty and conflict without making sure that you provide sensemaking on the back end.” In the sections that follow, I will unpack a barometer metaphor, I follow up on this metaphor in the practical implications sections offering guidance about how to utilize a barometer in the adaptive leadership classroom.

Barometer as a Metaphor for Sensemaking Within Adaptive Leadership. Heat is often equated to pressure people are feeling; however, this explicit connection is not always made. One question facilitators and students of leadership should consistently consider is what individual and systemic pressures are at play that are inhibiting progress? In the logic of adaptive leadership, by analyzing what pressures individuals and organizations/systems are feeling, you can then begin to regulate and address the felt-pressure to help people engage in productive action. A barometer serves as a useful metaphor to understand this ‘pressure’ (pun intended). To my knowledge, only one author (Govandarajan, 2016) has suggested such a metaphor, I extend the logic of a barometer here.

The purpose of a *barometer* is to measure pressure which is an indicator of current and future forecasts of weather. A meteorologist utilizes a barometer to help predict short-term changes in weather (Turgeon, 2022). A barometer is more predictive in nature than a thermometer, which simply describes the current state. Barometers indicate what plausibly could happen in the future, and, like sensemaking, a barometer favors plausibility rather than accuracy (Weick et al., 2005). While adaptive challenges often feel unpredictable, teachers of adaptive leadership rely on patterns of behavior to determine how to help students experiment with the ideas of adaptive leadership within a classroom setting.

In observations of the course studied, the facilitator team would frequently meet to discuss what was happening in the classroom, try to predict what might happen next, and to determine what teaching interventions would be most useful. This assessment of what students needed was somewhat dependent upon what was presently happening within the classroom (the heat), but facilitators also drew from their previous experience teaching leadership as patterns of behavior are often predictable (a plausibility barometer). I argue facilitators and experts were

focused on measuring and managing the pressure students were feeling with times of sensemaking to ensure application and learning. Thus, I contend a barometer metaphor is a logical explanation of how adaptive leadership instructors measure the pressure within a classroom and organization and when sensemaking is needed. This barometer metaphor is a useful addition and teaching tool for facilitators of adaptive leadership.

In summary, this study contributes to adaptive leadership theory and sensemaking within adaptive leadership by (a) highlighting how sensemaking within an adaptive leadership context is both a collective and individual exercise; (b) the components of sensemaking are intrinsically understood in adaptive leadership; (c) helps people move from chaos to greater clarity; (d) uncovered helpful metaphors for the abstract processes of sensemaking and adaptive leadership; and (e) presents a metaphor of a barometer as a helpful way of predicting plausible patterns of behavior within adaptive leadership contexts. Next, I overview practical contributions to sensemaking within adaptive leadership.

Practical Contributions

In addition to the theoretical implications, this project contributes practical guidance to students, facilitators, and experts who engage in adaptive leadership teaching and learning. Suggestions for students of adaptive leadership include expanding the time horizon for learning; engaging in both formal and informal times of sensemaking; and embracing uncertainty as a method of learning. For leadership facilitators and experts, this study encourages using a barometer metaphor to understand sensemaking within adaptive leadership; to teach sensemaking as a leadership skill; to allocate significant time and a variety of mechanisms to practice sensemaking within an adaptive leadership classroom; and, finally, that it is risky to teach adaptive leadership without utilizing sensemaking.

Practical Application for Students of Adaptive Leadership

Students of adaptive leadership refers to anyone engaging in an experiential adaptive leadership classroom or training experience. Students of adaptive leadership and facilitators and experts who create adaptive leadership learning experiences, should consider (a) expanding the time horizon for how long learning about adaptive leadership may take, (b) engaging in informal and formal times of sensemaking within an adaptive leadership experience, and (c) embracing uncertainty as a method of learning.

Expand the Time Horizon for Learning. Learning about adaptive leadership took place over a longer time horizon than just the few days students were physically within a classroom setting. The communicative process of sensemaking and practicing adaptive leadership happened within the classroom, but participants described a need to consider that the lessons on leadership continued well beyond the course experience. Participants argued that sensemaking “happens over years,” it is a “never-ending process,” and like golf, “each time you learn a little bit more.” In short, students should consider taking the pressure off themselves to understand concepts of adaptive leadership immediately knowing that sensemaking and application of adaptive leadership is a continual process.

Participants, even those who had been teaching for many years, described ongoing and updating learning and making sense of leadership even after years of application and practice. A more helpful reframing for facilitators and students may be viewing the classroom or training setting as an introduction to the ideas and a space to practice prior to applying the ideas in students’ real lives. This reframing also illustrates the ongoing processes of both adaptive leadership and sensemaking and allows students to embrace a more experimental mindset to the learning than one of mastery. Engaging experimentally with curiosity is embedded into the

teaching of adaptive leadership (Green & Fabris McBride, 2015), but should also be applied to learning outcomes and expectations of sensemaking for students within adaptive leadership courses

Engage in Formal and Informal Times of Sensemaking. When describing how sensemaking took place within an adaptive leadership experience, students described that both formal and informal times of making sense of the learning were important. The formal times of sensemaking included those listed on the agenda for the class including formal times for debriefs, small group reflection, self-reflection assignments/activities and “sense making circles” or a set aside time first thing in the morning to ask questions and gain clarity on students’ experience within the classroom. Times of informal sensemaking took place over lunch breaks where students would eat together, share reflections via text and Snapchat messages, and in hallway conversations between students and leadership facilitators. Students also shared that time reflecting with family and friends who were not actively taking the adaptive leadership course helped them to feel supported and make sense of how adaptive leadership theory can be applied to their contexts beyond the course. Overall, the equal need for both formal and informal times of sensemaking was inherent in what participants described regarding their experience learning adaptive leadership.

The course observed took place over a 5-day time period which included breaks and an hour for lunch. Interestingly, all but one student in the course chose to eat lunch together each day, which took place organically and was not prompted by course facilitators. Students described both the time in smaller groups and informal times of sensemaking including lunch as important to feel supported in their learning and to gain clarity on what they were experiencing. Although much of the formal, structured time of sensemaking took place inside the classroom,

students shared that the informal times of reflection that took place outside of class (with friends, loved ones and others) were especially meaningful. For students most learning happens outside of class, through reflection time and putting the ideas into words and actions.

The ability to talk to both peers inside the classroom and those unfamiliar with adaptive leadership were both helpful. Being able to talk to their peers going through the same adaptive leadership experience helped students to compare learning and to gain support. Knowing this, students should be intentional in fully engaging in different touchpoints of reflecting on the learning and not be afraid to engage with their peers going through the same experience to enhance their understanding and application of adaptive leadership. Leadership facilitators and experts should build in both the formal elements of sensemaking including small groups and debriefs, but also allow time and space for breaks and mealtimes to encourage more informal conversation and connection.

Embrace Uncertainty as a Method of Learning. Students in the adaptive leadership course experienced feelings of uncertainty. Knowing that some level of uncertainty and disequilibrium is embedded in the method of learning adaptive leadership, students should be encouraged to embrace uncertainty as a normal part of the learning experience (O'Malley & Cebula, 2015). For some students this included an invitation by leadership facilitators to move beyond their comfort zones. It was “nothing but scary,” moving beyond a comfort zone to learn in ways students did not anticipate experiencing which led to uncertainty, but so did times when they felt stuck. Students expressed a desire to engage in ways that would help them and others progress within the classroom and beyond, but often needed the support of their peers and the course facilitators to determine their next move.

For students, combining adaptive leadership and sensemaking was like putting together a puzzle. The ability for both students and leadership facilitators to carefully manage this uncertainty and productively channel it is essential. Some students shared that not knowing what to expect prior to taking this class and early in the course experience was almost too much to manage. Facilitating ways for students to manage expectations and to regularly gauge their levels of uncertainty are both necessary efforts for leadership facilitators and experts of adaptive leadership experiences. Students should be encouraged to rely on their peers to navigate the uncertainty inherent with adaptive challenges and facilitators/experts should pace the level of disequilibrium present to make it more tolerable for students new to the experience of practicing adaptive leadership.

In summary, students of adaptive leadership may benefit from (a) expanding the time horizon for how long learning about adaptive leadership may take, (b) consider engaging in informal and formal times of sensemaking within an adaptive leadership experience and (c) embrace uncertainty as a method of learning. Next, practical implications for facilitators and experts will be overviewed.

Facilitators and Experts of Adaptive Leadership Experiences

While many previous studies have focused on what is happening within leadership classrooms from an individual participant or student perspective (e.g., Easterling, 2013; Haber-Curran & Tillapaugh, 2015; Seemiller & Priest, 2015), few studies have considered the experience of a facilitator and how they create the conditions ripe to both learn about leadership while facilitators tangentially experiment with leadership through teaching, coaching, and supporting others. Since the nature of adaptive leadership is adaptive it requires facilitators and learners of adaptive leadership to be open to the improvisatory act of experimentation both in

how leadership is taught and practiced (Green & Fabris McBride, 2015). Leadership facilitators within this study were defined as those who facilitate an adaptive leadership experience at the collegiate level. These include front-of-room facilitators, small group facilitators, and leadership coaches. Leadership experts within this study are those who engage in teaching adaptive leadership experiences for a wide variety of audiences primarily within communities and organizations. Leadership facilitators and experts who engage in teaching adaptive leadership should consider (a) paying attention to a barometer for when sensemaking is needed when teaching adaptive leadership, (b) teaching sensemaking as a leadership skill, (c) allocating significant time and a variety of mechanisms for sensemaking within an adaptive leadership learning experience, and (d) that it is risky to not include intentional time for sensemaking when teaching adaptive leadership.

Using the Barometer Metaphor to Explore when Sensemaking is Needed Within Adaptive Leadership. The first implications for practitioners focus on the barometer metaphor presented within the theoretical implications of this study. A barometer metaphor focuses on considering the pressure within a classroom/organization/system may be useful to help position the sensemaking process relative to adaptive challenges. A barometer metaphor is a practical tool for describing when sensemaking is needed within adaptive leadership. This metaphor can help reveal the indicators that sensemaking is needed within a classroom environment, and help identify signs that we should probably pause to do sensemaking. In helping to answer these needs based on the findings of this study, facilitators, experts, and students should consider watching for: when a majority of people are feeling chaos or confusion over clarity; progress in conversations is stagnant; and/or tension/pressure within the room is unproductive/combative

rather than open/exploratory. While these signs are not exhaustive, they are helpful markers of when sensemaking may be a productive intervention.

Participants and scholars have raised the question of who dictates when sensemaking is needed (e.g., Is it participant-driven, facilitator-driven, or both?). While this study cannot offer a definitive answer, the parallels to the processes of sensemaking and adaptive leadership would point to both students and facilitators being implicated in calling for additional sensemaking when needed. An exercise to present the barometer for when sensemaking is needed would be a useful teaching tool to showcase both the systemic and individual pressures that are at play within an adaptive leadership classroom and to present sensemaking as a leadership skill to be practiced. As a teaching tool, facilitators might talk about the existing metaphors of adaptive leadership like ‘heat’ and ‘climate,’ but would benefit from clarifying the role of making plausible estimates, corresponding to the role of a barometer. This could include talking about individual and systemic pressures at play that are impeding progress and a time to reflect and predict what might help overcome and address these pressures for more productive action. Individual and collective reflection would both be helpful when using this barometer metaphor as a teaching tool.

Teach Sensemaking as a Leadership Skill. Some participants wondered whether sensemaking should be taught as a leadership skill like other skills taught within the class observed (e.g., experiment beyond your comfort zone, explore tough interpretations, speak to loss and speak from the heart, as a few examples; O’Malley & Cebula, 2015; O’Malley & Fabris McBride, 2023). In addition to viewing sensemaking as a leadership skill, this study illustrates a need to pay close attention to the overlap of sensemaking and adaptive leadership and how to integrate sensemaking to add value to the experiential learning contexts created for learning

about leadership. Participants described adaptive leadership learning as “valueless” without sensemaking and a “wasted experience.” While sensemaking is not exclusive to an adaptive leadership context, leadership experts, facilitators and students agreed that it is critical to include within the teaching and practice of adaptive work.

Previous literature describes both sensemaking and adaptive leadership as active processes requiring participant action (Heifetz et al., 2009; Weick et. al., 2005). Participants saw sensemaking as “a teach piece,” “a leadership skill taught in the course,” and even “an underlying or fundamental pedagogy.” Since there is no specific script or way of learning within an adaptive leadership context, sensemaking is a logical piece of the complex process. Leadership facilitators expressed the need for sensemaking to be implemented as a leadership skill due to the adaptive nature of the teaching and learning. Facilitators and leadership experts described how creating space for sensemaking within adaptive leadership experiences was an intentional move, however it was not explicitly presented as a leadership skill or behavior. In line with findings, that significant dedicated time for sensemaking and a variety of ways of engaging in reflection were helpful for students of leadership, I argue that explicitly naming sensemaking as a behavior, skill, or activity to practice alongside the other leadership skills within the adaptive leadership curriculum would be a useful endeavor.

Allocate Significant Time and a Variety of Mechanisms for Sensemaking. Facilitators and experts who create adaptive leadership learning experiences encouraged the need for significant, intentional time for sensemaking through a wide variety of mechanisms (e.g., debriefs, small groups, self-reflection, practical application, etc.). Facilitators and experts agreed that allocating intentional time for sensemaking and in high doses was a useful tactic to ensure learning about adaptive leadership. Participants agreed sensemaking proceeds adaptive

leadership, going so far as to estimate that adaptive leadership was impossible without sensemaking or that 80% of time should be devoted to sensemaking and 20% to teaching/Case-in-Point. The amount of sensemaking needed within an adaptive leadership context, facilitators and experts largely attributed to the experiential nature of the course. Facilitators and experts shared that the set aside time helped manage feelings of uncertainty and ambiguity. It is both logical, and demonstrated in this data, the more experimentation, the more the students need time for sensemaking. Clearly communicating that there will be time set aside to reflect and sensemake about the learning is something facilitators of adaptive leadership should consider incorporating into their teaching practice. This could practically look like time labeled sensemaking on course agendas and/or creating a routine rhythm and practice built into the schedule for an adaptive leadership experience. Regardless of how sensemaking tangibly manifests in the classroom, it should be frequent, intentional, and explicit (and as noted in the theoretical contributions, the latter two principles are not assumption in existing sensemaking theory; see, Weick et al., 2005).

In addition to the significant allocation of time devoted to sensemaking, participants found having a variety of different ways to sensemake is helpful. The various mechanisms included formal small group time, structured debriefs, ‘sense making’ circles (time each morning where students could ask questions that came up overnight), individual self-reflection activities and assignments and times of reflecting on how leadership lessons could be practically applied. Small groups or time that students would gather with 6-8 peers were structured to offer both peer support and to deepen the learning. They were described by students as “a safe haven” and a “space to open up.” ‘Sense making’ circles were a formal time in the course observed where students optionally could meet in the morning with facilitators to ask questions and seek support.

Times for formal debriefs were also useful in that they allowed a slowing down and replaying of what just happened for better understanding. Participants shared it is easy to get “caught up in the action” and that slowing down to collectively reflect and make sense of what happened was useful for future understanding and progress. For students, ‘sense making’ circles allowed the ideas to “settle deep into [the] bones” of students. Self-reflection both as an ongoing practice (meant to persist beyond the course) and as dedicated course-time to individually reflect was a vital component in the facilitators estimation as well. This practice of self-reflection was new to some students, but they found it to be useful not just for making sense of an adaptive leadership context, but other contexts and relationships. The ability to pause and self-reflect was necessary to also be able to productively engage within a system (organization, classroom, etc.) to make collective progress and continue learning together.

Finally, practical application was a necessity when learning about adaptive leadership. Participants described how the process of sensemaking, and leadership were more powerful with real life application. The reflective practice of helping people move from just understanding leadership concepts to being able to apply them within a context where they seek to engage beyond the course was a challenge facilitators and experts agreed needed more attention. Lack of pragmatism was also a major critique of adaptive leadership teaching that was raised by participants in needing to find a way to “make this more practical, doable, implementable for people,” as one facilitator shared. The risk in not including ways to practically apply the learning is that the leadership concepts just remain intellectual and not useful beyond the adaptive leadership course. Facilitators and experts studied encouraged other teaching adaptive leadership to not only elevate practical implications and applications for students, but for them to be the centerpiece to how adaptive leadership experiences are taught. This certainly affects how

facilitators communication, these findings highlight the value of using more stories and examples beyond the classroom when presenting concepts, and suggest facilitators should include time where students are thinking about how to apply what they learned within the classroom to spaces they hope to lead within beyond the leadership course.

Each of the mechanisms for sensemaking within adaptive leadership (small groups, debriefs, self-reflection, and practical application) participants agreed were helpful especially when used in tandem. The different components of sensemaking and adaptive leadership complement each other. Facilitators shared the importance of variance saying, “there's some variety in there that might speak to different ways the students learn or different approaches that resonate with them better.” The variety coupled with the intentionality was the recipe facilitators shared needs to be replicated for future adaptive leadership experiences. The different touchpoints of sensemaking also helped with the different ways and paces at which students learn. Participants of this study hope adaptive leadership practitioners will pay attention to building in both a high dosage of intentional time and variety of ways to sensemake within future adaptive leadership experiences.

It is Risky to Not Include Intentional Time for Sensemaking. Finally, considering the risk associated with not including space for sensemaking was an unexpected but important finding of this study. The experiential nature of adaptive leadership teaching and learning can lead to much uncertainty for participants. One facilitator shared that those learning adaptive leadership are “not used to being asked to voluntarily go to places of uncertainty and discomfort.” Participants will act and react in ways to restore their comfort so facilitators calling for people to move beyond their comfort zone are implicated to help manage students’ feelings of uncertainty. Facilitators agreed that the goal was to manage discomfort or risk the learning

experience. Much of the uncertainty and disequilibrium facilitators and experts attributed to Case-in-Point, a primary teaching methodology utilized when teaching adaptive leadership. Case-in-Point is difficult for teachers and students because it disrupts the traditional roles and expectations of teacher-student, leader-follower, and authority-learner (Heifetz, 1994).

The leadership facilitators and experts who participated engaged in Case-in-Point pedagogy including calling out questions, interpretations, and observations along with taking provocative actions to help students understand leadership dynamics happening within a classroom (Hufnagel, 2015). For students accustomed to a more traditional lecture set-up to a course, particularly college students interviewed in this setting, the shift in method of teaching is disorienting to the norms they have about how a college classroom functions. One expert urged facilitators and experts to keep a focus on asking the question “what is this in service to?” while utilizing Case-in-Point as a teaching pedagogy. There was also a shared understanding by facilitators and experts that if you are going to provoke people, you also must create space “where they can begin to metabolize and apply it [the learning].” This balance between a need for both challenging and supporting participants is vital to teaching others adaptive leadership.

Strong emotions were conveyed by participants when asked what would happen if both challenge and support were not provided including utilizing intentional times of sensemaking. Participants described the risk of teaching leadership without sensemaking using descriptors including “reckless,” “traumatic,” “unethical,” and “irresponsible”— those are not common emotional descriptors (Bisel, 2019). At a base level, facilitators, experts, and students agreed that you first have to understand what is going on (within an organization, community, etc.) to be able to make any progress. Facilitators and leadership experts described uncertainty as “the way of doing business” within adaptive leadership; however, facilitators may benefit from being more

explicit that this tension is purposeful and reveal the reason for creating a learning environment that raises uncertainty within students. This careful management could look like access to testimonials from students who previously took this course (which were provided to students in the course observed), regular check-ins with students to gauge if they are engaged, and purposefully building the course agenda to scaffold and distribute disequilibrium throughout the week paired with intentional times for sensemaking and application. Another practical implication of this finding is for facilitators of adaptive leadership to consider explicitly telling participants that there will be time for sensemaking at different points during the experience and to then build sensemaking into the course experience. Attention should be paid to the recommendations for both a heavy dosage and a variety of the sensemaking mechanisms previously presented. Facilitators and experts agreed this will help to ensure a productive learning environment where participants feel sufficiently supported and to not create a “traumatizing” experience for students sitting in adaptive leadership classrooms.

In summary, facilitators and leadership experts creating adaptive leadership experiences should consider (a) paying attention to a barometer for when sensemaking is needed when teaching adaptive leadership, (b) teaching sensemaking as a leadership skill, (c) allocating significant time and a variety of mechanisms for sensemaking within an adaptive leadership learning experience and (d) that it is risky to not include intentional time for sensemaking when teaching adaptive leadership. Next, limitations and future directions for study are considered.

Limitations and Future Directions

Although there are strong merits to this research, the current study is limited in a few important ways. First, this study only utilized one primary type of data, semi-structured interviews, with supporting observer-participant observation to explore sensemaking within

adaptive leadership. Future studies could use other types of data, such as more in-depth observer-participant observations or focus groups to further investigate these experiences, or (longitudinal) survey data to create generalizable findings.

Secondly, this study focused on one collegiate classroom that taught adaptive leadership at one university. Future studies could expand the scope of the research to evaluate a variety of adaptive leadership classrooms and organizational contexts that utilize adaptive leadership teaching/training. Additionally, while leadership experts' voices were considered within this study, a more thorough exploration and observation of their training contexts globally would add additional depth to the perspectives of this study.

Third, this study primarily found sensemaking to be more relevant than sensegiving. Additional focus could be given in future studies to determine when, if, and how sensegiving has a place within adaptive leadership teaching. Fourth, this study did not look at a third related dimension to sensemaking and sensegiving, sensebreaking. Sensebreaking is the "destruction or breaking down of meaning" (Pratt, 2000, p. 464). Sensebreaking happens when a person's process of sensemaking is disrupted by additional conflicting interpretations. Additional focus could be placed on how sensebreaking occurs within adaptive leadership teaching and learning. Fifth, this study raised an unanswered question of who dictates when sensemaking is needed (is it participant-driven, facilitator-driven, or both)? Future research could seek to answer this question and offer additional guidance for how to determine when sensemaking is needed and who should facilitate times of sensemaking within adaptive leadership classrooms and contexts. Restated, who gets to ask for a timeout in the class to sensemake and why? In addition, both the theories of adaptive leadership and sensemaking could be enhanced by acknowledging the position of the other.

Finally, this study shows that power dynamics are inherent in adaptive leadership teaching. Both sensemaking, but especially adaptive leadership are largely mute to power dynamics. Participants in this study generally did not discuss the power differentials between facilitators, leadership experts and students, but they were present within the classroom environment studied. Sensemaking does not give a tool to remedy inherent power differentials either. Future research could seek to better understand power within adaptive leadership contexts.

Conclusion

In conclusion, this study contributes to the growing body of empirical research on adaptive leadership and extends our current understanding of how sensemaking practically manifests. Sensemaking is a necessary and crucial component and should be framed as a leadership skill within the teaching of adaptive leadership. This study found that sensemaking is both an individual and collective endeavor which requires intentionality and does not happen by accident. Facilitators and experts of adaptive leadership teaching and training should seek to include significant, purposeful time for sensemaking through a variety of mechanisms including debriefs, small groups, reflection assignments, and practical application. Emphasizing intentionality in the sensemaking process, and explicitly including it in curriculum, also contributes to ensuring the teaching of adaptive leadership is less risky and experienced uncertainty by students is appropriately managed.

This study also extends existing metaphors for understanding the inherent uncertainty and disequilibrium present within adaptive leadership by including a metaphor of a barometer to measure pressure within an environment. The barometer metaphor emphasizes when those facing an adaptive challenge (whether that is as a facilitator, trainer, student, or leader) ought to pause

for sensemaking. Teaching the barometer metaphor will help students learn and practice adaptive leadership. Facilitators and experts of leadership should pay close attention to the pressures students are feeling within adaptive leadership classrooms and trainings, and seek to engage wholeheartedly to offer both challenge and support. Overall, this study encourages facilitators and experts of adaptive leadership to create the conditions necessary for students to move from feelings of chaos to greater clarity in their learning of adaptive leadership utilizing sensemaking. Sensemaking is a key communicative ingredient to solidify learning and productive application of adaptive leadership concepts and should be elevated in adaptive leadership scholarship and pedagogy.

References

- Adame, E., Tracy, S., Town, S., Towels, M., Razzante, R., Tietsort, C., Kamrath, J., Clark, L., Tremblay, R., Pettigrew, J., Donovan, M., & Becker, K. (2020). Can we create the 'being' of leadership?: A mixed-methods study of two leadership pedagogies at a Southwestern, U.S. University. *Journal of Applied Communication Research*, 49(3), 286-304. <https://doi.org/10.1080/00909882.2020.1851040>
- Ancona, D. (2012). Sensemaking: Framing and acting in the unknown. In R. Khurana & N. Nohria (Eds.), *The handbook for teaching leadership: Knowing, doing, and being* (pp. 3-19). Sage Publications.
- Bass, B. (1999) Two decades of research and development in transformational leadership, *European Journal of Work and Organizational Psychology*, 8, 9-32.
<https://doi.org/10.1080/135943299398410>
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research*, 1, 99–112. <https://doi.org/10.1111/j.1468-2958.1975.tb00258.x>
- Bisel, R. S., & Adame, E. A. (2019). Encouraging upward ethical dissent in organizations: The role of deference to embodied expertise. *Management Communication Quarterly*, 33(2), 139-159. <https://doi.org/10.1177/0893318918811949>
- Blanchard, K. H. (1985). *SLII: A situational approach to managing people*. Blanchard Training and Development.
- Blanchard, K., Zigarmi, D. & Nelson, R. (1993). Situational leadership after 25 years: A retrospective. *Journal of Leadership & Organizational Studies*. 1, 22-36.
<https://doi.org/10.1177/107179199300100104>

- Borgatta, E. F., Bales, R. F., & Couch, A. S. (1954). Some findings relevant to the great man theory of leadership. *American Sociological Review*, *19*, 755-759.
<https://doi.org/10.2307/2087923>
- Brown, A. (2014). *The myth of the strong leader: Political leadership in the modern age*. Basic Books.
- Brown, A. D., Colville, I., & Pye, A. (2015). Making sense of sensemaking in organization studies. *Organization Studies*, *36*, 265-277. <https://doi.org/10.1177/0170840614559259>
- Burns, J. M. (1978). *Leadership*. Harper and Row.
- Burns, J. M. (2003). *Transforming leadership*. Grove Press.
- Cantor, J. A. (1995). Experiential learning in higher education: Linking classroom and community. *ASHE-ERIC Higher Education* (Report, 7). Washington, D.C.: The George Washington University, Graduate School of Education and Human Development.
- Carlyle, T. (1841). *On Heroes, Hero Worship, and the Heroic in History*. Chapman and Hall Limited.
- Catasús, B., Mårtensson, M. and Skoog, M. (2009). The communication of human accounts: Examining models of sensegiving. *Journal of Human Resource Costing & Accounting*. *13*(2), 163-179. <https://doi.org/10.1108/14013380910968674>
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage Publications.
- Charmaz, K. (2014). *Constructing grounded theory*. Sage Publications.
- Chrislip, D., & O'Malley, E. (2013). *For the common good: Redefining civic leadership*. KLC Press.

- Clarke, A. E. (2005). *Situational analysis: Grounded theory after the postmodern turn*. Sage Publications.
- Creswell, J. W. (2007). Chapter 5: Standards of validation and evaluation. In *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed., pp. 207-209). Sage Publications.
- Cunliffe, & Coupland, C. (2012). From hero to villain to hero: Making experience sensible through embodied narrative sensemaking. *Human Relations*, 65(1), 63–88.
<https://doi.org/10.1177/0018726711424321>
- Currie, G., & Brown, A. D. (2003). A narratological approach to understanding processes of organizing in a UK hospital. *Human Relations*, 56, 563-586.
<https://doi.org/10.1177/0018726703056005003>
- Dawkins, C. (2014). The principle of good faith: Toward substantive stakeholder engagement. *Journal of Business Ethics*, 121, 283-295. doi:10.1007/s10551-013-1697-z
- Dunford, R. & Jones, D. (2000). Narrative in strategic change. *Human Relations*, 53. 1207-1226.
<https://doi.org/10.1177/0018726700539005>
- Easterling, D. (2013). Scaling up civic leadership combining individual-level change and culture change. *National Civic Review*, 101(4), 51-64. <https://doi.org/10.1002/ncr.21105>
- Fairhurst, G. (2008). *Discursive leadership: In conversation with leadership psychology*. Sage Publications.
- Fairhurst, G. (2011). *The power of framing: Creating the language of leadership*. Jossey-Bass.
- Fiedler, F. E. (1964). A contingency model of leadership effectiveness. *Advances in experimental social psychology*, 1, 149-190. [https://doi.org/10.1016/S0065-2601\(08\)60051-9](https://doi.org/10.1016/S0065-2601(08)60051-9)

Fiedler, F.E., & Garcia, J.E. (1987). *New approaches to leadership: Cognitive resources and organizational performance*. Wiley.

Geertz, C. (1973). *The interpretation of cultures: Selected essays*. Basic Books.

Gioia, D.A. & Chittipeddi, K. (1991), Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12, 433-448.

<https://doi.org/10.1002/smj.4250120604>

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Sociology Press.

Govindarajan, V. (2016). Adaptive leadership 101. *Leader to Leader*, 2016(81), 42–46.

<https://doi.org/10.1002/ltl.20244>

Green, C., & Fabris McBride, J. (2015). *Teaching leadership*. KLC Press.

Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods*, 3, 42-55. <https://doi.org/10.1177/160940690400300104>

Guest G., Bunce A., & Johnson L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18, 59-82.

<https://doi.org/10.1177/1525822X05279903>

Haber-Curran, P., & Tillapaugh, D. W. (2015). Student-centered transformative learning in leadership education: An examination of the teaching and learning process. *Journal of Transformative Education*, 13(1), 65–84. <https://doi.org/10.1177/1541344614559947>

Hall, M. (2011). Sensing the vision: Sensemaking and the social construction of leadership in the branch office of an insurance company, *Atlantic Journal of Communications*, 19, 65-78.

<https://doi.org/10.1080/15456870.2011.561146>

- Hatch, J. (2002). *Interviewing, In Doing qualitative research in educational settings*. (pp. 91-116). State University of New York Press.
- Heifetz, R. (1994). *Leadership without easy answers*. Boston: Harvard Business Review Press.
- Heifetz, R. (2004). Adaptive work. In *Encyclopedia of Leadership*. Sage Publications.
<https://doi.org/10.4135/9781412952392>
- Heifetz, R., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*. Boston: Harvard Business Press.
- Heifetz, R., & Laurie, D. (1997). The work of leadership. *Harvard Business Review*, 75, 124-134. <https://doi.org/10.1109/EMR.2009.5235495>
- Heifetz, R. & Laurie, D. (1998). Mobilizing adaptive work: Beyond visionary leadership. In A., Conger, G., Spreitzer, & E. Lawler (Eds.), *The leader's change handbook*. Jossey-Bass.
- Heifetz, R., & Linsky, M. (2002). *Leadership on the line: Staying alive through the dangers of leading*. Boston: Harvard Business School Press.
- Huffman, T., & Tracy, S. J. (2018). Making claims that matter: Heuristics for theoretical and social impact in qualitative research. *Qualitative Inquiry*, 24, 558-570.
<https://doi.org/10.1177/1077800417742411>
- Hufnagel, J. (2015). The point of case-in-point: Six anchors for turning classrooms into living learning labs. *The KLC Journal*, 7, 50-59.
- Jensen, P. R., Cruz, J., Eger, E. K., Hanchey, J. N., Gist-Mackey, A. N., Ruiz-Mesa, K., & Villamil, A. (2020). Pushing beyond positionalities and through “failures” in qualitative organizational communication: Experiences and lessons on identities in ethnographic praxis. *Management Communication Quarterly*, 34, 121-151.
<https://doi.org/10.1177/0893318919885654>

- Kegan, R., & Lahey, L. (2009). *Immunity to change: How to overcome it and unlock potential in yourself and your organization*. Harvard Business Press.
- Kellerman, B. (2015). *Hard times: Leadership in America*. Stanford University Books.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Pearson Education Limited.
- Kolb, D. A. (2015). *Experiential learning: Experience as the source of learning and development*. Pearson Education Limited.
- Kolb & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193–212.
<https://doi.org/10.5465/AMLE.2005.17268566>
- Kramer, M. W. (2004). *Managing uncertainty in organizational communication*. Routledge.
- Kramer, M. W. (2010). *Organizational socialization: Joining and leaving organizations*. Polity.
- Kramer, M. W., & Crespy, D. A. (2011). Communicating collaborative leadership. *The Leadership Quarterly*, 22, 1024-1037. <https://doi.org/10.1016/j.leaqua.2011.07.021>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Linsky, M., & Lawrence, J. (2011). Adaptive challenges for school leadership. In H. O'Sullivan & J.W. Burnham (Eds.), *Leading and managing schools* (pp. 3-15). Sage Publications.
- Lofland, J., & Lofland, L. H. (1999). Data logging in observation: Fieldnotes. In A. Bryman & R. G. Burgess (Eds.), *Qualitative research* (Vol. 3). Sage Publications.
- Maak, T., & Pless, N. (2006). Responsible leadership in a stakeholder society: A relational perspective. *Journal of Business Ethics*, 66, 99-115. <https://doi.org/10.1007/s10551-006-9047-z>

- Maitlis, S., Christianson, M. K. (2014). Sensemaking in organizations: Taking stock and moving forward. *Academy of Management Annals*, 8, 57-125.
<https://doi.org/10.5465/19416520.2014.873177>
- Mantere, S., Schildt, H., Sillince, J. A. A. (2012). Reversal of strategic change. *Academy of Management Journal*, 55, 172-196. <https://doi.org/10.5465/amj.2008.0045>
- Matthias, W. & Pies, I. (2018). Sensemaking and sensegiving: A concept for successful change management that brings together moral foundations theory and the ordonomic approach. *Journal of Accounting & Organizational Change*. <https://doi.org/10.1108/JAOC-11-2016-0075>
- Moustakas, C. (1994). *Phenomenological research methods*. Sage Publications.
- Nichols, A. E. (2016). *Redefining leadership: Acts of leadership beyond a college classroom*. [Unpublished master's thesis]. Kansas State University.
- Northouse, P. (2018). *Leadership: theory and practice*. Sage Publications.
- O'Malley, E., & Cebula, A. (2015). *Your leadership edge: Lead anytime, anywhere*. KLC Press.
- O'Malley, E., Fabris McBride, J. & Nichols, A. E. (2014), *For the common good participant handbook*. KLC Press.
- O'Malley, E. & Fabris McBride, J. (2023). *When everyone leads: How the toughest challenges get seen and solved*. Bard Press.
- Pares, M., Ospina, S., & Subirats, J. (2017). *Social innovation and democratic leadership: Communities and social change from below*. Edward Elgar.
- Parks, S. D. (2005) *Leadership can be taught: A bold approach for a complex world*. Harvard Business Review Press.

- Ravasi, D., & Schultz, M. (2006). Responding to organizational identity threats: Exploring the role of organizational culture. *The Academy of Management Journal*, *49*, 433-458.
<https://doi.org/10.2307/20159775>
- Robinson, V.M.J. (2001). Embedding leadership in task performance. In K. Wong & C. W. Evers (Eds.), *Leadership for quality schooling* (pp. 90-102). Routledge/Falmer.
- Seemiller, C., & Priest, K. L. (2015). The hidden “who” in leadership education: Conceptualizing leadership educator professional identity development. *Journal of Leadership Education*, *14*(3), 132-151. <https://doi.org/1012806/V14/I3/T2>
- Srivastava, P., & Hopwood, N. (2009). A practical iterative framework for qualitative data analysis. *International Journal of Qualitative Methods*, *8*, 76-84.
<https://doi.org/10.1177/160940690900800107>
- Steffensmeier, T. & Chrislip, D. (2019). Changing the game: Developing a new lexicon for leadership. *Journal of Leadership Studies*, *13*, 1-5. <https://doi.org/10.1002/jls.21634>
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, *25*, 35-71. <https://doi.org/10.1080/00223980.1948.9917362>
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry*, *16*, 837-851. <https://doi.org/10.1177/1077800410383121>
- Tracy, S. J. (2018). A phronetic iterative approach to data analysis in qualitative research. *Journal of Qualitative Research*, *19*, 61-76. <https://doi.org/10.22284/qj.2018.19.2.61>
- Tracy, S. J. (2019). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact* (2nd ed.). Wiley-Blackwell.
- Turgeon, A. (2022, November 10). *Barometer*. National Geographic.
<https://education.nationalgeographic.org/resource/barometer/>

- Valiente-Riedl, E., Anderson, L. & Banki, S. (2022) Practicing what we teach: Experiential learning in higher education that cuts both ways. *Review of Education, Pedagogy, and Cultural Studies*, 44(3), 231-252. <https://doi.org/10.1080/10714413.2021.1985372>
- Voronov, M. (2008). Toward a practice perspective on strategic organizational learning. *The Learning Organization*, 15(2), 195-221. <https://doi.org/10.1108/09696470810852348>
- Wakefield, N., Abbatiello, A., Agarwal, D., Pastakia, K., & van Berkel, A. (2016, February 29). Leadership awakened: Generations, teams, science. <https://www2.deloitte.com/us/en/insights/focus/human-capital-trends/2016/identifying-future-business-leaders-leadership.html>
- Weick, K. (1995). *Sensemaking in organizations*. Sage Publications.
- Weick, K. (2020). Sensemaking, organizing, and surpassing: A handoff. *Journal of Management Studies*, 57, 1420-1431. <https://doi.org/10.1111/joms.12617>
- Weick, K., & Roberts, K. (1993). Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly*, 38, 357-381. doi:10.2307/2393372
- Weick, K., Sutcliffe, K., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16, 409-421. <https://doi.org/10.1287/orsc.1050.0133>
- Whitaker, B. & Arensdorf, J. (2018). Big questions for leadership education. *Journal of Leadership Studies*, 12(1), 46-48. <https://doi.org/10.1002/jls.21575>

Appendix A: Interview Protocol

Interview Protocol

Note for IRB: I will use a semi-structured interview format. Questions will be modified based on my observations of the leadership course and follow up questions will be used to encourage the participants to provide more detail.

Date/Time of Interview: _____

Place of Interview: Zoom _____

Participant's Chosen Pseudonym: _____

Purpose: The purpose of this study is to understand how students (facilitators & leadership experts) make sense of adaptive leadership. Specifically, I am interested in what helps students (facilitators and leadership experts) in times of uncertainty, chaos and change inherent in adaptive leadership.

Information statement: I have read you the information statement. Before we proceed, please review the informed consent statement I sent via chat and read out loud your response from the bolded statements on page 2.

Overview: Throughout the interview I will be taking notes. I'm just trying to ensure I follow what you're saying and understand you. I'm asking questions of both students and facilitators of this course. There are no right or wrong answers and I don't presume to know what it's like to learn (teach) adaptive leadership or be in this leadership course—so please share your experiences.

Questions for students only:

Background:

1. In general, what did you think this course would be like prior to the first day of class?
2. Have you taken any leadership courses or done any leadership trainings prior to this course? If so, can you explain how this current course compares?
 - a. Follow-up: Prior to this course, did you think of yourself as a "leader"?
3. Before this course, how would you define leadership? In what ways (if any) has your definition changed?

Questions for students, facilitators and experts:

General Questions

1. This course utilizes a wide variety of teaching tools and tactics. What would you say were the most useful to your learning (experience teaching)? Why?
2. What were you hopeful to learn (teach) in this course? To what extent do you feel you have learned (taught) what you had hoped you would?

3. Could you talk about some of the **best** experiences you had in the course? Follow-up: why do you believe that the experiences you described were impactful to your learning (teaching) of leadership?
4. Please tell me about times when you **felt frustrated or limited** in the learning (teaching) of leadership. Follow-ups: Why was this a challenge? How did you or others in the course address this challenge?

Sensemaking: The process of making sense out of uncertainty and chaos

5. When you think about your experience in the course, can you describe a time when you were (you saw students were) confused? What did you do?
6. In times when you felt uncertain about your next move or action, what would have helped you to feel more confident?
7. There was a process within your course where you first considered multiple observations, next created interpretations before finally deciding how to intervene or act. Can you describe your experience applying this process?
 - a. Follow-up: When you apply the process of diagnosis do you spend the most time observing, interpreting or intervening?
8. When you think about future opportunities where you might have the opportunity to lead, can you share an experience from the course that you feel would help inform your decisions on how to lead?

Sensegiving: Facilitated times of one person helping others make sense of leadership

Intro: We know that dedicated times to reflect and help make sense of learning can be helpful for students. The next set of questions will help to better understand a few structured times in the course including debriefs and sense making circles/groups.

9. *For students only:* Can you tell a story about a time during the course when you wished you had more information than you did? What did you do?
 - a. Potential Follow-up: What could the leadership facilitator or facilitator have done differently to help?
10. *For facilitators/experts only:* Can you tell a story about a time during class when you could see students wished they had more information? What did you do?
 - a. Potential Follow-up: What could you as a leadership facilitator or facilitator do to help?
11. *For students only:* Tell me about a time when you experienced uncertainty or disequilibrium in the classroom. What did the facilitators do or not do to help you navigate any uncertainty or disequilibrium you felt during the course?
 - a. Follow-up: What else could they have done to help?

12. *For facilitators/experts only:* Tell me about a time when you witnessed students experiencing uncertainty or disequilibrium. What did you do or not do to help students navigate any uncertainty or disequilibrium felt during the course?
 - a. Follow-up: What else could have been done to help?
13. From your perspective why is carefully managing disequilibrium important within adaptive leadership learning?
14. *For students only:* There were structured times in the course which were labeled as “debriefs.” What did you think about the debriefs? In what ways were they productive or not?
 - a. Follow-up: In what ways did these help you make sense of leadership?
15. *For facilitators/experts only:* There were structured times in the course which were labeled as “debriefs.” Can you describe the purpose of a debrief?
 - a. Follow-up: In what ways were they productive or not?
16. Can you tell me about a time in the course when you had an “Aha” moment about leadership?
 - a. Follow-up: What from your previous experiences was limiting or not helpful in navigating an adaptive leadership context?

Final Questions

17. What would you recommend facilitators and experts do to help future students make sense of adaptive leadership?
Follow-up: If you had a magic wand and could change anything about this course for future students, what would you change and why?
18. Finally, is there anything else that comes to mind about your experience and the process of making sense of adaptive leadership that you would like to share with me?

Appendix B: Codebook

Phase 1 - Discrete Codes	Phase 2 - Themes	Phase 3 - Findings
<ol style="list-style-type: none"> 1. Benefit of sensemaking 2. If sensemaking were not present 3. Sensemaking tied to learning 4. Value of sensemaking 5. Reckless to not sensemake 6. Sensemaking critical to learning 7. Sensemaking as ongoing 8. Sensemaking vs. adaptive leadership 9. Sensemaking as collective 10. Sensemaking as leadership 11. Sensemaking as reframing perspectives 12. Sensemaking is adaptive 13. Sensemaking as integration 14. Debrief 15. Dedicated time and space 16. Functions of sensemaking 17. Self-reflection 18. Need to practice sensemaking and leadership 19. Small group 20. Unstructured space for sensemaking 21. Intentionality in building in time 22. Variety in modes 23. Case-in-point pedagogy 24. Carefully manage disequilibrium 25. Adaptive work 26. Uncertainty and unknowable within adaptive leadership 27. Curiosity and need for asking questions 28. Uncertainty tied to conflict 29. Observe, interpret, intervene 30. Create safe space 31. Expanding perspective 32. Experiential nature of adaptive leadership 	<ol style="list-style-type: none"> 1. Collective 2. Ongoing/Lifelong 3. Necessity of sensemaking 4. Iterative 5. Sensemaking as leadership 6. Practical application 7. Expanding worldview 8. Self-reflection 9. Debrief 10. Small group 11. Intentionality/different modes of sensemaking 12. Invitation to step into the unknown 13. Managing uncertainty 14. Student experience of uncertainty 15. Chaos and uncertainty way of doing business 16. Uncertainty related to Case-in-Point pedagogy 17. Power dynamics present 	<p style="text-align: center;">RQ1:</p> <p>Overlapping components of sensemaking and adaptive leadership</p> <p style="text-align: center;">Necessity of sensemaking</p> <p style="text-align: center;">RQ2:</p> <p>Intentionality in the process of sensemaking</p> <p>Adaptive leadership: “Work of the heart”</p> <p>Mechanisms to build in sensemaking into adaptive leadership education</p> <p style="text-align: center;">RQ3:</p> <p>Students move beyond their comfort zones</p> <p>Inviting uncertainty as the way of ‘doing business’</p> <p>Facilitators balance tension of offering challenge and support</p>

<p>33. Vulnerability 34. Ask for help 35. Iterative nature of sensemaking 36. Move beyond comfort zone 37. Space to practice 38. Need for support 39. No correct answer 40. Observe to learn</p>		
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Appendix C: IRB Approval Letter



Date: August 11, 2021

TO: Amy Braselton, (abraselton@ku.edu)

FROM: Alyssa Haase, IRB Administrator (785-864-7385, lrh@ku.edu)

RE: **Approval of Initial Study**

The IRB reviewed the submission referenced below on 8/11/2021. The IRB approved the protocol, effective 8/11/2021.

IRB Action: APPROVED		Effective date: 8/11/2021	Expiration Date : N/A
STUDY DETAILS			
Investigator:	Amy Braselton		
IRB ID:	STUDY00147593		
Title of Study:	Making sense of adaptive leadership: How sensemaking and sensegiving help students learn leadership		
Funding ID:	None		
REVIEW INFORMATION			
Review Type:	Initial Study		
Review Date:	8/11/2021		
Documents Reviewed:	<ul style="list-style-type: none"> • Amy Braselton Ltr of Support.docx, • Braselton_hrpp-rea ctivation-safety-plan-phase2_8-3 BI signat ure.docx, • Braselton_procedural-integrity-checklist-00147593.xlsx, • Consent Form, • Demographic Questions .docx, • Interview Protocol_7-18.docx, • IRB Protocol_Braselton_8-1.docx, • Recruitment Materials Braselton.docx 		
Exemption Determination:	• (2)(i) Tests, surveys, interv ews, or observation (non-identifi able)		
Additional Information:			

KEY PROCEDURES AND GUIDELINES. Consult our website for additional information.

1. **Approved Consent Form:** You must use the final, watermarked version of the consent form, available under the “Documents” tab, “Final” column, in eCompliance. Participants must be given a copy of the form.
2. **Continuing Review and Study Closure:** You are required to provide a project update to HRPP before the above expiration date through the submission of a Continuing Review. Please [close your study](#) at completion.
3. **Modifications:** Modifications to the study may affect Exempt status and must be submitted for review and approval before implementing changes. For more information on the types of modifications that require IRB review and approval, [visit our website](#).
4. **Add Study Team Member:** [Complete a study team modification](#) if you need to add investigators not named in original application. Note that new investigators must take [the online tutorial](#) prior to being approved to work on the project.
5. **Data Security:** [University data security and handling requirements](#) apply to your project.
6. **Submit a Report of New Information (RNI):** If a subject is injured in the course of the research procedure or there is a breach of participant information, an RNI must be submitted immediately. Potential non-compliance may also be reported through the RNI process.
7. **Consent Records:** When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.



8. **Study Records** must be kept a minimum of three years after the completion of the research. Funding agencies may have retention requirements that exceed three years.