Using Lifemaps to Build Capacity for Educational Leadership

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This study examines the impact of a pedagogical strategy using individual life mapping as a foundational piece of a graduate educational leadership program. We argue that active learning opportunities, like life mapping, allow educational leadership students to explore more fully their sense-making processes about systems leadership, which is foundational to their developing mindsets and leadership skills. Jäppinen (2014) suggests that educational leadership programs should aim to allow students to make sense of the complexity around them and study the viewpoint of collaborative non-linear human interactions in their journey to leadership. Data and artifacts were collected from 41 graduate students; their ages ranged from 29 to 65 with the median age being 46. All the participants were enrolled in the closed-cohort, executive educational leadership program working toward an Educational Specialist degree and superintendent certification. The final condensing of the initial categories into macro-level themes illustrated that students perceived the life mapping activity as a catalyst for learning about themselves and others, building a successful cohort, and affirming their decisions to become systems leaders.

Most traditional leadership models focus on top-down, bureaucratic structures which no longer work in complex contexts and research suggests the need for a system-level or systems view of leadership that focuses on the dynamic and complex nature of the environment leaders are asked to serve (Apenko & Chernobacya, 2016; Hannah, Campbell & Mathews, 2010; Uhl-Bien, Marion & McKelvey, 2007). This study is grounded in the assumption that graduate programs are intended to prepare future school system leaders with the knowledge and capacity to navigate complex educational issues and systems. Heylighen (2008) describes this system-level complexity as consisting of many interacting components that undergo constant change both in an autonomous way and in interaction with one another and their social environment. We argue that active learning opportunities like a life-mapping session allow educational leadership students to more fully explore their sense-making processes about systems leadership, which is foundational to their developing mindsets and leadership skills.

This study examines the impact of a pedagogical strategy using individual life mapping as a foundational piece of a graduate educational leadership program. The program prepares superintendents and system-level leaders to lead innovation processes in the increasingly complex landscape of public education. The program also utilizes a closed cohort structure, and the life-mapping activity that is the focus of this study takes place in the first semester of the program. We use life-maps as a catalyst for identity development of both the cohort as a collaborative group and each individual as a system leader. The purpose of this study is to examine the students' perceived impact of the life-mapping activity on their leadership, cohort membership, and identity as system-level leaders. To advance our understanding of how the life-mapping activity served to enhance our pedagogical goals, we posed the following research question: What impact does life-mapping as an active learning activity have on graduate students enrolled in an educational leadership program focused on developing systems leaders? In particular, we focused on the activity's implications for program completion, students' learning, cohort membership, and identity development as systems leaders.

Theoretical Framework

We sought to understand the relationship between various teaching practices and how they come together in the life-mapping activity to help students make sense of their learning journeys and begin to develop identities as systems leaders. Students physically make maps of their inner cognitive landscapes and share those with others in the cohort within a "circle of trust." The activity relies on pedagogy of vulnerability to create a connection for students to engage in the development of complex adaptive leadership and sense making related to their leadership journey, as well as constructivist narratives and cartographies to position themselves in their leadership development and cultivate a sense of belongingness in a graduate cohort.

Prior to the activity, students read "A Sense of Place" written by William R. Ferris in an effort to get students to think about their "little postage stamp of native soil" and their historical sense of place as it defines them as leaders and members of the cohort. Ferris original wrote the piece for a speech made to the Commonwealth Club of San Francisco (1996) and later adapted it to an article (1998). In the article, Ferris states (p. 3):

> For we Americans are taught to devalue the places we come from. We are taught to abandon old worlds. We are taught that to achieve success and make a mark on society, we must separate ourselves from our roots…but these places,

memories, and values are essential to life and should not be abandoned in the name of progress.

This reading is coupled with the article "Sacred Cartography" (DeBlieu, 2000) where the author poses the question:

> With astronauts creating a precise 3-D map of the Earth and biologists mapping the human genome, technology is introducing new ways to chart human territory. But what about our personal territories, the ones we carry in our memories and curiosity? We map, each of us, mentally and physically every day of our lives. We map to keep ourselves oriented and to keep ourselves sane. Making an actual physical map of something you feel in your heart can be powerful…seeking to keep your bearings in a shifting world.

The intent of engaging students in these readings prior to the active learning of creating their life map is to help soften their armor, as well as to begin to open their thinking about who they are as leaders and where they came from. As students examine their self-identity and landscape as leaders, we hope they become open to deeper examination of self, others, and their practice as educational leaders, thus allowing space for the learning within the program and cohort to become more relevant.

Pedagogy of vulnerability builds a climate of trust and a practice of critical self-reflection in the process of co-learning (Brantmeier, 2013). In addition, Brantmeier (2013) defines pedagogy of vulnerability as an approach to education that invites vulnerability and deepens learning through a process of self and mutual disclosure on the part of co-learners in the classroom. In the life-mapping activity, students are asked to create a visual map of the places, people, and events that got them to this point – the beginning of their journey as graduate students working to become systems leaders in education.

As part of the life-mapping activity, the graduate students share their map with the cohort within a "circle of trust" where confidentiality is observed. Circle of trust is a term drawn from Parker Palmer's (2004) book, *A Hidden Wholeness*, in which he describes the unique qualities of this practice:

> A circle of trust is a group of people who know how to sit quietly "in the woods" with each other and wait for the shy soul to show up. The relationships in such a group are not pushy but patient, they are not confrontational but compassionate; they are filled not with expectations and demands but an abiding faith in the reality of the inner teacher and in each person's capacity to learn from it . . . The people who help

us grow toward true self offer unconditional love, neither judging us to be deficient nor trying to force us to change but accepting us exactly as we are. And yet this unconditional love does not lead us to rest on our laurels. Instead, it surrounds us with a charged force field that makes us want to grow from the inside out—a force field that is safe enough to take the risks and endure the failures that growth requires (pp. 59–60).

Love (2012) describes Palmer's "circles of trust" as having hallmarks to gently welcome into the circle compassion, a sense of invitation to participate, unconditional love, and faith in each participant's "inner teacher"—all qualities that nurture the "shy soul" to emerge. Simultaneously, these guiding tenets prohibit behaviors that stunt the growth of soul: communicating expectations or judgment, confrontation, or the "fixing" of others. In these ways, every circle of trust launches an educational journey toward the discovery of each participant's authentic self. The goal is to bring out that which is found within the learner. While much of education is focused on transmitting knowledge and acquiring understanding, the intersection of that knowledge with the human heart—with one's values and life experience—is what makes learning come alive.

We rely on others to help us to define who we are and how to be in the world, to help us figure out what should be important, and to learn how we might be most productive as leaders. Palmer (1998) suggests, "A learning space must have features that help students deal with the dangers of an educational expedition: places to rest, places to find nourishment, even places to seek shelter when one feels overexposed" (p. 75). A cohort structure can create that learning space for students. Students within a cohort exist in a collaborative journey, enjoying their particular grasp on the world as unique human beings, each embarking on their own specific journey, as well as the collective group embarking on a "course of study with its challenges, time sequences, situations" (Barnett, 2007, p. 27). Together they are forming their "identity" as educational leaders, as defined by Palmer (2004) as the "whole" identity, grounded in integrity and complexity: "an integrity that comes with being what you are" (p. 3) and a "complex integration that spans the contradictions between inner and outer reality that supports both personal integrity and the common good" (p. 21). Nevertheless, as Palmer notes, we need to continue to find ways of learning with our whole selves—and in community with others—if we want to move beyond surface learning that is short lived. Chadsey (2012) makes the case that we need to engage learning and learners in ways that make it possible to deepen and transform minds and hearts by quoting Parker Palmer:

In every discipline, knowledge is generated through a communal process. This requires habits of mind and heart that allow us to interact openly and honestly with other knowers and with the subject to be known—such habits as a capacity to care about the process, the willingness to get involved, the humility to listen, the strength to speak our truth, the willingness to change our minds. The more closely a pedagogy can emulate this communal process, cultivating these habits of mind and heart as it goes along, the deeper the learning will go. *(p. 3)*

Bennis (2009) makes a case for the importance of self-knowledge as leaders, claiming self-knowledge and self-invention are lifetime processes: "You make your life your own by understanding it" (p. 64). How do we make sense of ourselves as leaders and map our course for leadership that thrives in complex environments? The life-mapping activity creates an opportunity for sense-making by students to position themselves in their pursuit of an advanced degree and knowledge of systems leadership. Weick, Sutcliffe, and Obstfeld (2005) argue that sense-making deals with the interplay between action and the interpretation of that action. Further, research confirms that sense-making is a key leadership capability for understanding the complex world and the missing link between leadership theory and the actual everyday change of improving leaders' practice (Ancona, 2012; Thomson & Hall, 2011). Further, Jäppinen (2014) suggests that educational leadership programs should aim to allow students to make sense of the complexity around them and to study the viewpoint of collaborative non-linear human interactions in their journey to leadership.

Data Collection Methods and Analysis

This article presents an analysis of data gathered from multiple cohorts in an executive leadership program at a large, public doctoral granting university in the western United States. This study draws from data across multiple sources: students' life maps, student surveys, end of semester course evaluations, and unprompted student emails.

The program in this study uses a cohort structure to facilitate the development of leadership skills and dispositions, as well as to foster a sense of belonging. The program being studied is in its fifth year and has a one hundred percent retention rate of students. In graduate programs in education, cohorts are defined as "a group of about 10-25 students who begin a program of study together, proceed together through a series of developmental experiences in the context of that program of study, and end the program at approximately the same time" (Lei, Gorelick, Short,

Smallwood, & Wright-Porter, 2011, pp. 497-498). The cohort-based model fosters the dynamics of group cohesion. Students in the program develop their leadership mindsets, toolsets, and skillsets while trekking alongside other students on a collective educational expedition; therefore, it is important that they have some understanding of not only their own inner landscapes but also their co-learners.

In this study, 41 graduate students participated; their ages ranged from 29 to 65 with the median age being 46. All the participants were enrolled in the closed-cohort, executive educational leadership program working towards an Educational Specialist degree and superintendent certification. Of the participants, 76 percent identified as men and 24 percent as women. All the participants previously completed one or more graduate degrees, and 60 percent were currently serving as full-time administrators (e.g., building principals, curriculum directors, other building or central office administrators) while 40 percent were currently serving as full-time teachers, counselors, or instructional coaches. One researcher was also one of the instructors who facilitated the life-mapping activity. Her positionality was ever present in the research process; therefore, the other author actually did the coding and data analysis alone to determine themes and trends.

Data was collected during the fall semesters from 2014-2017 with a total of 41 students across three cohorts participating in the study. Data collection included pictures of the actual life maps, end of course evaluations, course completion rates, program completion rates, and unsolicited emails sent to the instructor regarding life maps. Life mapping was used to capture students' professional and personal journeys that brought them to the program and to the cohort. In the activity, students are asked to consider what or where are the jungles, mountains, and rivers in their lives as leaders? Some people map their life events—births, deaths, marriages, geographic moves—but students are also asked to think beyond just the facts and allow the other cohort members to see their authentic mental maps. We each have experienced multiple deaths when our hopes and dreams get cut off and then take a new direction. Students are asked to consider what forks were in the road that led them to become students in this program and members of this cohort?

The actual maps were used as data, as well as student reflections on the activity. A/r/tography defines itself as a form of living inquiry, which involves working from a "continuous reflective and reflexive stance to engagement, analysis, and learning" (Irwin & Springgay, 2008, p. xxix).

In addition, one cohort of students (n=16) provided survey data from a photo-elicitation activity. Photo-elicitation is a method of interview in visual sociology

that uses visual images to elicit comments (Epstein, Stevens, McKeever & Baruchel, 2006; Ortega-Alcázar & Dyck, 2011). During their fourth semester together, students were shown photographs of their life maps (created during the first semester together) through a PowerPoint slideshow that was projected for the class to see. They were then asked to individually respond in writing to the following three questions:

> What impact did the life mapping have on you as a leader?
> How does seeing the image of your life map impact you as a student in this program?
> What does the image of your life map tell us about you as a system leader?

Describing a journey is different from describing a single moment in time; therefore, the prompts were written in an effort to explore shifts over time and space in how participants described the impact of the activity. According to Kobayashi, Fisher, and Grapp (2008), photographs are an important means of collecting and analyzing qualitative data. They help in the retrospection of lived experiences of participants and combining photographs with other forms of data collection ensures contextual validity through triangulation.

Mapping conveys spatial relationships, thus our purpose is to help students understand their own complex context—highlighting significant features of their leadership journey, proposing limits and establishing direction, and in many cases revealing the emotive nature of "places" on their map. The instructors make a wide array of media readily available to the students to aid them in the creation of their life maps (Horovitz- Darby 1994). Drawing instruments include drawing pencils and erasers, colored drawing pencils, fine and broad-tipped colored markers, and large and small crayons. We also provide a choice of white paper (sizes 8.5" x 11" to 24" X 36") or colored construction paper (sizes 8.5" X 11" and 12" x 18"). Students also have available scissors, glue sticks, and rulers, as well as a variety of magazines and newspapers. Students often clip items from the latter media and paste them onto the life map to illustrate events or meaningful places. There is abundant data that ends up on the large maps representing each student's journey to systems leadership and specifically to our program. We take care in stressing the central function of the life map is to express and communicate a personal reality rather than to assess someone's artistic talent (Kahn, 1999).

Students complete this activity together in a casual, community environment in the evening; there is food present, and the course instructors are absent. Students are working in close proximity yet have room to spread out their work areas. It is also important to note that the creation of the life maps occurs in the evening following team building activities earlier in the day, and students actually present their maps and narrative the following morning in a circle of trust with the cohort members and course instructors.

Data Analysis

All the surveys, emails, and course evaluation comments were recorded on an Excel spreadsheet, separated by type of data. The researchers engaged in a three-stage coding process – beginning with *In Vivo* coding, then the categorization of those initial codes, and finally descriptive code mapping. The instructor/researcher (IR) did not participate in the pre-coding, first round, or second round of coding since she was already familiar with the data and had access to other sources of data on the students. The Critical Friend/Researcher (CFR) coded the data by utilizing an iterative thematic approach (Saldaña, 2016). During the pre-coding preparation, the CFR read and reread the data, familiarizing herself with the content and developing an awareness of connections across the data (DeWalt & DeWalt, 2011). In the first round of coding, the CFR built on that pre-coding work utilizing an *In Vivo* coding process, employing the direct language of the graduate students to ground the data analysis process in the participants' voices, perspectives, and micro-cultures (Manning, 2017; Saldaña, 2005). The CFR drew out *In Vivo* codes for every line of text. During the second round of coding the CFR examined the initial codes to look for commonalities and differences. This examination allowed the CFR to group like thematic codes into categories. The CFR wrote memos to clarify her thinking regarding the groupings. In the final round of coding, the CFR and IR separately examined the categories and compared their descriptions of the central themes across the categories. They did not find any differences in the final groupings.

Findings

In Vivo coding yielded 256 participant phrases. The initial categorization of the *In Vivo* codes into clusters of descriptive codes were organized into 11 different categories. Finally, the initial categories were condensed into macro-level themes (Tables 1-3).

Discussion

The final condensing of the initial categories into macro-level themes illustrated that students perceived the life-mapping activity as a catalyst for learning about themselves and others, successful cohort building, and affirmation of their decision to become systems leaders. The sharing of the outer maps – the ones students are

Table 1
Phases II and II – Descriptive Code Mapping: Theme A, Making Personal Reflection Public Through Life-Mapping

Category	Sample of Related Codes
Category 1. Reported Foci of Life Mapping	"Reflect on who I was" "Reflect on why I am going in the direction I am" "Reflect on where I want to be" "Reflect on my journey as an educational leader" "Reflect on people" "In depth reflection of one's own leadership" "Life mapping helped me reflect on the journey."
Category 2. Perceived Outcomes of Life Mapping	"map it [reflection] out" led to remember more often" "very therapeutic" "Leveraged reflection on core values to make decisions" "Brought us together as a cohort" "knowing oneself better" "the real impact came from the bonding we developed from our strong emotional reaction to our posters and to our member's life maps." "The emotion, authenticity, and willingness to be vulnerable helped me gain the trust of our cohort." "It was therapeutic in my leadership and helped me gain perspective and vision." "having empathy for others and their journeys" "the activity helped me to form a bond with those who would have an immense impact on the next year of my education and ultimately my life with regards to friendship and networking partners." "It makes me feel as though I have place in this program, my job, state & world. People care about my story & where I came from."
Category 3. Reported Understandings of Self from Life Mapping	"core values" "opened my eyes to what kind of system and eco system might be best for my skills and philosophy on leadership." "true beliefs" "Remind me of all the times I persevered with conflict" "life mapping made me realize that I am a product of many of the places and experiences I have lived." "Reminded me about my strengths as person and leader" "it was valuable for me to reflect and look back what events and aspects of my life had the most impact on who I am as a person."
Category 4. Reported Understandings of Others from Life Mapping	"Understanding others in cohort on a personal level" "Understanding others' perspectives in cohort" "People as positive or negative influencers" "It helped me see that others have life stories and maps that influence them in their decision making." "Education is social and people all come with a different frame of reference from life experiences that influence the journey."
Category 5. Reported Understandings of the Process of Life Mapping	"Willing to be vulnerable" catalyst for building trust" "reinforced the idea of connection and the importance of networking" "the art of academic inquiry" "authentic connections"

Table 2
Phases II and II – Descriptive Code Mapping: Theme B Centering Pre-service
Systems Leaders as Students through Life-Mapping

Category	Sample of Related Codes
Category 6. Shift in Agency, Belonging, and Other Affective Domains	"It makes me feel as though I have place in this program, my job, state & world." "Stronger!" "I have been amazed how I have grown in my leadership skills and who I am as a person." "Identifying areas that I need to grow on I can call on others to give valuable advice." "It evokes feelings and emotion on where I was then and where I am now. I'm proud of my growth and I would not have experienced this without the cohort." "Seeing my life map, brings back an emotional sense of uneasiness in bringing back the anxiety and emotions that I experienced that day having to peel back the layers to share the true base of who I am as a person and the experiences that I have gone through to create the person that I am today."
Category 7. Emerging Beliefs	"People care about my story & where I came from." "our uniqueness makes us funny, engaging, effective, etc." "We all come from different backgrounds and each of us offer different skills we bring to the table." "To be a good, effective leader you have to be able to build relationships and trust to move forward and guide change." "In order to build those types of relationships, you also have to know yourself and your strengths."
Category 8. Appreciation of the Pedagogy of Life Mapping in a Cohort	"It was great to start at with who I am as a leader" "I actually enjoyed seeing all of our life maps as a cohort" "[I actually enjoyed] reflect[ing] on how much this team has meant to me over the past two years." "I didn't think I would enjoy the project, but learned so much about myself through the process and how past traumas have affected me as a leader." "Seeing my map…I appreciate my cohort members. Our relationships have developed much farther than I ever would have thought possible. The networking with our real world work is phenomenal." This program has taught me how to self-reflect and to make a change in my practice, as well as to help lead change. This project was the first part of that process of self-reflection.

willing share with their cohort – helped them discover unknown places within themselves as leaders, gain consciousness about their interior landscapes, and visualize their strengths and funds of knowledge that will help them be successful in the graduate program, as well in their leadership roles. Interestingly, the students did not reflect on any one of the specific pre-readings but reflected more on perceived traits of leaders and the value of the learning activity. Many of the theoretical frameworks and concepts from the course emerged in their reflections on the life-mapping activity through responses to survey questions and course evaluations.

Today, educational organizations and leaders at all levels of education systems have to adapt to ambiguity arising from their internal processes, relations with others, and the complexity in their political, social, and economic surroundings (Beabout, 2012). This study illustrates how developing our graduate students' understanding of their interactional sense-making process, in a cohort structure through the use of a life map pedagogy, builds their capacity as future system leaders. We contend that this active, sense-making process is foundational to their developing complex, adaptive leadership skills.

The findings support that the life map activity also creates an opportunity for students to develop a sense of belonging within the cohort. A sense of belonging, a feeling of connectedness, and a belief that one is important and matters to others in an organization rank third on most people's hierarchy of needs after physiological and safety needs (Maslow, 1954). Research has found that a sense of belonging influences graduate student retention and success (Lovitts, 2001; Strayhorn, 2012), and it has been tied to key educational outcomes such as academic self-concept, self-efficacy, intrinsic motivation, academic success, and persistence in higher education settings (Lovitts, 2001; Ostrove, Stewart, & Curtin, 2011; Strayhorn, 2012). Further, researchers O'Meara, Griffin, Kuvaeva, Nyunt, and Robinson (2017) argue that graduate programs must be designed to enhance a sense of belonging in ways appropriate to the distinct culture and nature of graduate education, noting that it is often more difficult for graduate students to find a sense of belonging than undergraduates because of their age, career, and family obligations.

Although we did not study the transfer of the learning that the life mapping activity from an academic to a professional context, we see potential for the participants to draw from their experiences with cohort building in their professional roles. More specifically,

Table 3

Phases II and II – Descriptive Code Mapping: Theme C, Using the Life-Map to Develop a Sense of Self as System-Leader

Category	Sample of Related Codes
Category 8. Expressed Philosophy of Leadership	"I don't think that my life map tells much about me as a systems leader. When I created it, I made it more to tell about my past life experiences. While I believe those experiences affect who I am as a leader, I don't think my life map necessarily depicts who I am as a leader." "Systems are affected by all the pieces and parts of the whole. For example, the human body is a complex system that depends of the health of multiple independent systems to work together."
Category 9. Professed Professional Aspirations	"I want to see change in the world. I want to BE that change through positive interactions & an attitude." "I wonder if part of me as a leader is to help people on their own journeys and help them realize their potential or paths that they could take. Or help them feel safe to take on new challenges or risks. I love growing professionals. :)" "…allowed us to envision an "[State Name] of Educational Excellence" and realize that [our] Cohort is full of promise and energy." "I strive to put people first and understand that a "system" must be relative to the environment."
Category 10. Practicing Professional Self-Talk:	"I can overcome any obstacles that come my way. No matter what people say or do I can accomplish my dreams" "I will never stray from my core values. My faith and my family will never be compromised!" "…even though I will have many mountains to climb, I will not give up and keep me positive energy and relationship building mentality throughout my leadership journey." "I will think through decisions and how those might affect the people around me and the students those people impact. Each situation has a positive effect and often an unintended consequence." "With the knowledge and pulse of the people embedded in the system, you will be successful."
Category 11. Assessment of Self	"My core is still the same and I still hold the same values." "My life map was about my journey, and what I think about when I reflect is how many forks in the road took me places I had no idea I was going to go. I NEVER thought I would be a principal, definitely NEVER thought I'd be at the district office. And honestly, I never really knew I would be a teacher until I was 23 or 24 years old. I am led or called to things by what feels like kismet/serendipity…" "I cherish my sacred places in my life, and that the lifestyle within my sacred land has a unique cultural aspect which directly impacts my professional mindset. Living in the mountains all my life makes me a different leader than if I had grown up in an urban setting. Ono-traditional education is a focal point for my craft." "I feel that in having to map out myself as a person, it has demonstrated the level of strength and self-determination that I possess as a person and my ability to press through difficult situations to achieve my goals."
Category 12. Posing Questions	"Can an outdoor experience over a weekend have more positive impact on a student's life than all their seat time in Science class?"

we view students' development of their interactional sense-making process as a way to build capacity in their professional roles after completing their graduate program, and to support their continued connectedness with other systems leaders from their cohort as well as building relationships outside of their cohort. This capacity to connect can be a powerful professional skill, helping the graduates to foster feelings of belonging in their wider professional network and to protect themselves against feelings of isolation and burnout in their systems leader roles.

Implications of the Study

The study's findings illuminate the use of visual narratives as a pedagogical strategy for fostering self-belonging, cohort development, and self-identity as systems leaders. The findings also suggest that this instructional activity may play a role in student retention and program completion. These findings have implications for not only the classroom level, but also program and institution levels. For example, faculty could strategically integrate cohort building experiences, such as life-mapping, into graduate programs in which cohort models are already utilized to organize applications, admissions, and course registrations. This intentional community building within a cohort model might be particularly beneficial in professional education programs where students will enter a network of professionals. Teaching students to connect with one another through activities such as life mapping, especially across differences in experience, worldview, and identity, might better equip them to continue this practice of connecting with other professionals outside of their cohort.

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