Leadership Education for the Volatile, Uncertain, Complex, and Ambiguous Now: A Challenge to the Field

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Abstract

Edgar Schein (2004) proposed that leading was in the midst of an evolutionary shift in which the primary challenge would be to sustain a culture of learning in an emerging “age of perpetual learning and change. What learning is required through leadership education to address this challenge? What design will assure that these learning outcomes are attained? What practice would demonstrate that the outcomes persist and have meaning? In distinguishing the process of “education” from the process of “learning”, what are the implications of the reciprocity of development, learning, education and the practice of leading for the design of a theory of leadership education able to assure necessary outcomes for leadership in a context that is perpetually volatile, uncertain, complex, and ambiguous?

Introduction

In 2004, Edgar Schein closed his third edition of *Organizational Culture and Leadership* with the proposition that the emerging function of organizational culture was to paradoxically “stabilize perpetual learning and change” and that leaders in a “learning culture” would need to develop commitments to a set of principles and values that defined what it means to lead from the emerging future (Schein, 2004, pp. 393-402). The implications for leadership development and education were clear to Schein; the challenge was to come to know and understand how to develop the “learning leader” for a context where the work of every human being is to “act as a problem-solver and learner in an environment of constant change” (p. 406).

Over a decade later, it seems clear to me that Schein’s understanding of the emerging need in both leadership and leadership education was accurate. The lack of leadership capacity is frequently cited as a global workforce challenge, with only 32% of 800 corporate respondents in one study indicating that they have either the “right” leadership or the capacity to develop the “right leaders” at multiple levels in the organization (Harvard Business Publishing Service, 2013; Henley Business School, 2015; IBM Global Business Services, 2008). Further, survey results over time indicate a rising need to prepare leaders to face volatile, uncertain, complex and ambiguous (VUCA) realities for which there are no answers or clear precedents, a context in which the life experience and formal learning of many senior leaders have not prepared them to act wisely and well. Nick Petrie (2014) describes this current state as evidence of a changing environmental challenge. We are not called to train fully grown minds to lead; we are called to grow bigger minds (p.10).
How does the field of leadership education respond to this evolutionary shift? Petrie (2014) worked with this question as a constant challenge in his work in leader development. He recognized that while leaders are facing what the military terms VUCA realities (NATO, 2015), university faculty, professional developers, trainers and coaches are using relatively unchanging concepts, models, and methods of leadership education. This apparent paradox prompted Petrie to conduct a study of perceptions held by Harvard University faculty in the schools of Business, Education, Government, Law and Psychology on current practice in leadership education. Based on this exploratory study, Petrie identified four future foci for leadership education, identified as emerging needs in contrast to current practice.

I propose that Petrie’s study, and his identification of future foci in leadership development, frame the current need for a theory of leadership education, one that draws from what Hoare (2011) describes as “thinking on the borders of disciplines”. The nexus in the borderlands is the reciprocal relationship between the development of a human capacity (leadership), the proximal processes (learning and education) that shape and must be shaped by development (Bronfenbrenner & Morris, 1998), and the world -natural and constructed -in which that capacity is enacted. What follows is a proposed dialogue for the field, from which such a coherent theoretical framework will emerge.

**Question One: What does it mean to lead in a “democratic society” and what does that mean for the education of leaders?** In a VUCA world, most problems are increasingly “wicked problems” (Rittel & Webber, 1973 in Camillus, 2008). They are wicked because they have an interconnected network of proximal and distal causes. They are difficult to describe and capture in the kind of “simple and clear” briefs preferred by boards and executives. Worse, they have no clear right or wrong strategic approaches, no matter how much data you bring to bear on the problem of modeling outcomes. They are “…issues that cannot be resolved merely by gathering additional data, defining issues more clearly, or breaking them down into small problems. [P]lanning techniques don’t generate fresh ideas, and implementing the solutions those processes come up with is fraught with political peril.” (Camilllus, 2008 p. 1).

These problems pose a particular hazard for representative democracies, as they tend to factionalize people into enacting one of two opposing cycles, which Scharmer (2013) has eloquently described as creating a landscape of divides: the ecological divide, the social divide, and the spiritual-cultural divide. This context is one in which leaders must emerge at critical junctures that are not easily predicted and thereby normalized within an operational structure of “politics” or “business” or even “education” as usual. This is the paradigm shift Kuhn (1962) describes in *The Structure of Scientific Revolutions*: it IS a revolution in the perception of what is normal. Networked “systems of systems” with leadership shared within the network is emerging as that new norm.

This tends to push the need to lead further down any hierarchy, and calls for leadership to emerge from unexpected sources. For democratic societies in the VUCA world with its wicked problems, it is wisdom to suggest that all persons in the society must develop the capacity to lead from an ambiguous, emerging future as an outcome of leadership education.
**Question Two: What are the outcomes of designed development for this capacity/practice/stance/role?** Petrie (2014) found a current focus on horizontal development characterized by training intended to develop expertise in competencies within a level of development identified as “adult”. Much time is spent in on-the-job training to administer or manage “normal operations”. The content and direction of learning is owned by an externality – a society, a professional organization, or a corporation. Paradoxically, much effort is put into hiring “innovators” or “entrepreneurs” who by definition create new things, make clear new perspectives, and lead in new directions. Horizontal development, while necessary is not sufficient to the challenge of a VUCA world. The future trend calls for education to accomplish vertical development, in which a learner is led through a transition from one developmental stage or order of mind (Kegan, 1994) to another.

**Vertical Development.** What does vertical development entail? Constructive development theory (Kegan, 1994) would define this as observable, qualitative change in the subject/object relationship between what is known and how it is structured and acted upon. The three adult stages are described as Stage 3 –The Socialized Mind, Stage 4 – The Self-authoring Mind, and Stage 5 –the Self-transforming Mind. Vertical development is often described as a transformational process, characterized by moving across the boundaries between these developmental stages.

McGuire and Rhodes (2009) and Kegan (2009) state that development moves forward, or stalls out, when a person is confronted by increasing complexity, challenges with no clear solutions, and an awareness that his or her current ways of understanding the world will not serve well, if at all. There are competing commitments that can either motivate or paralyze a person. Vertical development requires awakening, unlearning and opening up, and experimenting with new prototypes, new actions based on a whole new way of seeing.

Rooke and Torbert (2005) describe the outcomes of vertical development in leadership as a transition through seven transformations, with “transforming leadership” indicated by:

- Capacity to challenge assumptions and see emergent futures.
- Capacity to lead others to envision that future and the pragmatic and timely actions that can make it real.
- Capacity to generate personal and organizational change in necessary directions.
- Capacity to practice of leadership within a network of highly collaborative leaders.

The authors conclude that leaders are made, through education and development, and that any person is capable of transforming himself or herself and the leadership they practice. But how?

**Question Three: What designed learning – education - leads to this development?**

**Reciprocal Development, Learning and Leading.** In her overview of the 2nd edition of the *Oxford Handbook of Reciprocal Adult Development and Learning* (2011), Carol Hoare explains that the contributors “frame a new way of seeing” that transcends and reconceptualizes the relationship between human development and learning as *reciprocal*. Each process is capable of altering the rate, scope and scale of the other throughout the lifespan in ways that can be studied and perhaps predicted. It is an ironic testament to the divide between disciplines that
neither she nor her contributors reference Bronfenbrenner’s “mature” bioecological theory of human development (Tudge, Mokrova, Hatfield, & Karnik, 2009) which as early as 1998 provided a theoretical framework explaining the general nature of this reciprocal relationship and poses several hypotheses that have so far been demonstrated to hold true.

Bronfenbrenner (1979) described his work as “ecological systems theory” explaining human development from an evolutionary perspective. It describes development as “bioecological”, an evolving biological response to changing ecologies and the problems they present to living organisms. Development in humans is subject to the person, the natural and designed processes in which the person engages (actively or passively), the context in which development occurs, and the changing dynamic between process, person, and context over time. This is commonly referred to as the Process-Person-Context-Time (PPCT) developmental model.

Learning is a key proximal process in which the form, power, content, and direction of learning “varies systematically as a joint function of characteristics of the developing person…, the environment… the nature of the developmental outcomes under consideration…and social continuities and changes over time through the life course and historical period during which the person has lived” (Bronfenbrenner & Morris, 1998, p. 996). Education and training are designed proximal processes intended to accelerate and direct development toward a specific end. I use Bronfenbrenner’s PPCT model to frame a proposed theoretical framework for leadership education (Fig 1) as a design proximal learning process. In this bioecological model, the person is the locus of development, a process that can be accelerated for that person and others in the same environment. This person’s learning comes through engagement with the challenges of the environment in which he or she is solving problems.

The developmental outcome is the capacity for self-transformation and transformative leadership. That capacity relies on knowledge and understanding of human development, learning, and leading. It requires self-design and regulation of learning, as the learning takes place in novel environments that have not been encountered before, and for which no standard approaches exist beyond that of “learn everything you can”.

The social continuities and changes over the life course in this historical period are recognized as volatile, uncertain, complex, and ambiguous as human social, political, cultural and economic interactions become an interconnected global network. Global human action is capable, demonstrably, of initiating complex ecological, social and cultural challenges that are not fully understandable and which cannot be addressed by any one person, group, or entity acting alone. Leaders move in and out of leadership roles as needed. They lead within a network of leaders in response to the envisioned future need.

The learning process that accelerates the development of the capacity for self-transformation in this environment is characterized by:

1. Learning owned and determined by the learner, facilitated by tailored developmental scaffolding, situated learning, and punctuated coaching, mentoring and peer evaluation.

2. A complex of focused challenges that are just beyond the limits of the individual to address out of any existing framework for their prior action and practice (Vygotsky, 1978).
3. Learning owned and determined by the learner, facilitated by tailored developmental scaffolding, situated learning, and punctuated coaching, mentoring and peer evaluation.

4. A complex of focused challenges that are just beyond the limits of the individual to address out of any existing framework for their prior action and practice (Vygotsky, 1978).

5. A collaborative inquiry into the development of self as learner, and applying the capacity to learn to the challenge of leading others to learn.

6. A process of situated learning and self-regulation that includes dialogue, reflection, and evaluation of development by self and by knowledgeable peers and coaches.

7. Constructed learning environments that provide the resources needed for inquiry, generative thinking and design, prototyping, experimentation and evaluation, and reflection on process, outcome and impact.

Time is a crucial dimension of this model. The developing person learns continuously, but that learning can be accelerated by creating powerful learning experiences in structured and scaffolded spaces within the learner’s time horizon. This accelerates learning and development in tandem.

**Question Four: How will leadership education designed in this framework know it is generating the learning it intends?** To provide a guide for assuring that programs designed within the proposed theoretical framework generate the intended learning, I turn again to Petrie (2014) and his four future foci for leadership development. Effective programs would be able to demonstrate the following, based on evidence of learning outcomes.

- Vertical development would be demonstrated as a consistent outcome over time for a high percentage of learners engaged in the learning process.
- Program designers (faculty, coaches, and developers) would demonstrate an ability to create, test, evaluate and adapt innovative approaches to improving the form, content, power, and direction of the designed learning process in response to continuous analysis of learner outcomes.
- Learning experiences would demonstrate significant power to accelerate development, as evidenced by assessed student learning and both horizontal and vertical development outcomes.

An indicator that is less direct but should become evident over time is:

- Leadership education would correlate to further democratization of leadership, and to a shift in emphasis from mastering the role of leader to demonstrating mastery in leading across the conditions of leadership within networked systems.

**Summary**

Edgar Schein predicted in 2004 the future of leadership and leadership education that we now face in 2015. I’ve proposed a dialogue to the field of leadership education, framed around four key questions. Each question is informed by scholarship and theoretical frameworks from the fields of human development, human learning, and leadership, with a nod to assurance of learning. The practice of *presencing* (Scharmer, 2009) – of making oneself and others aware of the emerging future is inherent in this work.
I’ve also proposed a theoretical framework for the design of leadership education, based on Bronfenbrenner’s bioecological theory of human development, as an opening to this discourse. This framework is in need of testing, and I welcome collaboration with any person or coalition interested in this work. It is my hope that this theoretical piece provokes thought about the challenge that a VUCA world poses to us all, and raises awareness of emerging directions in leadership development and learning as they pertain to leadership education.

Learning Design for Vertical Development Context

The Volatile, Uncertain, Complex and Ambiguous NOW
Accelerated Time Horizon

Form

Learner Owned
Self-Directed & Designed

Collaborative Inquiry and Prototyping

Framed by Challenge & Problems

Content

Development Theory & Practice

Learning Design

Leading and Leadership

Direction

Self-Transforming Leader

Figure 1. Theoretical Framework for Leadership Education
References


