

# CHDS 69X PROGRAM RESEARCH

## *An Introduction*

In order to provide a holistic response to the topics provided, we have broken the first set of research topics into three components. The first component discusses the theme of adult psychological development within the context of transformation and growth of individual adults and on increasing adults' capacity to change organizations and external stakeholders. The second component discusses two different types of transformational learning experiences, the first a facilitated approach and the latter an independent project based approach. Partnered with each transformational learning experience are discussions of theory and several real-world courses or experiences that have been used to promote learning and personal change. The last addresses key topics, including recruitment and trends in homeland security. We look forward to hearing your perspective and honing the direction of the program's development.

### THEMES AND OUTCOMES IN ADULT LEARNING AND DEVELOPMENT

#### **The Trends of Adult Psychological Development and Adult Learning**

The latest trend in adult learning is a movement away from gaining information to the transformation of self. In respect to this paper, transformation denotes an individual developing a greater ability to understand the complexity of self, the world around them, and the ability to leverage that understanding into action.<sup>1</sup> There are many learning experiences that promote such development and are some of the highest rated courses at America's top universities. For example, "Exercising Leadership," a course at the Harvard Kennedy School of Government, is consistently rated the most impactful course at the school. It has no lecture component and challenges students to understand what "hungers" drive them, while also enabling them to experience the complexities of power, group dynamics, and leadership from a case-in-point style of facilitation.<sup>2</sup> Stanford's most popular course, "Designing Your Life," leverages design thinking and challenges students to reframe their thinking, uncovering assumptions one holds about their future allowing them to lead a happier life.<sup>3</sup> Top MBA programs across the country list Negotiation as one of their top rated courses. At Harvard Law for example, the practical exercise of trial negotiations leads people to realize their personal assumptions of their worth, and unseen perceptions of their biases towards others. These courses, as well as many of the others listed in this paper, meet students where they are and work to support them in their further development.

While each of them maintains a different contextual approach, they all provide an opportunity to both support and challenge individual growth and development beyond the curriculum. This portion of the paper will discuss what growth beyond the curriculum means, and will serve as a deep dive into how a person grows. Here we will decode the adult psychological developmental spectrum, focusing on the challenges and limitations of each stage of development which will provide context for later portions of this paper where we will identify the mechanisms learning experiences leverage to provoke and promote adult psychological development.

### ADULT PSYCHOLOGICAL DEVELOPMENT

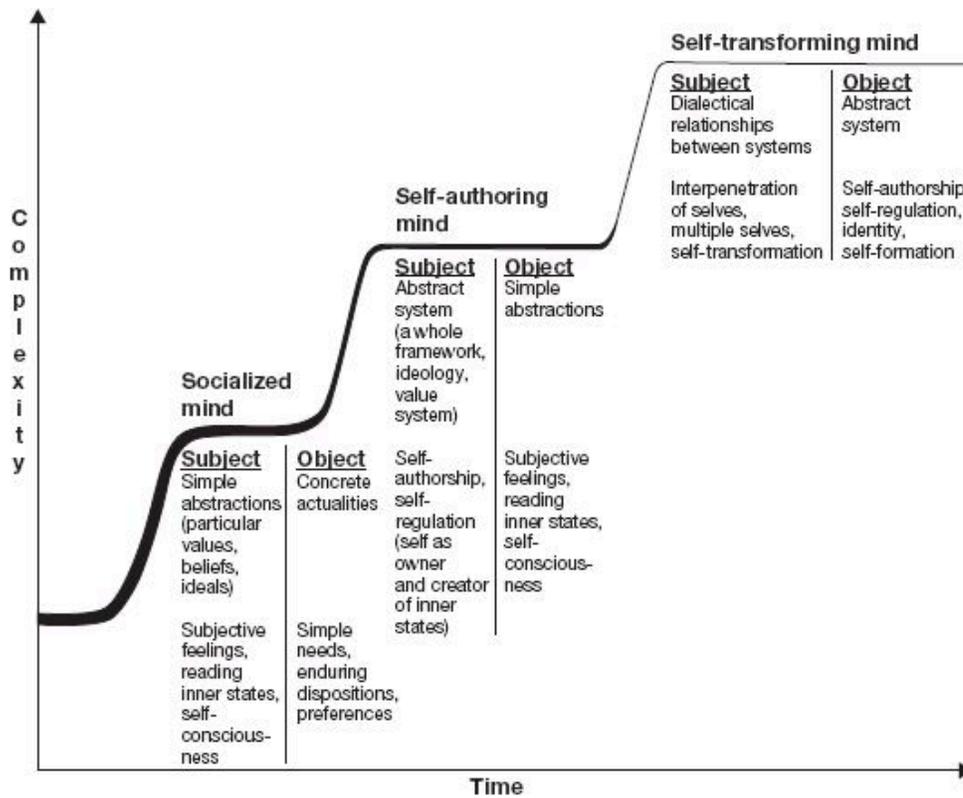
#### **Micro-Level Development: Subject-Object Transition**

At the heart of psychological development is a transition from a simpler state of understanding to one that is more complex, constructive developmental theorists describe individual moves of understanding as a subject-object transition. Dr. Jennifer Garvey Berger explains, "subject (that which you cannot yet see because you are fused with it) and object (that which you can see and

make decisions about because you have gained more distance from it). As elements of understanding move from subject (hidden) to object (seen), our worldview becomes more complex, and constructive–developmental theorists would say we have developed.”<sup>4</sup> An example of a small shift in understanding, a subject-object transition, may be a leader of a small team who finds success in motivating others through forming personal relationships with each of them. While this team leader found success in the personal connection, a move to managing multiple team leaders, they may come to find that their style no longer works. Through trial and error, they may come to realize a new style is required on a system level. The internal realization that her subordinates respond differently to their personable nature could be described as a subject-object transition. In other words, an assumption, that “if I am personable and form close relationships with my subordinates they will be motivated” was realized to be incorrect, and was replaced with, “people are motivated by different actions, some through a personal relationship and others through more professional relationships”. Notice that this transition brings with it a hint of a greater complexity. Growing a more complex understanding of how to foster an environment of motivation is not limited by single subject-object transitions, but expands as one continues to progress in their psychological development. Nor should we be content in believing that the personable leader didn’t already know that people are motivated in different ways, as knowing and owning their understanding are two different things.

### **Macro-Level Development: Orders of Mind**

On the micro-level of constructive developmental theory, we see small tiny shifts in understanding, while at a macro-level we see profound changes in how individuals construct meaning. In the words of constructive developmental theorists Dr. Robert Kegan and Dr. Lisa Lahey of Harvard University, “researchers have studied the ways human beings construct reality and have observed how that constructing can become more expansive over time.”<sup>5</sup> They describe the developmental spectrum in that “(t)here are qualitatively different, distinct levels (the “plateaus”); the demarcations between levels of mental complexity are not arbitrary. Each level represents a different way of knowing the world.”<sup>6</sup> These plateaus are described in five stages or orders of mind. Each stage comes with it a new mental capability or capacity, and with that a new way to construct information to better understand self and the world. Of these five stages there are three that are most relevant to a mid-career program as the probability of participants having grown past the 2nd Order is high. The stages are the 3rd Order known as The Socialized Mind, the 4th Order The Self-Authoring Mind, and the 5th and most developed Order The Self-Transforming Mind.<sup>7,8</sup> This section will provide a brief overview of the various plateaus of the spectrum with an emphasis on the capabilities and capacities leaders develop as they progress along this psychological developmental spectrum and challenges unique to each stage of development.



### The Socialized Mind (3rd Order)

The Third Order, known as the Socialized Mind, describes the developmental leap typically begun during adolescence where one works to leave behind a state of mind that is centered on self to an individual who is able to be empathetic and take the perspective of others. Empathy and perspective taking begins with the ability to internalize others' feelings, becoming a closer part of the group. In Kegan's words, "you have become more a part of society, because society has become more a part of you."<sup>10</sup> A great challenge of the 3rd Order is the inability to differentiate between the values the individual truly holds and those that have been imprinted on them by external sources. Individuals are more susceptible to the opinions, beliefs, and values of their tribe, as they have made the psychological leap to be capable of internalizing the perceptions of others, but have yet to make the leap to be able to discern and concurrently separate them from their own. When a person is challenged with conflicting ideals, they may struggle to identify what is right for them. A 3rd Order leader in charge of an emergency response center may struggle to overcome socially delivered biases to types of people, assumptions about certain agencies or organizations they may be expected to work with, or even internal limitations of how they expect an emergency response center should or should not function. Worse off, they may be so subject to these beliefs and biases that they are unable to see how they impact and affect their behavior.

The beliefs and biases in the 3rd Order rest with an unseen reliance on the lens of external social creation. This external reliance may manifest itself in the need for greater direction and guidance, and to feel responsible to meet the expectations of others. While these limitations can foster positive traits, they can also manifest behaviors that may limit their ability to lead the organization to succeed. At the heart of these two limitations are a desire for certainty and/or stability in their purpose, in their relationships, and the world around them. These needs may contribute to a 3rd Order leader becoming overly collaborative, and at times noncommittal to protect the certainty of relationships (as the 3rd Order individual "may provide a warm 'shoulder to cry on,' but then feels identified with, responsible for, the other's pain"<sup>11</sup>) they hold in their position. It may also bring

about overly top-down, authoritarian leadership style, as the individual may feel uncomfortable from a lack of direction in the situation and seek to protect their hold of power.<sup>12</sup>

This external reliance may be of benefit to the military as service members typically enter service in their late teens and early twenties, a time when they are typically transitioning to or are in the early portion of the Socialized Mind. The young Sailor finds solace in the certainty of their role; they regard themselves as their position in part because this is how others in their unit regard them. In the 3rd Order “[a]uthority is an internalized value/principle/role which comes from outside herself.”<sup>13</sup> If an individual is tasked by a superior entity or by circumstance, it becomes easier for them to assume the leadership position, where once they were less likely to exercise their informal authority, they may now engage and leverage a fuller array of their informal and formal authority.<sup>14</sup> While this order of mind is ideal for inculcation and acculturation into a group whether military in nature or other, it brings with it limitations.

Being able to direct an individual from subordinate to leader can be a valuable trait for maneuvering lower level leaders; however, as individuals reach higher positions, they are often expected to exercise leadership as needed, even if they are not in a formal position of authority. This brings about a need for a higher level of development. One may argue that young individuals in the defense and intelligence communities have the ability to assume leadership as needed given a situation but have yet to demonstrate elements of the 4th Order. While that may be true, the sub-culture’s expectations typically encourage that behavior. These actions taken by individuals in the 3rd Order are still operating in a way the external world confirms. While participants may exist in 3rd Order in a mid-career program, there is a good chance that a sizable percentage will also exist in the 4th Order.<sup>15</sup>

### **The Self-Authoring Mind (4th Order)**

The transition to the Fourth Order brings with it the capability for individuals to make decisions from their own internal position of authority separate from the implicit external social adherence of the 3rd Order.<sup>16</sup> The achievements of leaders who have reached this plateau are profound; they are capable of authoring their own values and possess the capacity to examine external values separate from their own.<sup>17</sup> In essence “you become your own person.”<sup>18</sup> Individuals who have reached the self-authored mind have been shown to be “more strategic, allocate resources more effectively and efficiently, generate more revenues, and are perceived to be more effective in leadership roles by their peers and subordinates.”<sup>19</sup> While the benefits of the 4th Order have been identified so have the challenges. The 4th Order can bring with it an over-reliance on their meaning making system and on their self-authored beliefs and values.<sup>20</sup> The process of shifting to the 4th Order is challenging, as it often calls into question socialized beliefs, bringing with it a level of uncertainty and ambiguity as some of those beliefs held in the 3rd Order are disregarded. That process may be destabilizing.<sup>21,22</sup> It may often create feelings of loss that those that were once admired and relied on (beliefs, people, and organizations) have flaws, inconsistencies, and inabilities.<sup>23,24</sup> While many of the benefits of 4th Order leaders may stem from the certainty that forging one’s own values may bring, it may also lead to a lack of flexibility. One benefit of the certainty gained is that individuals “are likely to have a clear sense of personal mission that can be extended to the organizational realm.”<sup>25</sup> A 4th Order leader is, in a way, broken free of the organization’s social construct that may have limited innovation and may provide a new refreshing mission for the organization; however, the 4th Order meaning-making may have also solidified certain disruptive practices brought about by the organizations social structure. The 4th Order leader may bring a new clear sense of an organization’s mission and they may sway 3rd Order subordinates to ascribe to the new belief system and direction. However, due to the self-authored leader’s certainty, a 3rd Order subordinate may avoid recommending course corrections to avoid challenging a new organizational or cultural belief. The 3rd Order subordinate may also fear they will be disregarded due to the self-authored leader’s certainty in their self-authored perspective.<sup>26</sup>

The potential over-certainty in a 4th Order leader’s belief system may not just adversely impact the individuals within the organization but may also adversely impact external organizations and

situations. A 4th Order leader who faces a negotiation with a sister service in the midst of an emergency might overly rely on techniques they have found to be successful from their experience, and might inadvertently push the other service away from collaboration due to their desire to also pursue an alternate technique. In the midst of action, an internal conflict might arise in the 4th Order leader that causes the relationship to sour, or to lessen the potential for unity of effort.

While 4th Order individuals may overly ascribe to their self-curated belief system, 4th Order individuals possess the ability “to hold onto many different perspectives and make an informed decision that takes competing perspectives into account.”<sup>27</sup> Examining competing perspectives and values without compromising one’s own as an achievement reached at the self-authored stage. As they find new values, beliefs, and perspectives they are capable of enriching their own, ascribing these new values and understandings and even taking action on them.<sup>28,29</sup> It also brings with it the capacity to engage with stakeholders that possess very different perspectives, and to overcome these value differences to be capable of engaging in talks and collaborations that at one time might not have been possible. However, if their self-authored system possesses values they feel are at odds, it may lessen the probability of a collaboration taking place.

The self-authored individual has not only learned how to construct their own perspectives, values, and beliefs, but has relied on and enriched their perspective. While major achievement brings an over-reliance on this personally minted belief system, they also develop the capacity to think beyond the social narrative able to hold other belief systems. As an individual in the 4th Order continues to develop they will slowly see that their self-ascribed belief system may be called into question much like their Socialized beliefs had once been.

### **The Self-Transforming Mind (5th Order)**

While the achievement of the 4th Order is the ownership of one’s meaning-making systems and self-authored beliefs, values and ideologies, the blind-spot of this stage of development is an over-reliance on their self-authored beliefs. The progression to the Fifth Order in Kegan’s words is that one “could actually begin to step back a bit even from their own personal ideologies, even from their own personal internal framework,” he continued to explain that “people [come] to see inevitably any one system of meaning is going to leave some things out, it is going to privilege some things or some people, and is going to disadvantage others.”<sup>30</sup> The basis of the achievement of the 5th Order is the realization of the false certainty of the self-authored order of mind. The power of the 5th Order comes from an embracing that there is no real certainty, and that the complexity and interconnectedness of the world is often beyond comprehension. This leap in understanding provides the opportunity for 5th Order leaders to seek greater understanding when tackling the toughest challenges; specifically, to empower subordinates as partners in the process, to make failure an empowering experience, and to lead with greater intimacy and understanding of one’s self and others. As in previous orders of mind the challenges of this order are intimately tied to the achievements; individuals may experience loneliness as there are so few who make meaning in these same ways, that strong vision becomes challenged by their lack of certainty, and that communicating as a leader to subordinates at lower orders of mind may become challenging.

The psychological distance from the 5th Order leader to followers in earlier orders may create challenges or stoke internal conflicts. A 5th Order leader may see complexity and interconnectedness, where the 3rd and 4th orders might see the certainty of a solution that matches their ascribed beliefs. This difference in understanding has the potential to manifest as conflict in the 3rd and 4th order followers. Furthermore, the transition to the 5th Order may come with “the loss of the single-minded dedication and potential for (or hope for) certainty”<sup>31</sup> that existed in their former self-authored self. As a 5th Order leader their organizational vision might lack the luster of certainty expected by 3rd and 4th Order individuals. That lack of certainty could also extend to their own future lessening their ability to inspire themselves and others.<sup>32</sup> Finally, there is sometimes a loneliness that is reported when there are few people who understand how

you see the world.<sup>33</sup> 5th Order leaders may find the challenges of leading others different from when they were less psychologically developed.

While individuals may struggle to find those who fully understand them, their position on the developmental spectrum makes them ideal for listening and supporting others. Those at the 5th Order have developed a greater awareness of the human condition, both in their intimacy with themselves and others. They realize they do not have it all figured out, and possess a greater ability to accept their own faulty assumptions allowing them to also recognize and accept these faults in others.<sup>34</sup> They have come to understand that most people are not in full control of themselves and that “development offers new ways to think and sit with emotion.”<sup>35,36</sup> They grow to see the irritation of daily life whether from differences they once fought to defend or from the recognition of their failures from others is truly a conflict in themselves.<sup>37,38,39,40</sup> Their spacious understanding of internal conflict and the struggles along the journey of development brings with them an understanding of the pain and struggle of development and life, enabling honesty and therefore greater trust to be built with others.<sup>41</sup>

The benefit of an inherent understanding of the challenge of humanity and a desire to cultivate a deeper understanding of the challenges they face brings with it a desire to ensure others feel comfortable bringing information to the table, even if it might work against the current momentum of the group.<sup>42</sup> This characteristic of a 5th Order individual is reflective of the fact that they are “not a prisoner of that [4th Order] filter.”<sup>43</sup> There is a distance that evolves in the 5th Order past the tight ownership of one's self-curated belief system, and with it they hold their emotions more loosely. Where once the individual, as characterized by the 3rd Order, went to the external to find answers, the 5th Order leader understands that they must also leverage an external lens to gain awareness.<sup>44,45,46</sup> It is that external curiosity that brings leaders to further develop and see the vast interconnected systems, paired with their desire to engage others in tackling adaptive challenges and to seek out more holistic solutions.<sup>47,48</sup>

The 5th Order brings about the ability to let go of the certainty of their constructed world, understanding that the totality of uncertainty, ambiguity, and complexity is far beyond anyone's grasp. These moves give rise to a willingness to question and encourage others to question the assumptions, decisions, and actions of the organization.<sup>49,50,51</sup>

### **Conclusion: Leaders in All Orders**

The complexity of psychological development is vast, and seeks to support the understanding of how people make meaning. There are a few broad conclusions and similarities that can be generalized across all the orders from behaviors to processes for further development. While each stage of meaning making may lead to a propensity for different leader actions or behaviors (as mentioned above), it does not mean that those behaviors are exclusive to those orders. The actions of a 5th Order leader may be replicated by a 3rd Order leader, but that 3rd Order individual's actions will be based on how they make meaning of the world. A 3rd Order leader may be highly collaborative and reach for a deeper complexity of understanding. However, while even their desired outcome may be the same as the 5th Order leader, the context of the underlying psychology is different. Moving from one stage to the next occurs over long periods of time, it is common for people to spend multiple decades in a single order of mind. The transition of orders of mind as an adult rely on the continued questioning of internal assumptions, while they are often unseen, the reflection of glimpses into these more complex world allows for a greater revelation of the potential of a transition. The trend in adult learning is moving towards transformation rather than information, constructive developmental theory provides a model that can be used to understand how one grows and develops over time.

## **CULTIVATING AND PROMOTING CHANGE: HOW ADULTS FURTHER DEVELOP THEIR ABILITY TO LEAD**

*While the past section focused on developing a common language for adult psychological development, this section focuses on the processes and mechanisms that promote micro-developments that build and lead to a macro-shift in development. It is recommended that you begin with the previous section.*

As we have seen from the top courses across the most prestigious US academic institutions, today's learners desire courses with mechanisms that seek to transform rather than inform. This includes millennial and members of Generation X, who have grown-up understanding that access to information is ubiquitous. They are looking for experiences rather than things, and development rather than just information. As explained in the previous section, vertical psychological development (ex. Orders of Mind) lends itself to the ability to progress leadership development. This section focuses on unraveling the difference between horizontal development and vertical development and addresses the mechanisms that may promote vertical transformation (ex. Orders of Mind) and its application to empowering one's ability to lead.

### **Vertical Development (Transformation) versus Horizontal Development (Information)**

Over the past few decades, there has been tremendous attention paid to developing leader behaviors that work towards accomplishing the mission and making behaviors that are undesirable for leaders extinct. However, over the last two decades there has been work and research encouraging a new direction. In 2014, The Center for Creative Leadership (CCL) published a study titled "Future Trends in Leadership Development". Among those consulted in its production were twenty-four giants in the leadership development industry along with six of the top faculty in leadership development at Harvard University. The report described two major challenges in leadership development: the first was "This is no longer just a leadership challenge (what good leadership looks like); it is a development challenge (the process of how to grow "bigger" minds,"); and second, "Managers have become experts on the "what" of leadership, but novices in the "how" of their own development."<sup>52</sup> The challenge as described in the CCL paper ranges from identifying and encouraging behaviors, to being capable of cultivating vertical psychological development (ex. Orders of Mind).<sup>53</sup> This growth brings with it the progressing capacity to question the internal assumptions one holds and build a larger, more complex, understanding of the world around them. In this section, we discuss the difference in the assimilation of leadership techniques, frameworks, and ideas compared with accommodations or micro-developments that act as the building blocks towards a macro-leap in development.

#### *Horizontal Development*

Horizontal development refers to gaining new tools, frameworks, and tactics. While there have been significant developments in how people develop psychologically, it still refers to informing. If horizontal development were a metaphor, it would be the equivalent of pouring water into a formed vessel. Hence the term, in-form-ation.<sup>54</sup> "Surgery training is an example of horizontal development. Students learn to become surgeons through a process known as "pimping," in which experienced surgeons continually question students until the point when the student cannot answer and is forced to go back to the books to learn more information."<sup>55</sup> In a leader example of horizontal development, an individual with a team of followers may learn a new method of providing feedback to their subordinates. This technique, while complex, fits into their way the world works, and is assimilated.

#### *Vertical Development*

Vertical development (transformation) relates to gaining an ever more complex understanding of the world, building to new ways to make meaning (orders of mind). Vertical development in terms of water entails changing the form of the vessel that holds the water. Hence the term trans-form-ation.<sup>56</sup> Kegan's Orders of Mind, as described in the previous section, is vertical psychological

development. Having an experience that pushes your understanding of the world, enlarging your ability to comprehend complexity, is at its heart, vertical development.

### **Vertically Developmental Learning Experiences**

The challenge of experiencing a vertically developmental learning experience is that students are at different stages of development, and facilitation mechanisms need to put students in a position where they will challenge their personal underlying assumptions. There are two experiences that have been researched and tested demonstrating success in promoting vertical development; they are Dr. Robert Kegan and Dr. Lisa Lahey's Immunity to Change program and Dr. Ronald Heifetz Exercising Leadership: The Politics of Change. These courses and practices are the most highly rated and desired courses at their respective schools at Harvard University. They have a number of similarities that provoke development, and at their core, break down to a combination of challenge and support. They course meet students where they are, challenge learners' deeply held assumptions, focus on adaptive challenges rather than technical ones, allow for a level of personal autonomy, and provide access to strong peer and facilitator supports. There are other courses that possess the same mechanisms described above, however, there is no conclusive research that demonstrates they successfully support vertical movement.

#### *Challenge Deeply Held Assumptions*

The process of uncovering that which is subject (that which you do not see, that moves you to action without your understanding or awareness) to that which is object (that which you can metaphorically hold, examine, and take action on based on a conscious awareness) is at the heart of micro-vertical developmental steps. We constantly see a version of the world that feels accurate to us, yet, when you examine all the complexities separate from self, it becomes only a portion of the total picture. While this is the case for all of us, it is difficult to describe how one person is subject to something, as they would not realize it. However, when looking at others from a third party perspective, it is common to see someone who regularly makes similar assumptions, or takes the same action with the same results, yet consistently fail. These people are challenged by a view of the world that is smaller in complexity than reality.<sup>57</sup> Challenging assumptions aids these individuals in breaking through what they are subject to, eventually leading to change in their actions.

#### *Focus on Adaptive Challenges Rather than Technical Problems*

Technical problems "are technical because the necessary knowledge about them already has been digested and transformed into a set of legitimized organizational procedures guiding what to do and role authorizations guiding who should do it."<sup>58</sup> While technical problems may be highly complex, there are concrete solutions or approaches that can be leveraged to overcome them. However, when individuals or organizations do not possess the organized processes, whether it comes from a member of the organization or a type of standard operation procedure, or the challenge is far too complex for a solution to be present it is in fact an adaptive problem. Dr. Ronald Heifetz and Dr. Donald L. Laurie describe adaptive challenges as "demand[ing] learning and the widespread shouldering of responsibility if they are to be resolved." They "demand not merely the application of expertise, but ongoing changes in the habits, attitudes, and values of people high and low in the workplace."<sup>59</sup> While adaptive challenges also describe mitigating challenges external to oneself, Dr. Jack Mezirow of Columbia University and Associates connect the challenge of personal change they call transformative learning as a pre-requisite for being capable of overcoming adaptive challenges. They explain "transformative learning refers to the process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits, or mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action."<sup>60</sup> The process of realizing you are facing an adaptive challenge is overcoming the belief that you have a readymade solution, depending on the person or situation. The accomplishment of realizing that one's "taken-for-granted frame of reference" is not enough

to overcome a challenge and that new learning must take place is the conscious realization that one might face a personally transformative challenge, an assumption and/or a need to grow one's level of complexity.<sup>61</sup> Facing adaptive challenges are at the core of both complex internal and external challenges.

#### *Allow for a Level of Personal Autonomy*

Self-Determination Theory (SDT), developed by Dr. Richard Ryan and Dr. Edward Deci, has been well researched in the fields of education and leadership. Their seminal work "Self-Determination Theory and the Facilitation of Intrinsic Motivation" has been cited 18,847 times in peer-reviewed works since its publication in 2000 according to Google Scholar.<sup>62</sup> Ryan and Deci's work establishes the need for an environment to provide for the volition of individuals in order to be conducive towards intrinsic motivation.<sup>63</sup> They describe, "people must grasp its [autonomy] meaning and synthesize that meaning with respect to their other goals and values. Such deep, holistic processing is facilitated by a sense of choice, volition, and freedom from excessive external pressure toward behaving or thinking a certain way. In this sense, support for autonomy allows individuals to actively transform values into their own."<sup>64</sup> Ryan and Deci are seeking to explain the necessity to fully realize autonomy in order to have an impact on their level of motivation. Being able to internally possess this level of volition enables individuals to seek their own direction through the learning process, and enables them to select directions they feel are relevant to them.

#### *Peer and Facilitator Challenge and Support*

The work of faculty and peers in a transformative learning experience is to establish a holding environment. Heifetz describes the purpose of a holding environment "is to not eliminate stress but to regulate and contain it so that it does not overwhelm anyone. Eliminating stress altogether is counterproductive, for it removes impetus for adaptive work. The leader's major task is to maintain a tolerable level of stress that helps mobilize people's responsibility-taking."<sup>65</sup> The actions of strong facilitators is to ensure participants remain at a level of productive stress. Finding the right places to push-back at a level that is manageable for students working in line with their zone of proximal development psychologically.

This challenge is matched with a level of support established by facilitators and promoted as social norms within the learning environment practiced by peers. Ryan and Deci have titled autonomy support as one of their essential keys to motivation as educators and leaders. Autonomy support possesses several core strategies and perspectives: 1) Work to understand the perspective of those you are in charge; 2) Keep in mind that people will be more engaged if they have some say in how they do it; 3) Providing respectful language, along with purposeful statements that demonstrate a level of importance to the task; 4) The language you use is essential, try using language that isn't filled with controlling language; 5) Providing positive feedback not personal attribution; and 6) Provide negative feedback, in a way that is not demeaning.<sup>66</sup> These strategies work to support a level of trust in the learning experience and act as models for students to use as they continue their leadership journey.<sup>67,68</sup> These strategies are used to demonstrate peer relationships as much as superior-subordinate relationships.

<sup>1</sup> Kegan, Robert. *In over Our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard UP, 1994. Print.

<sup>2</sup> Parks, Sharon Daloz. *Leadership Can Be Taught: A Bold Approach for a Complex World*. Boston, MA: Harvard Business School, 2005. Print.

<sup>3</sup> Burnett, Bill; Evans, Dave (2016-09-20). *Designing Your Life: How to Build a Well-Lived, Joyful Life* (p. 13).

- <sup>4</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 445-447). Stanford University Press. Kindle Edition.
- <sup>5</sup> Kegan, Robert, Lisa Laskow Lahey, Matthew L. Miller, Andy Fleming, and Deborah Helsing. *An Everyone Culture: Becoming a Deliberately Developmental Organization*. Boston, MA: Harvard Business Review, 2016. p 58-61.
- <sup>6</sup> Kegan, Robert, Lisa Laskow Lahey, Matthew L. Miller, Andy Fleming, and Deborah Helsing. *An Everyone Culture: Becoming a Deliberately Developmental Organization*. Boston, MA: Harvard Business Review, 2016. p 58-61.
- <sup>7</sup> Kegan, Robert, and Lisa Laskow Lahey. *Immunity to Change: How to Overcome It and Unlock Potential in Yourself and Your Organization*. Boston, MA: Harvard Business, 2009. Print.
- <sup>8</sup> Basseches, Michael. "Chapter 11: Approaching Work as a Context for Adult Development." *Dialectical Thinking and Adult Development*. Norwood, NJ: Ablex Pub., 1984. 338-64. Print.
- <sup>9</sup> Kegan, Robert; Lahey, Lisa Laskow (2009-02-15). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization (Leadership for the Common Good)* (Kindle Location 983). Harvard Business Review Press. Kindle Edition.
- <sup>10</sup> *The Further Reaches of Adult Development*. Dir. Robert Kegan. Perf. Dr. Robert Kegan. *The Further Reaches of Adult Development*. The RSA, 10 July 2013. Web. 30 Dec. 2016. <<https://www.youtube.com/watch?v=BoasM4cCHBc>>.
- <sup>11</sup> Kegan, Robert. *In over Our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard UP, 1994. p. 227.
- <sup>12</sup> Kegan, Robert. *In over Our Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard UP, 1994. p. 227.
- <sup>13</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Location 466). Stanford University Press. Kindle Edition.
- <sup>14</sup> Heifetz, Ronald A. *Leadership without Easy Answers*. Cambridge, MA: Belknap of Harvard UP, 1994. 15. Print.
- <sup>15</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 532-533). Stanford University Press. Kindle Edition.
- <sup>16</sup> *The Further Reaches of Adult Development*. Dir. Robert Kegan. Perf. Dr. Robert Kegan. *The Further Reaches of Adult Development*. The RSA, 10 July 2013. Web. 30 Dec. 2016. <<https://www.youtube.com/watch?v=BoasM4cCHBc>>.
- <sup>17</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Location 521). Stanford University Press. Kindle Edition.
- <sup>18</sup> *The Further Reaches of Adult Development*. Dir. Robert Kegan. Perf. Dr. Robert Kegan. *The Further Reaches of Adult Development*. The RSA, 10 July 2013. Web. 30 Dec. 2016. <<https://www.youtube.com/watch?v=BoasM4cCHBc>>.
- <sup>19</sup> Valcea, Sorin, Maria Riaz Hamdani, M. Ronald Buckley, and Milorad M. Novicevic. "Exploring the Developmental Potential of Leader follower Interactions: A Constructive-developmental Approach." *The Leadership Quarterly*22.4 (2011): 605. Web.
- <sup>20</sup> Kegan, Robert; Lahey, Lisa Laskow (2009-02-15). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization (Leadership for the Common Good)* (Kindle Locations 461-464). Harvard Business Review Press. Kindle Edition.
- <sup>21</sup> Valcea, Sorin, Maria Riaz Hamdani, M. Ronald Buckley, and Milorad M. Novicevic. "Exploring the Developmental Potential of Leader follower Interactions: A Constructive-developmental Approach." *The Leadership Quarterly*22.4 (2011): 607. Web.
- <sup>22</sup> Coughlin, Carolyn. "Developmental Coaching to Support the Transition to Self-Authorship." *New Directions for Adult and Continuing Education* 2015.148 (2015): 17-25. Web.
- <sup>23</sup> Kegan, Robert (2009-06-30). *The Evolving Self (Problem and Process in Human Development)* (Kindle Location 2357). Harvard University Press. Kindle Edition.
- <sup>24</sup> Kegan, Robert; Lahey, Lisa Laskow (2009-02-15). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization (Leadership for the Common Good)* (Kindle Location 5003). Harvard Business Review Press. Kindle Edition.
- <sup>25</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Location 897). Stanford University Press. Kindle Edition.
- <sup>26</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Location 744). Stanford University Press. Kindle Edition.
- <sup>27</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Location 897). Stanford University Press. Kindle Edition.
- <sup>28</sup> Valcea, Sorin, Maria Riaz Hamdani, M. Ronald Buckley, and Milorad M. Novicevic. "Exploring the Developmental Potential of Leader follower Interactions: A Constructive-developmental Approach." *The Leadership Quarterly*22.4 (2011): 606. Web.
- <sup>29</sup> Block, J. (1995). Assimilation, accommodation, and the dynamics of personality development. *Child Development*(2), 281-295.
- <sup>30</sup> *The Further Reaches of Adult Development*. Dir. Robert Kegan. Perf. Dr. Robert Kegan. *The Further Reaches of Adult Development*. The RSA, 10 July 2013. Web. 30 Dec. 2016. <<https://www.youtube.com/watch?v=BoasM4cCHBc>>.
- <sup>31</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 965-967). Stanford University Press. Kindle Edition.
- <sup>32</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 967-969). Stanford University Press. Kindle Edition.
- <sup>33</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 992-993). Stanford University Press. Kindle Edition.
- <sup>34</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 978-981). Stanford University Press. Kindle Edition.
- <sup>35</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 3731-3734). Stanford University Press. Kindle Edition.

- <sup>36</sup> KEGAN, Robert (2009-06-30). *The Evolving Self (Problem and Process in Human Development)* (Kindle Locations 1841-1842). Harvard University Press. Kindle Edition.
- <sup>37</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 1002-1008).
- <sup>38</sup> KEGAN, Robert (2009-06-30). *The Evolving Self (Problem and Process in Human Development)* (Kindle Locations 1870-1874). Harvard University Press. Kindle Edition.
- <sup>39</sup> KEGAN, Robert (2009-06-30). *The Evolving Self (Problem and Process in Human Development)* (Kindle Locations 1887-1889). Harvard University Press. Kindle Edition.
- <sup>40</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 986-988). Stanford University Press. Kindle Edition.
- <sup>41</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 3737-3740). Stanford University Press. Kindle Edition.
- <sup>42</sup> KEGAN, Robert (2009-06-30). *The Evolving Self (Problem and Process in Human Development)* (Kindle Locations 1876-1878). Harvard University Press. Kindle Edition.
- <sup>43</sup> Kegan, Robert; Lahey, Lisa Laskow (2009-02-15). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization (Leadership for the Common Good)* (Kindle Location 486). Harvard Business Review Press. Kindle Edition.
- <sup>44</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 965-967). Stanford University Press. Kindle Edition.
- <sup>45</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 986-988). Stanford University Press. Kindle Edition.
- <sup>46</sup> KEGAN, Robert (2009-06-30). *The Evolving Self (Problem and Process in Human Development)* (Kindle Locations 1887-1889). Harvard University Press. Kindle Edition.
- <sup>47</sup> Kegan, Robert; Lahey, Lisa Laskow (2009-02-15). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization (Leadership for the Common Good)* (Kindle Locations 479-480). Harvard Business Review Press. Kindle Edition.
- <sup>48</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 959-962). Stanford University Press. Kindle Edition.
- <sup>49</sup> Garvey Berger, Jennifer (2011-11-30). *Changing on the Job: Developing Leaders for a Complex World* (Kindle Locations 978-981). Stanford University Press. Kindle Edition.
- <sup>50</sup> Kegan, Robert; Lahey, Lisa Laskow (2009-02-15). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization (Leadership for the Common Good)* (Kindle Locations 480-481). Harvard Business Review Press. Kindle Edition.
- <sup>51</sup> Kegan, Robert; Lahey, Lisa Laskow (2009-02-15). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization (Leadership for the Common Good)* (Kindle Locations 493-495). Harvard Business Review Press. Kindle Edition.
- <sup>52</sup> Petrie, Nick. "The Future of Leadership Development." *Leadership and Management Development in Education* (n.d.): 125-38. *Future Trends in Leadership Development*. Center for Creative Leadership, 2014. Web. 6 Jan. 2017. <<http://www.ccl.org/wp-content/uploads/2015/04/futureTrends.pdf>>.
- <sup>53</sup> Petrie, Nick. "The Future of Leadership Development." *Leadership and Management Development in Education* (n.d.): 125-38. *Future Trends in Leadership Development*. Center for Creative Leadership, 2014. Web. 6 Jan. 2017. <<http://www.ccl.org/wp-content/uploads/2015/04/futureTrends.pdf>>.
- <sup>54</sup> Kegan, Robert. Personal Communication, February 2015.
- <sup>55</sup> Petrie, Nick. "The Future of Leadership Development." *Leadership and Management Development in Education* (n.d.): 125-38. *Future Trends in Leadership Development*. Center for Creative Leadership, 2014. Web. 6 Jan. 2017. <<http://www.ccl.org/wp-content/uploads/2015/04/futureTrends.pdf>>.
- <sup>56</sup> Kegan, Robert. Personal Communication, February 2015.
- <sup>57</sup> Kegan, Robert. Personal Communication, February 2015.
- <sup>58</sup> Heifetz, R. and Laurie, D. (1999) Mobilizing Adaptive Work: Beyond Visionary Leadership (pp. 55-86). In J. Conger, et al. (Eds.), *The Leader's Change Handbook*. San Francisco: Jossey-Bass.
- <sup>59</sup> Heifetz, R. and Laurie, D. (1999) Mobilizing Adaptive Work: Beyond Visionary Leadership (pp. 55-86). In J. Conger, et al. (Eds.), *The Leader's Change Handbook*. San Francisco: Jossey-Bass.
- <sup>60</sup> Mezirow, J., & Associates. (2000). *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass.
- <sup>61</sup> Nicolaidis, A., and D. C. Mccallum. "Inquiry in Action for Leadership in Turbulent Times: Exploring the Connections Between Transformative Learning and Adaptive Leadership." *Journal of Transformative Education* 11.4 (2013): 246-60. Web.
- <sup>62</sup> "Self-determination+theory+and+the+facilitation+of+intrinsic+motivation - Google Search." *Self-determination+theory+and+the+facilitation+of+intrinsic+motivation - Google Search*. Google Search Engine, n.d. Web. 09 Jan. 2017. <<https://www.google.com/search?q=self-determination%2Btheory%2Band%2Bthe%2Bfacilitation%2Bof%2Bintrinsic%2Bmotivation&oq=self-determination%2Btheory%2Band%2Bthe%2Bfacilitation%2Bof%2Bintrinsic%2Bmotivation&aqs=chrome..69i57j0l3j69i60l2.942j0j4&sourceid=chrome&ie=UTF-8>>.
- <sup>63</sup> Ryan, Richard M., and Edward L. Deci. "Self-determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-being." *American Psychologist* 55.1 (2000): 68-78. Web.
- <sup>64</sup> Ryan, Richard M., and Edward L. Deci. "Self-determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-being." *American Psychologist* 55.1 (2000): 68-78. Web.

---

<sup>65</sup> Heifetz, R. and Laurie, D. (1999) Mobilizing Adaptive Work: Beyond Visionary Leadership (pp. 55-86). In J. Conger, et al. (Eds.), *The Leader's Change Handbook*. San Francisco: Jossey-Bass.

<sup>66</sup> Edward Deci, Personal Communication, August 2015.

<sup>67</sup> Valcea, Sorin, Maria Riaz Hamdani, M. Ronald Buckley, and Milorad M. Novicevic. "Exploring the Developmental Potential of Leader follower Interactions: A Constructive-developmental Approach." *The Leadership Quarterly* 22.4 (2011): 605. Web.

<sup>68</sup> Kegan, Robert; Lahey, Lisa Laskow (2009-02-15). *Immunity to Change: How to Overcome It and Unlock the Potential in Yourself and Your Organization (Leadership for the Common Good)* (Kindle Location 486). Harvard Business Review Press. Kindle Edition.