Leadership Education and Development:
Theory Driven Evolutions

Steven D. Raymer
Major and Course Director
United States Air Force Academy, CO

James Dobbs Ph.D.
Lt Col and Associate Professor
United States Air Force Academy, CO

Christopher P. Kelley Ph.D.
Instructor
United States Air Force Academy, CO

Douglas R. Lindsay, Ph.D.
Associate Professor
United States Air Force Academy, CO

Abstract

This paper examines the evolution of the core academic leader development course at the United States Air Force Academy. The course serves as a key part of student leadership development integrated into all four years of a student's education and their roles within the organization. The curriculum focuses on skills, character, and critical thinking in leadership contexts. The desired effect is to engage students where they are in their development and to train them in the practice of effective, professional team leadership within their teams and the larger organization. Assessment strategies such as reflection, journaling, self-assessment, and practiced application of course material are designed to fit into students' leadership experiences so students apply what they learn in an immediate, relevant context.

"An unexamined life is not worth living" - Plato

Introduction

Society often mythologizes leadership as heroic figures who dictate policy and direct others to get a job done. This view of leadership as a hero still holds appeal, but downplays the important role leaders have in personal growth, development of followers, and promoting organizational strength. It excludes those lacking "traditional" leadership qualities, while ignoring space for development, and inferring sufficiency of traditional leadership practices regardless of organization or context. Fortunately, organizations are increasingly recognizing that leadership occurs at every level, with interpersonal relationships influencing substantial effects on organizational outcomes. This reconceptualization of leadership paints the leader as a figure who supports others to create meaning and find purpose in their work, rather than someone primarily focused on performance or providing a "vision" of organizational goals.

Context

The mission of the United States Air Force Academy (USAFA) is to "educate, train, and inspire men and women to become leaders of character, motivated to lead the United States Air Force in service to our nation." USAFA's commitment to this mission has not wavered since the service academy's establishment in 1954. However, expectations for leaders, including military leadership, have changed over the last several decades. Paradigm shifts have led to recognized value in "quiet" approaches to leadership – leaders concerned with day-to-day direction using essential skills of relating to others. Upon graduating USAFA and commissioning, new officers outrank 80% of the Air Force and face continually increasing levels of responsibility that put greater demands on their leadership skills. The impact of their leadership is felt throughout the full range of organizational outcomes and working conditions (Avolio, Walumbwa, & Weber, 2009). Additionally, given the joint operation emphasis in the military (working with different military services), students will grapple with sharing leadership roles across time, distance, cultures, and multiple government organizations (Avolio, Sosik, Jung, Berson, 2003).

As part of the curriculum, an important component of the Academy's mission to build leaders of character resides in a core leadership course – Foundations of Leadership Development. The semester-long course is designed as a series of developmental stages moving from personal awareness, to understanding interpersonal processes, to team dynamics, and finally impact at the organization and system levels. To this end, our curriculum addresses the need for continuous development at the personal level in order to better develop others at the interpersonal, team, and organizational levels.

The course considers the practices of leadership in a variety of settings as well as the major theoretical concepts underpinning interpersonal processes and the practice of effective leadership. Through these concepts, the faculty emphasize the importance of understanding one's self in relation to others using specific skills (e.g., emotional intelligence, empathy) supporting positive leadership behaviors. In this regard, we use a scientist-practitioner approach to leadership, with the focus on integrating theory alongside application. From this perspective, leadership theory informs practice, and the practice of leadership enhances the quality of scientific research.

For the present discussion, it is not so much about the concepts that are taught or the development model itself, it is about structure. As educators, we know that good instructors with useful models and the best intentions can still be constrained by the course design. Therefore, through deliberate attention to the course structure we lay a clear path for student growth, while allowing instructors the flexibility to respond to the individual dynamics of each class.

An advantage of USAFA is that students live immersed in the Air Force environment during the majority of their forty seven months at USAFA (often referred to as a leadership laboratory). This intense setting is meant to prepare them for the demands of active military duty; however, cadets wrestling with the constraints of a regimented environment can sometimes come across as despondent towards leadership education. The challenge becomes keeping them invested in the process while they juggle various other responsibilities at a formative time in their lives. As a result, given the turbulence of their situation, our leadership course requires

more than good content and good instructors. Using the Personal, Interpersonal, Team, Organizational (PITO) model to anchor their development, the course structure provides direction, purpose, and a set of "knowns" in the student life of "unknowns."

Goals for Leadership Development Education

USAFA's goal is to develop leaders with proficiencies in Leadership, Teamwork, and Organizational Management. Even with these outcomes, historical renditions of the leadership course delivered the content in a vacuum. Efforts remained largely on delivery of theoretical content and broad understanding (versus application) of concepts. Other than an overview of leadership theory, most of the focus stayed at the "team" level, diminishing the broader perspectives surrounding development. Learning from the limitations of previous instantiations, the current evolution of the course uses the incremental growth guided by the PITO model enabling students to grow from self-development to understanding their impact on developing others at each level of an organization. They move from personal growth to active pursuit of developing others; from peers to teams to the success of the organization.

Working toward these proficiencies highlights the growing needs within the military. Military operations increasingly require officers to operate within a system of experts working together toward shared objectives. This requires growth beyond self-expertise and an awareness of ones impact on others. Air Force leadership requires that multiple experts coordinate their activities through functional relationships in complex environments and in uncertain contexts (Lawrence, 2013). Putting these increasing competencies into practice at each stage of leadership development fits with research showing that engagement in deliberate application helps students achieve greater academic outcomes (Moulaert et al., 2004; Plant et al., 2005). We concede that these proficiencies are not the sole purview of the military. A quick examination of the current world of work indicates that all leaders are facing a complex interplay of dynamics at a pace previously unknown. The similarities between effective leadership in the military and outside the military outweigh the differences. Our point here is that what the military is requiring of leaders is changing and our approach to developing leaders needs to keep pace.

Few deliberate educational opportunities exist to specifically explore the complexity of interpersonal biases and social processes that weigh on leadership behaviors/decisions. These normal human processes can be dangerous for inexperienced students whose decision-making skills, often based in simplistic understandings of operational environments, can limit their perspective and encumber best efforts to apply learned concepts (Johnson et al., 1991). Previous models of the course leaned on each instructor to address these complexities within existing content. With the new design, decision making exercises are incorporated alongside behavioral implications throughout the course in order to routinely challenge simplified views of the social world. This addresses views often seen in untrained leaders who may be prone to reinforce uninformed views within an isolated environment (Kelloway & Barling, 2000). Learning about the complexity of the human decision-making process aims to move students away from relying on common heuristics (Proctor & Zandt, 2008; Artinger, Petersen, Gigerenzer, and Weibler 2014) and toward the use of systematic analysis for effective decision making and leadership behaviors.

Leadership Development Course Curriculum

In working toward the learning objectives, the course utilizes an interdisciplinary approach designed to prepare students to practice leadership at all levels at and beyond USAFA. The curriculum follows USAFA's cumulative model of leadership development. This PITO model builds from development of personal and interpersonal skills at the start of the course and reinforces the importance of these concepts to effectively leading at the team, organizational, and systems level. This incremental approach allows for a cumulative experience as students routinely revisit learned concepts in new contexts. As the course progresses, the students experience a gradual shift from personal development to focusing on the development of others. This approach stresses continual improvement of leadership skills at all levels of the organization, encouraging others to recognize their growth potential within the PITO levels.
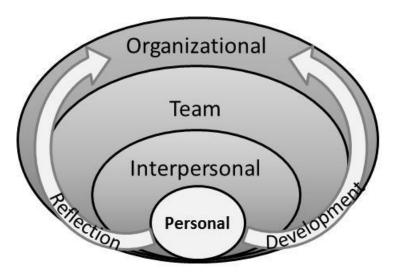

Figure 1. Simplified PITO Model

The first element of the PITO approach challenges students to reflect on their self-awareness and understanding of how self-perception affects their behavior (Foster & Dobbs, 2017). They learn ramifications of personality differences, and how to utilize strengths while improving areas for growth within their leadership and followership roles. At this **Personal** level, students focus on the foundations of leadership development. Best practices and methods for leadership growth are introduced alongside the course design which complements those same best practices. Additionally, students are introduced to analysis using the scientific method in preparation for their course long team project. Next, students begin self-reflection as they engage in personality assessment, 360 degree feedback, and guided personal growth exercises.

The next level centers on effective interpersonal communication and influence - attentive listening, articulate speaking, and clear writing. At this **Interpersonal** level, students learn followership skills. They are challenged with using those skills which guide individuals to function effectively as a member of a team. This concept prepares students for the transition of personal growth to understanding their connection to others within the organization. Students

must reflect on how they have impacted others, and on how their future actions impact both those above them and the replacements they will now be charged with developing.

Introduction to leadership theory forms a bridge between the interpersonal domain to the greater team and organizational domains. The full range model of leadership, as outlined by Bass & Avolio (1984), is used to provide students with a common understanding of effective behaviors which leaders can demonstrate, along with expected outcomes of such behaviors at all levels within the PITO model. The full range model of leadership (Figure 2) guides the students from leader approach and behaviors toward application of other concepts, such as bases of power use, motivational approaches, and expected outcomes such as organizational commitment.

Laissez-Faire	Transactional		Transformational			
Hands-Off Leadership	Management by Exception (MBE)	Contingent Reward (CR)	Individual Consideration (IC)	Intellectual Stimulation (IS)	Inspirational Motivation (IM)	Idealized Influence (II)
	Passive / Active					

Figure 2. Simplified Full Range Leadership Model

With a common frame of leadership and personal development, students shift to application of these concepts in order to develop others. The third level of the continuum focuses on those leadership skills necessary to be successful when leading/managing a small group and forming a team. At this **Team** level, students learn theories of motivation, teambuilding, and diversity. Building on theories of structural power and personal influence students learn the importance of understanding different motivational methods and the long and short term outcomes one can expect from them. Students also learn to identify aspects of successful teams, how to develop those teams, and how to align team members toward a common purpose and goal. Understanding performance expectations challenge students to navigate a leader's role in aligning goals, motivation, and organizational outcomes.

Finally, at the top tier of the continuum, students are taught more advanced concepts such as system thinking, boundary spanning leadership, and the difference between technical vs. adaptive challenges (Heifetz & Laurie, 1997), that are required to effectively and successfully lead and manage larger teams, and even large complex organizations. At this level of the **Organization**, students are introduced to organizational analysis to explore the effects of organizational structures and the value of applying varied perspectives to organizational issues. Additionally, as students begin to see the interconnections of the course concepts, systems thinking is introduced to help them tie it all together. By using this approach, students discover the ripple effects created from the impact of leader behaviors. This serves as a bridging tool to highlight the full spectrum of relationships from their personal development to their impact on others at the organizational level, now seeing the full progression of the PITO model.

Systematic Course Design

Earlier models of the course used solid academic content as a foundation, but left the responsibility of connecting concepts up to the instructors and students. A lack of cumulative concept growth divided the course into blocks of content which students often neglected as they moved into new blocks. Additionally, as each lesson largely stood on its own, there was no clear relationship to the PITO approach to connect levels of development. However, careful thought on class dynamics and instructor/student interaction were adopted early on for the course. Building on these best practices from previous iterations, the structure of small seminar sized classes was kept, allowing instructors to personalize the application of concepts. This approach encourages student engagement and meets their needs on a more individual level (Sweller, 1989; Ward, Byrnes, & Overton, 1990).

In our re-design, use of the very practices taught in the course required that we create transparency for students on 1) what they will learn, 2) how they will learn it, and 3) expectations of assessment. This model guides students to recognize where they start, where they are heading, and how to properly apply tools along the way. Most importantly, instructors work alongside students to help them make sense of the model, connect cumulative material, and track their progress through the course. When students engage with the model and see their progress, their level of commitment and investment in their own continuous development increases, which is the point of the course.

Previous designs for this course relied heavily on instructor involvement to provide course material, guidance, and assessments to students. This placed a strain on instructors and risked lack of uniform instruction among classes. Two changes were implemented to enhance structure. First, the course was designed on a Learning Management System (LMS) that was easy to use for both instructors and students. Next, rather than having course material in multiple locations with varying versions, all necessary course material (to include assessments) were uploaded to the LMS prior to course launch. Each instructor was given their own version of the course based on the master template which they could update to reflect their class interaction. Instructors were then able to use their time developing the class to fit their instructional style and focus on personal student development. Administrative hassles were negated by having a pre-designed, ready to use course with the flexibility to adapt, when needed. This clarity was also welcomed by students who knew where to go for all necessary information and assessment needs. Three areas - learning objectives, instructor preparation, and assignments - heavily guided the evolution of course design. Alignment of these factors would allow flexibility with remaining structural design.

At the start of each lesson students are presented with a set of specific **learning objectives** tied to a series of targeted assessments. These objectives are drawn from a master course template focused on comprehension of course readings. Instructors are given the latitude to determine how these learning objectives are achieved through class discussion and illustration. Instructors have the flexibility, per collaboration with their class, to choose which objectives to cover extensively in the class discussion. While assigned readings ensure coverage of all objectives, students enjoy the flexibility of choice, and instructors are able to develop the class beyond a rushed set of shared slides that touch on each objective. Some concepts warrant more

attention than others and this design affords instructors the ability to focus time and attention where students want or need it most.

Instructor preparation is intended to allow adaptation to each class based on the individual class needs and growth. By providing a fully established yet flexible version of the course, each instructor is alleviated of unnecessary administrative burden. The time gain to instructors allows customization of lessons in a collaborative setting. Additionally, "best practice" presentations and methods for each lesson are shared among instructors. Any changes or updates during the semester can be applied course wide using the shared template, again relieving administrative burden from instructors and limiting potential for confusion among students. Finally, instructors practice grading comparisons among one another on given assignments to ensure consistency and standardization for larger written assessments.

Assignments tailored to the course structure match the growth from personal development to development of others. Given this class design, assignments were built to require cumulative application of learned material alongside new concepts. This cumulative application is mirrored in a semester long project demonstrating learning from identification to analysis, to application of course concepts. Standardized assignments are accompanied with an electronic grading rubric (part of the course structure update) to enhance grading consistency across sections while providing transparency of point values for grade ranges. These rubrics increase grading standardization, enhance transparency, and reduce grading burdens for instructors. Point value descriptors capture major themes for comments in assignment feedback, allowing greater time for personalized feedback on issues specific to individual students. Each rubric tailors assessment based on demonstration of the following objectives; 1) Identification of concept as they apply to everyday life, 2) Application of skill/behavior or specific example within proper context, and 3) Predict (using theoretical support) and assess the impact/outcomes of given behaviors.

Course Assessments

Reflection Paper (IPIP, 360-degree feedback). The course initially addresses how perceptions of self and others can be misleading through normal psychological processes. The instruction emphasizes the importance of understanding leadership first as a set of interpersonal process. To further assess individual strengths and weaknesses, students complete a data driven self-reflection paper. This includes information from the International Personality Item Pool (IPIP) test of the big five personality traits, 360 degree feedback from those they work with in their student roles and a gap analysis to assess the relationship between their individual personality characteristics and the feedback they received from subordinates, peers and superiors in their leadership roles. With a focus on dark side traits identified that could hamper leadership development, their paper wraps up with a set of goals for personal growth and a course of action to achieve them.

Concept Exercises. Building on the self-examination and interpersonal relations section from the start of the course, students are expected to apply this understanding to lessons on leadership theory, organizational behavior, and systems thinking. In a series of two concept exercises students practice the application of new knowledge in a series of exercises. These

assignments are an extension of in-class exercises that draw on real world experiences to illustrate how something as simple as a memo can incorporate important theoretical practices of (1) transformational and transactional leadership and (2) empowerment. Students are asked to identify and explain specific theoretical concepts demonstrated within elements of a series of two memos representing differing approaches to leadership drawn directly from their future working environment. These exercises require concise reflections of the behaviors and ramifications of differing leadership behaviors using theoretical grounding to frame their reflection.

Goal Development. Drawing on goals laid out in their first reflection and lessons on feedback and goal development this assignment accompanies an in class goal development event. Students work with each other using GAPS (*goal, ability, perceptions,* and *standards*) analysis to develop new goals with clear, executable plans of action. The outcome includes a long term self-improvement goal, plus crafting a goal for someone they influence to demonstrate capacity for developing others. Both goals must address the learned competencies of good goal setting, along with a detailed action plan to accomplish these goals. Adequate completion depends heavily on demonstration of ability to measure progress and accountability from others on achieving the goal. Progress checks occur throughout the remainder of the semester as time allows.

Empathy Practicum. In the final stages of the course, students are given the chance to apply their developing interpersonal and leadership skills in practice. An in class exercise matches leadership course students with students from the introduction to psychology class (freshman). The younger students work as actors to present one of a series of possible interpersonal problems commonly experienced by students at USAFA. The leadership students apply their learning to address these situations while being evaluated by peers and the underclassman actors they are advising. This exercise is particularly useful for students to recognize their progress from how they may have dealt with a similar situation prior to course instruction and gives them the opportunity to practice a difficult real world leadership skill in a safe learning environment.

Quizzes. These multiple choice exams are ongoing checks on the student's ability to recall and recognize specific concepts. Each quiz is taken through the course LMS platform outside normal class hours (take-home).

Course Group Research Project and Final Presentation. Throughout the semester, students are expected to practice and examine the leadership skills presented in the course through a series of three progress reviews that culminate in a group research final project. These projects can be approached in various ways as determined by the instructor but must be a data driven examination of best leadership practices. Students must work together effectively in teams while demonstrating the ability to apply course concepts in a theoretically sound and meaningful way, to identify best practices of leadership concepts, and to describe the application of findings on best practices to USAFA, or the larger Air Force. The project includes three graded phases of development (1) research question, study design, and measurement instruments, (2) data collection and assessment, and (3) drafted presentation and final presentation of research and findings to the class.

What We Have Learned

Student feedback in the form of course critiques emphasizes the value of the new approach. The feedback shift from mid-range course scores (3.4 out of 6, $n = 589$) to the highest ratings in course history (4.8+ out of 6, $n = 644$) demonstrate the immediate responsiveness of students to the new learning approach. Complimenting increased ratings, students reported greater applicability of course concepts to their roles outside the classroom. They also reported a similar increase in deliberate commitment to the continued practice of these positive behaviors.

These updates also had a positive impact on the course instructors. In its most recent iterations, instructor feedback was overwhelmingly positive. While unsure of the new assignments, many instructors grew to appreciate the engagement they created with the class once seeing them implemented. One veteran instructor, having taught the course 10 semesters over a 9 year period described this as their favorite iteration of the course. Other instructors agreed they appreciated feeling empowered as an instructor to drive the course in line with the development of their individual classes. Of instructors who were given other teaching options, 100% volunteered to teach the class for another semester.

Conclusion

By using the PITO framework and a developmental view of learning, this course evolved from rote classroom lectures to an integrated and applied experience for students. This is not intended to minimize the impact of classroom/lecture based training. Rather, this was a deliberate adaptation to student needs given their environment and the purpose of the course. We acknowledge and fully utilize lectures as an important component in communicating conceptual knowledge and priming student engagement. Given our intentions with course design, we feel the intentional blending of content with skill building, peer learning, assessment, experiential activities, and time for reflection ultimately produces better leaders.   Further research should explore this blended approach in a variety of contexts, to include other service academies, universities, and business sectors. Additional research should also focus on the scalability and generalizability of the model. Could a 20 hour compressed schedule provide the same benefits as the current 40 lessons in a semester model? Would this development have a similar effect with more experienced personnel or across varying role responsibilities?

The benefits of this design, in a safe and confidential environment for students, demonstrated a commitment from students toward application of their learning in their approach to and reflection on everyday life. This in turn generates greater communication and engagement within the classroom environment. As previously described, students benefit from this engagement through a clarity of expectations, and those expectations in turn perpetuate the positive behaviors toward commitment to learning. What follows is a student population more open to learning, applying, and working toward course outcomes as they become more aware of their need for growth and their ability to impact the development of others.

References

Artinger, Florian, Malte Petersen, Gerd Gigerenzer, and Jürgen Weibler. 2014. "Heuristics as Adaptive Decision Strategies in Management." Journal of Organizational Behavior 36 (S1): S33–S52. doi:10.1002/job.1950.

Avolio, B., Walumbwa, F., & Weber, T. (2009). Leadership: Current theories, research and future directions. *Annual Review of Psychology, 60*, 421-449.

Avolio, B., Sosik, J., Jung, D., & Berson, Y. (2003). *Leadership models, methods, and applications*. Handbook of Psychology.

Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership.* Thousand Oaks, CA: Sage Publications.

Foster, C. A., & Dobbs, J. (2017). The role of interpersonal perception in effective leadership: A call for self-perception humility and social perception humility. In Smith, Brazil, Cornwell, Britt, Bond, Eslinger (Eds.), *West Point Leadership*. New York, NY: Rowan Technology Solutions.

Heifetz, R. A., & Laurie, D. L. (1997). The work of leadership. *Harvard business review*, *75*, 124-134.

Lawrence, K. (2013). Developing leaders in a VUCA environment. Retrieved from http://execdev.kenan-flagler.unc.edu/developing-leaders-in-a-vuca-environment

Johnson, E. J., Camerer, C., Sen, S., & Rymon, T. (1991). *Behavior and cognition in sequential bargaining*. Wharton School, University of Pennsylvania, Marketing Department.

Kevin Kelloway, E., & Barling, J. (2000). What we have learned about developing transformational leaders. *Leadership & Organization Development Journal*, *21*, 355-362. https://doi.org/10.1108/01437730010377908

Moulaert, V., Verwijnen, M. G., Rikers, R., & Scherpbier, A. J. (2004). The effects of deliberate practice in undergraduate medical education. *Medical Education*, *38*, 1044-1052.

Plant, E. A., Ericsson, K. A., Hill, L., & Asberg, K. (2005). Why study time does not predict grade point average across college students: Implications of deliberate practice for academic performance. *Contemporary Educational Psychology*, *30*, 96-116.

Proctor, R. W., & Van Zandt, T. (2008). *Human factors in simple and complex systems*. CRC press.

Sweller, J. (1989). Cognitive technology: Some procedures for facilitating learning and problem solving in mathematics and science. *Journal of Educational Psychology*, *81*, 457. doi 10.1037/0022-0663.81.4.457

Ward, S., Byrnes, J., & Overton, W. (1990). Organization of Knowledge and conditional reasoning. *Journal of Educational Psychology, 82*, 832-837.

Author Biographies

Steven D Raymer is Director of the US Air Force Academy's core leadership development course. He holds an MS in Industrial/Organizational Psychology from Colorado State University. His research focuses on using alignment for organizational development, which currently influences the structure, culture, and development of the Air Force's newest career field. Steven.Raymer@us.af.mil

Dr. James M. Dobbs is the Director of Academics and Associate Professor in the Department of Behavioral Sciences and Leadership at the United States Air Force Academy. He holds a Ph.D. from the University of San Diego. His research and writing addresses leadership development and self-awareness, cynicism, and systems thinking. James.Dobbs@us.af.mil

Dr. Christopher P Kelley is an experimental social psychologist whose research focuses on the basic social, interpersonal, and organizational processes associated with leadership. He earned his PhD in sociology from the University of Iowa and currently serves as an instructor in the Department of Behavioral Science and Leadership and USAFA. Christopher.Kelley@usafa.edu

Douglas Lindsay, PhD, is a Professor at the US Air Force Academy. Previously, he served in the Air Force for 22 years and is the founding Director of the Psychology of Leadership Master's Degree at Penn State University. He has over 100 publications and presentations on the topic of leadership. Douglas.Lindsay@usafa.edu