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Educating, Training, and Inspiring Officers to Lead Adaptively with Character in a Complex 21st Century Environment

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HARVARD Kennedy School
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

POLICY ANALYSIS EXERCISE

Educating, Training, and Inspiring Officers to Lead
Adaptively with Character in a Complex 21st Century
Environment

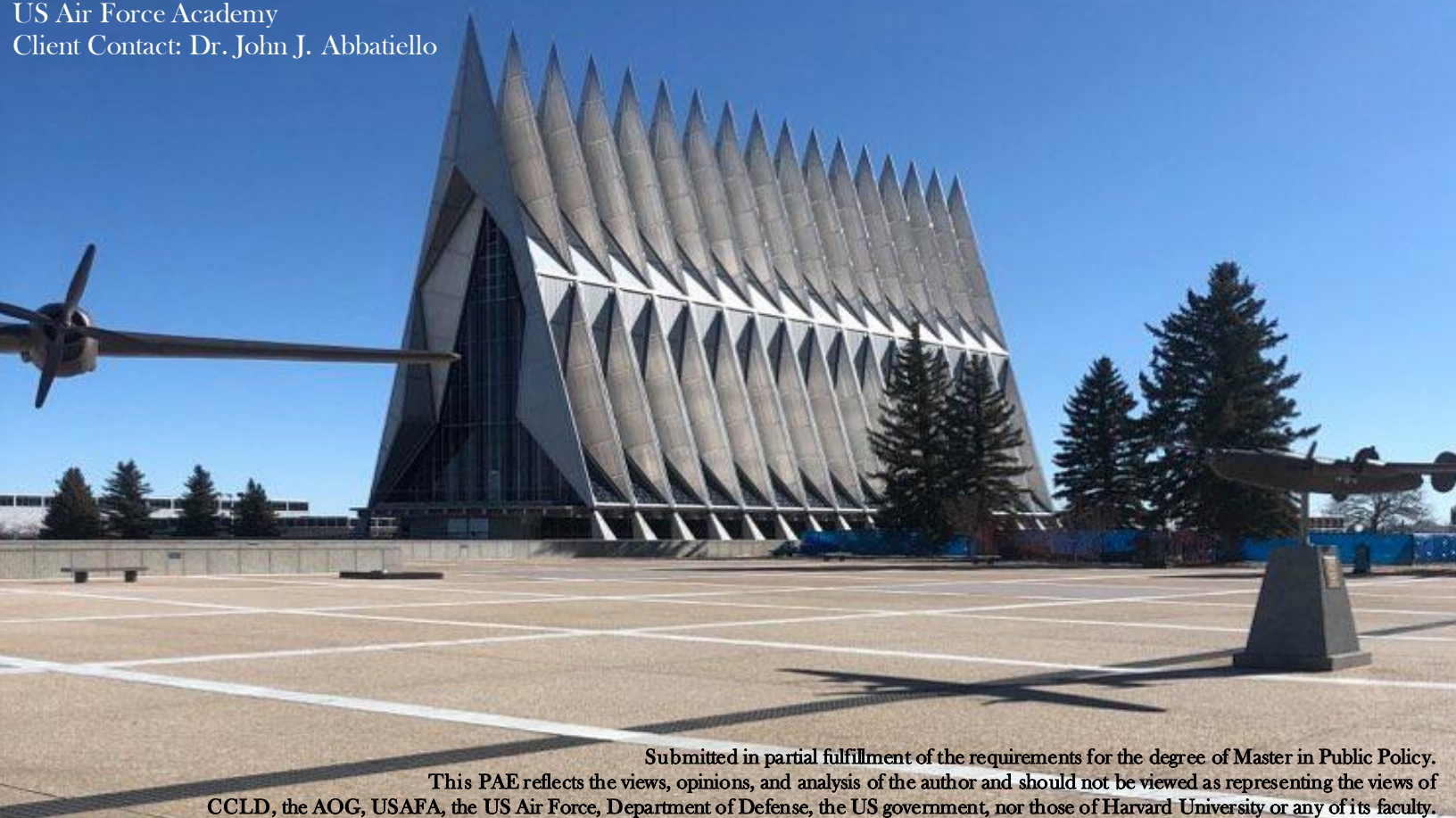
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This PAE reflects the views, opinions, and analysis of the author and should not be viewed as representing the views of
CCLD, the AOG, USAFA, the US Air Force, Department of Defense, the US government, nor those of Harvard University or any of its faculty.

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EXECUTIVE SUMMARY

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.” In short, it strives to develop both “leaders” and “character.”

Leading with character today differs from what it was at USAFA’s founding. The contemporary environment into which USAFA sends its graduates is faster-paced, more complex, and riddled with uncertainty. Officers require new knowledge, abilities, and attributes, but must be leaders of character more than ever.

I interviewed 52 individuals to determine the demands of the contemporary environment. They identified five main challenges that this new environment poses. Officers must be able to (1) operate in complex systems, (2) tolerate risk and change, (3) lead through a new great power struggle, (4) care for and empower their people, and (5) continuously learn. Interviewees identified characteristics that officers must develop to meet these challenges. Interviewees identified strong character as the base of these characteristics while others included various forms of knowledge, team-based skills/action-sets, and adaptive attributes like risk-taking, agility, critical thinking, and shaping systems.

USAFA must adequately develop these characteristics in officers. I surveyed 446 recent graduates to ascertain USAFA’s current development performance. The striking data indicated USAFA’s current vision, structures, and curriculum inhibit the required development. Its vision is not linked to the external environment, and it fails to link value instilment to the reasons for those values. Structurally, there is little collaboration between mission elements, employees have unclear job priorities, and leadership produces disjointed messages to cadets. These structures lead cadets to become fearful and distrusting. As a result, many skirt around a harsh discipline system as they struggle to endure the day. The curriculum does not adequately teach cadets to be strategic thinkers. Rather, it yields cadets who are cynical, focused on individual achievement, and unsupported emotionally.

USAFA must make urgent changes to address its shortcomings: It must align its vision to the external needs of the environment and reform their structures so that the institution portrays the behaviors it wants its cadets to practice. Mission elements must unify and synchronize their messages. Redefine job descriptions to fit the overall mission. Debriefing, 360-degree feedback, and job training need to be commonplace. Compliance and discipline should be secondary to virtue and leadership development. Cadets should have time to reflect, grow, and thrive. They should be allowed to experiment, take prudent risks, and learn—not burn—from their mistakes.

Though difficult, the environment demands these changes. Air Force officers need new skills in this complex environment, and the structures to develop these skills are dramatically different than those currently in place. The environment necessitates these changes. Our adversaries are only growing stronger, and the world is only speeding up. The time to act is now. USAFA must shed many pieces of its traditional development system. It must relinquish some control and put the power in the cadets’ hands to develop cadets to be effective leaders of character in this new environment. Human capital is the most important resource today, our officers can and must be better. Our adversaries demand it.

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PROBLEM STATEMENT

A future that is increasingly fast-paced and complex presents USAFA with a new set of challenges. USAFA must maintain its mission, but the methodologies USAFA uses must adapt, not just to survive, but to lead and succeed in a new complex environment. We must answer the following question and its components.

How can USAFA better equip its officer candidates to be adaptive leaders and thinkers in order to maintain its lead in the

complex and changing 21st century?

- What characteristics do current officers think future officers will need most to lead our Air Force?
- What does USAFA successfully do to help its cadets develop these characteristics and what are the gaps?
- Which visions, structures, or traditions must be developed or changed to fill these gaps in development?

BACKGROUND

The United States Air Force Academy

USAFA is located in Colorado Springs, Colorado and was established on April 1, 1954.

USAFA reports directly to the Chief of Staff of the Air Force separate from the normal reporting structure.¹ It possesses this status because it has a singular mission that the Air Force determined necessitates being independent. Its mission and vision are as follows:

The mission of the United States Air Force Academy 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.

The vision of the United States Air Force Academy is to serve as the Air Force's premier institution for developing Leaders of Character.²

These statements are further supplemented by the Air Force-wide core values and the institution-specific honor code:

Integrity First. Service Before Self.
Excellence in All We Do. We Will Not Lie, Steal or Cheat, Nor Tolerate Among Us Anyone Who Does.³

Figure 1 depicts a simple representation of USAFA's authority structure.

¹ "Governance," United States Air Force Academy, accessed February 1, 2020, <https://www.usafa.edu/about/governance/>.

² "Mission & Vision," United States Air Force Academy, accessed February 1, 2020, <https://www.usafa.edu/about/mission/>.

³ "Mission & Vision."

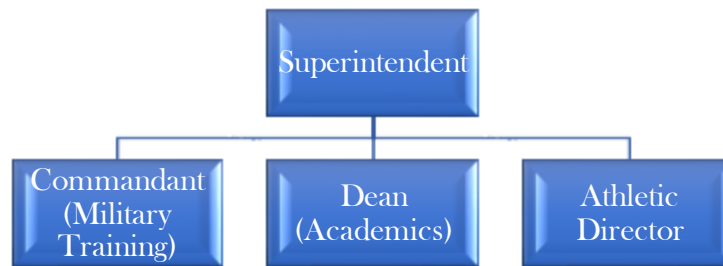


Figure 1. Simple Mission Element Structure of USAFA

Additional subordinate organizations of USAFA include: the Center for Character and Leadership Development (CCLD), the 10th Air Base Wing which handles base-wide support functions, the Preparatory school, and the 306th Flying Training Group which runs “airmanship programs.”⁴

CCLD is the client of this analysis. CCLD conducts and provides research while offering a space where the Profession of Arms, the changing needs of military leadership, and character development can be better understood.⁵

There is also a corporate structure to USAFA. The Superintendent is the chairman of the USAFA Board. The Board is in charge of “determining requirements, approving program starts and stops, advocating for and allocating resources, providing guidance, and determining policies.”⁶

Along with advisory boards and committees, USAFA also has congressional oversight through the Board of Visitors (BoV) which was established to inquire into the morale, discipline, social climate, curriculum, instruction, physical equipment, fiscal affairs, academic methods, and other matters relating to USAFA.⁷

In addition, USAFA has an endowment named the Air Force Academy Foundation and an alumni association, the Association of Graduates (AOG). These stakeholders carry significant weight in decision processes.

USAFA commissions around 1,000 cadets a year as Second Lieutenants in the US Air Force. These cadets are exposed to a four-year immersive experience of athletic, military, and academic rigor. Just as there is a structure for authority figures at USAFA, cadets are also organized into their own structures. The sum of the cadets is known as the Cadet Wing. Figure 2 depicts the Cadet Wing structure is below.

⁴ “Academy Airfield,” United States Air Force Academy, accessed February 1, 2020, <https://www.usafa.edu/academics/facilities/academy-airfield/>.

⁵ “Center For Character and Leadership Development, Mission,” United States Air Force

Academy, accessed October 27, 2019, <https://www.usafa.edu/research/research-centers/center-for-character-leadership-development/>.

⁶ “Governance.”

⁷ “Governance.”

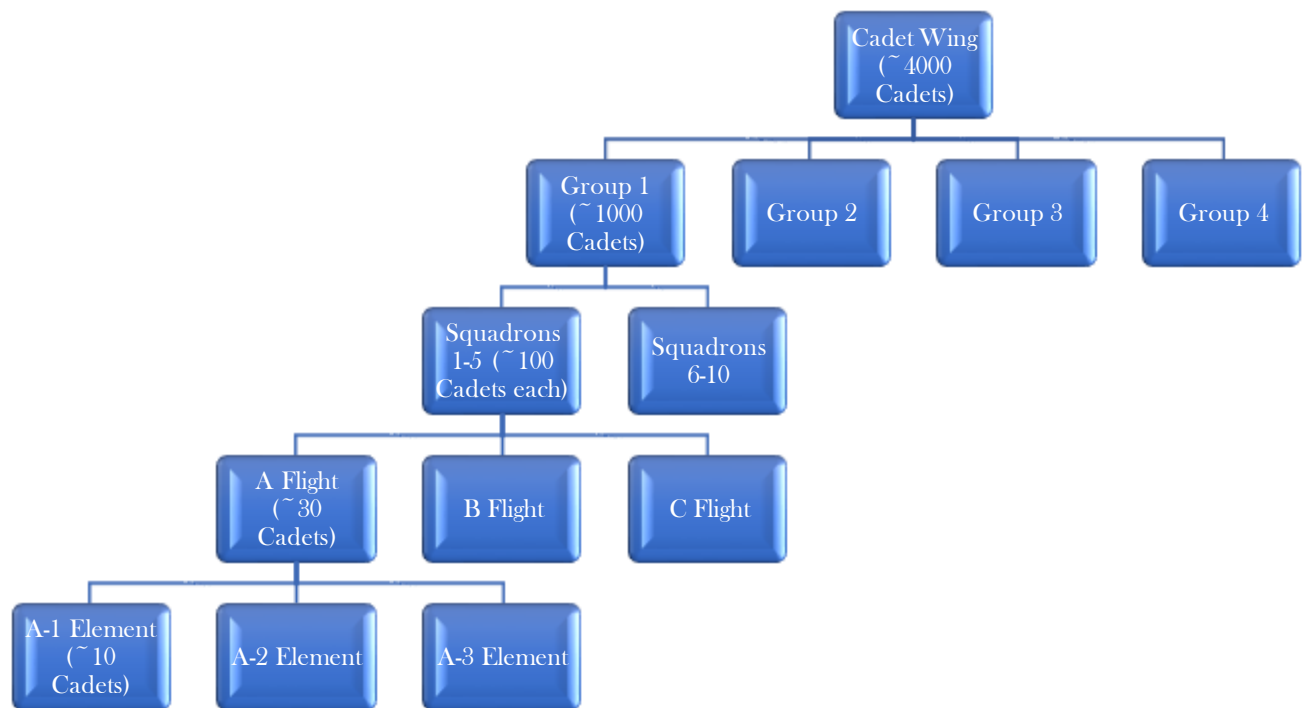


Figure 2. Breakdown of USAFA Cadet Wing Structure

In each level of the hierarchy, cadets from all four class years are distributed approximately evenly. The four different class years have

varying roles and responsibilities.

Demographic information of the Cadet Wing can be found in Appendix A.

Methodology

To set the external context, I conducted 52 phone interviews about what challenges Air Force officers will face. Because cadets graduate to work in the Air Force, USAFA has a major role in preparation for these challenges. These interviewees also provided insight into the characteristics that graduates will need to face these challenges. All challenges and characteristics reported were provided by the interviewees without prompting. Interviewees are anonymous. Appendix B contains a table of the breakdown of interviewees by rank in the Air Force as well as questions they were asked.

This paper also leverages survey data obtained with the help of the AOG and, my main person of contact for this paper, Dr. John Abbatiello. This data assesses how USAFA performs in preparing its leaders for the criteria it currently measures.

To supplement the AOG survey, I conducted an email-delivered survey of the six most recent graduating classes of USAFA (classes 2014 to 2019). Of 3392 people who received the email, 446 people responded yielding a 13% response rate and a 4% margin of error for a 95% confidence interval. The survey asked questions about respondents' experiences at USAFA.

Respondents are anonymous. The data can be found in Appendix B.

I also conducted 22 in-person interviews at USAFA across the different Mission Elements to understand the organization's side of the development process. I spoke with senior leaders, instructors, AOCs, and coaches. Interviewees are anonymous.

USAFA Development Frameworks

As the mission of USAFA is to “educate, train, and inspire men and women to become leaders of character,” there are many frameworks USAFA uses to develop these desired qualities in its cadets. The core values and the honor code, listed above, are two, but there are many more. These frameworks and short descriptions can be found in Appendix C.

Overall, there are many different frameworks, overlap between them, disconnect about whether developing leaders of character is the only desired end state, and different ways the frameworks suggest cadets will achieve these end states.

RESULTS

Challenges

The interviewees identified five main challenges the Air Force faces:

1. Facing Complex Systems
2. Risk and Change Tolerance
3. National Strategy and Future War
4. Caring for and Empowering People
5. Continued Learning

Figure 3 is a graph of the percentage of interviewees that identified each of these challenges.



*Figure 3. Challenges Identified **Without** Prompting by Interviewees*

The most mentioned challenge was the increasingly complex environment officers face and the corresponding need to adopt a systems approach. Forty-six interviewees raised this challenge. They cited the need to view the Air Force through a complex systems lens. They also cited that the complexity necessitates collaborating better across different mission areas. Mainly, officers need to stop strictly following the checklist and start thinking in a larger more strategic way—about the direction of the organization and mission. This challenge included the dire need for more agile acquisitions processes, a greater ability to make sense of the changing environment, and a need to process the high amounts of information which the environment produces.

Forty-four of the 52 interviewees cited the risk-averse nature of the Air Force, bureaucratic sluggishness, and a desire to stick with the status quo as a challenge. Some even cited their own aversion to risk as a problem. Calls for less risk aversion were also met with the challenge of not simply disregarding the risk but being smart and analytical with it.

Thirty-nine people identified the challenge of the rise of near-peer adversaries and understanding the changes and needs in future warfare. This challenge included the rise of cyber and space capabilities as well as the internal challenge of curbing the politicization of the military and managing civilian-military relations.

Thirty-two respondents noted the challenges surrounding caring for their people and empowering them with intent and information to take action and make decisions. Respondents also underlined the growing need to completely leverage human capital and building human capacity for more adaptive contexts. Responses included leading with a heart, communicating expectations, understanding and coping with the brutality of war and violence, and cutting away the barriers to executing on the job.

Thirty-one interviewees emphasized that continuing to learn throughout one's career is a pressing challenge. Respondents underscored the various aspects of this challenge including having more purposeful and timelier professional military education

curriculum, providing team members and subordinates with career broadening and

practical leadership experience, and also emphasizing lifelong learning habits.

Characteristics Officers Need

After identifying challenges individually, interviewees were asked what specific characteristics officers would need to meet the identified challenges. The characteristics officers said they would need in order to meet the challenges they identified are organized as follows: what officers need to know (Knowledge Capabilities), what they need to do (Skills/Actions), and who they

need to be (Attributes). Thirty-seven interviewees stated outright that strong character should be the base for all 17 characteristics. I will discuss each characteristic in light of what the respondents stated as well as what the relevant literature reveals. Figure 4 is a display of these characteristics in their three categories with strong character as their base.

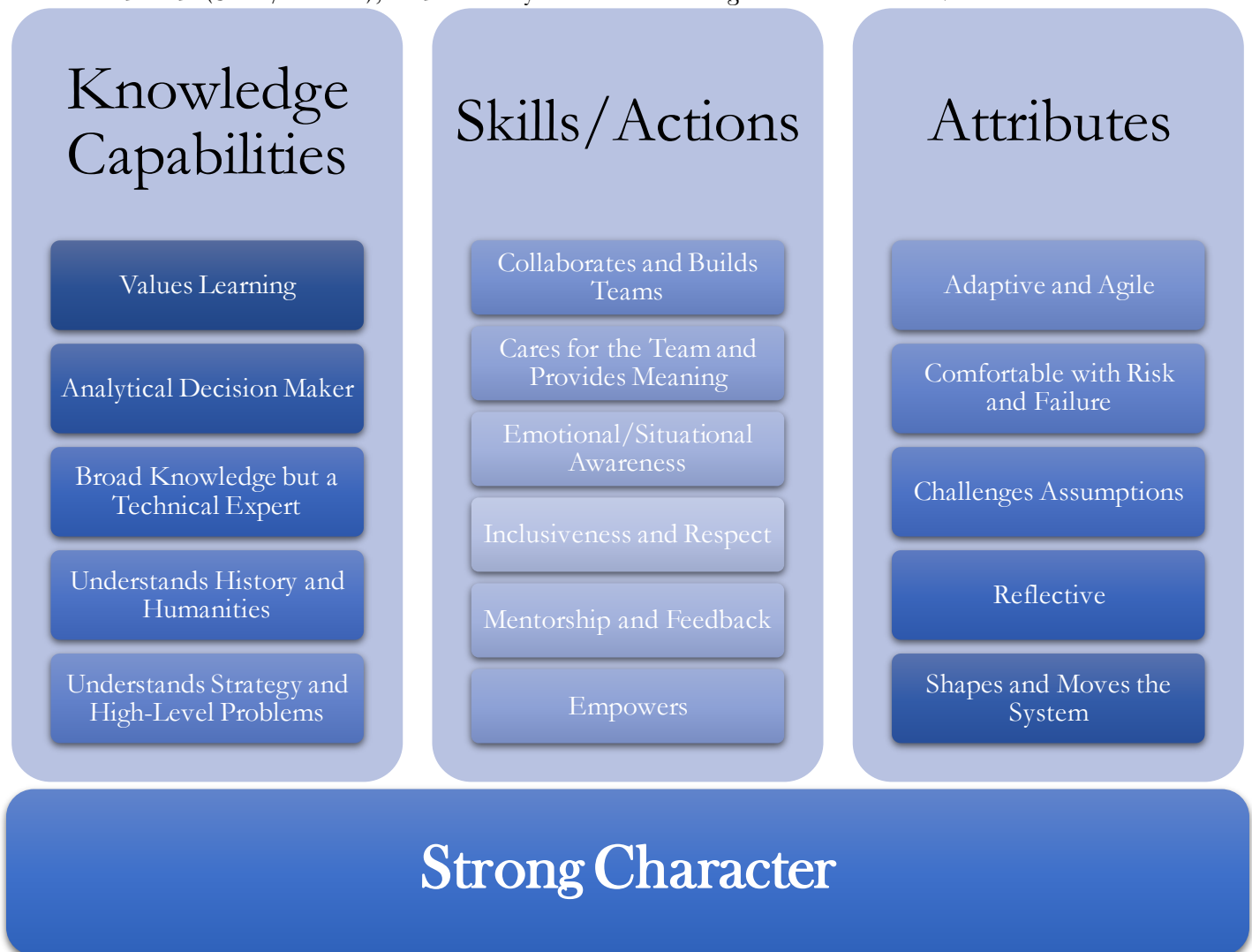


Figure 4. Synthesized Model of 17 **Unprompted** Characteristics Provided by Interviewees with Strong Character as the Foundation

Strong Character

The interviews revealed that without common values and a strong moral character, none of the other qualities matter. Values and character guide everything officers do. Dr. John Gardner writes how values can decay over time when leaders do not continuously emphasize the values of that culture or organization that have made it functional and effective.⁸ Speaking about the US' values, one respondent stated, "Our character separates us from our enemies—our ethics and values. We must value all people equally. Many of our enemies don't have this. Strategic thinkers are nothing without their values."⁹ The adherence to these values separate us from our enemies. These are the values that must persist and avoid decay.

Interviewees highlighted the extreme importance for officers to follow the core values. In speaking about the first core value, integrity, many respondents spoke about the need for leaders to be honest and to build trust with their superiors, peers, and subordinates. Trust is "important in building credibility" amongst those in an organization. It is even more important given the complex nature of the environment. If a leader cannot trust their subordinates, it takes significant effort to verify their work and hold them accountable, causing micromanagement and slower processes.¹⁰ In an Air Force study on becoming leaders in an adaptive environment Sawtelle states:

Morale, potential, and creativity suffer when members of an organization do not feel their leadership's trust. If trust is fundamental to the success and morale of an organization in times of relative stability, it is critical when communications are disrupted or when other unexpected crises arise.

If one's subordinates "are comfortable and trusting," it will foster candor and productivity within the organization.¹¹ Building this trust will require cadets to consider and revise their past relationships with authority. While most interactions in the military are based on authority, very few take this time to consciously debrief their past authority experiences to understand how to engage properly and build trust with authority figures.¹²

Ownership of mistakes and responsibilities was also identified as important. When members are honest about their shortcomings, gaps in knowledge, or mistakes, overall trust increases. Members also must own their responsibilities. Doing the small, menial responsibilities well will help leaders build confidence and trust with superiors and peers.¹³ In addition, officers must have the moral courage to speak up when they do not know something or when something is awry.¹⁴ Team members need to trust that the mission will come first over personal hesitations.

Having a sense of a higher purpose for service, patriotism, and warrior spirit were mentioned as important character aspects.

⁸ John W Gardner, *On Leadership: With a Preface to the Paperback Edition* (New York, NY: Free Press, 1993), 13, <https://archive.org/details/onleadership00john>.

⁹ Interviewee #14, Phone Interview, October 28, 2019.

¹⁰ Interviewee #28, Phone Interview, October 28, 2019.

¹¹ Interviewee #33, Phone Interview, December 3, 2019.

¹² Ronald A. Heifetz, Personal Correspondence, 2020 2019.

¹³ Interviewee #36, In-person Interview, October 31, 2019.

¹⁴ Interviewee #47, Phone Interview, October 24, 2019.

An interviewee mentioned that this value “may need to be reinforced more because the world will demand it, and we owe it to the world to maintain our competitive difference between other countries. We are different than the Russias and Chinas of the world.”¹⁵

Another interviewee mentioned that in his experience the most cited characteristic of a leader is that they must “lead by example, and model what right looks like in performance, quality, and character.”¹⁶ This theme was echoed by many other respondents, one of whom quoted Erwin Rommel:¹⁷ “Be an example to your men, in your duty and in private life.”

Even with all of these necessities raised to be improved upon, interviewees also raised problems with the current state of values and character in officers. Many respondents cited how societal values may no longer be aligned with the values in the military, and those societal values may change how officers interact with the core values.

Additionally, respondents described the difficulty of changing the values of people who have already developed for at least 18 years before entering the military. Cadets need the opportunity to deeply examine their values and wrestle with which ones they should keep, discard, or adopt.¹⁸

Another issue raised was that the core values do not establish their origin—their moral, ethical, or religious backing.¹⁹ People come in with values which were instilled in them throughout their lives and then are told to adopt new values without being given

compelling reasons to do so. This situation is different from common corporate cases of core values because corporations often do not seek the deep, personal level of life commitment which the military seeks.

Finally, core values could be becoming diluted through internal factors. Drs. Leonard Wong and Stephen Gerras highlight rampant lying in a study examining the Army:

...many Army officers, after repeated exposure to the overwhelming demands and the associated need to put their honor on the line to verify compliance, have become ethically numb. As a result, an officer’s signature and word have become tools to maneuver through the Army bureaucracy rather than being symbols of integrity and honesty. Sadly, much of the deception that occurs in the profession of arms is encouraged and sanctioned by the military institution as subordinates are forced to prioritize which requirements will actually be done to standard and which will only be reported as done to standard. As a result, untruthfulness is surprisingly common in the U.S. military even though members of the profession are loath to admit it.²⁰

Tolerating a level of dishonesty in areas deemed trivial or unimportant also results in the degradation of the trust that is vital to the military profession.

¹⁵ Interviewee #14, Phone Interview.

¹⁶ Interviewee #29, Phone Interview, December 18, 2019.

¹⁷ Interviewee #35, Phone Interview, November 15, 2019.

¹⁸ Heifetz, Personal Correspondence.

¹⁹ Interviewee #22, Phone Interview, November 6, 2019.

²⁰ Leonard Wong and Stephen J. Gerras, “Lying to Ourselves: Dishonesty in the Army Profession” (Fort Belvoir, VA: Defense Technical Information Center, February 1, 2015), xi, <https://doi.org/10.21236/ADA615274>.

Once the bar of ethical standards is lowered, the malleability of those standards becomes a rationale for other un-ethical decisions... The slippery slope of ethical compromise is a real and legitimate danger to the assumption of truth in the profession.²¹

The internal pressures to perform and many constraints can cause values to erode. The work in imposing and promoting values is not finished. USAFA must continue and revamp its efforts to emphasize, cultivate, and inculcate core values, ethics, and character. Character should be the foundation on which officers base the rest of their careers.

Knowledge Capabilities

To equip officers to face the challenges in this new environment, cadets will need certain knowledge capabilities: a knowledge of high-level, strategic problems in the Air Force, a passion towards life-long learning, a broad knowledge set paired with tactical skill, analytical decision skills, and an understanding of humanities and history. Figure 5 shows respondents citing these characteristics as needs.

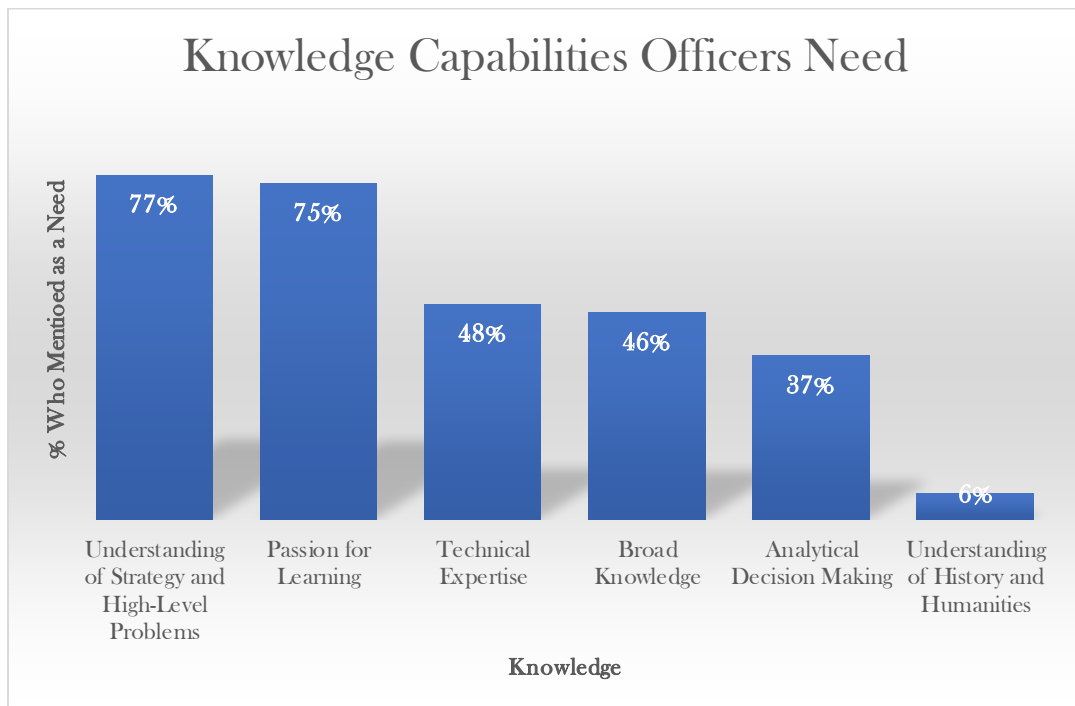


Figure 5. Knowledge Capability Characteristics Officers Need

²¹ Wong and Gerras, 25.

Understanding of Strategy and High-Level Problems

Officers need to begin understanding strategy and thinking strategically at the onset of their careers. While some say that “we aren’t training everyone to be the Chief of Staff,”²² the process of exposing officers to higher-level, critical thinking will develop a comprehensive force interwoven with those who are strategically-minded and those who are tactically-minded.²³ Currently, there are too many tactical-level achievers being promoted to general officer and strategy-level positions while strategic-minded individuals get overlooked.²⁴ Early separation of those inclined to think strategically will help address this error.

Regardless of this dynamic, Retired Army General Stanley McChrystal believes all officers need “generalized awareness,”²⁵ an understanding of the joint environment, technological change, cyber and space capabilities, and the capabilities of our adversaries and allies. This the environment in which everyone is fighting.²⁶ Additionally, it is essential for all officers to understand the acquisitions process more thoroughly. “Most Air Force officers receive no formal education on acquisition programs” while all Air Force jobs are affected and constrained

by it.²⁷ Officers need to understand the implications of and solutions to these high-level issues. Tactical-level strategic thinking is for everyone.

Passion for Learning

Officers should value being lifelong learners. Colonel John Pearse writes, “Most educators agree lifelong learning should be inculcated early as an enduring value in a successful Air Force career.”²⁸ This is a personal choice, but it needs to be instilled by the commissioning sources. Today’s fast paced environment makes lifelong learning even more difficult given constraints on time. It also makes it even more important, as Pulitzer Prize winner Thomas Friedman explains, “when the pace of change gets this fast, the only way to retain a lifelong working capacity is to engage in lifelong learning.”²⁹

In addition, many interviewees stated the need to understand how to lead in enemy-contested environments. To accomplish this, John Kroger, former Marine, explains that because America’s competitive advantage over its adversaries is shrinking, we must learn to “out-think them.”³⁰ This need can only be accomplished through education and life-long learning. General McChrystal explains that education allows for resiliency

²² Interviewee #31, Phone Interview, October 25, 2019.

²³ Interviewee #36, In-person Interview.

²⁴ S. Zimmerman et al., *Movement and Maneuver: Culture and the Competition for Influence Among the U.S. Military Services* (RAND Corporation, 2019), xv, <https://doi.org/10.7249/RR2270>.

²⁵ Stanley A. McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* (New York, New York: Portfolio/Penguin, 2015), 153.

²⁶ “The Foundations of Innovation - A Model of Innovative Change (Part 2 of 7) By: Lt Col Dave ‘Sugar’ Lyle - The Innovation Blog - Air University Innovation - APAN Community,” accessed February 5, 2020, <https://community.apan.org/wg/aucoi/air-university-innovation/b/innovation-blog/posts/the->

[foundations-of-innovation-a-model-of-innovative-change-part-2-of-7](#).

²⁷ John W. Pearse, “Officer Education: Preparing Leaders for the Air Force of 2035.” (Fort Belvoir, VA: Defense Technical Information Center, February 15, 2009), 35, <https://doi.org/10.21236/ADA540089>.

²⁸ Pearse, 118.

²⁹ Thomas L. Friedman, *Thank You for Being Late: An Optimist’s Guide to Thriving in the Age of Accelerations* (New York: Picador, 2017), 35.

³⁰ “Charting the Future of Education for the Navy-Marine Corps Team,” War on the Rocks, November 4, 2019, <https://warontherocks.com/2019/11/charting-the-future-of-education-for-the-navy-marine-corps-team/>.

against infinite unanticipated threats in contested environments while training only prepares for anticipated challenges.³¹ An officer who continues to learn will be prepared for the numerous challenges they will face in a complex environment.

Technical Expertise and Broad Knowledge

Air Force officers need a broad knowledge base to operate effectively in the complex environment—something USAFA historically tries to provide.³² This breadth is vastly important in advancing innovation and critical thinking skills. Cadets must continue to obtain understanding of fields “beyond the discipline they are focused on.” Contrary to many views of the past, this breadth needs to be developed alongside specialization. General McChrystal puts it like this, “We [want] to fuse generalized awareness with specialized expertise.”³³ We need both. However, in this new environment, writes Vikram Mansharamani, “breadth will prove as valuable as—if not more valuable than—depth.”³⁴ The focus on breadth will increase the overall effectiveness of the military in times of uncertainty, but will also show leaders who the strategic thinkers are at an earlier stage in their career. A massive need in the military is promoting the strategic thinkers who are “visionary generalists..Jacks or Jills of all trades but masters or mistresses of none.”³⁵ Incentivizing and promoting breadth will allow these visionaries to flourish and lead the Air Force to new heights.

A broad knowledge base needs to be coupled with deep, technical expertise in two or three fields.³⁶ Officers have to be good at their jobs. However, this technical and tactical skill needs to be coupled with breadth. Col. Pearse writes, “As leaders rise in rank, their technical skills, while important, become less critical than their breadth of knowledge and their experience.”³⁷ The technical expertise “gets you in the door” and helps you earn the trust of your superiors while the breadth of knowledge and ability to critically think lets officers start innovating and moving the system forward. As technology continues to progress, it is likely that it will become increasingly difficult for officers rising in rank to remain technical experts, further underscoring the need for both skills.

Analytical Decision Making

Because of an increasing amount of information in the environment, officers need to understand how to best use this large dataset—including when discerning data from a non-reputable source, like social media.³⁸ To be able to understand the data, officers need a better understanding of decision sciences, IT systems, coding, and modeling software. They also need to become more aware of cyber security concerns, more-so than the annual, repetitive, annual ADLS (Advanced Distributed Learning System)

³¹ McChrystal et al., *Team of Teams*, 153.

³² Liberal Education, “Commitment to Liberal Education at the United States Air Force Academy,” Text, Association of American Colleges & Universities, April 5, 2010, 2, <https://www.aacu.org/publications-research/periodicals/commitment-liberal-education-united-states-air-force-academy>.

³³ McChrystal et al., *Team of Teams*, 153.

³⁴ “Speakers’ Spotlight – Vikram Mansharamani on Why Breadth May Trump Depth,” accessed February

5, 2020, <https://www.speakers.ca/2015/11/vikram-mansharamani-on-why-breadth-may-trump-depth/>.

³⁵ “Strategy 2.0: The Next Generation,” National Defense University Press, accessed February 5, 2020, <http://ndupress.ndu.edu/Media/News/News-Article-View/Article/702002/strategy-20-the-next-generation/>.

³⁶ Interviewee #50, Phone Interview, October 30, 2019.

³⁷ Pearse, “Officer Education,” 33.

³⁸ Interviewee #6, Phone Interview, October 5, 2019.

training provides.³⁹ There needs to be humans who can understand these systems and outputs to serve as liaisons between computers and humans.^{40 41} This understanding not only helps add a human element, but also serves to counteract the tendency to micromanage and centralize authority and decision making.⁴²

Understanding of History and Humanities

The breadth an officer possesses should be complimented with understanding of History and Humanities. While this category could fall into either breadth or strategy, it is separate because of the overwhelming support from literature and senior leaders like Retired Secretary of Defense James Mattis. The support from literature paired with the lack of mentions by interviewees underscores the importance of emphasizing History and Humanities. With other characteristics, officers are aware of their necessity. With History and Humanities, the problem lies in the lack of awareness.

Humanities “teach humans how to interact with each other.”⁴³ They allow us to better understand the world we are in and appreciate the other cultures. Additionally, History “stimulates the imagination” of officers by forcing them to look “at the past and then [visualize] alternative futures.”⁴⁴ In short, because of the complexity of the environment and the need to provide vision for the future, “History matters.”⁴⁵ History teaches officers to be inquisitive, critical thinkers and be more comfortable when there are no black and white answers. By studying History one can become familiar with the complexity of the “grayness” of the future.⁴⁶

Skills/Actions

Respondents identified various skill and action-sets which officers need to develop. Cadets should learn to collaborate and build teams, empower people, understand emotional aspects of actions and decisions, care for teams, leverage feedback and mentoring, and be respectful and inclusive. Many of these characteristics can be developed only through practice and interaction with others—like the immersive experience provided at USAFA. Figure 6 is a chart of respondents citing these characteristics as needs.

³⁹ Interviewee #30, Phone Interview, November 26, 2019.

⁴⁰ Army Science Board, “Multi Domain Operations Final Report” (Department of the Army, May 2019).

⁴¹ Friedman, *Thank You for Being Late*, 6.

⁴² Jonathan D. Sawtelle, *Resilient Effective Adaptable Leadership* (Maxwell Air Force Base, Alabama: Air University Press, 2016), 38.

⁴³ Interviewee #43, Phone Interview, October 25, 2019.

⁴⁴ Pearse, “Officer Education,” 25.

⁴⁵ Duncan Green, “How Do You Go about Embracing Complexity? It’s Complicated,” *The Guardian*, August 26, 2015, sec. Working in development, <https://www.theguardian.com/global-development-professionals-network/2015/aug/26/embracing-complexity-theory-aid-duncan-green-review>.

⁴⁶ John Abbatiello, Personal Correspondence, 2020 2019.

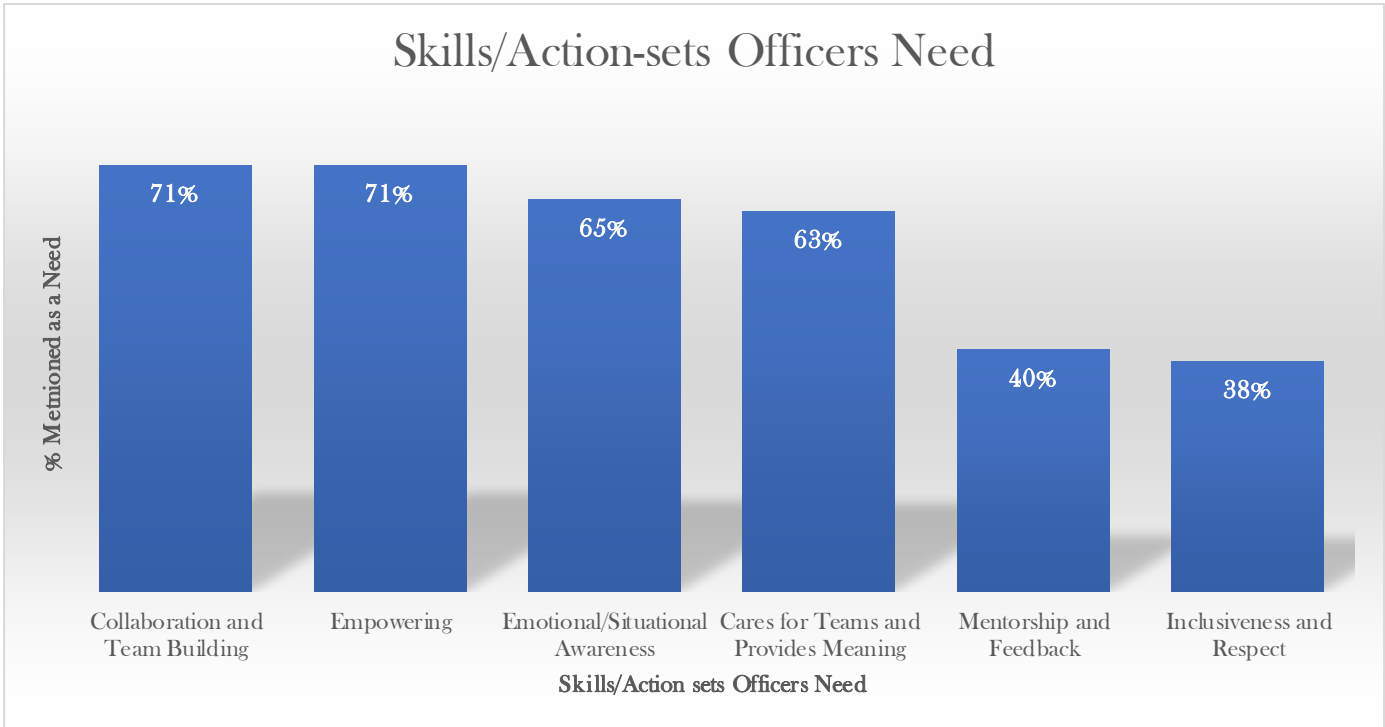


Figure 6. Skills/Actions Officers Need

Collaboration and Team Building

Officers need to learn how to collaborate and build high-functioning teams. A large part of this ability depends on the leader’s character, especially humility. An interviewee stated it best when she said that leaders need to have “enough humility to know we cannot do it on our own.”⁴⁷ Leaders need to build their teams with people who compliment their own weaknesses. They must understand that “the performance of the team is what matters to the nation.”⁴⁸

Leaders need to learn to build relationships and trust within teams,⁴⁹ which will allow them to “get more information about what is working and what is not.”⁵⁰ Ones et al. define leadership as “a solution to the problem of collective effort—the problem of bringing people together and combining their efforts to promote success and survival.”⁵¹ In this way, leaders can counteract their own biases from influencing the decision process as Economist and Nobel Prize recipient Daniel Kahneman explains, “it is easier to recognize other people’s mistakes than our own.”⁵² Officers must rely on and leverage their team in order to be effective. Therefore, the role of the leader is no longer solely top-down.

⁴⁷ Interviewee #11, Phone Interview, November 1, 2019.

⁴⁸ Interviewee #12, Phone Interview, November 5, 2019.

⁴⁹ Friedman, *Thank You for Being Late*. 255.

⁵⁰ Green, “How Do You Go about Embracing Complexity?”

⁵¹ Deniz Ones et al., eds., *The Sage Handbook of Industrial, Work & Organizational Psychology*, 2e, v2: *Volume Two: Organizational Psychology*, 2nd edition (Thousand Oaks, CA: SAGE Publications, 2016), 270.

⁵² Daniel Kahneman, *Thinking, Fast and Slow*, 1st pbk. ed (New York: Farrar, Straus and Giroux, 2013), 28.

There is also the concept that teams must have a shared consciousness and shared vision.⁵³ General McChrystal emphasizes the importance of sharing information to meet the challenges of this new environment. He writes:

Team members tackling complex environments must all grasp the team’s situation and overarching purpose. Only if each of them understands the goal of a mission and the strategic context in which it fits can the team members evaluate risks on the fly and know how to behave in relation to their teammates.⁵⁴

There needs to be “cognitive oneness” in the team which can only be fostered by the leader.⁵⁵ This oneness comes about through the deliberate sharing of information. He continues to speak about how this oneness is not only limited to a small team but can be applied organizationally through a “team of teams” approach which fosters shared consciousness between all the teams in an organization, depicted in Figure 7.

Individual teams are connected, and those teams are connected to all the other teams and the overall direction of the organization.⁵⁶ This approach is difficult to adopt, but leaders must do so in today’s environment. Thus, it is important for officer’s to be trained how to lead and build teams. Figure 8 on the following page an example of how teams of teams are formed in the private sector.

Many of the structures in the military are capable of handling most challenges, and the increase of jointness and collaboration in the past 30 years is a positive trend. However, there will still be unforeseen situations in officers’ careers where they will face challenges not suited to current structures. For these cases, officers will need to know when and how to reach across stove pipes that are preventing information sharing and shared consciousness. In the government, this is extremely difficult. James Wilson explains, “Government agencies...view any interagency agreement as a threat to their autonomy.”⁵⁷

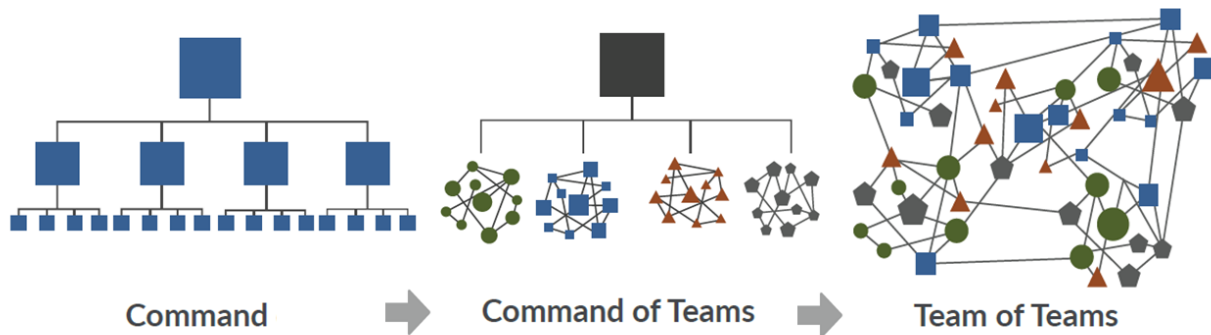


Figure 7. Team of Teams Model

⁵³ Interviewee #7, October 20, 2019.

⁵⁴ McChrystal et al., *Team of Teams*, 99.

⁵⁵ McChrystal et al., 151.

⁵⁶ McChrystal et al., 151.

⁵⁷ James Q. Wilson, *Bureaucracy: What Government Agencies Do and Why They Do It*, New ed. (New York, NY: Basic Books, 2000), 192.

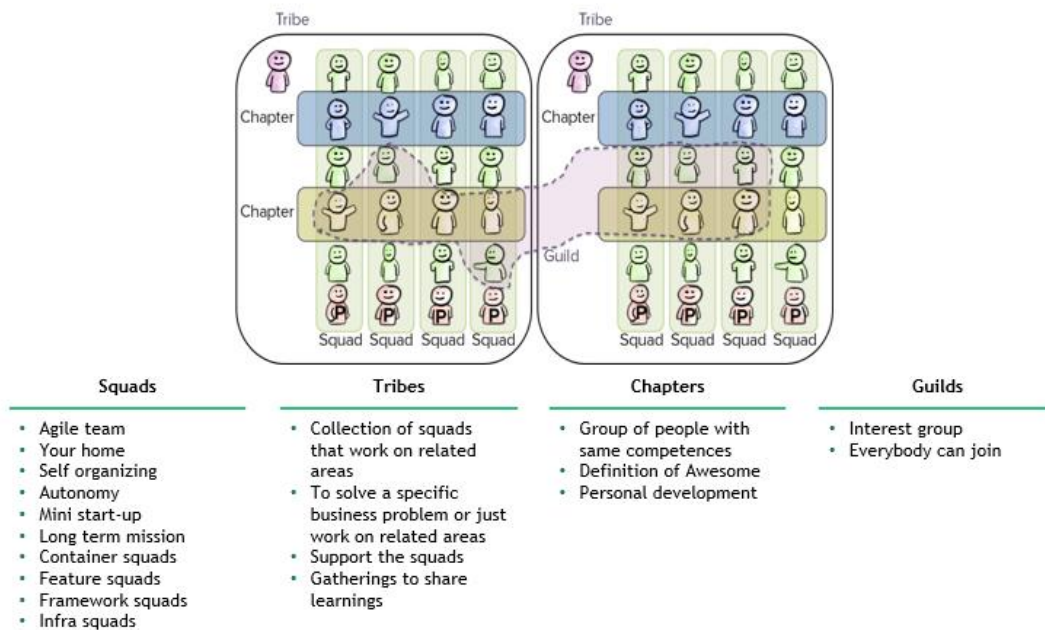


Figure 8. Agile Teams Model⁵⁸

When attempting to bring silos together, officers will be forced to show the current uselessness of standard procedure and create urgency and necessity for collaborative efforts. Silos exist for a reason so departing from original function will meet resistance. Officers must create the need for collaboration but then they also must target

the issue of “identity,” states Ernst and Chrobot-Mason.³⁹ Leaders must understand the tension between the “two basic fundamental human needs: the need for differentiation or uniqueness and the need for integration or belonging.” Figure 9 depicts their process of spanning boundaries.⁶⁰

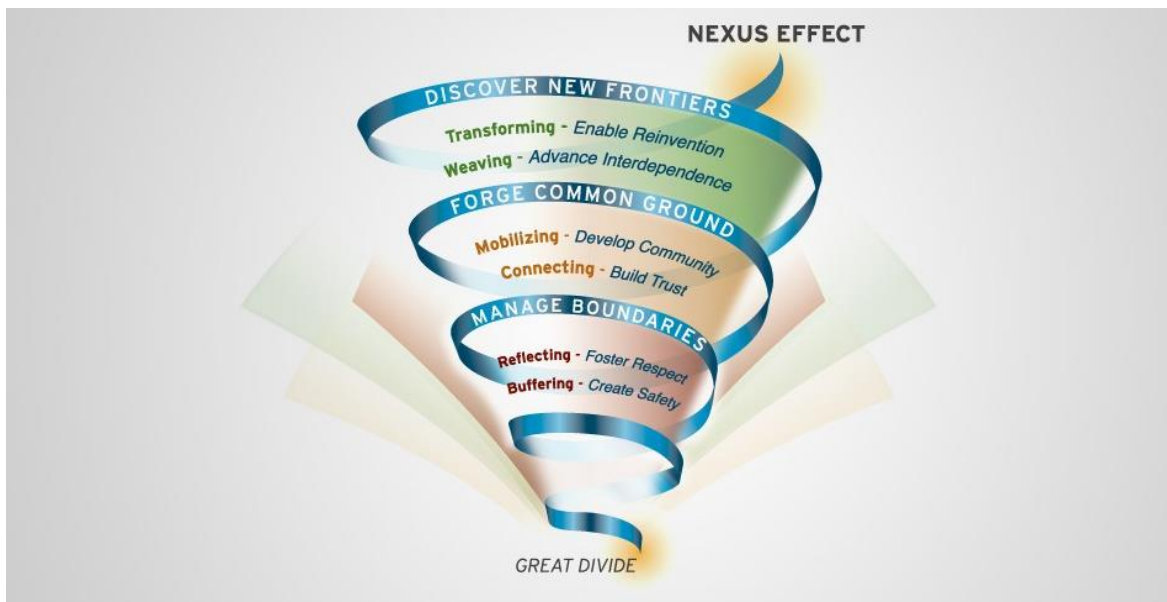


Figure 9. Framework to Achieve a Nexus Effect by Bridging Divides Between Groups and Silos. Start from the bottom and work up.

⁵⁸ “Five Secrets to Scaling Up Agile,” <https://www.bcg.com>, accessed February 13, 2020, <https://www.bcg.com/en-us/publications/2016/five-secrets-to-scaling-up-agile.aspx>.

⁵⁹ Chris Ernst and Donna Chrobot-Mason, *Boundary Spanning Leadership: Six Practices for Solving Problems, Driving Innovation, and Transforming Organizations* (New York: McGraw-Hill, 2011), 40.

⁶⁰ Ernst and Chrobot-Mason, 13.

By keeping group identities intact, providing space to understand other groups and build common ground, leaders have a better chance at reaching across silos and achieving oneness across the organization. Officers should possess these skills.

Empowering

In a complex environment, leaders must be willing to give their subordinates ample authority to execute the commander's intent. The levels of authority are increasingly being pushed down.⁶¹ McChrystal writes that "the role of the leader becomes creating the broader environment instead of command-and-control micromanaging."⁶² Instead of asking for minute details about the process, leaders should be Socratic in their questioning, building capacity for team members to understand intent and the situational context.⁶³ Leaders should over-communicate intent, then let their team members execute.⁶⁴ This allows time between decisions to be saved and operational capability to increase.⁶⁵ While the leader still has a role in accomplishing the mission, in a complex environment, "the adaptive work...is the responsibility of the entire group; it is for all the members of the profession to engage the uncertainty to be creative and come up with innovative solutions."⁶⁶ The sense of

empowerment "facilitates the development...of creative problem solvers at all levels of their organization."⁶⁷

In order to empower, Gardner writes that leaders must also simultaneously enable. Barriers must be removed, conflicts must be resolved, responsibility must be shared, and resources must be obtained.⁶⁸ These requirements enable agility and rapid communications.⁶⁹ High complexity environments also call for leaders to have their subordinates' backs. If there are highly punitive measures when an outcome is undesirable, the requisite psychological safety cannot be sustained.⁷⁰ Psychological safety describes the environment needed to be created for the team—one of trust and free for "interpersonal risk-taking" and free from retribution and personal attacks.⁷¹ This safety allows for greater adaptability and overcoming group "fragmentation" that the environment requires. "Rapidly adaptable and resilient teams succeed."⁷²

Emotional/Social Awareness

Officers must have some level of emotional and situational awareness. While emotional intelligence (EQ) has been labeled by a few

⁶¹ "A Leader Development Strategy for an Expeditionary Army" (Obtained from Dr. Ronald Heifetz, June 16, 2009).

⁶² McChrystal et al., *Team of Teams*, xi.

⁶³ Francesca Gino, "The United States Air Force: 'Chaos' in the 99th Reconnaissance Squadron," n.d., 8.

⁶⁴ Interviewee #25, Phone Interview, November 13, 2019.

⁶⁵ McChrystal et al., *Team of Teams*, 169.

⁶⁶ Iv Richardson and John B., "Real Leadership and the U.S. Army: Overcoming a Failure of Imagination to Conduct Adaptive Work:" (Fort Belvoir, VA: Defense Technical Information Center, December 1, 2011), 104, <https://doi.org/10.21236/ADA555138>.

⁶⁷ Sawtelle, *Resilient Effective Adaptable Leadership*, 2.

⁶⁸ Gardner, *On Leadership*, 22.

⁶⁹ Over The Horizon, "Fifth Generation Warfare and Other Myths: Clarifying Muddled Thinking in Our Current Defense Debates," OTH, December 4, 2017, <https://othjournal.com/2017/12/04/fifth-generation-warfare-and-other-myths-clarifying-muddled-thinking-in-our-current-defense-debates/>.

⁷⁰ Amy Edmondson, "Psychological Safety and Learning Behavior in Work Teams," *Administrative Science Quarterly* 44, no. 2 (June 1999): 350, <https://doi.org/10.2307/2666999>.

⁷¹ Edmondson.

⁷² Sawtelle, *Resilient Effective Adaptable Leadership*, 19.

in the academic world as a fad or fake,⁷³ even these academics would admit that there are certain personality traits that allow for higher levels of empathy and conscientiousness. Leaders, in order to be adaptive, must be able to understand their emotions and those of others that can often be brought about by “surprises” in the environment.⁷⁴ Humans have emotions which need to be handled and cared for in order to reach solutions and effectiveness—this is part of the officer’s role.

Situational and social awareness is also important. General McChrystal writes, “Only with deep, empathetic familiarity could these different units function so seamlessly together...what on the surface seemed like an inefficient use of time in fact laid the foundation for our adaptability.”⁷⁵ Officers must have a situational understanding of their emotions and those of others in the organization or team. Learning this skill starts in infancy but must be developed further in commissioning sources. Thomas Friedman states that in today’s world and economy “human-capital” is the driver, meaning “talent, skills, tacit know-how, empathy, and creativity.”⁷⁶ If the Air Force does not properly manage, understand, and value its people, it will not succeed in the modern world.

Cares for Teams and Provides Meaning

Officers will need to care for their team members and provide them with direction and meaning. War is ugly, many interviewees expressed uncertainty concerning the extent to which all our officers are prepared to commit the ultimate violence and process the aftermath. We may not be as resilient as we think we are.⁷⁷

Successful leaders provide resources and care to their team members. In environments like this, leaders must adapt to what the team member needs. Sometimes this means that “leadership [will be] uncomfortable because it involves helping people through loss.”⁷⁸ Leaders also have the role of encouraging team members to find a sense of meaning or purpose. A recent Army on the Profession of Arms looked at the connection “between mind, body, and spirit (e.g., spiritual health and moral reasoning),” it found that there was a interdependency between “physical, cognitive, and spiritual health for developing a person’s overall resiliency and” it “improved ability to self-regulate and perform optimally every day, and especially in the most challenging circumstances.”⁷⁹ All four pillars of the comprehensive fitness model (Figure 10⁸⁰) must be cared for, including the spiritual pillar.

⁷³ Quora, “It’s Time to Stop Talking About EQ, Because It Doesn’t Actually Exist,” Inc.com, November 28, 2016, <https://www.inc.com/quora/its-time-to-stop-talking-about-eq-because-it-doesnt-actually-exist.html>.

⁷⁴ Sawtelle, *Resilient Effective Adaptable Leadership*, 2.

⁷⁵ McChrystal et al., *Team of Teams*, 187.

⁷⁶ Friedman, *Thank You for Being Late*, 221.

⁷⁷ Interviewee #39, Phone Interview, December 10, 2019.

⁷⁸ Maya Bernstein and Martin Linsky, “Leading Change through Adaptive Design,” *Stanford Social Innovation Review*, Winter 2016, https://ssir.org/articles/entry/leading_change_through_adaptive_design.

⁷⁹ Air University (U.S.), “Airman Development Growth: In a Complex World” (Provided by Air University, n.d.), accessed November 22, 2019.

⁸⁰ “Air Combat Command > Home > Comprehensive Airman Fitness,” accessed February 6, 2020, <https://www.acc.af.mil/Home/Comprehensive-Airman-Fitness/>.



4 Pillars of Comprehensive Fitness

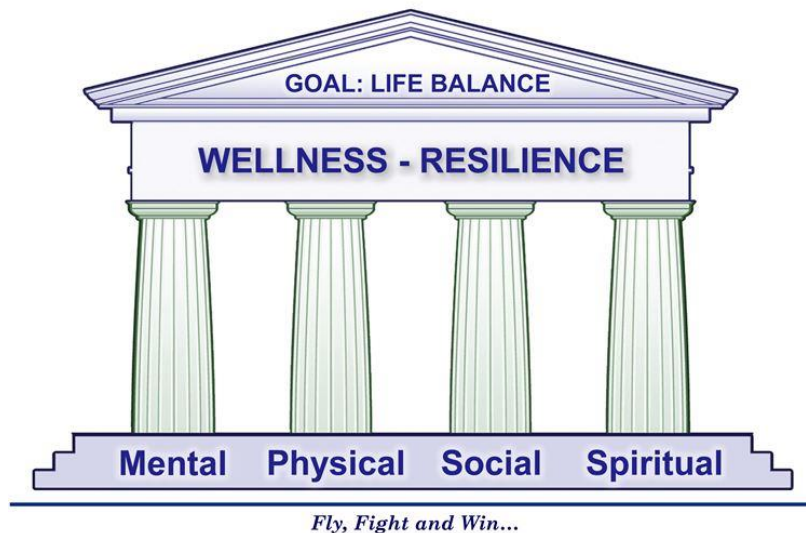


Figure 10. The Air Force 4 Pillars of Comprehensive Fitness

Mentorship and Feedback

Officers should also be skilled in mentorship relationships and giving feedback. For high-functioning teams feedback goes both ways. The level of psychological safety in the team will determine the candor of the feedback you receive which is extremely important in determining the direction and overall health of the team. This is another area where humility is important. “The humble leader will take the feedback and try to adapt their leadership styles or behaviors.”⁸¹

Interviewees also identified mentorship as important. Leaders need to develop other leaders while being careful to not only encourage others to be like themselves.⁸²

⁸¹ Interviewee #8, Phone Interview, December 9, 2019.

⁸² Interviewee #5, Phone Interview, November 19, 2019.

⁸³ Interviewee #22, Phone Interview.

Mentorship is even more important at USAFA where cadets are being developed every day and need to have guidance on how to make sense of their experiences.⁸³

Inclusiveness and Respect

For teams to function at high capacities, members need to feel included, respected, and valued. They also must have diverse thoughts and the psychological safety to voice these thoughts.⁸⁴ Interviewees expressed the need to leave the way you were raised and personal biases out of the equation.⁸⁵ Friedman says we need to be “radically inclusive” in this new environment bringing every possible person to the table.⁸⁶ From every vantage point, human-capital is the

⁸⁴ Tim Sullivan, “Embracing Complexity,” *Harvard Business Review*, September 1, 2011, <https://hbr.org/2011/09/embracing-complexity>.

⁸⁵ Interviewee #2, Phone Interview, December 16, 2019.

⁸⁶ Friedman, *Thank You for Being Late*, 14.

most important resource. The more diverse, cared for, and abundant it is; the more successful the Air Force will be.

Attributes

Interviewees identified many attributes that officers must possess to mold and push the Air Force forward. The Air Force needs “intellectual leadership” who challenge assumptions.⁸⁷ Members must learn about the system, reflect on these lessons, be willing to push the organization in the direction it needs to go even when met with resistance, and become comfortable with taking risks and failing. They have to be adaptive.⁸⁸

A complex adaptive system has many characteristics. They consist of many heterogeneous agents, and each of those agents makes decisions about how to behave. These decisions evolve over time. The agents interact with one another. These systems also exhibit emergence—the whole is greater than the sum of the parts.

To change adaptive systems, Dr. Ronald Heifetz, a senior lecturer at the Harvard Kennedy School, suggests some main considerations to hold in mind. Officers

should understand that any change will be interdependent on the environment, so to shape the system, it is critical to consider the environment it is in. Additionally, complex systems behave almost organically. Thus, change must consider which qualities of the system that have evolved over time should stay and which no longer achieve the desired results. It is hard to ascertain how changes will affect the system so iterating, running experiments, and taking probing risks are valuable tools in this type of environment. It is also important to understand that all changes will involve loss from what is discarded and changed. The loss and experimentation will often cause members to resist change efforts.⁸⁹ Leaders must help navigate these considerations

The imperative for leaders to first be grounded in strong character is because of the uncertain and experimental nature of complex adaptive environments. Once character becomes the base leaders can then be equipped with knowledge and skills and action-sets. After obtaining knowledge and skills, leaders can begin to exhibit adaptive attributes that will operate on systematic levels. Figure 11 depicts respondents citing these adaptive attributes as needs.

⁸⁷ Jim Mattis, “Summary of the 2018 National Defense Strategy,” n.d., 14.

⁸⁸ Pearse, “Officer Education,” 37.

⁸⁹ Ronald A. Heifetz, “Leadership: The Adaptive Framework” (Sliddeck, Adapted from Sliddeck, October 31, 2019).

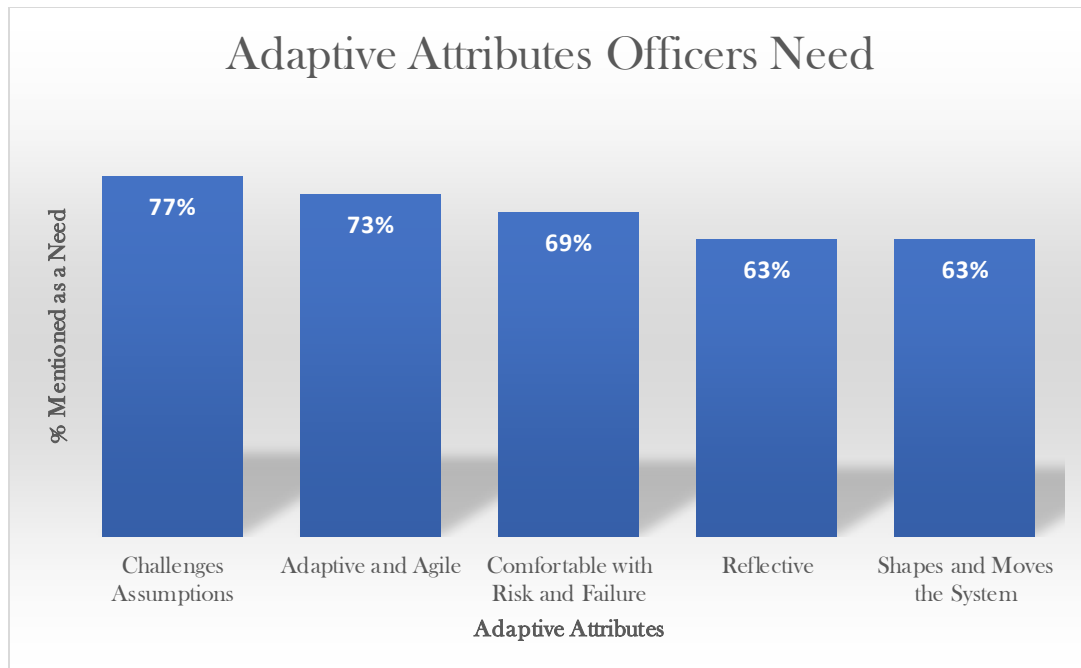


Figure 11. Attributes Officers Need

Challenges Assumptions

To be adaptive in complex environments, officers also need to think critically about the direction of the organization and challenge key assumptions. While critical thinking is a skill often emphasized by the Air Force, a 2015 study shows that Air Force officers are not good at it.⁹⁰ Many interviewees talked about the “checklist mentality” of Air Force officers and their impairment to challenge assumptions about how things are done. As with risk aversion, this blindness is human nature. Kahneman writes, “...Our excessive confidence in what we believe we know and our apparent inability to acknowledge the full extent of our ignorance and the uncertainty of the world we live in” makes us “prone to overestimate how much we understand about the world and to underestimate the role of chance in events.”⁹¹ Kahneman exposes many

hidden biases that humans have in how they understand the world and make decisions—we are “predictably irrational.”⁹² It is important for officers to understand these biases so they can begin to question the assumptions they are making. One of these biases is thinking “the system works because it got them where they are.”⁹³ It’s hard to swallow that the system may be broken and that leaders should not have actually been promoted to their position. Two other problems are that we gravitate towards cause and effect narratives, even when they are dramatically illogical, and we weight the opinions of experts much too highly, especially when the environment is complex (experts are shown to do worse than non-experts when predicting outcomes in complexity).⁹⁴ Humans do these things because the complexity is uncomfortable. It is much easier to put the problem in a nice

⁹⁰ Col Adam J Stone, “Critical Thinking Skills in USAF Developmental Education,” n.d., 16.

⁹¹ Kahneman, *Thinking, Fast and Slow*, 14.

⁹² “Life at 32F: Why Structure Eats Culture for Lunch,” Safi Bahcall, August 1, 2019,

<https://www.bahcall.com/why-structure-eats-culture-for-lunch/>.

⁹³ Gino, “The United States Air Force: ‘Chaos’ in the 99th Reconnaissance Squadron,” 6.

⁹⁴ Sullivan, “Embracing Complexity.”

narrative or believe experts even if they are blatantly wrong. The reality is the direction of the organization is littered with “unexplored assumptions and muddled thinking.”⁹⁵ Organizations with strong missions, like the Air Force, are even more prone to being blind to changes in the environment.⁹⁶

To avoid falling into these mental traps, officers must learn how to think rather than what to think.⁹⁷ It’s why Thomas Friedman states, “In the twenty-first century, knowing all the answers won’t distinguish someone’s

intelligence—rather the ability to ask all the right questions will be the mark of true genius.”⁹⁸ Cadets must be taught to challenge the “rules and frames” that make the military “rigid and inflexible.”⁹⁹ When the military can “possess a questioning and open culture,” it “can gain a significant advantage.”¹⁰⁰ The lack of creative or critical thought has been a problem for centuries, at least. The difference may be that this environment is less forgiving if officers refuse to challenge what they know:

Many commanding generals only spend their time on the day of battle in making their troops march in a straight line, in seeing that they keep their proper distances, in answering questions which their aides de camp come to ask, in sending them hither and thither, and in running about incessantly themselves. In short, they try to do everything and, as a result, do nothing. They appear to me like men with their heads turned, who no longer see anything and who are only able to do what they have done all their lives, which is to conduct troops methodically under the orders of a commander. How does this happen? It is because very few men occupy themselves with the higher problems of war. They pass their lives drilling troops and believe that this is the only branch of the military act. When they arrive at the command of armies, they are totally ignorant, and, in default of knowing what should be done, they do what they know.

-Maurice de Saxe, 1757

Figure 12. Quote from Maurice de Saxe, 1757

⁹⁵ Horizon, “FIFTH GENERATION WARFARE AND OTHER MYTHS.”

⁹⁶ Wilson, *Bureaucracy*, 110.

⁹⁷ “Speakers’ Spotlight - Vikram Mansharamani on Why Breadth May Trump Depth.”

⁹⁸ Friedman, *Thank You for Being Late*, 110.

⁹⁹ “What Is Practical Wisdom and Why Do We Need It?,” *Motivated Mastery* (blog), November 17, 2014,

<http://motivatedmastery.com/what-is-practical-wisdom-and-why-do-we-need-it/>.

¹⁰⁰ Williamson Murray, *America and the Future of War: The Past as Prologue*, Hoover Institution Press Publication, no. 674 (Stanford, California: Hoover Institution Press, 2017), 59.

Adaptive and Agile

The need for adaptive leadership starts when you realize “that one person in authority...will rarely have the answer that is needed” (see Figure 13 below for a list of questions to determine if the situation is adaptive).¹⁰¹ ¹⁰² In fact, in these situations, centralized command and the equilibrium it sometimes seeks by default “becomes hazardous.”¹⁰³ But what does it mean for a leader to be adaptive? Adaptive leaders place a “higher premium on the ability...to toggle through different approaches and apply the right one at the right time.”¹⁰⁴ They value “dynamic

stability.”¹⁰⁵ This value is important because in today’s environment, “something unusual happens usually”¹⁰⁶ which means officers need to have a large toolkit of responses for situations, but more than that, they need to be prepared to leverage the toolkits of everyone in their organization. Because while “having the courage to make the tough calls is important,” “not knowing what tough call to make is a problem.”¹⁰⁷ “Everyone on the team needs to become an adaptive leader.”¹⁰⁸ In this way, the organization can actually start to benefit from the unexpected events through what Nassim Taleb labels “post traumatic growth.”¹⁰⁹

1. Is the problem a recurring one?
2. Does it challenge values, assumptions, policies, mindsets, or current procedures?
3. Does it require people to face issues they would prefer to avoid or have been avoiding?
4. Is there no previously identified solution to this problem?
5. Is there no recognized expert for this problem?
6. In order to solve this problem, will new learning or new ways of doing business be required?
7. Is the solution embedded in both the people in authority positions and the entire team?
8. Will the solution involve change and subsequent discomfort and sacrifice by the members of the team the authority figures?
9. Will the solution require some experimentation before advancing to implementation?
10. Will the solution take time and perseverance in order to change a former routine?
11. Will the solution require more than just logic and data?
12. Will the solution require courage to implement because it involves risk to reputations or relationships?
13. Will the solution require the loss of employment or other sacrifices?
14. Will the solution require collaboration across silos, stovepipes or other organizational boundaries?

Figure 13. Questions to Ask to Determine if a Problem or Situation is Adaptive

¹⁰¹ Ronald A. Heifetz and Tim O’Brien, “Harvard Kennedy School Course; MLD 202 Student Packet; Peer Case Consultation Framework,” 2018.

¹⁰² Stephen V. Bowles et al., “Adaptive Leadership in Military and Government Settings,” in *Handbook of Military Psychology*, ed. Stephen V. Bowles and Paul T. Bartone (Cham: Springer International Publishing, 2017), 301–29, https://doi.org/10.1007/978-3-319-66192-6_19.

¹⁰³ McChrystal et al., *Team of Teams*, 22.

¹⁰⁴ Robert B. Kaiser and John Brothers, “Raising the Bar in Leadership Development,” *The Journal of*

Character & Leadership Development 6, no. 2 (July 5, 2019): 12.

¹⁰⁵ Friedman, *Thank You for Being Late*, 36.

¹⁰⁶ Nassim Nicholas Taleb, *Antifragile: Things That Gain from Disorder*, Random House Trade Paperback edition (New York: Random House Trade Paperbacks, 2014), 45.

¹⁰⁷ Daphne DePorres et al., “The BAR Manifesto,” *Organizational Development Practitioner* 50, no. 3 (2018): 40–46.

¹⁰⁸ Bowles et al., “Adaptive Leadership in Military and Government Settings.”

¹⁰⁹ Taleb, *Antifragile*, 41.

To “understand complex systems” and how to be adaptive and agile, cadets need to be exposed to theory about complex adaptive systems, like biologic systems, systems engineering, agile business practices, and chaos theory.¹¹⁰ Exposure to curriculum such as these will build understanding of the complex environment to build cadets’ pattern recognition skills so they can determine when to use adaptive solutions. This exposure should be paired with curriculum that advances their “cognitive and moral/ethical reasoning development” so they learn not only when and how to tackle these problems, but so they solve them with moral integrity.¹¹¹

Comfortable with Risk and Failure

Part of being adaptive and elevating organizational performance in complex environments is being comfortable failing and with taking smart risks (see Appendix D for the four most common failures when responding to risk). Tim Kane asks in *The Atlantic*, “Why does the American military produce the most innovative and entrepreneurial leaders in the country, then waste that talent in a risk-averse bureaucracy?”¹¹² However, James Wilson makes it clear that we should not be “surprised that organizations resist innovation. They are supposed to resist it...The [Standard Operating Procedure] is not the enemy of organization; it is the essence of organization. Stability and routine are especially important in government agencies.”¹¹³ Because government is “driven

by the constraints on the organization,” individual members naturally “become averse to any action that risks violating a significant constraint.”¹¹⁴ A case study on the 99th Reconnaissance Squadron reveals this very point:

“The support market is a ‘culture of no.’ Too often when an idea is floated, the answer is, ‘We can’t do that.’...‘Don’t rock the boat,’ was the response I received,” he said...“You get promoted in the Air Force by not screwing up. Trying something new means risking failure, scaring people around you, and therefore risking advancement. Do what the guy before you did, and train those below you to do what you do. Safe and comfortable, stay the course, that’s the norm.”¹¹⁵

This “systematic removal of uncertainty”...“all for the sake of comfort, convenience, and efficiency” makes the Air Force very fragile.¹¹⁶ Additionally, this risk removal is not rationally undertaken because humans by nature often place too much weight on small risks¹¹⁷ instead of thinking about large risks.¹¹⁸

So, risk aversion is both mankind’s and bureaucracy’s natural state. Then, how can we teach and enable cadets to take risks to respond to complexity? It takes getting rid of constraints and providing incentives¹¹⁹ to experiment, fail, learn, and adapt.¹²⁰ Complex problems “demand an opportunity-driven approach; they require making decisions,

¹¹⁰ Brett G Scott, “Transformation at the United States Air Force Academy: Producing Critical and Systems Thinkers for the Complexity of the 21st Century Military,” n.d., 22.

¹¹¹ Air University (U.S.), “Airman Development Growth: In a Complex World.”

¹¹² Tim Kane, “Why Our Best Officers Are Leaving,” *The Atlantic*, January 4, 2011, <https://www.theatlantic.com/magazine/archive/2011/01/why-our-best-officers-are-leaving/308346/>.

¹¹³ Wilson, *Bureaucracy*, 221.

¹¹⁴ Wilson, 115, 129.

¹¹⁵ Gino, “The United States Air Force: ‘Chaos’ in the 99th Reconnaissance Squadron,” 6.

¹¹⁶ Taleb, *Antifragile*, 62-63.

¹¹⁷ Kahneman, *Thinking, Fast and Slow*, 143.

¹¹⁸ Taleb, *Antifragile*, 163.

¹¹⁹ “Life at 32F.”

¹²⁰ Sullivan, “Embracing Complexity.”

doing experiments, launching pilot programs, testing prototypes, and so on.”¹²¹ General McChrystal explains it is a shift from risk mitigation to “risk adaptation.”¹²² The system must begin allowing for variation, understanding that there will be unintended consequences, and then adapt.¹²³ As many interviewees asserted, this process takes excellent communication skills in all directions—there must be collaboration¹²⁴ and “risk consensus.”¹²⁵ The shared vision of the group allows for risks to be smartly analyzed and for trust to be developed.

Reflective

Being adaptive involves challenging assumptions and understanding the system, to do this however, an officer must learn to reflect and to view the system from different angles. “Persons in positions of authority...who lack the ability to reflect, to stand back from the fray to take a large view of the system, and who cannot learn, are prone to providing counterfeit leadership.”¹²⁶ ¹²⁷ To avoid this type of counterfeit leadership, it is important to learn how to think systematically as it “is an invaluable skill in understanding and influencing our increasingly interconnected and complex

world.”¹²⁸ To become system thinkers, officers “must have the opportunity and requirement to reflect.”¹²⁹ When you reflect, it engages your “System 2” thinking enabling you to confront your assumptions.¹³⁰ “...you start to reimagine what is possible and, most importantly, you start to reconnect with your most deeply held beliefs. Once you’ve done that, you can begin to reimagine a better path.”¹³¹

An interviewee stated that often there is no time to reflect, “we are playing whack-a-mole with the problem of the day. We are 99% reactive and 1% proactive.”¹³² Williamson Murry puts it this way, “Military leaders are under the enormous pressure of events so fast-moving that they have almost no time for reflection or calculation.”¹³³ Interviewees stressed the importance of delegating tasks down to allow time for personal reflection while requiring subordinates to set time aside for themselves.¹³⁴ Leaders need “moments of quiet for thinking and making tough decisions.”¹³⁵ It’s important for systems thinking, situational awareness, and for leadership development.¹³⁶

¹²¹ E. Jeffrey Conklin, *Dialogue Mapping: Building Shared Understanding of Wicked Problems* (Chichester, England ; Hoboken, NJ: Wiley, 2006), 10.

¹²² McChrystal et al., *Team of Teams*, 108.

¹²³ Green, “How Do You Go about Embracing Complexity?”

¹²⁴ Pearse, “Officer Education,” 23.

¹²⁵ Sawtelle, *Resilient Effective Adaptable Leadership*, 13.

¹²⁶ Richardson and John B., “Real Leadership and the U.S. Army,” 86.

¹²⁷ Dean Williams, *Real Leadership: Helping People and Organizations Face Their Toughest Challenges*, 1st ed (San Francisco, CA: Berrett-Koehler, 2005).

¹²⁸ Scott, “Transformation at the United States Air Force Academy: Producing Critical and Systems

Thinkers for the Complexity of the 21st Century Military,” 19.

¹²⁹ Scott, 17.

¹³⁰ Kahneman, *Thinking, Fast and Slow*, 65.

¹³¹ Friedman, *Thank You for Being Late*, 4.

¹³² Interviewee #41, Phone Interview, December 2, 2019.

¹³³ Murray, *America and the Future of War*, 13.

¹³⁴ Interviewee #49, Phone Interview, December 6, 2019.

¹³⁵ Sawtelle, *Resilient Effective Adaptable Leadership*, 3.

¹³⁶ Kevin Davis et al., “Thriving at the U.S. Air Force Academy,” *LEADERSHIP DEVELOPMENT*, 2019, 85.

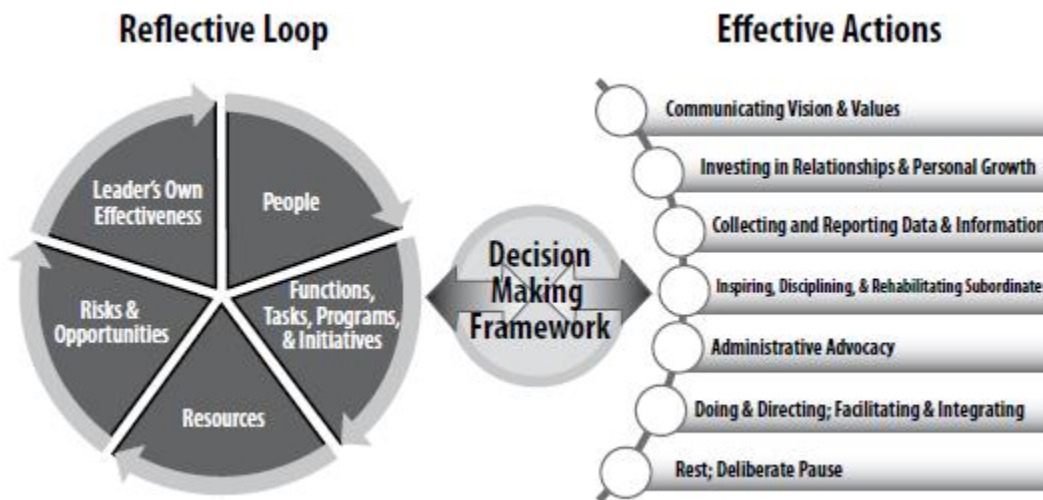


Figure 14. Reflective Loop Framework for Officers and Leaders

Figure 14 shows a proper reflective loop.¹³⁷ It is important that leaders establish this loop for themselves and for the institution. These “institutionalized feedback loops”¹³⁸ allow for rapid adaptation to get the organization going toward its overall mission.

Shapes and Moves the System

Understanding the system is only part of the struggle, systems constantly must adapt to meet the changing environment. Therefore, adaptive leaders must also learn how to intervene in the system, how to shape it and move it. Bureaucracy is large and while most may write it off as immobile, it’s really more of a “slowly turning ship, *but it is turning.*”¹³⁹ Leaders must learn how to engage the people in the organization to face and own change—persisting through people telling them “no,”¹⁴⁰ chipping away where they can,¹⁴¹

not being satisfied with the status quo, taking initiative, and pushing back.¹⁴² This part of leadership can be the hardest, but it is where the work gets done. Heifetz speaks about leaders potentially being “neutralized” where they will be silenced, degraded, or anything that takes away their authority or influence. It’s in those moments where it’s important to have resilience, to not get beat down by the culture.¹⁴³ It is a balancing act of pushing people along enough to produce change, but not too much to completely lose them. Heifetz calls this managing the disequilibrium. As the officers view the system, empathize with the people in it, understand the dynamics, then they can begin to run “interventions” or experiments to “test potential new processes” and “reveal the ability of an organization or system to accommodate change.”¹⁴⁴ Leaders move the system towards increased effectiveness.

¹³⁷ Sawtelle, *Resilient Effective Adaptable Leadership*, 31.

¹³⁸ Interviewee #12, Phone Interview.

¹³⁹ Interviewee #1, Phone Interview, December 10, 2019.

¹⁴⁰ Interviewee #7, Phone Interview.

¹⁴¹ Interviewee #12, Phone Interview.

¹⁴² Gino, “The United States Air Force: ‘Chaos’ in the 99th Reconnaissance Squadron,” 8.

¹⁴³ Interviewee #12, Phone Interview.

¹⁴⁴ Bernstein and Linsky, “Leading Change through Adaptive Design.”

The Leader of Character for the Future

All these traits identified by interviewees and literature are traits needed to meet the complex environment. An environment that “freshly minted” officers from USAFA will be sprung into headfirst. Their journey to being an adaptive leader starts from the inside. It starts with their character and values—the base from where it is all built. Then, they are given knowledge, a love for learning, and methods to make decisions. They learn skills and to take actions related to working in teams, building and

empowering teams, and caring for and respecting others. Finally, they start to think in terms of systems and complexity, how to move and shape these systems, when to take risks, how to fail, and how to think critically about their next steps. These are the leaders USAFA needs to be equipping for the Air Force to keep its competitive advantage in a complex world. These characteristics were always necessary, but the environment now is less forgiving.

CURRENT STATE

Currently, USAFA collects data on classes after they graduate for metrics it hopes new officers demonstrate in their jobs (Appendix E). These surveys judge character traits, institutional outcomes, mission-oriented leadership qualities, interpersonal leadership qualities, and supervisor provided metrics.

From these results, about 65% of officers who graduate from USAFA rate better than Air Force officers from other commissioning sources in terms of character traits. These numbers have shown positive trends over the past three measuring periods. For an institution whose mission is to produce leaders of character, these are positive results even if there is room for improvement.

USAFA provides cadets with the base to build a leader of character in a complex environment. Other characteristics that rank positively in these surveys, when compared to the characteristics provided by interviewees, include technical expertise, analytical decision making, and passion for life-long

learning, respect for human dignity, maintaining psychological safety required for empowerment, and communication skills required for operating with more risk.

Unfortunately, the method of measuring these characteristics only compares these graduates to other Air Force officers. Officers are being compared to the average instead of a set benchmark. If the organization does not perform well as a whole in a certain area, comparing graduates to unsatisfactory work and concluding they are better is unhelpful if that is the only means of measurement. In addition to this comparison, there needs to be a measurement benchmark that is continuously adjusted against needs from the changing environment. The previous section on the characteristics that officers need begins to set that benchmark. Additionally, many of the challenges identified by interviewees in Figure 3 are not completely addressed or measured in the current USAFA assessment.

GAPS ANALYSIS

A gap is something at USAFA that is keeping it from giving cadets what interviewees identified they need in the current environment. The three major gaps are vision, structure, and curriculum. These gaps are divided into sub-gaps.

Vision Gaps

USAFA's vision and mission are not consistently linked to the external demands of the environment. USAFA needs to develop leaders in the context of the environment and needs to explore the sources of virtue for character they want to develop.

Vision Gap 1: Leaders of Character not Developed According to Environmental Context

The largest external challenge that interviewees listed was the complex environment and the adaptive and systems thinking it requires. These types of thinking are not measured in the AOG survey. The literature also reveals that Air Force Captains rank in the 38th percentile for critical thinking when compared to graduate-level students.¹⁴⁵ Officers cannot question the old ways of business (measured in USAFA survey) if

their critical thinking skills are not fully developed. In addition, the interviews overwhelmingly revealed the “checklist mentality” of officers, and case studies like the 99th Recon Squadron show that officers are taught not to “rock the boat.”¹⁴⁶ Officers are overwhelmingly underdeveloped to handle complexity or be adaptive.

Vision Gap 2: Sources of Values Not Sought After or Understood

Cadets follow the Core Values and the Honor Code as they develop into leaders of character. However, there is little explanation for why these values are desired values, and why other values, with which some cadets may have been raised by their families and local culture, are undesirable. Many interviewees expressed this disconnect. Cadets already have 18 years of life before coming to USAFA. At this point, new values are imposed on cadets, and they are told to accept these values as their own. USAFA development frameworks in Appendix C do little to address this issue directly. Exploring why certain values are important and where they come from will increase ownership of those values.

Figure 15 summarizes USAFA's gaps in vision.

¹⁴⁵ Stone, “Critical Thinking Skills in USAF Developmental Education.”

¹⁴⁶ Gino, “The United States Air Force: ‘Chaos’ in the 99th Reconnaissance Squadron.”

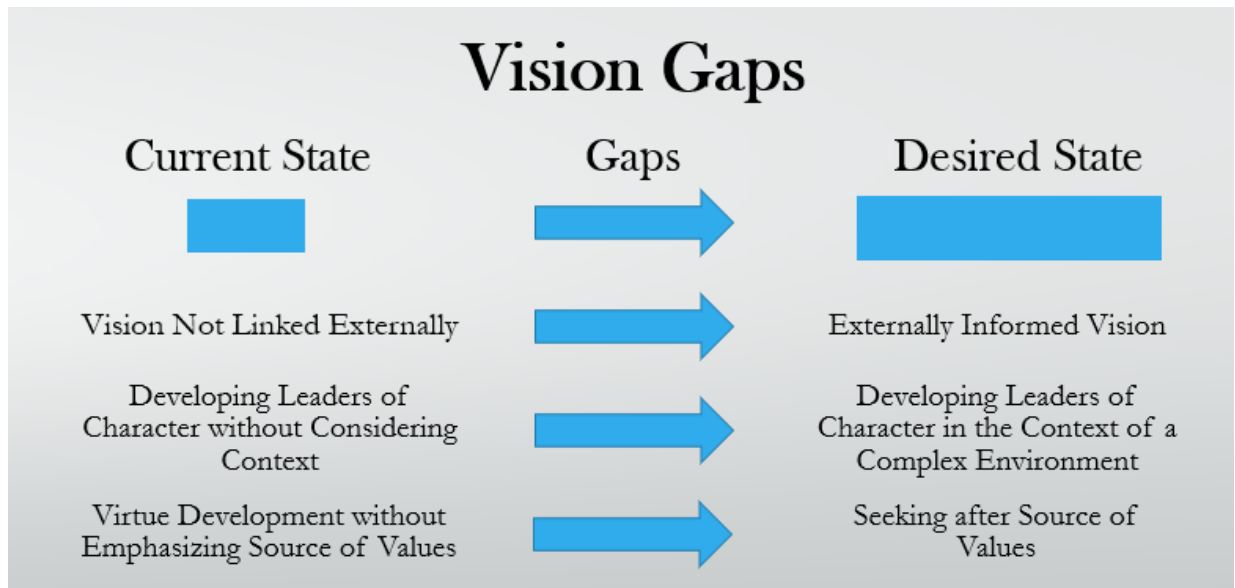


Figure 15. Summary of USAFA's gaps in vision.

Structure Gaps

Even if the vision and mission were completely synchronized with the needs of the external environment, many structures at USAFA would prevent the desired results. These structures and processes need to

change for the desired development to be possible. One way to consider this change is to shift the focus from hierarchical and market-based cultures to clan and adhocracy-based cultures, depicted in Figure 16.¹⁴⁷ This shift would create more capacity for external focus, flexibility, and innovative processes.

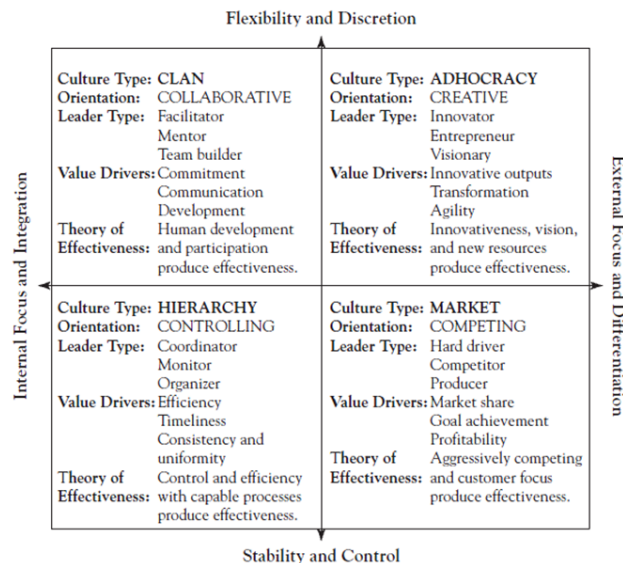


Figure 16. Model of Different types of Organizational Cultures

¹⁴⁷ Farshad Andam, "Knowledge Sharing: Exploring the Links to Organizational Culture," n.d., 11.

Structural Gap 1: Disjointed Message and Integration of Development

There are many frameworks USAFA uses to develop cadets. Frameworks and models are important to understanding systems and organizational missions.¹⁴⁸ While USAFA should not stop using models, the current models are not thoroughly coherent or integrated. The mission of USAFA is to produce leaders of character, so the frameworks should all highlight that outcome as the end result. Every method of development should be tightly coupled with that objective. Though progress has been made, mission elements are still not aligned as depicted in survey results in Figure 17.

Instructors, Commander, and Coaches usually define their own path towards developing leaders of character in the context of their job, beliefs, and what is incentivized.¹⁴⁹ As a result, cadets do not

know which framework to engage with, so they then choose to engage with what is stressed or incentivized.¹⁵⁰ The survey data in Figure 18 shows a clear lack in familiarity with development frameworks when compared with compliance-based, technical knowledge.

The system produces cadets proficient at executing tasks, but not people willing to engage in thoughtful development. The design of the system is to blame, not the individual members. Without clearer engagement with the frameworks and a cohesive message from leadership, cadets are then prone to take the path of least resistance. As Kahneman states, our System 2, or deliberate processor, is “often lazy.”¹⁵¹ Cadets simply choose to go through the motions to survive and graduate.¹⁵²

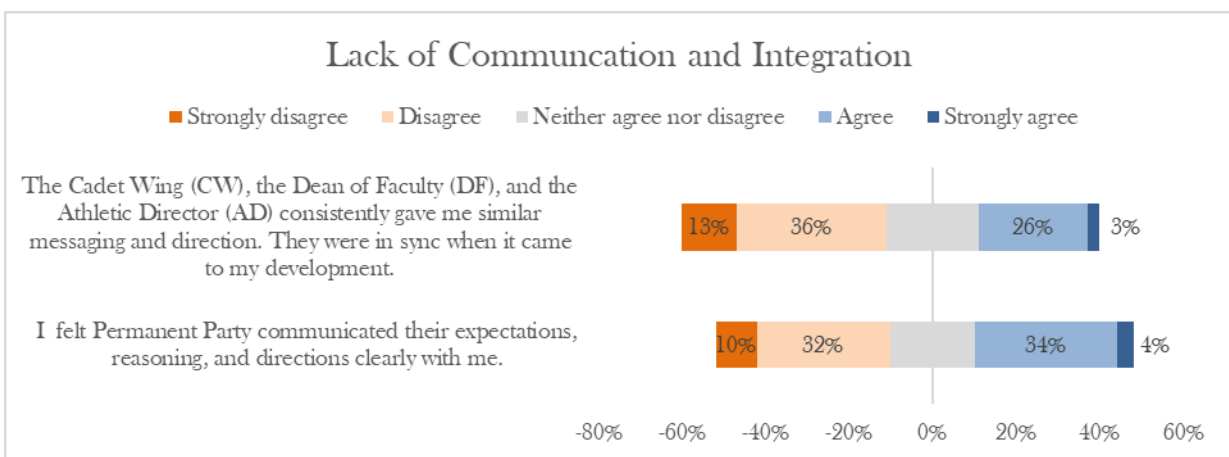


Figure 17. Results showing cadets did not feel communicated with nor feel they were given consistent direction.

¹⁴⁸ Scott E. Page, “Why ‘Many-Model Thinkers’ Make Better Decisions,” *Harvard Business Review*, November 19, 2018, <https://hbr.org/2018/11/why-many-model-thinkers-make-better-decisions>.

¹⁴⁹ Interviewee #57, USAFA in-person Interview, January 13, 2020.

¹⁵⁰ Wilson, *Bureaucracy*.

¹⁵¹ Kahneman, *Thinking, Fast and Slow*, 81.

¹⁵² Interviewee #59, USAFA in-person Interview, January 14, 2020.

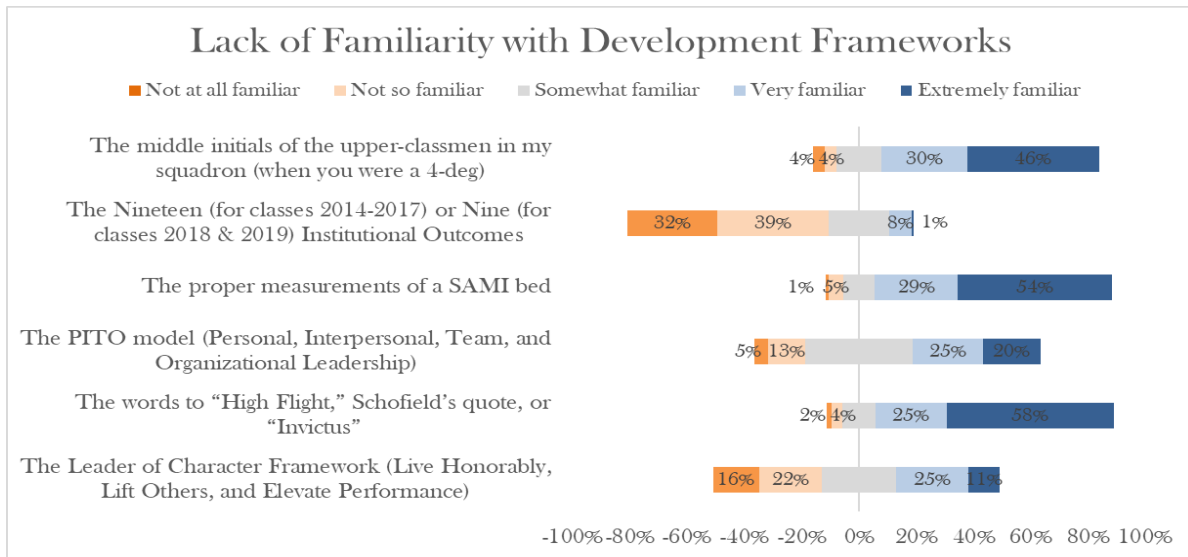


Figure 18. Survey results displaying cadets are not familiar with USAFA development frameworks

Structural Gap 2: Core Job Tasks not Linked to Overall Mission

Developing leaders of character can quickly fall victim to the “tragedy of the commons.”¹⁵³ It is everyone’s duty to ensure cadets are leaders of character upon graduation but no one’s primary focus. Many interviewees stated that the number of tasks in the day cause them to lose sight of the bigger picture. This common mental bias can be explained through the syllogism, “nothing in life is as important as you think it is when you are thinking about it.”¹⁵⁴ When a teacher is working, their focus is on imparting the material onto the students. Teachers are hired to teach, coaches to coach, and AOCs to command. Thus, the mission of developing a leader of character loses focus.¹⁵⁵ Some interviewees even described taking initiative to work leadership development into their lessons or practices but admitted that it was not their first responsibility.^{156 157 158} The system structure produces this output.

¹⁵³ Evan Munsing and Christopher J Lamb, “Joint Interagency Task Force-South: The Best Known, Least Understood Interagency Success,” n.d., 82.

¹⁵⁴ Kahneman, *Thinking, Fast and Slow*, 402.

¹⁵⁵ Interviewee #54, USAFA in-person Interview, January 10, 2020.

What is identified as the worker’s primary task will be what gets done, and if that task is not well defined, then the beliefs and background of the worker will define the task.¹⁵⁹ While CCLD is tasked at unifying the mission of developing leaders of character across the mission elements, it will only succeed in areas where USAFA orients and defines the core tasks of faculty and staff.

Structural Gap 3: Desire for Virtue Development while Emphasizing Compliance and Discipline

USAFA operates as more of a compliance enforcer than developer of character. The Honor Code at USAFA embodies this contradiction. Cadets are sworn by oath to not lie, steal, or cheat nor tolerate those who do. If a cadet breaks it and is caught, they face disenrollment or a very difficult honor rehabilitation process (lately, most first offenders go through this process). All cadets are exposed to honor lessons every semester,

¹⁵⁶ Interviewee #57, USAFA in-person Interview.

¹⁵⁷ Interviewee #60, USAFA in-person Interview, January 9, 2020.

¹⁵⁸ Interviewee #61, USAFA in-person Interview, January 8, 2020.

¹⁵⁹ Wilson, *Bureaucracy*, 115.

which admittedly are not taken very seriously.¹⁶⁰ The strict punishments for violating the code, with very little amount of virtue instilment and development, creates an environment which actively encourages cadets to skirt around the system. It is gamed.¹⁶¹ While only about five percent of cadets are investigated for honor, the survey data in Figure 19 shows a much different reality.

In addition to survey data, a report from the Colorado Springs Independent, 39% of cadets in 2014 ranked honor as their highest priority while 38% ranked loyalty as the priority.¹⁶² USAFA’s honor system grows perverted comradery and misses a valuable opportunity to grow virtue in its cadets,¹⁶³ and as one professor states, “to weed out the 2% who are truly rotten.”¹⁶⁴

Structural Gap 4: Needing Experimentation and Risk Taking while Creating Fearful Environment

USAFA is dubbed a “leadership laboratory,” but not much experimenting or risk taking occurs. The survey data in Figure 20 on the following page shows the state of fear cadets were in and whether they felt their voice was heard.

The data suggests the structures yield undesirable results. This environment chokes out any measure of initiative or risk taking. Cadets may feel there is no use thinking about how to shape the system if they do not trust their supervisors to help or listen nor if they do not feel empowered.¹⁶⁵

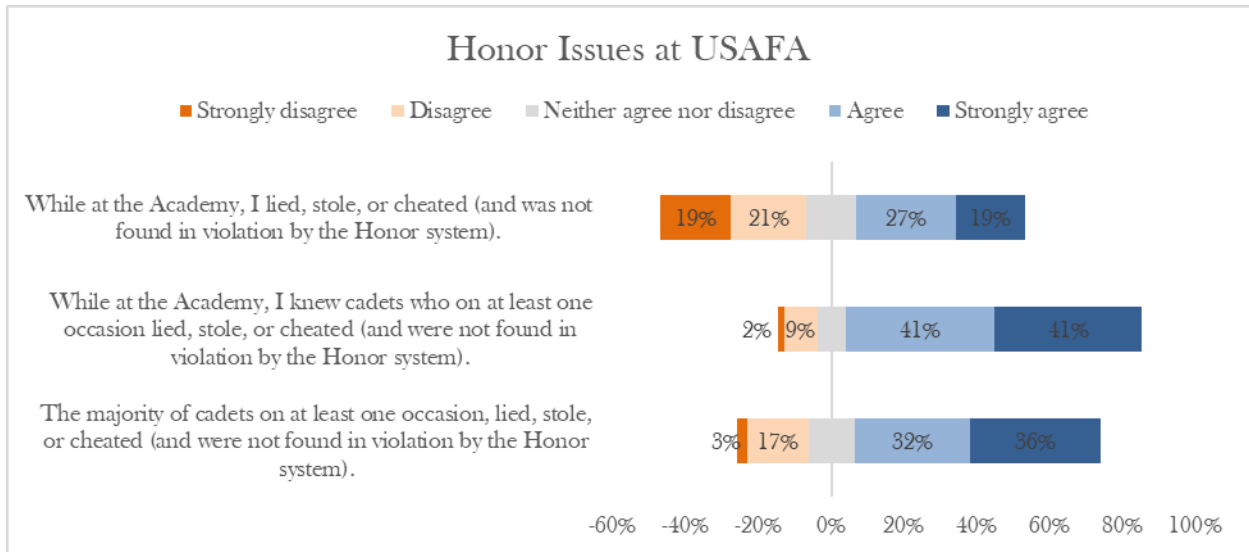


Figure 19. Survey results showing the state of honor at USAFA

¹⁶⁰ Interviewee #62, USAFA in-person Interview, January 13, 2020.

¹⁶¹ Interviewee #23, Phone Interview, November 11, 2019.

¹⁶² Pam Zubeck, “Air Force Academy’s Probation Program Doesn’t Restore Sense of Honor, Research Shows,” Colorado Springs Independent, accessed February 9, 2020, <https://www.csindy.com/coloradosprings/air-force-academy-probation-program-doesnt-restore-sense-of-honor-research-shows/>

¹⁶³ Davis et al., “Thriving at the U.S. Air Force Academy,” 82.

¹⁶⁴ Interviewee #53, USAFA in-person Interview, January 14, 2020.

¹⁶⁵ “Defense Innovation Board > Recommendations,” accessed April 6, 2020, <https://innovation.defense.gov/Recommendations.aspx>

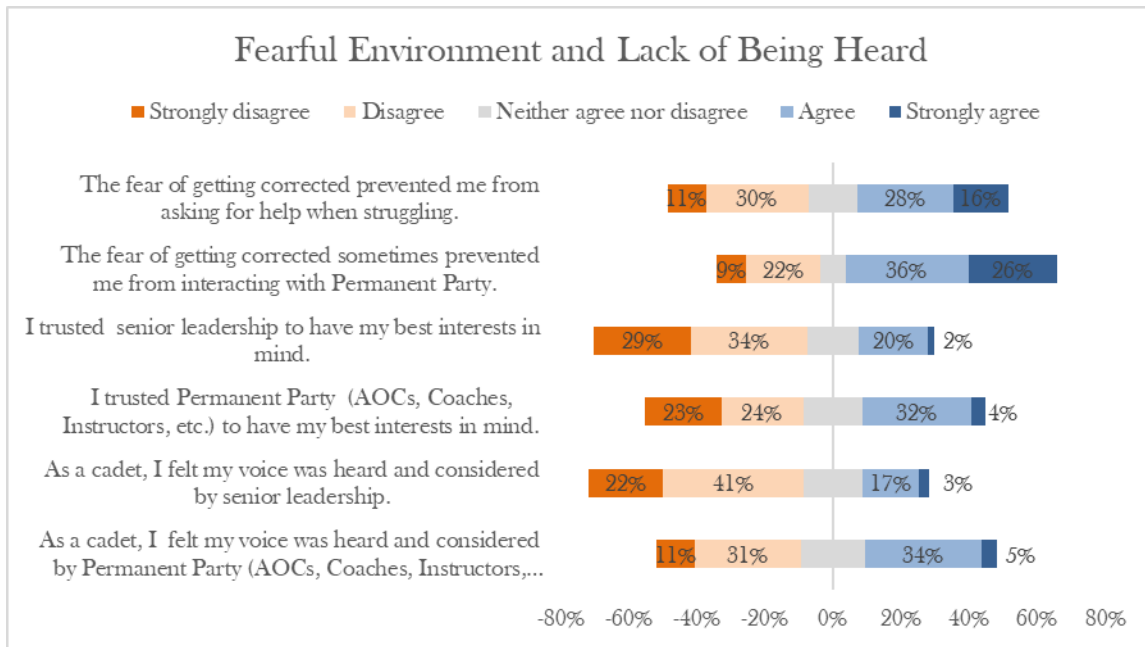


Figure 20. Survey results displaying levels of fear and trust at USAFA

Structural Gap 5: Cadets are Task Saturated but Need Time for Reflection to Thrive

Military members need to understand how to be resilient and survive adverse situations. Surviving develops persistence and grit—the willingness to pursue a difficult goal for long periods of time.”¹⁶⁶ ¹⁶⁷ Cadets are constantly task saturated and thus likely have large amounts of resilience, grit, and time management skills. However, while cadets are in this state, “the focus is on getting by,

making it through, not getting into too much trouble, feeling overwhelmed, and sometimes, going through the motions.”¹⁶⁸

The data in Figure 21 evidences this situation. Cadets are not thriving—defined as being able to self-actualize through having “autonomy, competence, and relatedness.”¹⁶⁹ Without time for reflection and space to thrive, cadets cannot develop higher-level skills that they need to lead effectively in the Air Force.

¹⁶⁶ Angela L. Duckworth et al., “Grit: Perseverance and Passion for Long-Term Goals,” *Journal of Personality and Social Psychology* 92, no. 6 (2007): 1087-1101, <https://doi.org/10.1037/0022-3514.92.6.1087>.

¹⁶⁷ Davis et al., “Thriving at the U.S. Air Force Academy.”

¹⁶⁸ Davis et al., 86.

¹⁶⁹ Davis et al., 86.

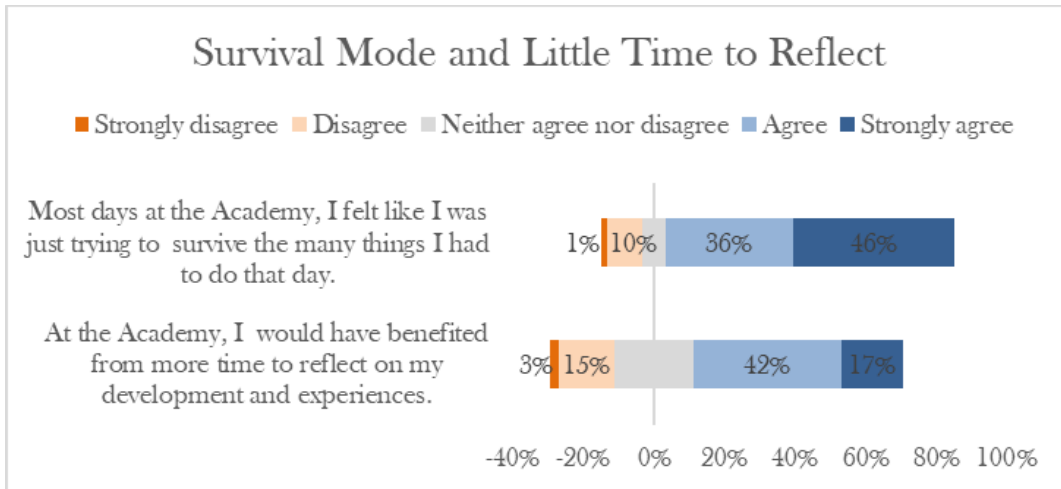


Figure 21. Survey results showing cadets are in survival mode and have little time for reflection

Figure 22 is a summary of USAFA’s structural gaps.

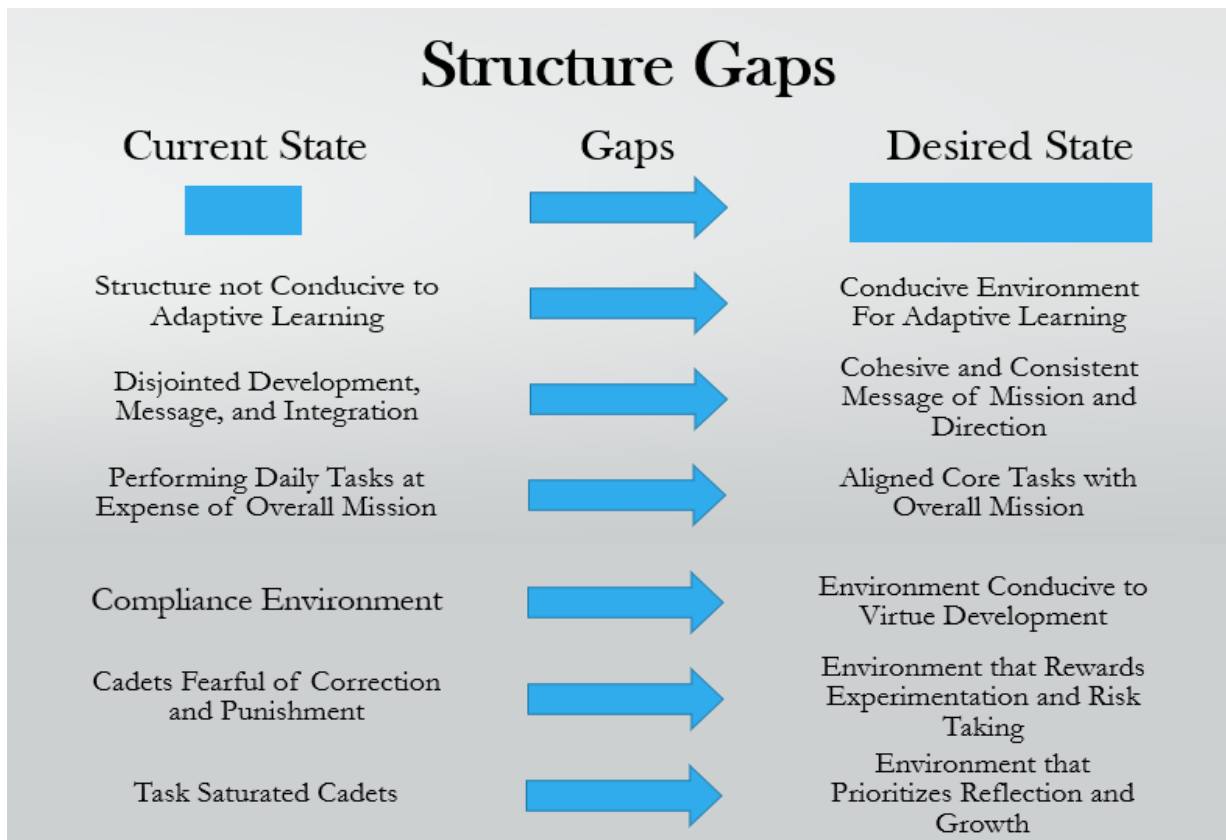


Figure 22. Summary of USAFA’s Structural Gaps

Curriculum Gaps

With vision and structure synchronized to the requirements of the external environment, USAFA still has many gaps in cadet curriculum—the comprehensive cadet experience. Curriculum must be informed by the external context and enabled by the structures.

Curriculum Gap 1: Sole Focus is Individual Performance

In the AOG survey, graduates were ranked poorly at “Is sought by peers for mentoring/guidance/advice.” Other team-based metrics are more normal, but this metric negatively reflects the team environment created by graduates. Additionally, the survey data in Figure 23 shows cadets did not trust each other or think others were willing to help.

These results show a lack of focus on being teammates with more focus on individual excellence and achievement. The Air Force

needs team builders more than individual achievers.

Curriculum Gap 2: Cadets with a Lack of Understanding of the Joint Environment, Strategy and High-level Problems

Through examining USAFA provided data, it is clear that understanding of the joint environment and coalition warfare is lacking compared to the other categories.

Interviewees identified the increasing need to stress strategy and other high-level Air Force problems like acquisitions knowledge, IT familiarity, and how private sector industries operate.

Curriculum Gap 3: Cadets with Low Cultural Understanding and Sensitivity

Similar to above, exposure to different cultures and international perspectives is lacking in the AOG survey results. While “respect for human dignity” showed improvement in 2016, the lack of understanding of different cultures indicates a lack of developed capacity to truly empathize with those who are different.

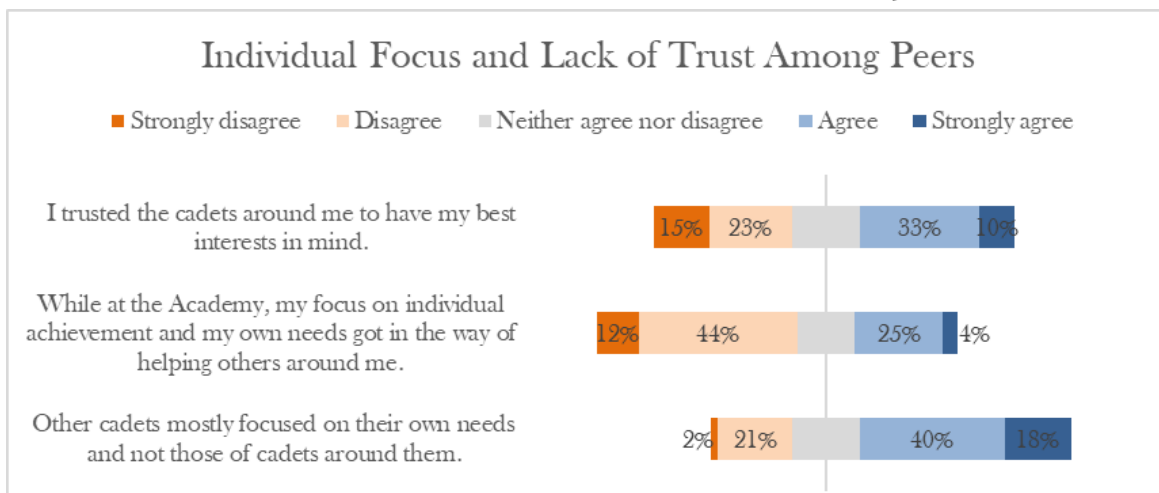


Figure 23. Survey results showing the lack of trust between peers and a poor team environment

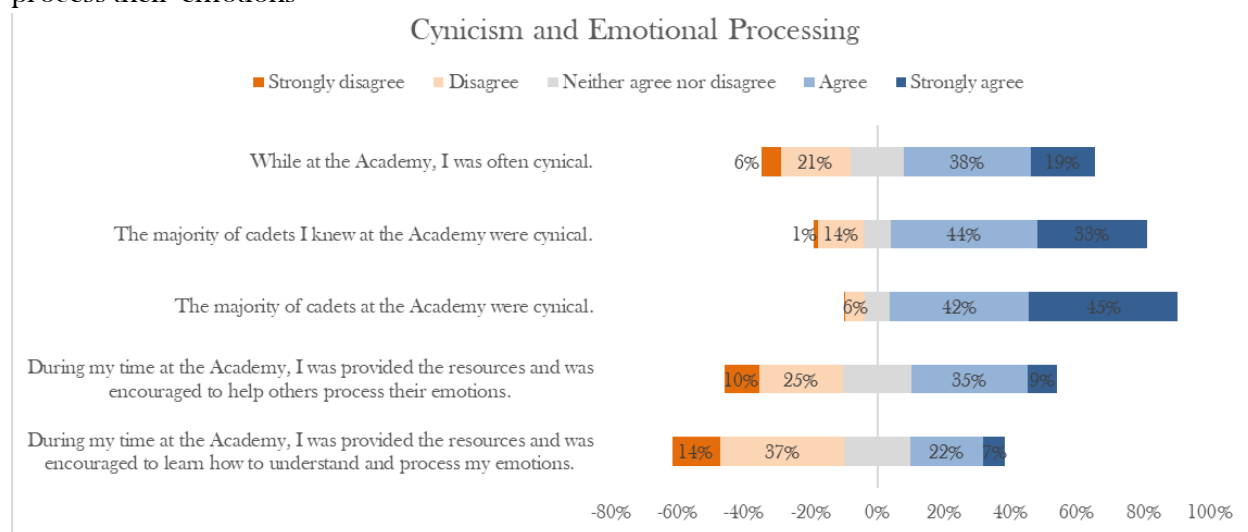
Curriculum Gap 4: Widespread Cynicism and a Lack of Support for Emotional Development

Officers need to be emotionally developed to handle situations of complexity. In addition to this developmental need, cynicism is widespread at USAFA and is commonly a defense mechanism to ward off negative emotions like anger, contempt, disappointment, or hurt.¹⁷⁰ USAFA can encourage healthy emotional development and combat cynicism simultaneously. Because cynicism is used as an emotional defense mechanism, it can be traced to cadets who are not emotionally developed and supported. The majority of cadets are under the age of 24. So, most cadets are still developing their prefrontal cortex where their emotional processing centers are located. They are still learning how to deal with emotions and need to be guided throughout this process. Support from USAFA can help cadets understand and handle their emotions and those of others. While emotionally healthy cadets might still choose to be cynical, they would have the opportunity process their emotions

at a deeper level, instead of helplessly building cynicism for four years. The ultimate effect will be officers who can handle emotionally charged situations in their future careers. Figure 24 shows the state of cynicism and the perception of being provided support for emotional development.

Curriculum Gap 5: All Cadets do not Receive Formal Authority or Leadership Experience

Because there are limited formal positions in the current system for authority opportunities, many cadets graduate without being the ones making the decisions or learning to handle positions of authority. There are constraints on the number of people who can hold those positions. Some people must be participators and subordinates and some will be authorities in command. Cadets who do not get these positions of authority largely remain inexperienced. In interviews conducted with USAFA senior leadership, they expressed their desire to expand these opportunities to all cadets.^{171 172}



¹⁷⁰ James W. Dean, Pamela Brandes, and Ravi Dharwadkar, "Organizational Cynicism," *Academy of Management Review* 23, no. 2 (April 1998): 346, <https://doi.org/10.5465/amr.1998.533230>.

¹⁷¹ Interviewee #55, USAFA in-person Interview, January 10, 2020.

¹⁷² Interviewee #55.

Figure 24. Survey results showing cynicism levels and a lack of support for emotional development

Additionally, the concepts of “leadership” and “formal authority” become conflated. This occurrence can cause a problem of not practicing leadership in positions where there

is little to no formal authority. Cadets need to be encouraged to lead in every position.¹⁷³

Figure 25 summarizes USAFA’s curriculum gaps.

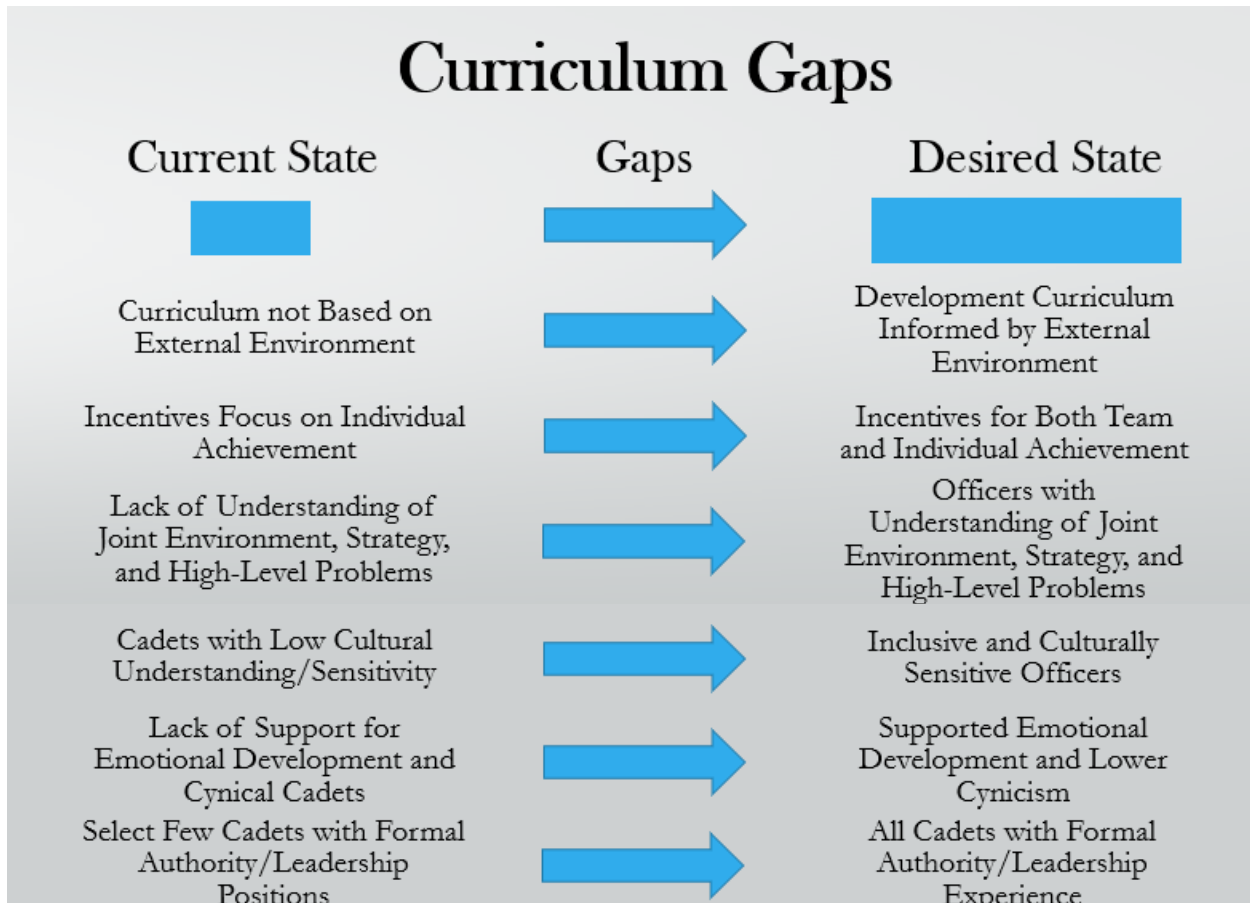


Figure 25. Summary of USAFA’s Curriculum Gaps

¹⁷³ Ronald A. Heifetz, *Leadership without Easy Answers* (Cambridge, Mass: Belknap Press of Harvard University Press, 1994).

RECOMMENDATIONS

The interviews, literature review, and survey results suggests the following recommendations for USAFA in order to prepare its cadets for a complex, future environment. USAFA must be externally aligned, structurally reformed, and development focused.

Externally Aligned

External Alignment entails understanding and connecting two key sources of information: changing, complex environments and sources of values.

1. Understanding the Changing Needs of the Environment.

What Gap this Recommendation Addresses:

Linking curriculum to what is needed externally will allow cadets to graduate with skills directly applicable to their careers and environment. The section “Characteristics Officers Need” is commentary on the types of characteristics needed in this external environment.

What Characteristics it Will Help Build:

Creating an environment conducive to adaptive leadership attributes

Why Address this Issue: Any change needs to start with recognizing the nature of changing environments and the characteristics cadets will need to face them. To do so, USAFA must self-examine and realize it *can and must* do better. It can be a place where cadets are reflective about their development, even happy with it—not

dreading the next day. The increasing intensity of our world and adversaries necessitate adaptability. Thus, to facilitate adaptive leaders, USAFA itself must be adaptive.¹⁷⁴ It must become bureaucratic institution that learns and continuously adapts—where the leadership experience is gained from well-debriefed experimentation. Though paradoxical, General McChrystal states, “We [need] to find a way to create that adaptability while preserving many of our traditional strengths...many of the practices that are most efficient directly [limit] adaptability.”¹⁷⁵ Past solutions are no longer working sufficiently, and members, from cadets to senior leaders, must understand the permanently changed environment and model the adaptability as their own.

For Example: Senior Leadership and curriculum developers should engage extensively and regularly with Air Force Headquarters and Senior Leaders to continuously assess if the curriculum represents the needs of the external environment.

Additionally, USAFA must give cadets control and relinquish much of its own.

2. Uncovering the Source of Values.

What Gap this Recommendation Addresses:

The vision gap between wanting virtue but not understanding/communicating where the virtue originates and the curriculum gap of not having emotionally developed cadets

¹⁷⁴ Richardson and John B., “Real Leadership and the U.S. Army,” v.

¹⁷⁵ McChrystal et al., *Team of Teams*, 82.

What Characteristics it will Help Build:
Strong character, providing meaning, and emotional awareness skillsets

Why Address this Issue: Gardner writes, that “it is virtually impossible to exercise leadership if shared values have disintegrated.”¹⁷⁶ USAFA must cultivate an environment that consciously shares, challenges, and develops values, building off of the source of values from its tradition and its members. This will also enable stronger “spiritual pillars” and improve emotional health.

For Example: Chaplains of all faiths as well as secular resources should be tasked with guiding cadets down this path of discovering the “why.”

Structurally Reformed

To properly accomplish its mission, USAFA must restructure organically. Restructuring needs to occur in five areas: there must be a unified vision and strategy among the mission elements, longer continuity in cadet wing leadership, redefined and clarified core job tasks, 360-degree feedback with purposeful job training, and a team of teams approach.

1. Unified Vision and Strategy from Three Mission Elements.¹⁷⁷

What Gap this Recommendation Addresses:
Collaboration Gaps between USAFA mission elements

¹⁷⁶ Gardner, *On Leadership*, X.

¹⁷⁷ Dennis J Volpe, “Educating Tomorrow’s Leaders Today: A Comparison of the Officer Development Programs of the United States Naval Academy and the United States Air Force Academy,” n.d., 62.

¹⁷⁸ Gregory (Speedy) Martin, “USAFA Core Curriculum External Review” (Provided by General (Ret.) Gregory Martin, March 25, 2016).

What Characteristics it will Help Build:
Creating an environment conducive to adaptive attributes and collaboration skillsets

Why Address this Issue: All three mission elements and all subordinate organizations must work together at developing character and leaders in a unified way.¹⁷⁸ Each mission element should not perform the same tasks, but their functions need to be coordinated and integrated throughout a cadet’s time.¹⁷⁹ For cadets to take ownership of their development, they need to understand its direction and purpose. Therefore, the mission elements must communicate the direction and purpose, model the type of leadership they want the cadets to develop, and be radically transparent (right up to the point where it would be illegal).¹⁸⁰ Cadets must perceive they are empowered and included.¹⁸¹

For Example: Collaboration should be incentivized in promotions, awards, and evaluations. There should be no option but to collaborate.

Collect data on how well different parts of the mission elements are collaborating with each other and display that data in meetings even if it is anonymous.

Bridging methods depicted in Figure 9 should also be considered. Collaborating effectively across traditional structural boundaries will allow USAFA to operate in

¹⁷⁹ Michael Josephson, “Report to the United States Air Force Academy” (Josephson Institute of Ethics, January 20, 2005).

¹⁸⁰ McChrystal et al., *Team of Teams*, 20.

¹⁸¹ Davis et al., “Thriving at the U.S. Air Force Academy,” 86.

uncertainty and complexity.¹⁸² CCLD should continue its efforts to bring together the mission elements with the goal that this integration becomes embedded in future structure.

Additionally, there are too many existing models (see Appendix C). Instead of creating entirely new models, old models should be discarded, refined, or integrated coherently with the new.^{183 184}

Involve cadets in all decision-making processes.

2. Longer Continuity in Senior Leadership.

What Gap this Recommendation Addresses:

The gap of not having consistent messaging and direction from leadership.

What Characteristics it will Help Build:

Creating an environment conducive to adaptive attributes

Why Address this Issue: Currently, the commandant of cadets only stays in the position for two years. The rapid changes in the commandant position makes USAFA vulnerable to new commanders with drastically different plans. It diminishes the likelihood of a sustained institutional effort to improve USAFA-wide practices. Cadets who have a consistent, non-vacillating direction will be more engaged with the curriculum and have greater trust in their leaders.

For Example: I am restating a recommendation given to the Secretary of the Air Force in 1965, that “there be established a minimum tour of duty for

Superintendents and Commandants of four years or more.”¹⁸⁵

In addition, there should be a Senior Associate Commandant position that is held by a civilian, much like the position of Senior Associate Dean. Or, it could be made a permanent professor position, to give the position more authority. The Senior Associate Commandant should provide continuity and direction setting capacity for incoming Commandants so that the direction of USAFA can engage in sustained improvement over time. This action will help eliminate the pendulum effect of USAFA’s direction that many interviewees identified.

3. Redefine and Clarify Core Job Tasks

What Gap this Recommendation Addresses:

The structural gap of doing daily tasks but also developing leaders of character

What Characteristics it will Help Build:

Strong Character and creating an environment conducive to adaptive attributes

Why Address this Issue: Employees at all levels must develop leaders of character first. The central task of USAFA should shift from performing the objectives of each mission element to performing the ultimate objective of USAFA.

For Example: Central tasks of Permanent Party level jobs should be clearly re-defined. Developing leaders of character should be made the primary task for coaches, AOCs, and professors. Hiring processes and job training should reflect these core task shifts. Because these changes are against the

¹⁸² Dave Lyle, “Overcoming ‘the Silo Effect’ in the Department of Defense,” ed. Sarah Canna (National Security Innovations, Inc., August 5, 2019).

¹⁸³ Josephson, “Report to the United States Air Force Academy.”

¹⁸⁴ Richardson and John B., “Real Leadership and the U.S. Army,” 3.

¹⁸⁵ The Special Advisory Committee on the United States Air Force Academy, “Report to the Secretary and Chief of Staff of the Air Force,” May 5, 1965, 24.

standard way of operating, the change will be met with resistance and will require skilled, sustained, and coordinated leadership across, down, and up the chains of command.¹⁸⁶

4. **Regular Debriefing, 360-degree Feedback, and Purposeful Job Training**

What Gap this Recommendation Addresses:

The structural gap of doing daily tasks but also developing leaders of character

What Characteristics it will Help Build:

Strong Character, collaboration skillsets, and creating an environment conducive to adaptive attributes

Why Address this Issue: Employees and mission elements must be judged by their results, not by their inputs, so their results must be what is measured.¹⁸⁷ To proficiently achieve this aim, employees need to be provided training, learning, feedback, and time for reflection. USAFA can only provide cadets with the education they need if there is a consistent process engrained in the system that allows for continuous improvement and adjustment. The practices set by employees will spill over into the practices in the cadet wing.

For Example: Teachers, coaches, and commanders should be provided with practical training in how to develop the desired characteristics in their cadets. Current “faculty and students...are largely a product of a social and military education system...focused and evaluated on teaching content knowledge versus teaching critical and systems thinking skills,”¹⁸⁸ and, there is

hardly any training for instructors at USAFA on how to successfully teach.¹⁸⁹

Regular debriefing of collective problem-solving exercises, including classroom processes themselves, should become commonplace. 360-degree feedback, augmented by coaching, must be used, as well. The feedback should be evaluative of performance so that it aligns organizational incentives with employee actions but not to the point of it negatively affecting performance reviews. Questions should ascertain if there was sufficient collaboration between the mission elements, and if the member developed the desired portions of the leader of character framework (e.g. in developing a cadet’s ability to be adaptive, was there adequate reflection time, structure, and feedback?).

5. **Team of Teams Approach**

What Gap this Recommendation Addresses:

The structural gap of needing a cohesive message and direction

What Characteristics it will Help Build:

Team-based skillsets in cadets and faculty, collaboration skill sets, and creating an environment conducive to adaptive attributes

Why Address this Issue: The structure of a system determines its outputs. USAFA must restructure itself more organically. Using models like “team of teams” (Figures 7 & 8) where collaboration is fostered through shared awareness and interdependence will help establish the necessary structural changes.

¹⁸⁶ Wilson, *Bureaucracy*, 222.

¹⁸⁷ Wilson, 373.

¹⁸⁸ Scott, “Transformation at the United States Air Force Academy: Producing Critical and Systems

Thinkers for the Complexity of the 21st Century Military,” 23.

¹⁸⁹ Interviewee #58, USAFA in-person Interview, January 14, 2020.

For Example: Relationships with other mission elements should be built so that the teams know at least one person on any other team. Build these bonds through formal and informal means. While it may seem inefficient to use valuable employee time for this activity, inefficiency creates greater collaboration effectiveness.

Team and interdisciplinary instruction should also be encouraged. Scott recommends, “Having a philosophy professor teach some math, and math professor teach some philosophy.”¹⁹⁰ Coaches should help teach anatomy. Commanders should be at team practices, and so on.¹⁹¹ Debriefed properly, these experiences will create collaborative spirit and “yield great critical and systems thinking educational opportunities.”¹⁹²

Development Focused

Everything at USAFA should be united around developing leaders of character. There are many practices that can be changed to develop the identified characteristics in cadets.

1. Mentorship, Debriefing, and Personal Reflection

What Gap this Recommendation Addresses: Structural gap of cadets being task saturated and not fully engaged or thriving and structural gap of needing emotionally developed cadets

What Characteristics it will Help Build: Mentorship and feedback skillsets, emotional awareness skillsets, and reflection and systems thinking attributes

Why Address this Issue: Mediated reflection should be built in the cadet’s schedule: time for cadets to purposefully ponder their development, to communally question concepts and struggles, and to devise new ways of interacting with the curriculum in the future.¹⁹³ This reflection time will cultivate values, make more thoughtful leaders, and build critical thinking skills and should be augmented with mentor relationships.

For Example: USAFA should provide each cadet with a mentor who can help guide them through their development and force them to think about their experiences. These mentors can be instructors, coaches, AOCs, or even officers from other local bases around USAFA. USAFA should provide a list of potential mentors to cadets for them to choose.

Reflection time can involve a journal that provides reflection questions. To ensure it is taken seriously, “this journal should be part of the grading criteria,” much like what is done in honor remediation.¹⁹⁴ These entries should be based on personal experiences and contain “the student’s initial response, the student’s analysis using the elements of reasoning and applicable intellectual standards and resulting lessons learned.”¹⁹⁵

¹⁹⁰ Scott, “Transformation at the United States Air Force Academy: Producing Critical and Systems Thinkers for the Complexity of the 21st Century Military,” 26.

¹⁹¹ Interviewee #51, Phone Interview, November 25, 2019.

¹⁹² Scott, “Transformation at the United States Air Force Academy: Producing Critical and Systems Thinkers for the Complexity of the 21st Century Military,” 26.

¹⁹³ Scott, 17.

¹⁹⁴ Scott, 17.

¹⁹⁵ Scott, 17.

2. Change the Procedures-based Disciplinary System.

What Gap this Recommendation Addresses:

The structural gap of wanting virtue but focusing on compliance and structural gap of having fearful cadets but wanting experimentation

What Characteristics it will Help Build:

Risk taking, challenging assumption, systems thinking, and adaptive and agile attributes

Why Address this Issue: The strict punishments in the system incentivize hiding and disincentivize learning.¹⁹⁶ If the cadets are too scared about punishments, class ranking, and their future, virtue will not be developed and system weaknesses cannot be identified.

To incentivize a shift from procedure-based performance, USAFA should also “replace the [MPA] system with one that identifies, develops, and rewards adaptability, creativity, entrepreneurial behavior, and prudent risk-taking.”¹⁹⁷ While marching performance, SAMI scores, and uniform inspections have value in teaching self-discipline, and while events like basic training are important for the resiliency, toughness, and grit they develop, USAFA over-relies on them. Overreliance “reduces opportunities... for overall leadership development and growth.”¹⁹⁸ By putting cadets in survival mode too often for extended periods of time, “the result is often cynicism, apathy, and disengagement.”¹⁹⁹ A shift from a purely survival environment to an environment that also provides autonomy, competence, and

relatedness is key. The result will be cadets with more energy, more desire to learn, increasing capabilities, and reduced burnout.²⁰⁰ This environment will enable cadets to learn how to be adaptive on behalf of the United States rather than adaptive for personal survival and promotion.²⁰¹

Additionally, compliance requirements on cadets should be relaxed. As Wong shows, the more rules and requirements, the more everyone is being forced “to make their own determination on what they want to lie about. Because we’re all setting a different standard and because we can’t talk about it, we’re obviously going to have the potential for the guys who take it too far.”²⁰² This environment degrades values and does not promote experimentation and prudent risk taking.²⁰³

For Example: The disciplinary system should be a development system. Focus should be on identifying situations where cadets made mistakes and then mentoring cadets to become more virtuous. “[USAFA] should replace the fragmented issue-by-issue approach with a coherent values-centered strategy that emphasizes the core values and the concept of honor and de-emphasizes legalistic and procedural aspects of administering the honor code” and other rules.²⁰⁴ Cadets are still responsible to the law, but leadership mistakes, small to medium errors, and honor violations should become learning opportunities and opportunities to expose failures in the system, at least on the first handful of occurrences.

¹⁹⁶ Interviewee #23, Phone Interview.

¹⁹⁷ Richardson and John B., “Real Leadership and the U.S. Army,” 3.

¹⁹⁸ Davis et al., “Thriving at the U.S. Air Force Academy,” 81.

¹⁹⁹ Davis et al., 81.

²⁰⁰ Davis et al., 83.

²⁰¹ “A Leader Development Strategy for an Expeditionary Army.”

²⁰² Wong and Gerras, “Lying to Ourselves,” 25.

²⁰³ Eric Schmidt, “Statement of Dr. Eric Schmidt to House Armed Services Committee” (2018).

²⁰⁴ Josephson, “Report to the United States Air Force Academy.”

Eisenhardt and Sull suggest, creating some decision rules, “things the organization stands for...that will guide your decisions.”²⁰⁵ ²⁰⁶ Ensure these guidelines are followed when making decisions or changes, then “let people decide on the fly in the field what they think makes sense given what they see. They’re never to violate the basic rules, but they have a lot of flexibility to actually decide from moment to moment.”²⁰⁷ This way leaders can provide cadets with a better lens “to anticipate and discern risks and opportunities” by breaking down each decision into these parts. After analyzing the situation, keep options within the decision rules set by USAFA and let cadets decide how to proceed.²⁰⁸ For optimal results, USAFA needs to ensure that debriefing structures and processes, to capture lessons from cadet choices are robust.

3. Less Focus on Individual Evaluation, More Team-based Metrics

What Gap this Recommendation Addresses:
The curriculum gap focusing of solely on the individual and the curriculum gap of needing more inclusive cadets

What Characteristics it will Help Build:
Collaboration and team skills, situational awareness, and inclusiveness and respect

Why Address this Issue: Cadets need to be incentivized to work on and with teams to develop as leaders.²⁰⁹

For Example: Much like the 360-degree feedback needed between Permanent Party and cadets, cadets need 360-degree feedback

²⁰⁵ Donald N. Sull and Kathleen M. Eisenhardt, *Simple Rules: How to Thrive in a Complex World* (Boston: Houghton Mifflin Harcourt, 2015), 49.

²⁰⁶ Sullivan, “Embracing Complexity.”

²⁰⁷ Sullivan.

²⁰⁸ Sawtelle, *Resilient Effective Adaptable Leadership*, 13.

with other cadets. Richardson suggests the initiation of this 360-degree feedback to “identify bad (counterfeit) leaders and develop all leaders in the spirit of the professional military ethic (PME).”²¹⁰

Questions on feedback forms should be direct about how well each member creates healthy team environments and displays adaptive characteristics. For proper results, cadets should compare team members to each other in different categories. Additionally, studies show the effectiveness of “ratings made with response scales that range from ‘too little’ to ‘too much’” and allows for “[discrimination] among different dimensions of performance.”²¹¹ Improvement over time should also be considered.

USAFA can also leverage some of its current resources to achieve more team focus. For example, cadets should have more exposure to the Leadership Readiness Course (LRC) and the Ropes Course more than just once in their cadet career.²¹²

4. Personality Testing

What Gap this Recommendation Addresses:
Structural gap of wanting virtue development

What Characteristics it will Help Build:
Mentorship and feedback skillsets, emotional/situational awareness skillsets, reflection attributes, and strong character development

Why Address this Issue: Personality is a key part of leadership, emotional awareness, and what behaviors are expressed when stress

²⁰⁹ Jeffrey T Polzer, “Module Note—Leading Teams Note,” n.d., 1.

²¹⁰ Richardson and John B., “Real Leadership and the U.S. Army,” 3.

²¹¹ Ones et al., *The Sage Handbook of Industrial, Work & Organizational Psychology*, 2e, V2, 280.

²¹² Interviewee #29, Phone Interview.

hits.²¹³ Additionally, Gordon Curphy argues that only about 25% of people actually benefit from leadership development, the others are either unwilling, unable, or use the development for selfish gain.²¹⁴

For Example: USAFA might consider subjecting applicants to personality tests before offering admission. USAFA should strengthen its efforts to ensure it accepts cadets who can be the best leaders for the Air Force and benefit most from the experience.

Tests should be given regardless. Because young adult personalities are still changing, the results will also allow cadets and their supervisors/mentors to better understand their individual needs and how they need to be developed.²¹⁵

5. More Focus on Strategy and the Joint Environment and History and Humanities.

What Gap this Recommendation Addresses: Curriculum gap of lack of focus on joint environment and curriculum gap of not having inclusive cadets

What Characteristics it will Help Build: Knowledge of strategy and high-level problems, History and Humanities, systems thinking, inclusiveness and respect

Why Address this Issue: USAFA should focus on the joint/multi-domain environment

so that the Air Force commissions officers with the working understanding they will need moving forward. Cadets “need to think more jointly earlier.”²¹⁶ Additionally, knowledge in History and Humanities give officers better understanding of future problems.

“The focus should not be on specific technical skills but on the capabilities and limitations of technology to enable Air Force officers to make educated judgments on the possible implications of future military capabilities and threats.”²¹⁷ While it is difficult to teach cadets both the technical skills normal in undergraduate programs as well as giving them skills to become strategic thinkers, the difficulty does not outweigh the imperative. Until now, we have relied on officers to become strategic thinkers when their job absolutely requires it, but now, this skill is so necessary that it must be developed at the commissioning source alongside technical knowledge. The Air Force has begun to take steps to address this gap in strategic and joint knowledge by changing the promotion system to Brigadier General, but this in no way fully alleviates or addresses the root of the issue—officers are not taught early-on how to be strategic thinkers.²¹⁸

For Example: This education should be enhanced with simulations or war games from Day One.^{219 220} These war games will

²¹³ “The Dark Side,” Hogan Assessments, accessed February 10, 2020,

<https://www.hoganassessments.com/the-dark-side>.

²¹⁴ Robert B. Kaiser and Gordy Curphy, “Leadership Development: The Failure of an Industry and the Opportunity for Consulting Psychologists.,” *Consulting Psychology Journal: Practice and Research* 65, no. 4 (2013): 294–302,

<https://doi.org/10.1037/a0035460>.

²¹⁵ Kaiser and Brothers, “Raising the Bar in Leadership Development,” 18.

²¹⁶ Interviewee #40, Phone Interview, November 18, 2019.

²¹⁷ Pearse, “Officer Education,” 44.

²¹⁸ Stephen Losey, “Air Force to Drop Below-the-Zone Promotions for Officers,” *Air Force Times*, December 11, 2019, <https://www.airforcetimes.com/news/your-air-force/2019/12/09/air-force-to-drop-below-the-zone-promotions-for-officers/>.

²¹⁹ Interviewee #35, Phone Interview.

²²⁰ “Charting the Future of Education for the Navy-Marine Corps Team.”

allow cadets to participate in “decision-making exercises” which will “build future leader adaptability skills.”²²¹ It is important to make these war games effective training exercises and not simply another task to accomplish. This is an excellent example where providing consistent and clear messaging about the purpose would be beneficial. Additionally, the development of these war games needs to constitute significant effort to construct. Leverage AOC, coach, and professor knowledge on war games and adapt them to USAFA contexts.

Studies in History and Humanities should be increased with an additional focus on future studies to “visualize potential futures.”²²² This learning could be enhanced by bringing past graduates back to talk about some of the big picture problems they are handling every day in their current jobs.²²³

Additionally, exposure to IT skill development, acquisitions processes, and industry best practice should increase. This is an objective of the new Institute for Future Conflict at USAFA. The combined focus on these skills will give cadets a better strategic vision on which their future decisions will be based.

6. Case Study-based Leadership Development²²⁴

What Gap this Recommendation Addresses:
Curriculum gap of having limited formal authority positions for cadets

What Characteristics it will Help Build:
Context dependent on individual case study

but can expect strong character to be developed as well as the other knowledge, skillsets, and attributes

Why Address this Issue: Not all cadets can have high authority positions. However, the learning experiences and challenges faced by the cadets in these positions can be presented to groups of cadets as case studies. In this way, no matter a cadet’s formal role, they can begin to share the experiences of others and learn valuable lessons. Cadets will learn from cadets.

For Example: Present issues as case studies that have not yet been resolved, to problem solve in real time. This method will allow for more experiments to be done and more perspectives to be heard. Group case studies, if used in courses and field exercises and debriefed properly, would strengthen the collaborative problem-solving capacities of cadets. It will also greatly contribute to the desired cadet culture of empowerment, and will provide a medium for cadets to wrestle with their relationships with authority.

Figure 26 summarizes the gaps and recommendations sections. Start at the top with complex external environment. As you go down the left section you can see the locations of the gaps. On the right-hand side, the gaps have corresponding recommendations.

²²¹ Pearse, “Officer Education,” 44.

²²² Pearse, 44.

²²³ Interviewee #20, In-person Interview, November 18, 2019.

²²⁴ Heifetz, Developed from Personal Correspondence.

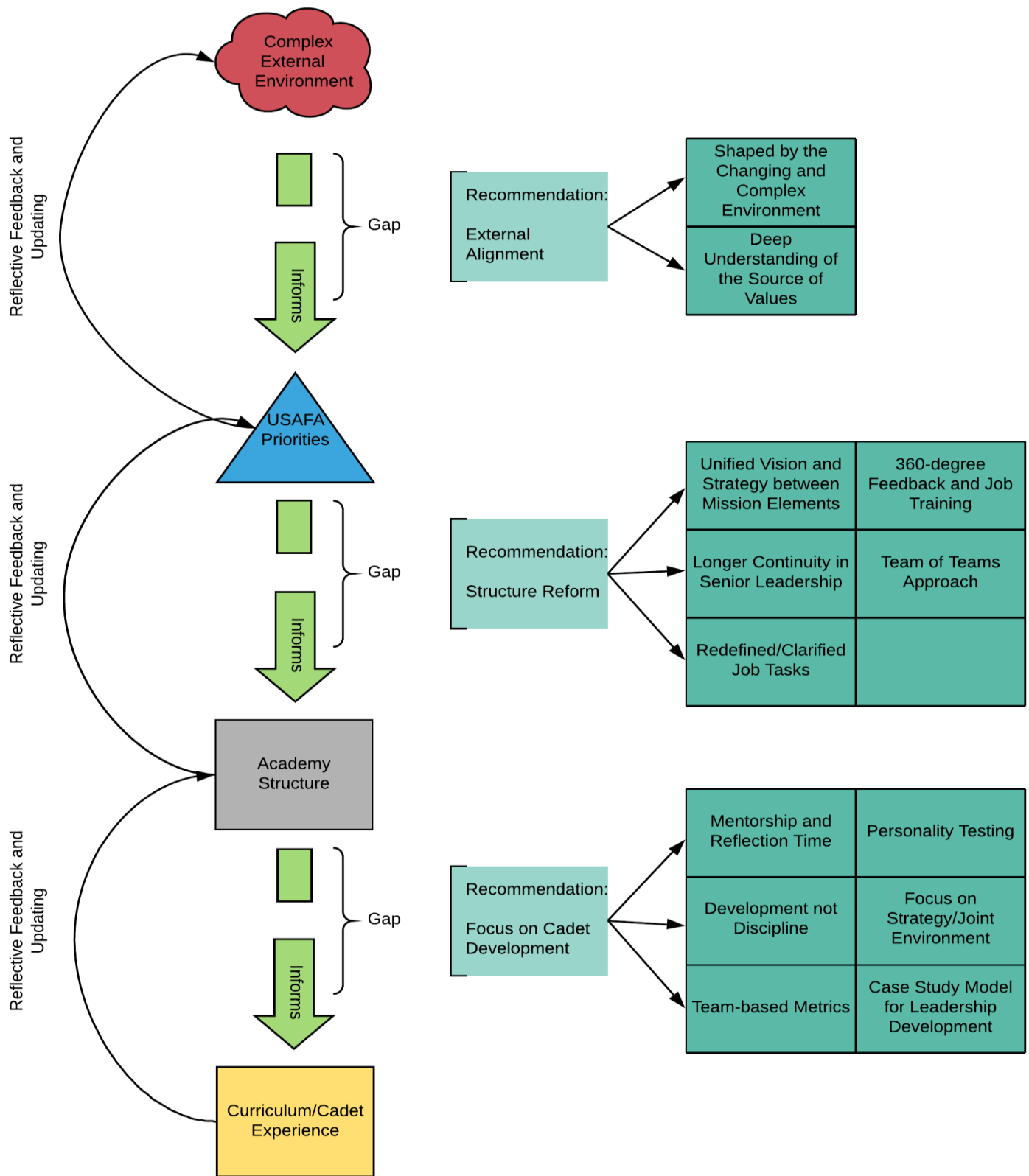


Figure 26. Road map for the gaps and recommendations sections. Start with the complex external environment at the top left and go down. Gaps are on the left, recommendations on the right. The cadet's experience is controlled by a structure that is shaped by USAFA. The priorities should be shaped by the realities in the complex environment where cadets will lead.

CHANGE AND FEASIBILITY

Many, if not all, of these recommendations have been made before. To implement the recommended changes, it would take a massive overhaul of USAFA. This analysis calls for new external integration, new structure, and new development methods. The changes will significantly strain USAFA and the leaders trying to make it happen. While the change management of these recommendations are the topic of a separate analysis, this section will describe my initial thoughts on making this change a reality.

Overall, I recommend hiring a change management professional to guide this process.

As time passes, as our enemies become greater threats, as technology advances, officers are still trained in ways quite similar to the ways they were trained before going to Vietnam.²²⁵ The right people, those who have the power to make the changes, need to see the urgency for which the complex environment calls. Officers must be adaptive leaders when they first step out in this environment, not after years of experience learning all the bad habits that they must shed. The beauty of these changes is that cadets will be provided the environment to learn how to be adaptive, learn how to work together on teams, and analyze the system.

They will be the ones to identify the changes USAFA needs to make. However, this means leadership will have to become more flexible, and this is the scariest part: They will not “have the same kind of control that traditional leadership is used to.”²²⁶ However, “What you don’t realize until you [let go] is that you may, in fact, have more control—but in a different fashion.”²²⁷

Admittedly, the changes proposed are vast and difficult. Thus, a methodical strategy for implementing this change must be considered. As General Martin said, “most strategies fail in their execution.”²²⁸ USAFA needs a change management plan. Equally important is understanding the magnitude of this change and visualizing the amount of effort necessary. It is imperative not to doubt and slowdown in the middle of the change.

While some might believe that the change is too daunting, and perhaps needs to be delayed so the need for it can permeate all levels of the institution, many of these changes continue to be delayed (at least since 1965). Necessary changes continue to pile up. There is no time to wait. The world is not waiting. It has already changed and continues to do so. Now, it is USAFA’s turn.

²²⁵ Interviewee #1, Phone Interview.

²²⁶ McChrystal et al., *Team of Teams*, 192.

²²⁷ McChrystal et al., 192.

²²⁸ Martin, “USAFA Core Curriculum External Review.”

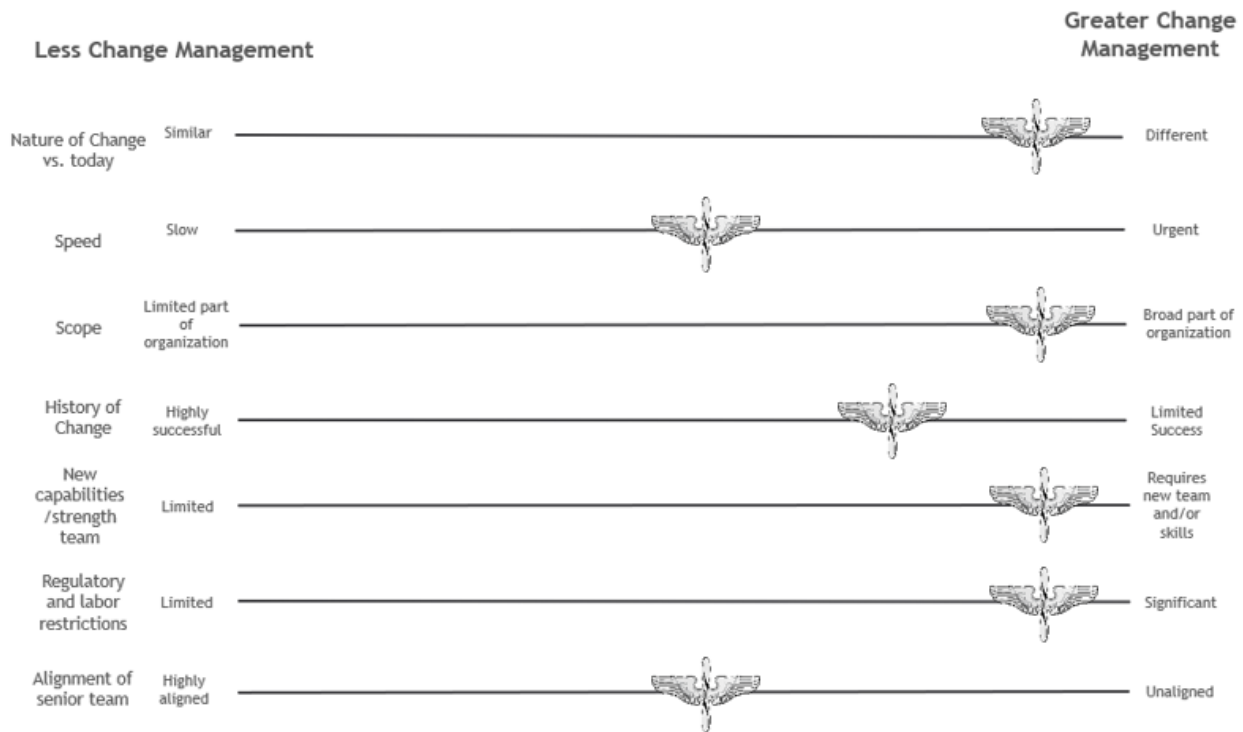


Figure 27. Mapping the Difficulty of the Change in Order to Understand the Amount of Necessary Change Management

Figure 27 highlights the need for greater change management efforts in order to be successful.²²⁹ On a more positive note, the change may be easier in key ways because of the necessarily extended timeline and the increasing alignment of senior leadership. Unfortunately, because the change is very different from the past and comprises the entire Academy. It will require different skills and new teams to form, and leadership that can navigate governmental constraints that at times can seem to engulf USAFA. This scale of change is not natural to USAFA or to any government organizations. The complex “web of constraints” that surrounds USAFA almost guarantee to “rouse the ire of some important constituency.”²³⁰ These difficulties are why USAFA should consider hiring a change management professional to implement with this project.

For any change, it is important to have an idea of the steps involved. In the *Harvard Business Review*, John Kotter (full table in Appendix F) explains that the change effort begins by getting the institution to understand the urgency for change.²³¹ They need to understand the environment officers are going into and the characteristics officers will need to meet those challenges. The most important person to understand this need is the Superintendent, given that the change will be directed by him. As there will be a new Superintendent replacing the current one, Lieutenant General Jay Silveria, shortly, the change must be passed on to this new leader. Awareness of the need for change should be spread to leadership, especially permanent professors, and down to cadets. Everyone should be involved in this process of understanding the changing needs. The objective, then, Kotter explains, is to build a guiding coalition outside of the normal hierarchy of

²²⁹ Grant Freeland, “MLD 632 Transforming Public Interest Organizations: Lecture 4, Culture Purpose and Vision” (Harvard Kennedy School, Fall 2019).

²³⁰ Wilson, *Bureaucracy*, 69.

²³¹ John P Kotter, “Why Transformation Efforts Fail,” *Harvard Business Review*, 2006, 11.

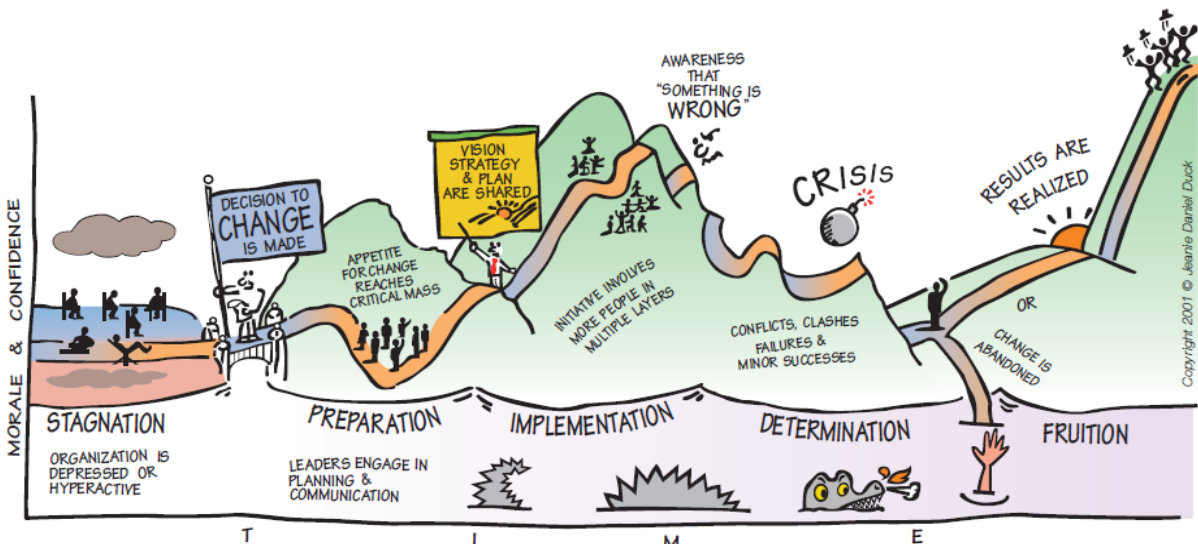


Figure 28. *The Road to Successful Change is Difficult and Volatile (Not Depicted is the Iterative Nature of the Change)*

the organization—in order to provide it with cover. The coalition needs sufficient power to start the changes, but it also needs to be composed of diverse portions of the organization so that many viewpoints are heard. I suggest that cadets be hyper-involved in this coalition. For the change to take hold, the cadets must own it. Leading this change will already begin to provide cadets with valuable lessons on becoming adaptive leaders.

This coalition's first task is to communicate the vision of change that they have for USAFA. Then, they must remove structures and processes that inhibit acting on this vision. Then the coalition must prepare for some short-term wins, build off of these wins to make more change, and then institutionalize the changes. This coalition, led by the Superintendent, must be committed to see this change through and to lead through the entire process, not only in words, but through actions. The examples that leadership sends are what will permit the change to take hold.²³² Figure 28 shows the

varying degrees of morale and confidence of the organization during a change process.²³³

Near Term (first 12 months)

Change starts in the short term, and for massive change to take place USAFA will need some short-term wins. Some easy wins to consider:

- Cadet empowerment, which starts already with forming the change coalition.
- Cutting rules and simplifying approval processes, again which starts in the change strategy phase.
- Focusing on early collaboration and integration projects between the mission elements, and start changing the employee incentive structures to emphasize collaboration.
- Consolidating and simplifying leadership development frameworks.
- Placing developing leaders of character for the future environment at the forefront of the mission and job

²³² Leonard Wong, "Op-Ed: Changing the Army's Culture of Cultural Change" (Strategic Studies Institute; US Army War College, May 12, 2014).

²³³ Jeanie Daniel Duck, *The Change Monster: The Human Forces That Fuel or Foil Corporate Transformation and Change*, 1st paperback ed (New York: Three Rivers Press, 2001).

descriptions for all members of USAFA.

- Implementing debriefing and 360-degree feedback programs to begin measuring progress.
- Beginning to screen new applicants or cadets for personality traits and critical thinking ability and using this to implement new mentorship initiatives.

Medium Term (2-4 years)

The medium term is all about using momentum obtained in the short-term and beginning to launch the larger efforts. Policies and people undermining the vision of change should be dealt with. New structures that beget the desired outcomes should be put in place. It's important that the Superintendent

and the senior leaders continue to support and push the change forward with tenacity.

Figure 29 shows how programs should be inserted into the organization over the medium and long-term.²⁹⁴

Long Term (5-7 years)

In the long-term, the structures need to begin to be institutionalized. They are no longer initiatives; they are the new norm. Leadership at this point has changed hands, meaning the change management will be in the hands of a second, new Superintendent. It will take coordination with the Secretary of the Air Force and the Chief of Staff of the Air Force to ensure that the new Superintendent will lead and embrace the changes happening and not attempt to reverse them.

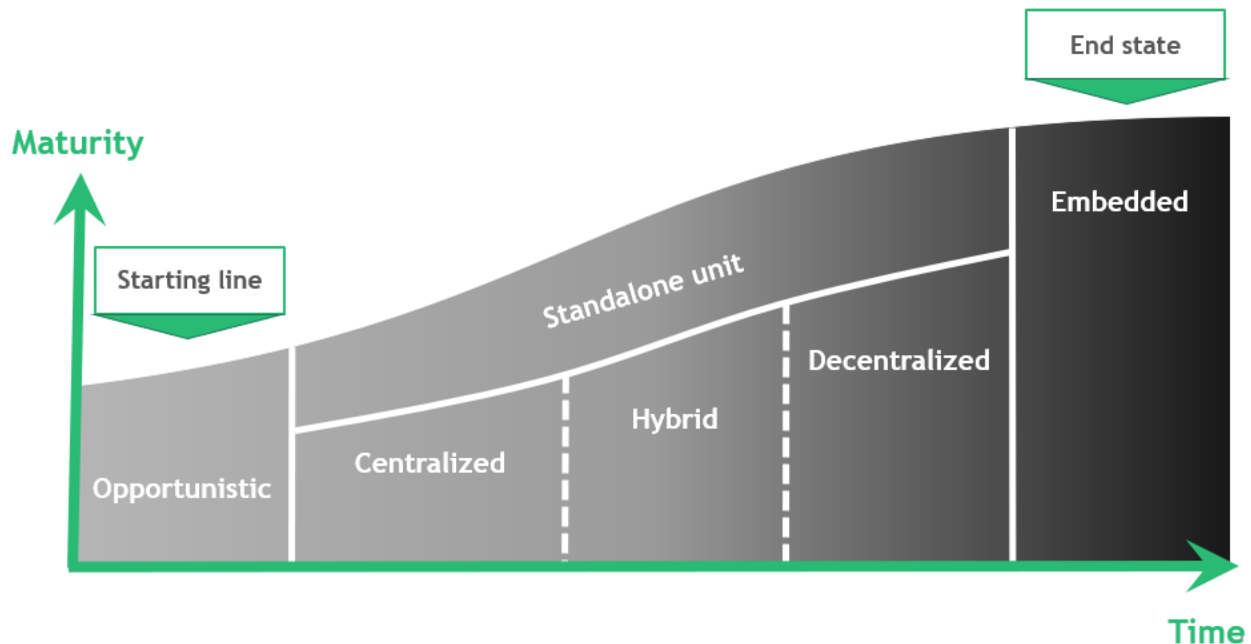


Figure 29. Inserting New Procedures and Structures into Organizations

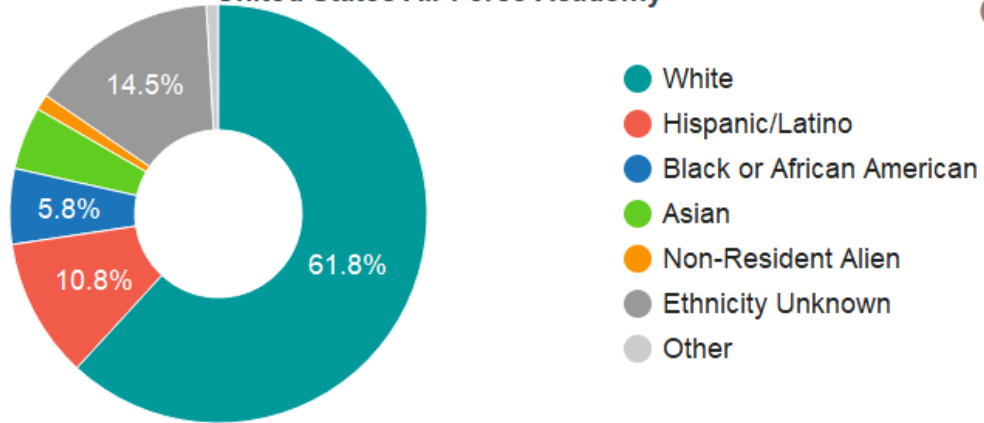
²⁹⁴ Grant Freeland, “MLD 632 Transforming Public Interest Organizations: Lecture 8, Work and Technology” (Harvard Kennedy School, Fall 2019).

CONCLUSION

USAF prides itself in commissioning high quality officers into the Air Force every year. It is important that the characteristics of these officers complement the needs of the environment into which they commission. Currently, there are significant gaps between what USAFA gives its cadets and what they need. These gaps need to be addressed in order to continue producing leaders of character who are relevant to the fight. Right now, this imperative means its officers need

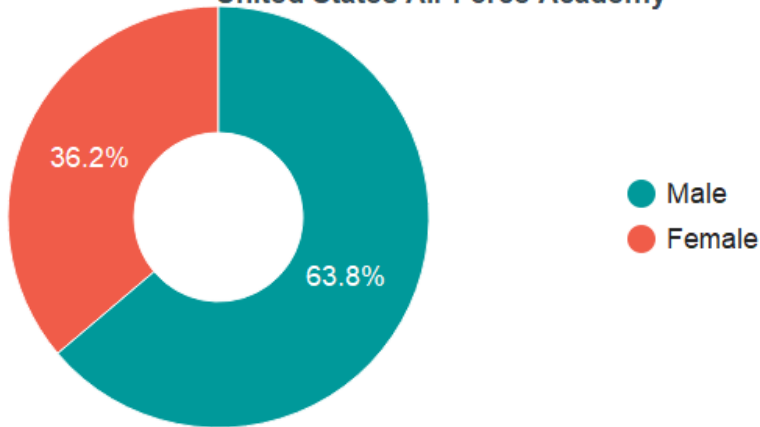
to continue being leaders of character, character is priceless in today's environment. To fully embody both "leader" and "character," officers must be equipped with knowledge, team-based experience, and adaptive characteristics. It is not that USAFA is deficient in producing officers, it is that the environment requires more from the officers. The complex environment can no longer be ignored by training institutions.

Ethnic Diversity of Undergraduate Students at United States Air Force Academy



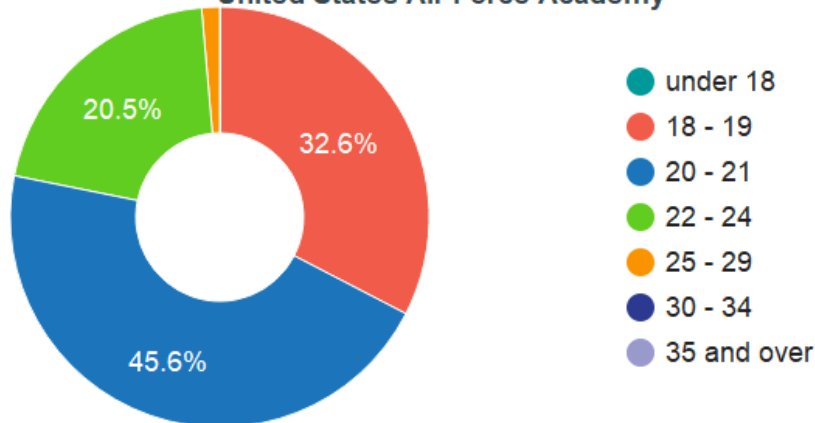
collegefactual.com

Male/Female Breakdown of Faculty at United States Air Force Academy



collegefactual.com

Age of Students at United States Air Force Academy



collegefactual.com ²³⁵

²³⁵ "How Diverse Is United States Air Force Academy?," College Factual, February 20, 2013, <https://www.collegefactual.com/colleges/united-states-air-force-academy/student-life/diversity/>.

APPENDIX B

Table of interviewees by rank. Not applicable category counts an SES civilian employee and an Air Force MSgt.

Rank	# of Interviewees
Second Lieutenant	1
First Lieutenant	0
Captain	7
Major	11
Lieutenant Colonel	8
Colonel	9
Brigadier General	5
Major General	3
Lieutenant General	4
General	2
N/A	2

Interview questions (first half of interviews):

1. What challenges do you see in the future for which officers in the Air Force will need to be prepared?
2. How will these be different as officers move up the ranks (and then give three or four levels, including the highest strategic levels)
3. Four-part question here: With what kind of knowledge, skills, and abilities do officers need to be equipped to meet these challenges? What kind of temperament? And what kind of values?
4. What methods is the Air Force currently using to prepare officers for these challenges?
5. What are any differences you see between Air Force Academy graduates and officers commissioned from other sources?
6. How well are officers equipped to recognize the bigger picture problems and engage in direction-setting deliberation with senior officers?
7. Do you think the Air Force has a “can do” culture? Why or why not?
8. How innovative, agile and open to change are officers?

Interview questions (second half of interviews):

1. What challenges do you see in the future for which officers in the Air Force will need to be prepared?
2. How will these be different as officers move up the ranks (if not specified in previous answer)?
3. Three-part question here: With what kind of knowledge, skills, and abilities do officers need to be equipped to meet these challenges? What kind of temperaments and attitudes? And what kind of values?
4. What methods is the Air Force currently using to prepare officers for these challenges?
5. Are there any gaps in leadership development throughout an officer's career?
6. Is critical thinking something that is being deliberately taught to officers? How about working on complex problems in a team setting?
7. How well are officers equipped to recognize the bigger picture problems and engage in direction-setting deliberation with senior officers?
8. Does the Air Force have a "can do" culture, if so, what is it doing to mitigate the potential pitfalls?
9. How innovative, agile and open to change are officers? Are they allowed to operate with certain levels of risk?

Survey results:

Recent Six Graduating Classes Survey Results

■ Strongly agree
 ■ Agree
 ■ Neither agree nor disagree
 ■ Disagree
 ■ Strongly disagree

The Cadet Wing (CW), the Dean of Faculty (DF), and the Athletic Director (AD) consistently gave me similar messaging and direction. They were in sync when it came to my development.



Offentimes, Permanent Party (AOCs, Coaches, Instructors, etc.) blamed senior leadership for problems, policies, or miscues.



I felt Permanent Party communicated their expectations, reasoning, and directions clearly with me.



The Academy gave me the opportunity to make decisions, take action, and learn from mistakes.



As a cadet, I felt my voice was heard and considered by senior leadership.



As a cadet, I felt my voice was heard and considered by Permanent Party (AOCs, Coaches, Instructors, etc.).



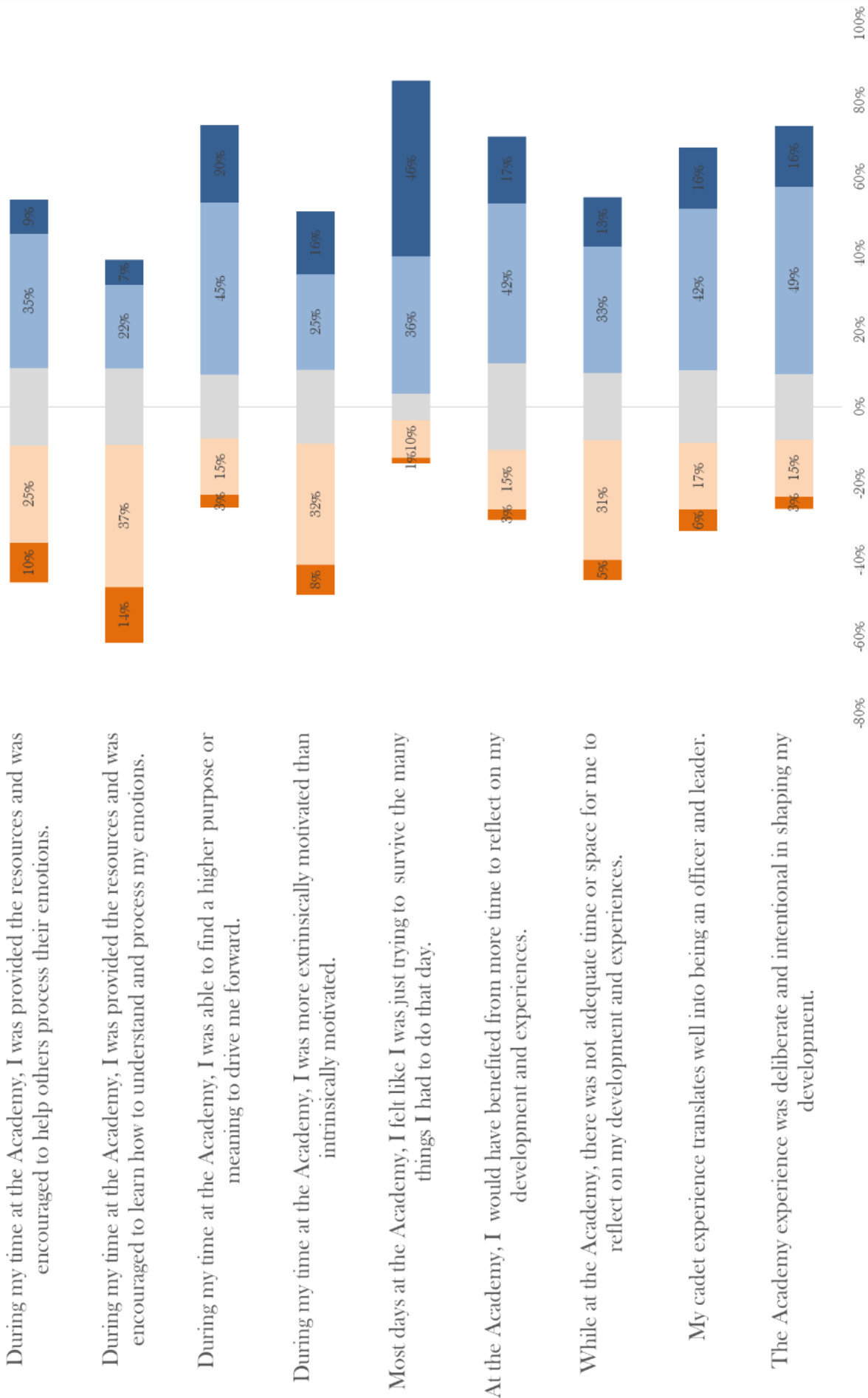
I felt that the institution valued me as a cadet (after all, cadets are the reason the Academy exists).



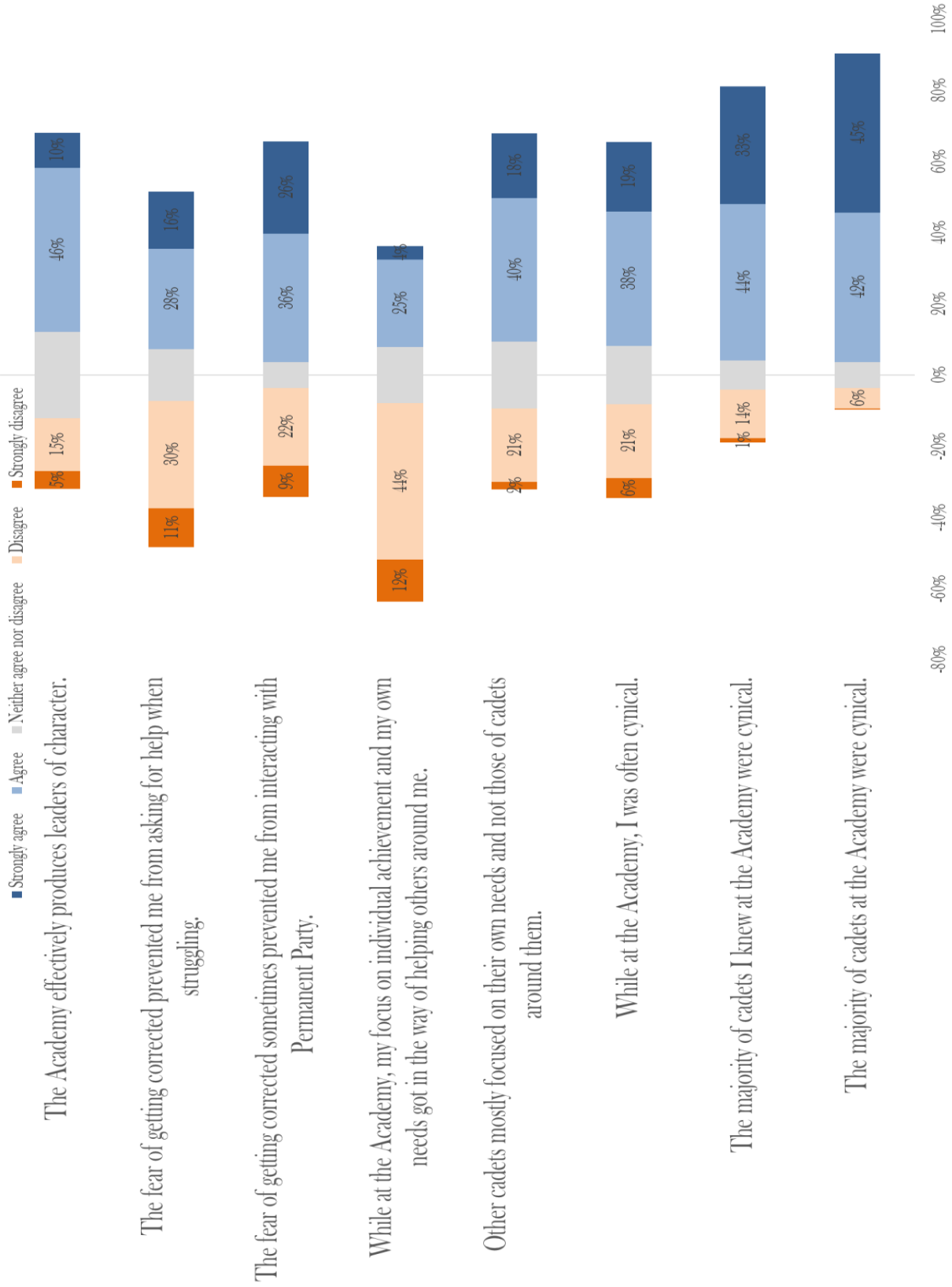
-80% -60% -40% -20% 0% 20% 40% 60% 80%

Recent Six Graduating Classes Survey Results

■ Strongly agree
 ■ Agree
 ■ Neither agree nor disagree
 ■ Disagree
 ■ Strongly disagree



Recent Six Graduating Classes Survey Results



Recent Six Graduating Classes Survey Results

■ Strongly agree
 ■ Agree
 ■ Neither agree nor disagree
 ■ Disagree
 ■ Strongly disagree

The fear of getting corrected prevented me from asking for help when struggling.



The fear of getting corrected sometimes prevented me from interacting with Permanent Party.



I trusted senior leadership to have my best interests in mind.



I trusted Permanent Party (AOCs, Coaches, Instructors, etc.) to have my best interests in mind.



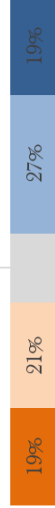
I trusted the cadets around me to have my best interests in mind.



At one point or another, I was afraid of having an informal clarification for something I did that violated the Honor code (that did not go to informal clarification).



While at the Academy, I lied, stole, or cheated (and was not found in violation by the Honor system).



While at the Academy, I knew cadets who on at least one occasion lied, stole, or cheated (and were not found in violation by the Honor system).



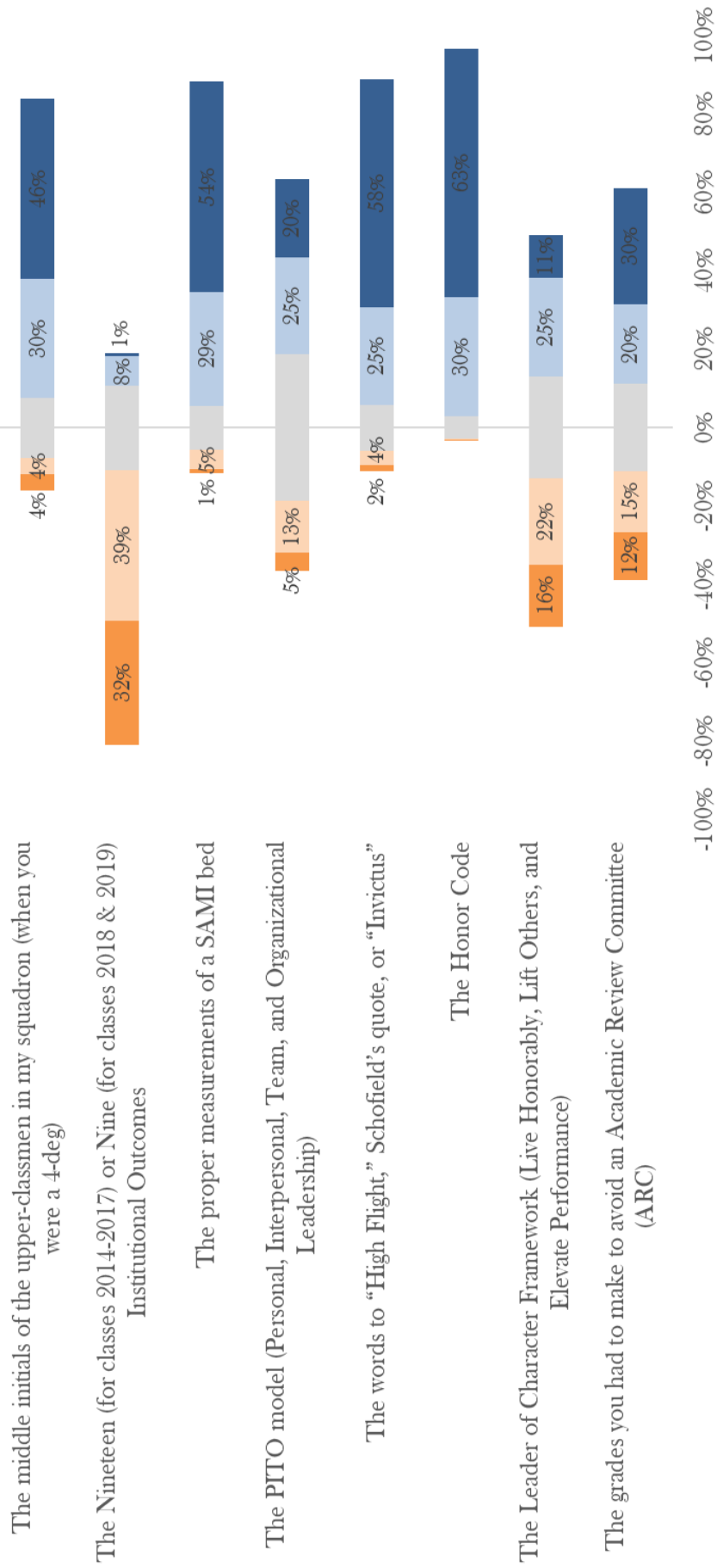
The majority of cadets on at least one occasion, lied, stole, or cheated (and were not found in violation by the Honor system).



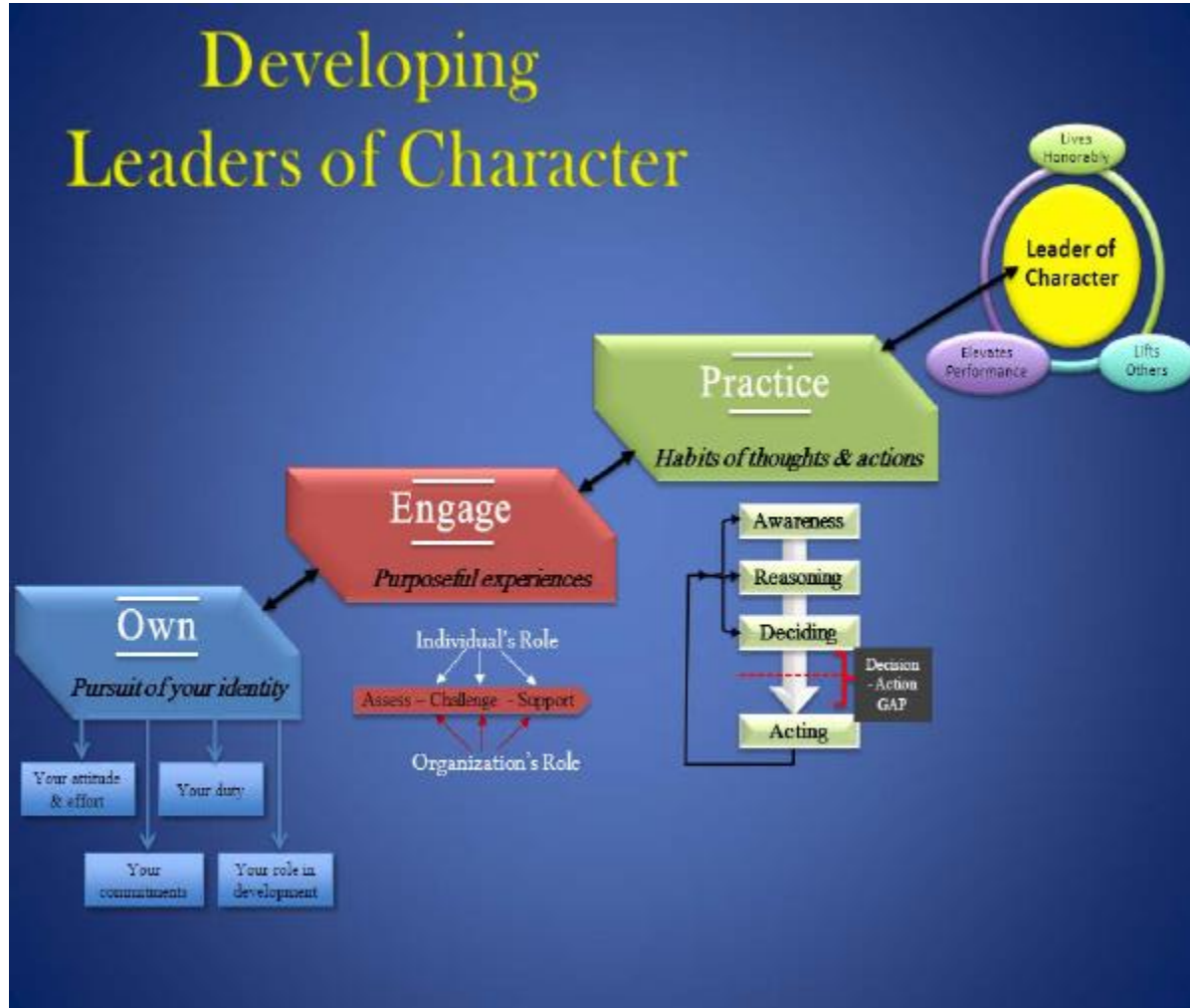
-80% -60% -40% -20% 0% 20% 40% 60% 80% 100%

Recent Six Graduating Classes Survey Results

■ Extremely familiar
 ■ Very familiar
 ■ Somewhat familiar
 ■ Not so familiar
 ■ Not at all familiar

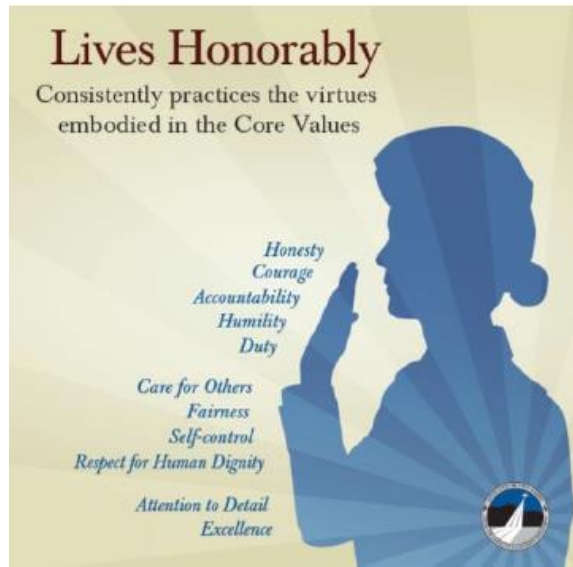


APPENDIX C

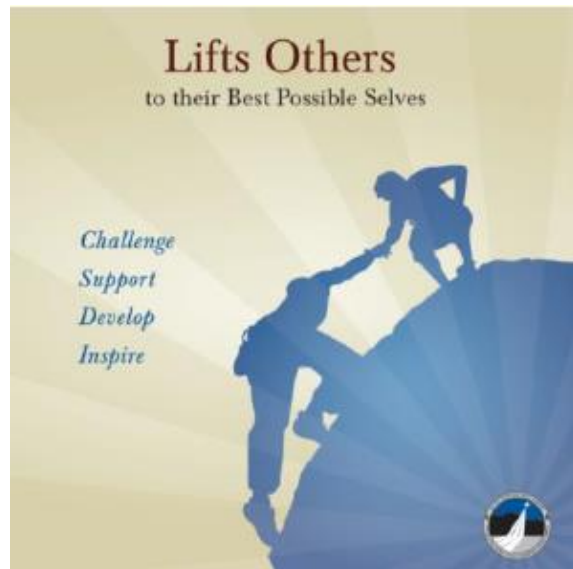


This framework defines a leader of character as someone who lives honorably, lifts others, and elevates performance. It also highlights three ways in which the institution believes cadets will become leaders of character: own, engage, and practice.

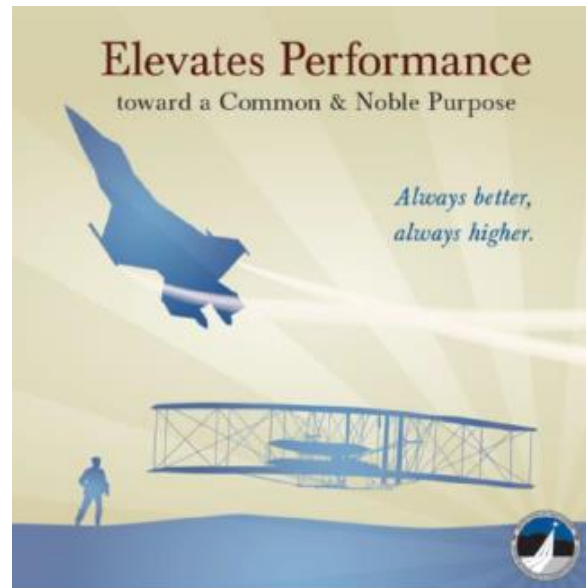
Living honorably is defined as living out the Air Force's core values and depicted in a graphic below:



Lifting others is defined as helping others be their best possible selves. Graphic below:



Elevating performance is defined as elevating the performance of the organization and transforming its current state towards a common and noble purpose. Graphic below:



Through the leader of character model, cadets are encouraged to own their role in their development, their attitudes and efforts, their duty, and their commitments. In engaging, cadets are supposed to interact with different members of the organization in order to assess their strengths and weaknesses, be challenged to better themselves, and engage with support to grow and learn through these purposeful experiences. Cadets are then supposed to put into practice their thoughts and actions to form habits. The ARDA (awareness, reasoning, decision, and action) model is a framework to practice these thoughts and actions. Cadets need to be aware of their situation, reason through it, decide how they will act, and then act. This model highlights the gap between deciding and acting that is caused by pressures or fear. This gap is overcome by character.²⁶⁵

In addition to the leader of character framework, there is the PITTO (personal, interpersonal, team, and organizational) model of development: pamphlet

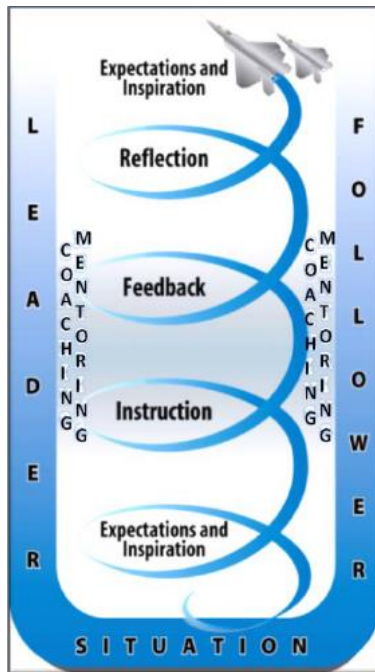
²⁶⁵ Center for Character and Leadership Development, "Developing Leaders of Character: At the United States Air Force Academy" (Internal Document, 2011).

United States Air Force Academy PITO Model



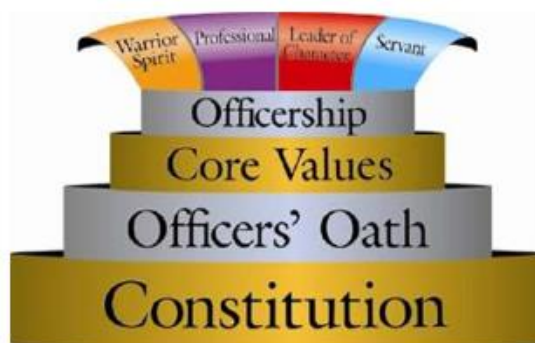
This model works in conjunction with each cadet’s journey through USAFA—learning personal leadership as a 4-degree (or freshman), interpersonal leadership as a 3-degree (or sophomore), team leadership as a 2-degree (or junior), and organizational leadership as a firstie (or senior). The end result expressed in this framework is also becoming a leader of character.

USAFA also has a leadership growth model:



This model represents the interactions between leaders and followers for any given situation through a four-step process. The leader provides expectations and inspiration to the follower, then instruction, feedback, and time to reflect. Mentoring and coaching happens throughout the process. This model is more of a tactical expression of how to develop cadets.

USAFA has a model for the foundation for understanding why the mission of USAFA is to develop leaders of character:

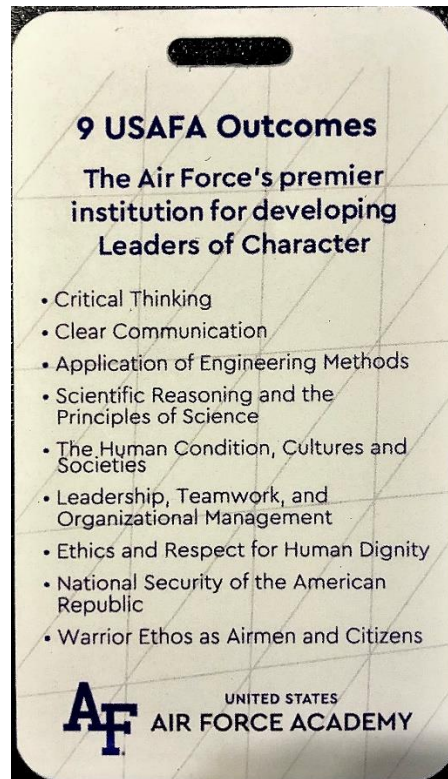


²⁷ Paul A. Price, "Genesis and Evolution of the United States Air Force Academy's Officer Development System:" (Fort Belvoir, VA: Defense Technical Information Center, April 15, 2004), 29, <https://doi.org/10.21236/ADA428315>.

²⁸ Center for Character and Leadership Development, "Officer Development System Pamphlet" (United States Air Force Academy Internal Pamphlet, July 2014).

This model places the US Constitution as the base to which each officer swears allegiance to in their Oath of Office. The core values are built on this oath and then principles of officership like warrior spirit, professionalism, being a leader of character, and serving the nation spring from the top of the model.

USAFA also boasts 9 institutional outcomes:



These outcomes have been changing over time. There used to be nineteen, but they were consolidated down to nine. These outcomes are defined as outcomes of leaders of character. When cadets become officers after 47 months at USAFA, they should exhibit these outcomes.

²⁹ "Outcomes," United States Air Force Academy, accessed February 4, 2020, <https://www.usafa.edu/academics/outcomes/>.

The Superintendent has also recently established four lines of effort (LOEs) for the organization:²⁴⁰



Developing leaders of character is one LOE, while the others focus on innovation, future conflict, and having a shared set of priorities as an organization.

Finally, USAFA’s outcomes are ultimately shaped by Air Force Doctrine. The Air Force has recently come out with new foundational competencies of its own:²⁴¹

Competency	Definition
Accountability	Demonstrates reliability and honesty; takes responsibility for the actions and behaviors of self and team
Teamwork	Collaborates effectively with others to achieve a common goal or complete a mission task
Develops People	Invests in others to maximize their contributions to the mission by inspiring and providing an environment of continual feedback and learning opportunities.
Communication	Effectively presents, promotes and prioritizes varied ideas and issues both verbally and non-verbally through active listening, clear messaging, and by tailoring information to the appropriate audience.

²⁴⁰ Interviewee #56, USAFA in-person Interview, January 9, 2020.

²⁴¹ “Air Force Institutional Competencies” (Obtained from AETC Lemay Institute, December 30, 2019).

Resource Management	Carefully and responsibly administrates resources placed under an Airman's control with the intent to maximize readiness and lethality and improve organizational performance.
Perseverance	Displays grit in accomplishment of difficult long-term goals. Works strenuously toward challenges; maintains effort and interest over years despite failure, adversity, and plateaus in progress.
Strategic Thinking	Considers and organizes activities and resources to achieve a desired goal; thinks on a large and small scale, long- and short-term
Decision Making	Makes well-informed, effective and timely decisions that weigh situational constraints, risks, and benefits.
Service Mindset	Desires to help or serve others to meet their needs; makes and focuses efforts to discover and meet others' needs.
Results Focused	Demonstrates concern for working well or for competing against a standard of excellence.
Flexibility	Adapts to and works with a variety of situations, individuals, or groups effectively.
Change Management	Adapts, helps others adapt, or implements change with the goal of ensuring unit goals are properly aligned to the desired end state.
Self-Control	Keeps emotions under control and restrains negative actions when under stress.
Creative Thinking	Develops new insights into new situations; questions conventional approaches; encourages new ideas and innovations.
Leadership	Intentionally takes a role as a leader of others.
Initiative	Does more than is required or expected to improve job results; takes action appropriately without prompting.
Precision	A concern for order, quality, and accuracy with an underlying drive to reduce uncertainty in the environment.
Analytical Thinking	Identifies problems; evaluates alternative perspectives / solutions; makes timely / effective recommendations; and identifies courses of action.
Information Seeking	Demonstrates an underlying curiosity; desires to know more about things, people, oneself, the mission or issues; an eager, aggressive learner.
Influence	Intends to persuade, convince, or impress others to elicit their support to make specific impacts or achieve particular effects on others.
Fosters Innovation	Builds a culture of behaviors and business practices that encourages, champions, and rewards creativity and informed risk taking; is open to change; and rapidly adapts to new conditions and technologies.
Resilience	Negotiates, manages, and adapts to significant sources of stress or trauma.

These outcomes can be seen in many of the nine institutional outcomes of USAFA but are not entirely represented. For example, the foundational competencies do not mention heritage, warrior ethos, or understanding of the human condition and cultures.

APPENDIX D²⁴²

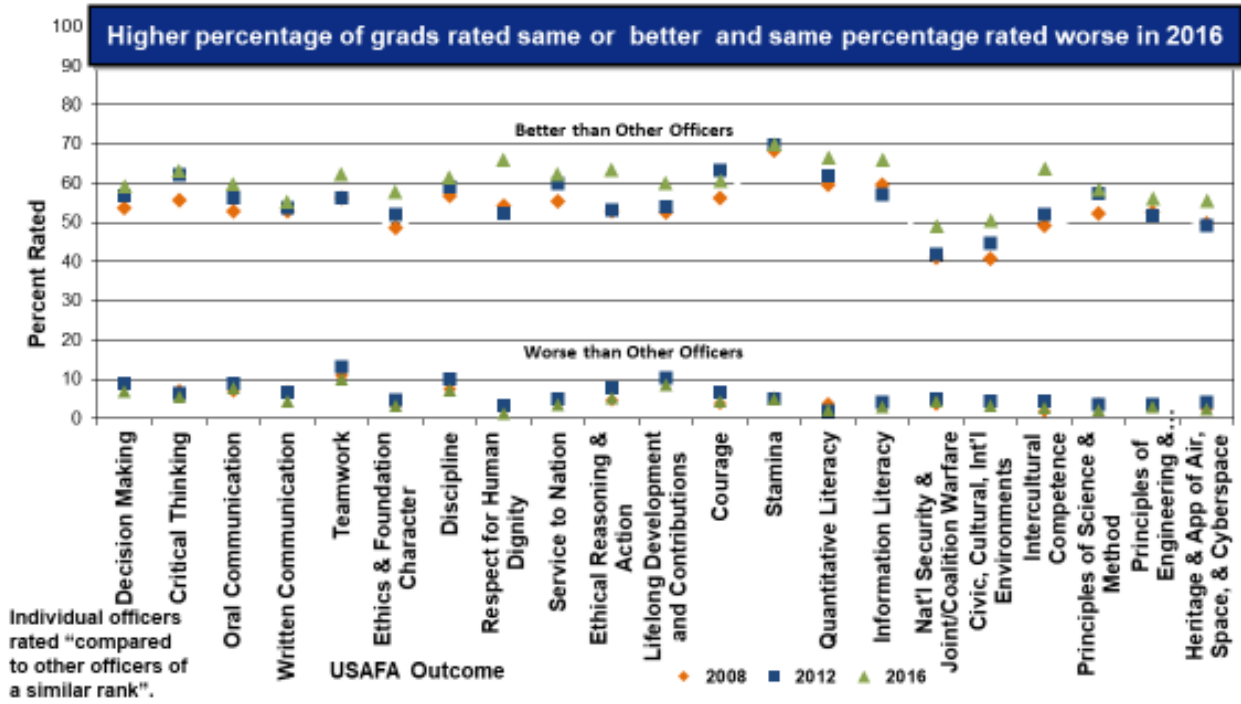
Failed Risk Response	Explanation
Risk Aversion	<p>Risk-averse leaders invest time and energy to avoid risk without weighing opportunity. Evading of risk is a simplistic response from a leader who has not examined all risk, is overwhelmed by new information, or is unfamiliar or uncomfortable with a particular situation, pace, or evolving context within which decisions must be made. Such leaders typically respond with a knee-jerk “no” or “you can’t do that” when approached by subordinates with new ideas or initiatives.</p> <p>To appease their own or their supervisor’s emotional distress with risk, leaders often adopt a “zero-defects” mentality. Prudent toleration of mistakes, failure, ambiguity, creativity, randomness, and bad luck are difficult, if not impossible, for risk-averse leaders. Former Defense Secretary William J. Perry once publicly stated that “demanding such a rigid standard produces timid leaders afraid to make tough decisions in a crisis, unwilling to take the risks necessary for success in military operations. This zero defects mindset creates conditions that will lead inevitably to failure.” Blanket risk aversion does not allow subordinates to focus on addressing current risks or addressing future opportunities. Risks exist in every decision; there is a danger in every moment of indecision. Risk-averse leaders feel emotionally better off by not “rocking the boat,” but their logic is flawed.</p>
Risk Denial	<p>“Risk denial” is a most expedient means to organize the complexities of risk because risk is simply disregarded. Risk denial is reflected in four common concepts: fatalistic inevitability—what’s supposed to be is what will happen, superstition—fortune favors the bold, naiveté, and emotional dissatisfaction with expected opportunities (not liking outcomes one thinks will happen).</p>
Risk Compensation	<p>Author John Adams illustrated this trap in his discussion of the invention of automobile seatbelts to prevent injury or death during accidents. The resulting behavior by many drivers was that they could drive faster and more recklessly because seatbelts mitigated the risk of harm. This sort of response is called “risk compensation” and is an illogical way to simplify decisions to assume greater risks. Mitigation of risk and real decreasing of risk are not necessarily in one-to-one proportionality; three seat-belts do not guarantee the safety of passengers going three times the speed limit.</p>
Risk Shift	<p>Shifts in how much risk one will assume may not be a result of calculated risks against objective and static criteria; in fact, they are usually rooted in deeply personal loyalties, values, and emotions. “Risk shift” occurs when external forces influence leaders to shift the perception of risk and often decrease the amount of risk the leader is willing to assume. Examples include changes in the immediate family such as a pregnant spouse or new baby; the possibility to death or injury to friends; or proximity to promotion, appointment, retirement, or other critical times deeply related to personal desires. Conversely, internal or emotionally driven shifts can cause a person to “show off” by increasing the amount of risk accepted given the perceived opportunities made possible when someone of significance is understood to be watching.</p>

²⁴²Adapted from: Sawtelle, *Resilient Effective Adaptable Leadership*, 23-25.

APPENDIX E



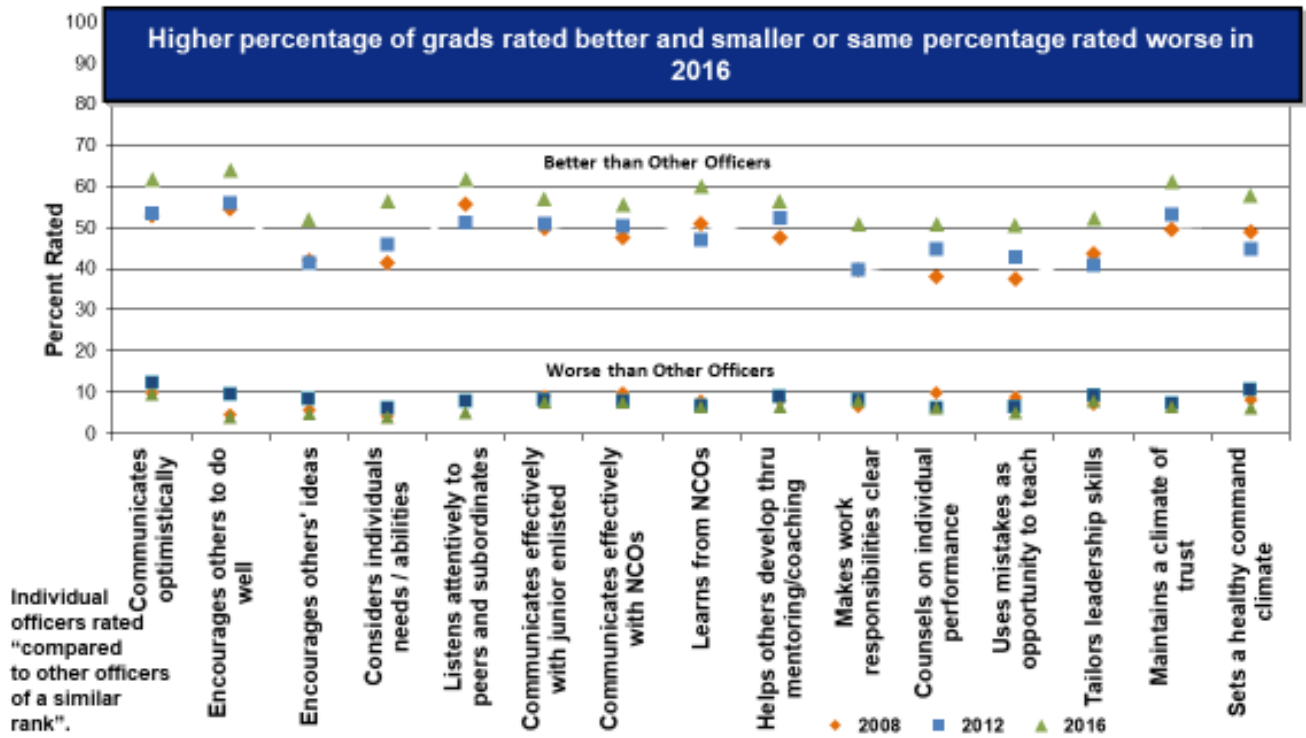
Supervisor Ratings on USAFA Outcomes 2008-2016



Integrity - Service - Excellence



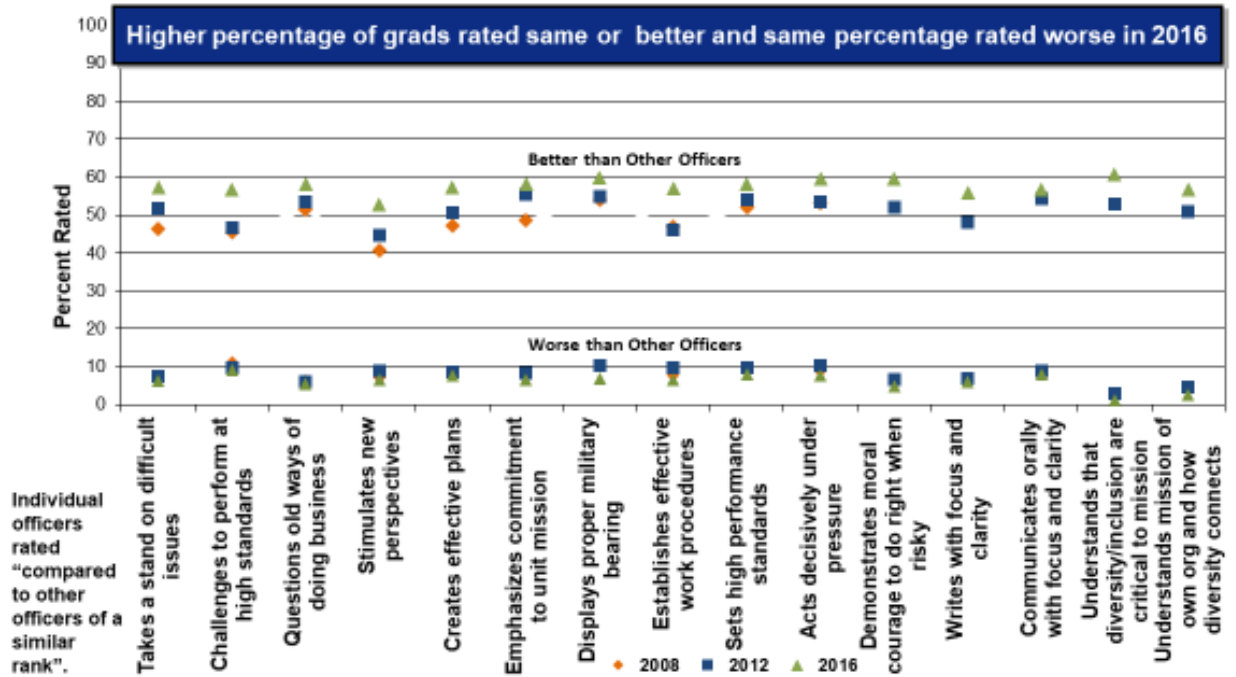
Supervisor Ratings on Interpersonal Leadership Behaviors 2008-2016



Integrity - Service - Excellence



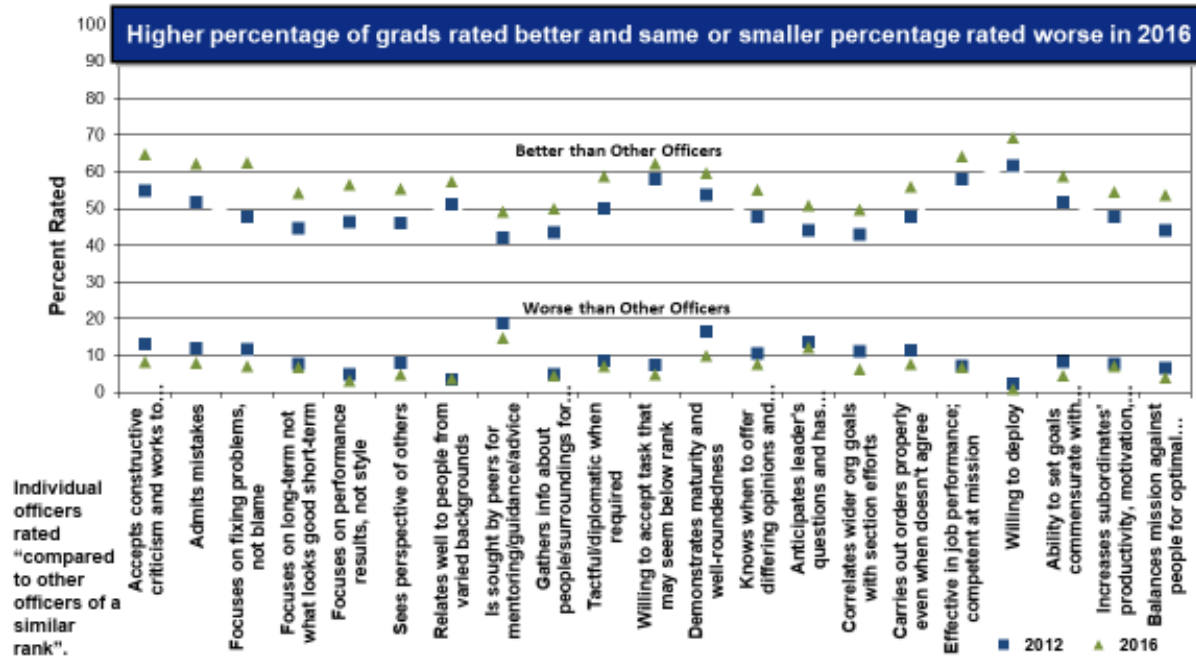
Supervisor Ratings on Mission-Oriented Leadership 2008-2016



Integrity - Service - Excellence



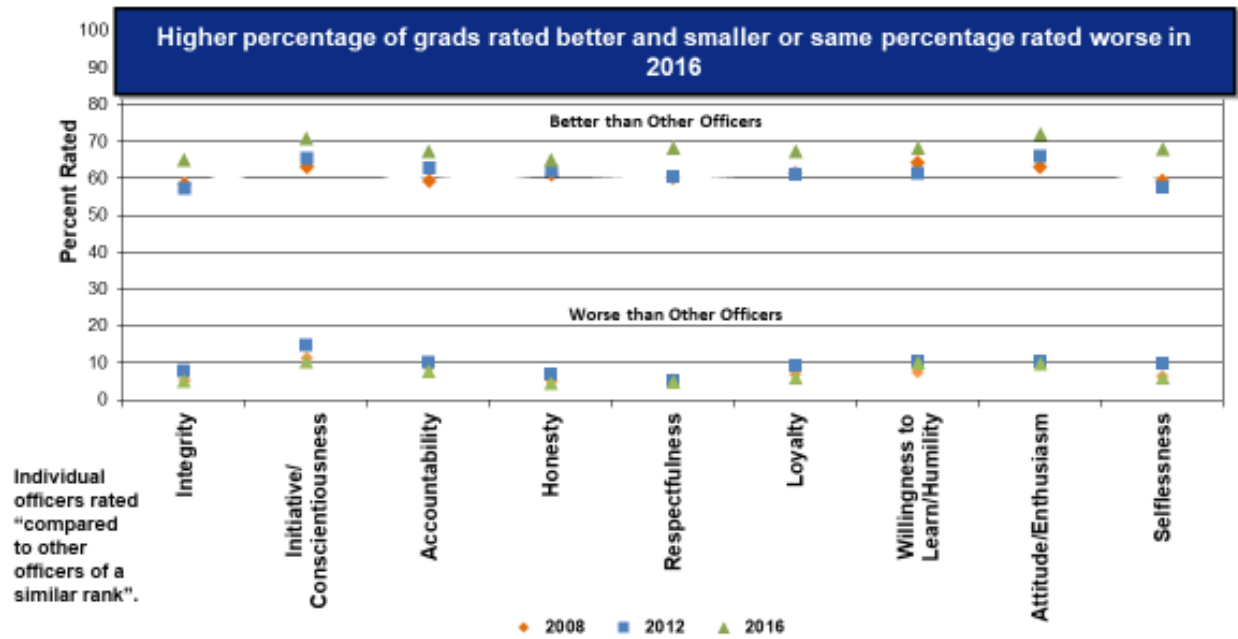
Supervisor Ratings on Supervisor Provided Leadership Behaviors



Integrity - Service - Excellence



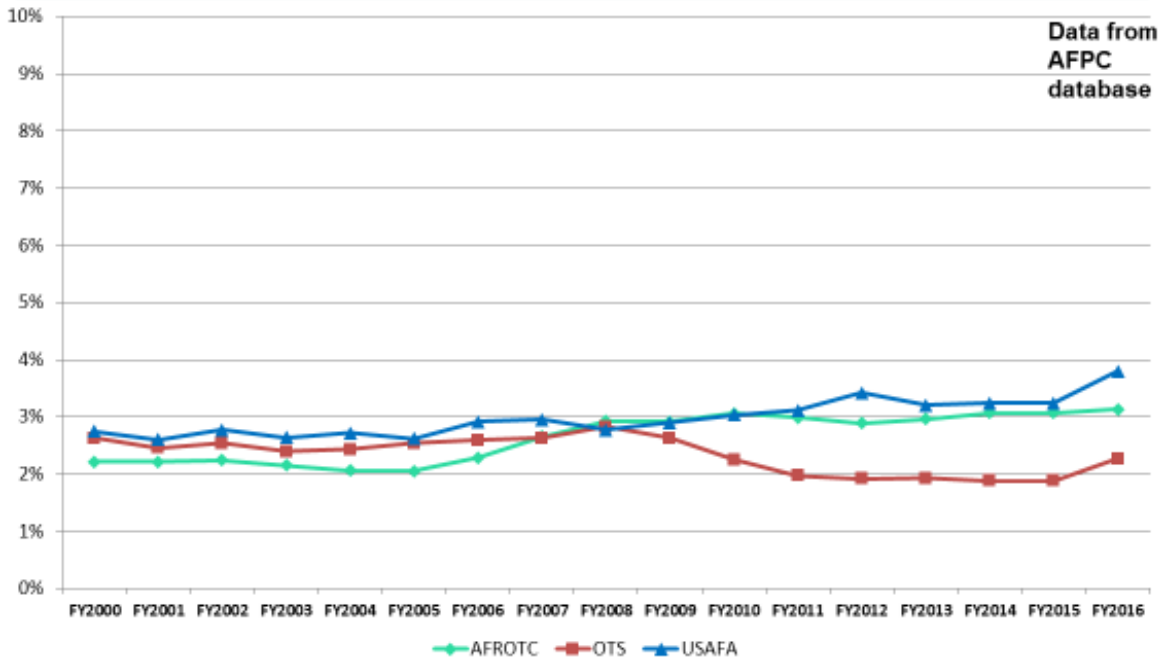
Supervisor Ratings on Character Traits 2008-2016



Integrity - Service - Excellence



Percent of Active Duty that Held a Command Position



Integrity - Service - Excellence

The Idea in Practice

To give your transformation effort the best chance of succeeding, take the right actions at each stage—and avoid common pitfalls.

Stage	Actions Needed	Pitfalls
Establish a sense of urgency	<ul style="list-style-type: none"> • Examine market and competitive realities for potential crises and untapped opportunities. • Convince at least 75% of your managers that the status quo is more dangerous than the unknown. 	<ul style="list-style-type: none"> • Underestimating the difficulty of driving people from their comfort zones • Becoming paralyzed by risks
Form a powerful guiding coalition	<ul style="list-style-type: none"> • Assemble a group with shared commitment and enough power to lead the change effort. • Encourage them to work as a team outside the normal hierarchy. 	<ul style="list-style-type: none"> • No prior experience in teamwork at the top • Relegating team leadership to an HR, quality, or strategic-planning executive rather than a senior line manager
Create a vision	<ul style="list-style-type: none"> • Create a vision to direct the change effort. • Develop strategies for realizing that vision. 	<ul style="list-style-type: none"> • Presenting a vision that's too complicated or vague to be communicated in five minutes
Communicate the vision	<ul style="list-style-type: none"> • Use every vehicle possible to communicate the new vision and strategies for achieving it. • Teach new behaviors by the example of the guiding coalition. 	<ul style="list-style-type: none"> • Undercommunicating the vision • Behaving in ways antithetical to the vision
Empower others to act on the vision	<ul style="list-style-type: none"> • Remove or alter systems or structures undermining the vision. • Encourage risk taking and nontraditional ideas, activities, and actions. 	<ul style="list-style-type: none"> • Failing to remove powerful individuals who resist the change effort
Plan for and create short-term wins	<ul style="list-style-type: none"> • Define and engineer visible performance improvements. • Recognize and reward employees contributing to those improvements. 	<ul style="list-style-type: none"> • Leaving short-term successes up to chance • Failing to score successes early enough (12-24 months into the change effort)
Consolidate improvements and produce more change	<ul style="list-style-type: none"> • Use increased credibility from early wins to change systems, structures, and policies undermining the vision. • Hire, promote, and develop employees who can implement the vision. • Reinvigorate the change process with new projects and change agents. 	<ul style="list-style-type: none"> • Declaring victory too soon—with the first performance improvement • Allowing resisters to convince "troops" that the war has been won
Institutionalize new approaches	<ul style="list-style-type: none"> • Articulate connections between new behaviors and corporate success. • Create leadership development and succession plans consistent with the new approach. 	<ul style="list-style-type: none"> • Not creating new social norms and shared values consistent with changes • Promoting people into leadership positions who don't personify the new approach

²⁴³ Kotter, "Why Transformation Efforts Fail."

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