

**Future Leader:
The Journey of Developing (and
Nurturing) Adaptability,
The Future Is Now**



**Futures Center (Forward)
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The Future Is Now**

A Proposed “Addendum” to the Capstone Concept

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All Future's Center Forward monographs dealing with the "Future Leader Study" are available upon request through electronic dissemination.

ABSTRACT

“Adaptability” has become a buzzword throughout the Army. The system in place today evolved from one that worked to support the nation’s mobilization doctrine. Several factors have combined to force the Army to think about the way it develops and nurtures its leaders. Continual modifications to today’s paradigm may not be enough.

The U.S. Army still “thinks” and “acts” from an industrial-age, mobilization doctrine-based leader development paradigm more than 16 years after the fall of the Berlin Wall. The industrial-age approach continues to shape the way the Army approaches its training and education, often confusing the two terms. The Army has to do more than post rhetoric about “adaptability” on briefing slides and in literature. The Army’s personnel system designed for an earlier era are so intimately tied to the maintenance of Army culture that they form a self-perpetuating cycle that will diminish and even prevent the Army from becoming an adaptive organization unless it accepts rapid evolutionary change as the norm of the new era.

One cannot divorce how the Army accesses, promotes and selects its leaders from its leader development paradigm. The Army cannot expect to create leaders that grasp and practice adaptability and then after graduation enter an Army that is not adaptive or nurtures innovation. The Army culture must become adaptive and the personnel system evolves into one that nurtures adaptability in its policies, practices and beliefs.

Viable education and training solutions exist alongside an evolution into a new personnel management system centered on flexibility. This is what the paper and follow-on papers will recommend.

PREFACE

The U.S. Army Training and Doctrine Command Future's Center Forward provides an excellent environment for selected military officers and civilians to reflect and use their career and educational experiences to explore a wide range of critical issues in order to "think for the Army."

This paper examines the adaptability and its implications on the Army's current leader development paradigm, as well as the concepts of institutional adaptability, specifically how the Army can move beyond technologies and ideas to entail a new cultural mindset that supports adaptability, not only in its leaders but also in its institutions. The author then advances a recommended model to develop adaptability along side defining adaptability.

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Introduction: A Journey from Wyoming to Kansas

Army Chief of Staff General Peter Schoomaker uses a Cattle Drive metaphor to explain his meaning that the Army has to see getting to the Future Force as a Journey, not a Destination. The Cattle Drive or Journey is an evolutionary *process*. While the Army can more or less define “where we are” and “where we need to go,” the process of getting there will not be straightforward.¹

The Cowboys of the 1880s knew that Kansas was the Drive’s end and Wyoming its beginning, but they did not know with any certainty what route would be best to get them there or what difficulties they might encounter on the way. It is relatively clear that the Army must change the way it develops its leaders to deal effectively with the genre of warfare we are now facing and will continue to face into the future. It is unclear how this will be accomplished, thus, demanding the Army approach it as an adventure and in the same spirit that the Cowboys used, a Journey into the unknown, to blaze a viable trail from an Industrial Age into an Information Age Future Force mindset. The Army must emphasize people development on par with infusion of technological innovation.

Purpose

- Briefly outline the *Need*, if not mandate, to change the Army Leader development paradigm, created and sustained for its 100-year-old mobilization doctrine.
- State “What” the Army needs to develop these leaders, the requisite monolithic capabilities and competencies.
- Describe the principles underpinning a new form of Instructional Technology the Army must develop and refine that is neither “Training” or “Education,” as these terms are conventionally used, but rather something in-between and focuses on “How” rather than “What” to think.
- Describe how the Army’s culture must change to nurture and further develop “Adaptive Leaders.”

The capacity to adapt is always a key contributor to military success. In his paramount book, *Eating Soup with a Knife*, Lieutenant Colonel John Nagl combines historical analysis with a comprehensive examination of organizational theory to rationalize why the Army fails to be as adaptive as required. “Even under the pressures for change presented by ongoing military conflict, a strong organizational culture can prohibit learning the lessons of the present and can even prevent the organization’s acknowledging that its current policies are anything other than completely successful.”²

The Army developed the mobilization doctrine and a supporting leader paradigm that is characterized by an aspiration to achieve quick results—a large force, proficient at the basics, over night. Over time, laws mandating personnel management, supporting

policies and beliefs, lead to cultural norms and measures of success or failure, which evolved in the last century to support the Army's mobilization doctrine. Easily measured and quick results of today's culture engender the culture and climates needed to promote adaptability over time.³

I. The Need: The Changing Face of War

Soldiers' mind is where change begins before it becomes operational reality. Dr. Williamson Murray describes in *Military Innovation in the Inter-War Period* and articles such as "Military Culture Does Matter" that effective change begins with innovation through evolved culture that can trace back to effective professional education and a climate that encourages and rewards new ideas.⁴ Changes centers around people, who develop a way to encourage and educate the leaders on how to use the ideas and then find the hardware to enable the ideas. In effect ultimately, minds win wars. Instead, technology or hardware has driven change within the Army and in society. The Army has followed from hardware to ideas about employment and then to how people will interface and use the technology for various purposes.⁵

Indeed, the U.S. and her allies won the major wars of the past century by developing more highly advanced technologies and deploying them with far superior numbers of troops on the battlefield and elsewhere. Sophisticated technological capabilities allowed the U.S. to "reach" into the adversaries heartlands and destroy their means of sustaining and maintaining their forces. This overshadowed the tactical and operational prowess the Army displayed in the later stages of WWII. Perceived by many, the Army won by "strangling them to death," rather than on the battlefield per se: Technology carried the day.

The pervasiveness of the industrial mindset carried-over into the information age. The U.S. has developed some of the most technologically sophisticated conventional weapon systems ever known to humankind. The Army won the first Gulf War with them and used them to preemptively enter and topple the government of Iraq. Ironically, the "glow of victory" allowed the Army to justify in retaining essentially a leader paradigm developed under the umbrella of the mobilization doctrine of the Cold War and before that, for World War I and II.⁶

Large, bureaucratic structures, with rigid lines of authority, are inherently slow to respond and adapt. Adversaries use information technology in innovative ways to decentralize control down to the lowest possible level within cells—shaped by a loose commonly defined mission. The Army has not managed to do so nearly as well. While many leaders and Soldiers are adapting, the Army must be honest and ask, "How many have not" and "how does this impact the mission within the new strategic security environment?"⁷ Further, the Army has to see change as positive and not a criticism of past and today's approaches.⁸

The Army's traditional *Mindset* that manifests itself in *Culture*, rather than *technology*, appears to be the major obstacle. Without question, the Army has the technology and the type of *people* to decentralize control and increase discretion downward to the front lines of action and throughout the organization. Nevertheless, the Army must evolve its ARFORGEN to meet the expectations of those leaders that adapted in combat, instead of expecting them to confirm to the past bureaucratic mindset, and thus, lose that valuable asset.⁹

For the institution—the Cowboys—to be successful in its Journey, it must be willing to reinvent itself, to become far more agile and adaptable than conditions—a journey—demanded it be in the past. Focusing on changing the Army's leader development paradigm and its culture simultaneously, produces a total system's perspective and a unified approach for moving the institution from the vestiges of an industrial era—Wyoming—into a more fully developed information age mindset.

Getting to Kansas is an organization where decentralization, innovation, and adaptability at all levels become its mainstay. This approach offers the only hope of producing real and lasting change—changing one part of the enterprise will not revitalize the whole and, ultimately, achieve the objectives intended.

II. Teaching an Old Dog New Tricks

“The Army will support adaptive leaders as long as they don't rock anyone's boat.”¹⁰

Is the Army learning to become adaptive to changes in purpose—from a big war, linear, attrition warfighting focus in support of a mobilization doctrine to setting the foundation to deal with varying missions across the spectrum of modern war? On the other hand, is the Army learning to innovate in line with its conventional warfighting focus while retaining its legacies from the Cold War? For if the Army is to really take on and implement adaptability as its theme, the thread of adaptability must not end with what occurs in leader development programs and courses, but spread throughout the entire organization. The process of evolutionary adaptability in our leaders must not end at graduation, but continue into units and beyond.¹¹

The Army has acknowledged that it needs to change. What is change though? It has to be far deeper and faster than past attempts. Attempts in the past were always at the edges and kept the culture untouched. The operating environments of today and in the future, rapidly evolving, demand far more. Today's changes cannot stop short as they did with the Army's evolution into “AirLand Battle” implemented in the 1982 FM 100-5, Operations.¹²

The post-Vietnam reforms were gigantic but were largely limited to technology and ideas. Yet, change is endemic to the culture. For example, racial integration in the 1940s and 50s, changing to an all-volunteer force in 1973; expanded opportunities for women in the 1980s and continuing today. Nevertheless, while change is actually a way of life within the Army, so is inertia. People at all levels resist change, especially when their culturally defined success has depended on what is in place. This holds true particularly in the people aspect of any equation of change in the Army. The post-Vietnam renaissance of the Army provides an excellent example of this phenomena.

The Army developed the “Big Five” (technology), AirLand Battle as its first maneuver doctrine (ideas), but attempted changes along the edges of the personnel system such as COHORT failed. At the core of this doctrine were the tenets of “mission tactics” or “maneuver warfare.” Only adaptive organizations execute “mission-tactics” or “maneuver warfare,” yet individual-centric personnel management practices did not leverage the full ability of people to execute such advanced doctrine.

“AirLand Battle” tenants of agility, initiative and decisiveness called for more decentralized command & control. They came into conflict with the realities of the every day environment. At the center of this culture was control, which as an outgrowth of how to create and sustain an Army supporting the mobilization doctrine. Today, legacies stand to impede a mobilization based Army changing into a “Campaign Quality Army with Joint and Expeditionary Capabilities” to handle the vast spectrum of missions in the 21st Century.

The Army boldly moved forward with technological and doctrine unseen in its history, while largely leaving untouched the factors—personnel management laws, policies and beliefs—that were at the root causes of tearing the Army apart during the Vietnam War and at the heart of the problems found in the Army Training and Leadership Development Panel report in 2001.¹³ After September 11, 2001 problems with the culture and recommended changes were put on hold in order to fight a war.

The Army achieved unparalleled successes against the Iraqi Army in Gulf War I, an even worse Iraqi Army during Operation Iraqi Freedom (OIF), and the opening combat phase of Enduring Freedom (OEF) against the conventional forces of the Taliban. If anything, the Army has been a victim of its own successful deployments to these far away theaters, as well as demonstrating that has become the ultimate *conventional* warfighting Industrial Age organization. At the heart of this Industrial Age organizational culture are its commitment to conventional linear war, as well as the centralized, top-down command style which subtly stands in the shadows as the Army publicly proclaims adaptability.

If anything, recent past successes in the “glow of victory” have allowed the Army to continue unknowingly to a more bureaucratized and centralized organization. The most potent and subtle social control mechanism in the Army is promotions and selections. Promotion and selection laws and policies, as well as the culture’s criteria of success “have the greatest impact on demonstrating and teaching the values of the organization.”¹⁴

In the Army promotion and selection, as well as evaluation tools, provide the primary “power levers for changing or maintaining culture.” These critical tools, presented as inherently fair, determine awards and control access to positions of influence and control.” They provide specific instructions when tasking subordinates due to an obsession with certainty. The individual as well as the “system” carefully monitor the execution of their instructions, and track all activities and outcomes with the finest attention to detail. Unfortunately, “professional systems and structures are not very adaptable.”¹⁵

If the Army is to become adaptive, a “Learning Organization,” it must ensure that its personnel system supports its move to a Future force, and not the other way around where a retained personnel system limits the evolution to adaptability. The Army must learn to be adaptive, while creating and supporting adaptive institutions. The thread of evolutionary adaptability must exist everywhere. It starts with doctrine and strategic leaders, and filters down to daily activities, threads through policies and beliefs, winding its way from the Generating Force to the those forces deployed in the conduct of an array of possible future missions. An environment must be in place to support and nurture the adaptability the Army says it wants in its leaders and Soldiers.

“Take it completely down in order to build it back up”¹⁶

There are solutions.

First, the Army must see the move toward adaptability as a way to establish a foundation to deal with all future threats and contingencies. This is not a move from preparing for one extreme spectrum of warfare from another. A move to adaptability sets the foundation to deal with an array of threats. Too many individuals use the excuse that the Army will lose its “edge” and will become simply a constabulary force because adaptability deals with insurgency warfare. This reasoning circumvents or ignores the reasons for rapidly evolving the Army. The foundation of the new culture of the “Campaign Quality Army with Joint and Expeditionary Capabilities” rests in how the Army develops—educates and trains (and selects)—its leaders and Soldiers. The new foundation is a new leader paradigm that emerges alongside a new culture.

Organizational change experts advise that the reform of ingrained problems in mature institutions such as the Army require an abrupt change to organizational design, management processes and personnel. Follow on papers will propose and present the detailed how-to to new personnel management system, evolving with a new organizational design, while retaining today’s Army values and ethos appropriate for the future. Transformation has normally been quicker and more complete for defeated armies “unfretted by the legacy of a recent victory.” Ultimately, the goal of this paper is not to duplicate a specific doctrine or historical period with that of a victorious or defeated Army.

Success in the future depends on the ability of all Leaders and Soldiers to contribute to the Army’s various missions. There will be increasing competition for the quality and type of Leaders and Soldiers will need. They will not come to the Army easy, but they our out there; and the Army must offer an environment that says, “We have what you desire, you just have to make our cut, and meet our standards—then, you have what it takes to solve global problems and protect the nation.”

The Army discovers that to win in the future, it has to take advantage of the potential for individual creativity at every level to solve the problems war will through at us in the future. War is more than a conventional fight whose objective is the destruction of the enemy. The Army is realizing that to succeed in the future that every Leader and Soldier must contribute more than just his or her physical prowess and a trained ability to react. This means the Army will institutionalize the harnessing of collective creativity within a doctrine that deals with complexity through evolutionary adaptability.

Evolutionary Adaptability

Evolutionary Adaptability (EA) is a doctrine for a culture that accepts a lack of absolute control over events on or off the battlefield. Implementing EA means the Army revisits “mission” or “trust tactics” through raising the bar in the way it educates, trains

and nurtures its Leaders and Soldiers. The environment will cherish those who, when the need arises, they will act without waiting for orders. Instead of seeking perfection or optimum solutions, find a solution that works locally and exploit its results as a continual evolution, preparing leaders to think and decide when opportunities arise. The focus from this point on will be Leader development.

Unlike John Wayne in the movie *The Cowboys*, where Wayne, as a cattle rancher who has lost all his seasoned hands and to go with what he got, teenagers with no experience, the Army must in fact raise the bar in leader accessions in order to achieve overall a high level of professionalism earlier in its leaders. John Wayne and his group of young cowboys were in fact similar to the mobilization Army of the past. A few seasoned professionals would lead masses of “newbies” and through experience from the lessons of battle eventually forge a force that could win (along with the ability to absorb losses as it learned). Leader development for this group consisted of exposing them to a little of everything and then letting them learn on the job how to do it.

The past reliance on “competency mapping” will not do in the future.¹⁷ Instead of creating longer lists of characteristics and attributes in which many contend future leaders must have and institutions must teach—less will actually be more. The evolutionary professional pyramid of the past must be reverted focusing on a couple of key attributes in the beginning—such as adaptability and development of strength of character—and “plug and play” attributes as they are needed in the future (forthcoming Critical Concept Plan or CCP). Also, see this as a tree trunk, and as the tree grows so does, its need for more limbs (attributes and capabilities). The teaching of fewer earlier, will allow teachers and curriculum alike to be evolutionary, open to experimentation with up to date lessons learned.

Critically important to the institutionalization of Adaptability in the Army will be superior military education and training. Not only will the Army produce leaders that possess adaptability, but the institutions tasked to develop leaders will become adaptive as well—evolving as the future operating environment evolves. The Adaptive Leader's Course (ALC) model will provide principles that allow implementation of the how to over time always adhering to a few ideas (Annex A).

ALC will hold to the first idea that every moment and event offers an opportunity to develop adaptability. Every action taken by a student in the classroom or in the field training is important to the process of inculcating a preference for solutions. If a student errs while acting in good faith, they do not suffer anything more than corrective mentoring. Constructive critiques of solutions are the norm, but more important are the results of their action, and the reason they took that action. The role of mentoring and 360-degree assessments is to teach the student so that their future actions will make a positive contribution to their unit's success, no matter what the mission. Base this idea on the premise that one learns more from a well-meaning mistake reviewed critically and constructively than from a mediocre performance following an established and memorized process.

The ALC teachers will not be so much concerned with what a student does or how they do it. Rather, the emphasis of the course will be on seeing that the student gained and then maintained an instinctive willingness to act. During numerous After Action Reviews and mentoring sessions—occurring during and after numerous scenarios with different conditions—the teacher will analyze why the student acted as he did and the effect the student's action has on the overall operation.

The ALC curriculum and Leader Evaluation System (LES) will use two criteria to judge whether students did well—the timelessness of their decisions, and their own justification for it. The first criterion will impress on the student with the need to act quickly, while the second requires the student to reflect on their actions and gain insights into their own thought process. Since the student has to justify their decision in their own mind before implementing it, imprudent decisions and rash actions will be less likely. During ALC, what the student decides to do will be relatively unimportant. The emphasis will be on the effect of the students' actions overall, not on the method they may have chosen. ALC will create a learning environment where there will be no formulas, or processes to achieve optimum solutions. This environment will solicit creative solutions.

The ALC LES is based on the idea of undue criticism, after the fact, of the Soldier on the scene—who will be in a confused, dangerous, and pressured situation and who has the best command of immediate information—will be unwarranted. Anything beyond a constructive critique will only destroy the student leader's willingness to act and might even lead them to withhold adverse information or provide falsely optimistic reports simply to avoid a less than perfect evaluation report. ALC will recognize there is little in adaptability that is systematic and will make allowance for it in its program of instruction (POI).

The heart and soul of adaptability—theme throughout ALC—will be the desired result, not the way the result is achieved. Teachers of adaptability will reject any attempt to control the type of action initiated during a mission as counter-productive. ALC will instead concentrate on instilling in students the will to act, as they deem appropriate in their situations to attain a desired result.

III. Conclusion

The Army's cultivation of adaptability requires a special and huge effort—from the “top-down” as well as “bottom-up.” It is so central to the Future Force that it applies to squad leaders as well as to the joint-force commander. A Future Leader will have to make a truly gross error to reflect negatively later in their career. Evaluations and performers cannot forever haunt the adaptive leader throughout their careers who makes an honest mistake.

The function of moving the Army toward becoming a Learning Organization where its institutions are adaptive in order to create and nurture adaptability will bring the collective creativity of the Future Force to bear in solving problems at the tactical, operational and strategic levels of war. The culture will become one that awards Leaders and Soldiers who act and penalize the ones who do not. Today's culture will evolve to one where the greater burden rests on all superior officers, who have to nurture—teach, trust, support and correct well—the student who now enters the force with the ability of adaptation.

The Future Leader's responsibility will also be to self-police its ranks, particularly early on as a teacher at an ALC. This makes evaluating, “racking, and stacking” graduates easy. The criteria is weighed through observations of the student or leader in several scenarios. The teacher or leader always asked themselves when selecting or promoting subordinates, “would I want this person to serve in my unit?” Throughout, teacher instills in students the importance of accurate reporting and to act when the situation demands it. The Future Force culture will not tolerate inaction, not “wrong” action. Indecisiveness or the inability to make a decision will become the culture's cardinal sin, not playing it safe.

Adaptability will become a product of the Future Force. It will depend on what appears to be relatively simplicity in order to deal with the complexity of war. However, the grasping, understanding and mastering of adaptability will come through rigorous education and tough training early on—quality, not quantity—to produce adaptive leaders. Adaptability will guide leaders in deciding how to accomplish their missions, while also recognizing and compensating for differences in the temperament and ability of Future Force officers and NCOs through unit training and professional development, and in the details each was given in orders in the field. Adaptability will provide a gigantic support structure to infuse and sustain Future Leaders initiative in future operating environments.

The Army today must understand by simply stating adaptability in power point presentations, saying we are going to do it, or repackaging curriculums and personnel policies with adaptive sounding names, but not changing the substance will not adequately prepare leaders to be adaptive. The entire Army must be prepared to support, nurture, and reinforce it.

ENDNOTES

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- ¹ Freedberg, Sydney, (October 2004) "Changing and Fighting, Simultaneously," *National Journal*. Washington, D.C.
- ² Nagl, John A. (2002) *Counterinsurgency Lessons from Malaya and Vietnam: Learning to Eat Soup with a Knife*, New York: Praeger .
- ³ Jones, Steven. (April 2003). "Improving Accountability for Effective Command Climate: A Strategic Imperative." Carlisle, PA. U.S. Army War College.
- ⁴ Murray, Williamson & Millett, Alan R. (ed) (1998). *Military Innovation in the Interwar Period*. New York. Cambridge University Press.
- ⁵ Murray, Williamson (1999). Military Culture Does Matter, *Orbis*. (pp. 2-7). Philadelphia, PA: *Foreign Policy Research Institute*. This essay is an abridged version of an article that appears in the Winter 1999 issue of *Orbis*, a special issue focusing on "Culture Wars in the Military." Other articles include: "An Uninformed Debate on Military Culture," by Don Snider, and "Must U.S. Military Culture Reform?" by John Hillen.
- ⁶ Essentially explains the bold attempts to move to Stabilization policies. These policies create intangible benefits seen in spring 2005 with high reenlistment rates among those divisions that move to and from the theater of operation as a unit. Soldiers reenlisted for their comrades and unit families, which appeared to be omitted by the press as to the reason Soldiers reenlisted.
- ⁷ Stabb, L. (2001) *Transforming Army Leadership—The Key to Officer Retention*, Strategic Research Project, Carlisle, PA: U.S. Army War College. 17.
- ⁸ Ulmer, Walter (2002). "Creating and Assessing Productive Organizational Climates," Army War College Course Handout, Carlisle, PA: U.S. Army War College. 1.
- ⁹ Fastabend, D. A., & Dimpson, R. H. (2003). *The Imperative for a Culture of Innovation in the United States Army*.
- ¹⁰ Spinney, Franklin R. (2005). Interview May 2005.
- ¹¹ Jones, Steven. "Improving Accountability for Effective Command Climate: A Strategic Imperative." iii.
- ¹² Based on numerous interviews in May-June 2000 with General Donn Starry, U.S. Army retired.
- ¹³ Department of the Army (2001) "Army Training and Leadership Development Panel" (ATLDP). U.S. Army War College.
- ¹⁴ Bell, William. (1999). "The Impact of Policies on Organizational Values and Culture." Paper presented at the Joint Services Conference on Professional Ethics, January 1999.
- ¹⁵ Snider, D. M. And G.L. Watkins (2000). "The Future of Army Professionalism: A Need for Renewal and Redefinition." *Parameters* 30(3): 5-20.
- ¹⁶ Statement by CSA General Peter Schoomaker, date unknown. Assessed on 30 November 2005 at andrewolmsted.com/archives/000362.html
- ¹⁷ Reed, Collins, Bullis and Paparone (2004). "Mapping the Route of Leadership Education: Caution Ahead." *Parameters*.

Annex A

The Adaptive Leader's Course (ALC) A Foundation for a new Leader Development Paradigm¹

Professional Education and development

A core to all professional military education, be it the officer education system (OES), the non-commissioned officer education system (NCOES), or the civilian education system (CES) should be how to develop adaptability through cognitive development using innovative teaching techniques within the context of a Learning Organization.

Professional education needs to advance adaptability over other potential outcomes. At the core of this education and providing a foundation for a lifelong of learning is an Adaptive Leader's Course (ALC) designed to interject how to develop and nurture adaptability into other professional leadership courses, particularly at the junior officer level. ALC consists of developing intuition over analysis, especially for junior officers, while simultaneously integrating task proficiency in support of evolving adaptability.

A Model: Adaptive Leader's Course (ALC)

Challenging the mind and the body is constant in an ALC. It encompasses a wide of variety of subjects that make up the complexity of leadership. The Army has access to people and organizations that understand what the future leader will look like, and what it takes to prepare them for future national security operating environments.²

Starting in the 1970's, cognitive psychology began in earnest to question the classical decision-making model and started studying how experienced decision-makers made decisions in "real life" situations. The phrase "naturalistic decision-making" distinguished between this new approach to decision-making theory and the classical approach. While the classical approach studied, decision-making decisions under controlled conditions in an attempt remove environmental and intangible factors, the new school sought to study decision-making under "naturalistic" conditions.

Clearly, the time has come for a serious reassessment of how the Army, but particularly TRADOC approaches and teaches command and staff action – the time to start introducing adaptability in a serious way and to give it priority in our schools—the earlier the better. Yet, we have to change the mindset of the one's that already know how to make decisions, who run all aspects of the Army.

How many times has someone heard the following argument against teaching “how to think” first?

Many officers and NCOs have argued that we have to teach the MDMP before we can teach intuitive decision-making because the MDMP constitute the “building blocks” of decision-making – as if adaptability is merely MDMP done subconsciously and more quickly; as if you cannot be adaptive until you have mastered MDMP. In addition, this argument has come from some very smart and competent leaders.

To argue this is to misunderstand the fundamental difference between the two models. The ability to adapt is not merely MDMP internalized. The two types of decision-making are fundamentally different type’s intellectual qualities.

The MDMP approach offers a rational, calculating activity – it is essentially scientific.

The ability to adapt is rational (but not irrational), sensing activity – essentially artistic.

Others will argue that if the process is adaptive, then there is no need to teach it because people will do it naturally. Nevertheless, while one aspect of adaptability may be intuitive, the experience and judgment are not. Acquire these through repeated practice. Moreover, just because we do something intuitively does not mean that we cannot learn to get at it.

The bottom line is that if the Army wants to develop leaders with adaptability, the ALC should start with cadets, at the beginning. “How to think” must occur before “what to think” (task training) in regards to leader development paradigm. Now, this is not to advocate that the Army abandon “mastering the fundamentals” or “basics” altogether, only that the Army subordinate it to more important (and more frequently used) adaptability.

Teaching Adaptability-Easier Said than Done

Being committed to Adaptability, then the Army must ask “how do we teach it?” One thing is clear: the Army cannot teach it the same way it did using proficiency and task training. Because it is process based, the way to teach it is to teach the process. This is exactly what the Army has done in schools. This approach makes no sense with adaptability precisely because the process is intuitive. In fact, adaptability is a skill that cannot be taught per se (as in provided by a drill sergeant training a Soldier in task proficiency and rote memorization), but rather that adaptability can only be learned (as in gained by the student by his or her own effort).

With that in mind, there are two important considerations in learning adaptability.

First, like most skills, decision-making is a skill that improves with practice. Even when students perform a skill without consciously thinking about how – IMT, battle drills, or gunnery skills – they intuitively learn to perform that skill more efficiently simply from repeated practice.

Second, as mentioned earlier, adaptability is an experience-based skill enhanced by critical and creative learning. A broad base of experience is essential to the “coup d’oeil” or skill for pattern recognition that is in turn the basis for adaptability; the way to improve pattern recognition is to improve the experience base. In either event, the way to learn adaptability is to practice decision-making repeatedly in an operational context—translated several increasingly intense scenarios with changing conditions observed by teachers that have already mastered adaptability. This is a point not wasted on other disciplines.

Cover of How to Teach Adaptability Handbook

The Harvard Business School adopted a case study approach to its MBA program. In the first year of the 2 year program, MBA students do not take classes on economics or business management theory per se. Courses consist of business case studies, which the students pick from a management point of view. Each class period is devoted to a different case, and students discuss that case intelligently as the basis for their course grades. It is only in the second year, after they have a firm grounding numerous historical cases that students take their courses in business theory – although they also continue with case studies. By the end of the second year, Harvard MBA students studied some 240-business cases. One of the things that make Harvard MBAs so desirable in the business world is that they have a broad base of practical understanding of business decision-making.

The ALC takes the same approach in preparing its students to use adaptability

Serving lieutenants say that by the time they had graduated they had been through 30 or more TDGs of different types at different unit levels. If a student evolved progressively through each scenario, they should experience 40 to 50 in 4 years of ROTC. Where there are no conflicts with the outside world, a junior officer should experience anywhere from 10-20 Scenarios that Enable Adaptability (SEAs) over a course of a six-weeks.³

Repeatedly put students in positions of having to make tactical, operational, and strategic decisions of all different sorts. One of the most popular tools by far in programs is the use of the Tactical Decision Game or TDG in implementing SEAs (followed closely by free play force on force approach with SEAs).

ALC will also make extensive use of case studies – battle and campaign studies – viewed from the perspective of command decision-making. Infuse case studies among TDGs and other war games. For example, every week begins in the classroom with an

appropriate level half hour TDG session. (TDGs are easier to do in a short period than other decision exercises and offer a higher yield in terms of decision-making experiences.) It is not enough to do the occasional case study or TDG: these must become a near-daily session in order to amass the requisite experience base.

Breadth of experience is more important than detail of experience. From a decision-making perspective, we discovered that 10 different TDGs were more valuable than a single full-scale, computerized war game in the same period. Moreover, each SEA should be a high-risk experience – meaning that the cadet in a decision-making position should feel the pressure of being “put on the spot.” This is important both to simulate the stress that is a main feature of most military decision-making and to provide a heightened learning incentive.

Each decision-making experience involves a discussion/critique or AAR led by a more experienced student to provide evaluation and draw out the key lessons, for while it was true that a person will learn simply by his or her own experience, the learning curve will be higher with wise guidance. As indicated early on with the principles, it is also best to play TDGs in a group, so teachers could see how others solved the same tactical problems and incorporated those lessons to the other student's own experience (though never discourage students from playing TDGs on their own time). The same principle applies outside the schoolhouse – in the field Army. All Soldiers should be exercising their decision-making skills on a daily basis and adding to their reservoirs of experience.

Scenario Enabling Adaptability (SEA)

The future curriculum of the ALC introduces, but does not indoctrinate, fundamentals in Army leadership doctrine and decision-making. In the spirit of classical education, there are no blocks of instructions. Tactical decision games (TDGs) or through presentations of a case study becomes the method of instruction to introduce operations orders or the Troop Leading Procedures. The ALC runs on scenarios that enable adaptability (SEAs) written with historical case studies that can be “plugged” and “played” where the instructor thinks it will reinforce a lesson that will enable adaptability.

The use of historical case studies facilitates learning. Physically, SEAs resemble the Harvard Case Studies and how to teach them presented in Chapter 10 in *Unleashing the Power of the Army Profession* published by the Army G6 CIO in December 2004. After Action Reviews from 3 BCT, 25th ID during the unit's preparation, deployment, and return from Afghanistan in Operation Enduring Freedom (OEF) 5 from April 2004 to April 2005 also serve as models for SEAs.⁴

Another way to understand scenarios that enable adaptability is by the use of historical case studies to facilitate learning. Sprinkle case studies throughout the scenario,

where the instructor sees fit, to enhance learning. Every training application has benefits and limitations, which is understandable since training can only simulate the operating environment, and the mettle required to function under combat conditions.

The SEA does have benefits and limitations. While all scenarios enable a student's ability to think critically in conjunction with some level of situational awareness and analysis, the generalized benefits of conducting scenario enabling are interactive, "hot seat," experiential learning, command experience, and in the context of "Learning Organization."

Figure A-1, Putting Together a SEA

SEA Design

Designing a SEA and choosing what tool to employ them with to enhance training and decision-making can be a challenge. Instructors using SEA need to incorporate critical thinking and decision-making skills in order to improve the performance of their cadets and themselves. This section focuses on how to design a Scenario and what tool to use to employ them that is innovative and useful.

The SEA is only as successful as the design and the tool selected to deliver the SEA. After developing or during development of a SEA, the facilitator should try to incorporate as many of the following elements as possible or required for SEA play when determining what tool to use to employ the SEA.

- Interest
- Appropriate tool with level of challenge
- Level of detail
- Granularity
- Multiple Interpretation and Solution
- Avoid a Solution Approach
- Role-Playing
- Limit Information
- Limit Time
- Create a Dilemma
- After Action Review
- Simplicity Design

A SEA and employment generates interest. In order to do this, the instructor has to focus on quality and the application reality. A mission that reflects the possibilities of the operating environment will build interest. Gaining interest is the first step in developing an infectious desire to learn and excel.

Developing a SEA employing the appropriate tool and with the level of challenge requires the instructor or facilitator to continually monitor the skills and abilities of the

cadets that are going to be involved. Pushing the limit on a student's tactical and technical ability is fine as long as it does not minimize interest and learning opportunity.

Using SEAs over time to create and demonstrate Adaptability

The level of detail for each SEA will be different and assists in picking which tool to use delivering to students. For example, you may have the resources to do a SEA involving a squad through the force on force free play, while a company or higher SEA would be appropriately delivered with a TDG. The facilitator must present enough information allowing the player to act. The right level of detail keeps the TDG from getting bored or overwhelmed. Ideally, creating a situation that amply shrouds the dilemma in the "fog of war" without overwhelming or boring the participants creates the max benefit for the players and facilitator.

The SEA should infuse fog and friction to create a situation that has no one clear solution. The ability to cause friction gives the simple SEA using a TDG or TBE magnified value through discussion and decision-making potential.

A historical battle can provide a useful basis for a TDG. The instructor can update the scenario by using modern weapons and the organizational structures. Adjust the scale of the battle, as necessary, to meet the SEA objectives. When the seminar leaders brief the historical situation and outcomes pre- or post-SEA, they should not present the historical solution as the "right" solution. The focus is on developing decision-making capacity and capabilities.

SEAs rely on personal experience, but the seminar leaders should focus on the decisions generated rather than the actual outcome. If the cadets involved all share common core competencies, this particular approach is particularly effective. Specific dilemma's include mission, enemy, sizes of friendly and opposing forces, disposition of friendly and enemy forces, and terrain and weather. Random Engagement focuses on a specific piece of terrain with relief, vegetation, and other features. The instructor then makes the enemy and friendly forces appear in different location and multiple directions, as the scenario requires. Situational factors are appropriate for the skills and abilities of the cadets participating in the SEA.

Design a SEA using one of two methods. The first is situational based, or "here is the mission," while the second is a reaction to the solution or "Now what?" Situational-Based SEA focuses on a particular situation given to the player in a mission order format. Solution reaction SEAs focuses on taking the initial situation and moving one situation forward in time. Consider the situation in three-dimensional terms, so that the instructor can select the best option to feed to the cadets.

Use enhancements to modify a SEA to achieve different adaptability objectives, and develop a larger experienced base. The instructor can implement any number of the

following suggestions to increase the decision-making opportunity, and minimize the amount of time required to negotiate the SEA.

Reverse Scenario is where the scenario is reversed and players have to rethink the dilemma from the opposing perspective. Used in either a TDG or a seminar approach. If time and resources allow, though, free play force on force can get exciting when the winner or part of the winner now has to assume the role of the opposing force they just defeated. A player has to create an analysis of how an opposing force would defend or attack on the same piece of terrain. This is an excellent method to war game a scenario. It identifies strengths, weaknesses, opportunities, and risks that fortified or weakened the previous scenario.

Modify Terrain Perspective is where the SEA can change drastically by simply modifying terrain perspective. When using a map, terrain model, or sand table, and rotating the perspective 90 degrees can totally change the way decisions have to be made and implemented. This is even the case when using free play force on force tool to deliver the SEA. During the after action review, which is conducted by the instructor, focus should be placed on how the SEA dynamics and decision-making rational changed by rotating the terrain.

Variable Modification is where SEAs slightly change the problem analyses, decision processes, and solutions significantly. For example, the instructor could change the TDG scenario with day to night operations, light to heavy, changing climatic or terrain factors, such as desert to woodland, or modifying the size of the enemy forces or changing the scenario from a close combat to non-combat. In order to be successful using variable modification, the instructor must be intimately familiar with the capabilities and capabilities of the cadets in their group. Challenging the mental processes and procedures is the goal, but avoid overwhelming the student to the point that they no longer wish to participate.

360-Assessments-Not a Process

Future Leaders of the Army must be adaptive and self-aware. Self-awareness is a foundational element of successful leadership. 360-degree is the preferred method gained through experience to evaluate adaptability. It is a method encompassing several different evaluation tools such as observed evaluations, essay based tactical decision game exams, and peer reviews. 360-degree feedback provides the student-leader with increased self-awareness, which provides significant potential for growth and development. Used correctly, it strengthens trust while instilling loyalty as a “two-way street.”

Teacher Observation Card

360-degree feedback occurs throughout a student leader's evolution in order to provide a continuous feedback loop for optimal self-awareness and leader development. The feedback consists of subordinates (in the case of pre-commissioning sources lower level classes), peers, and various instructors (two-way assessments of and by seniors and cadre), as well as the results of exams, essays, briefings and conduct in such events as land navigation.

Implementing 360-degree feedback takes a lot of work. As a leader development tool, it relies on trends based on comments to assist the student leader to self-develop. Each student leader receives a 360-degree feedback periodically throughout the course. Feedback by fellow students is equally valuable in identifying leader strengths and weaknesses.

There are many ways to implement the tools in 360-degree assessment. One example is where classmates in the same platoon rate each other using leader dimensions (proposed below). They then rate a few students of the classes above and/or below them. These assessments include students evaluating their instructor. The purpose is to build trust in the organization. The work begins with the instructor doing "roll ups" and looking for trends in evaluations. He or she then writes them on a counseling form and gives feedback to each student (without disclosing the names of those who made comments) in the class.

"Double-loop" "is the knowledge of several different perspectives. It forces the organization to clarify differences in assumptions across frameworks, rather than implicitly assuming a given set." Be it on an exam employing TDGs, or during training, cadre uses multiple tools to give the cadet continual and detailed evaluations to allow the cadet to evolve, improve, and prepare them for their graded field evaluations. Tests in an adaptive leader's course evaluate how students lead; demonstrate adaptability and intuition in making decisions under varied scenarios:

- Was a decision made?
- If so, teachers jump to the second issue, was it communicated to their subordinates effectively?
- Then, teachers jump ask was the decision made in support of the commander's intent (long-term contract), and mission (short-term contract).
- From there, if it was not, then the teacher asks himself was the cadet solution based on changing conditions that made it a viable decision even if it violated the original mission, but supported the intent?

The four "guiding actions" above are intertwined with the Army's values when evaluation potential (the art of developing leadership) and used when evaluating leadership. This has to be distinctive. Too often, teachers and students cannot tell the difference. There is a difference, one prepares, allowing students to improve (hopefully),

the same is used to “grade.” Teachers must set up scenarios, based on where they assess the student’s current and potential abilities are, then they identify the potential critical points based on the mission, commander’s intent, and how they adjusted to changes. There is a need to take teachers acting as tactical officers from being in the field administrators to assessing potential or evaluating leadership by simplifying the evaluation card to consisting of only name, date, mission, name of teacher and peer evaluating with most of the card left blank in order to write a summary of observations made.

As mentioned earlier, 360-degree assessments are composed of more than just cadre and student observations for adaptability. The evaluation of student leader performances also occurs in the classroom or on tasks that force stress on the student provides more perspectives in developing potential and evaluating performance. Nevertheless, this does not mean the use of traditional, industrial-age testing techniques. These techniques only reinforce rote memorization. They include “true or false,” “fill-in the blank” or “multiple choice” examinations. Sometimes instructors use these evaluation techniques because they are easier to grade (saving time) and provide quick feedback to the tested cadet and administration.

Because “knowledge” and “social judgment” gauge leadership, evaluate students on how they communicate decisions to their subordinates, or inform their chain of command of situations. If leaders do not communicate decisions well to their subordinates or units, decisive and timely decisions make no difference. As a result, as often as possible teachers should use essay-based evaluations in the classroom. The use of essays requires that the cadre understands the English language and grammar. Essays also take a lot of time to “grade.” However, well-placed comments can provide another aspect in the education of the cadet.

If student changes their original decision in order to go along with a teacher’s recommended solution, they should fail. This indicates weak character. Weak character is also demonstrated if the students stayed with a poor or out of date decision from higher because that is what “higher” told him to do. The worst thing a student can do is make no decision at all.

Evaluations within 360-degree assessments award and highlight performance. They also serve as a record on which the teacher must decide that the individual does not have the abilities to become adaptable. This does not mean the aspiring leader does not have a place, but the Army determines a way to place people that highlight their strengths while diminishing their weaknesses. An effective organization awards as well as enforces standards. Failure in one or the other degrades the effectiveness of the organization, and undermines trust.

Mentoring

Mentorship cannot be tasked, assigned or regulated-“top-down;” it is a “two-way street.” The first rule in mentoring is that those mentored must first accept who is mentoring them. IT cannot be assigned or automatic because the Army says so. That is the normal knee jerk, bureaucratic, centralized reaction to any intangible issue that is hard to understand but easy to put on a power point slide.

Again, as already discussed, investment in people, particularly junior leaders provides long-term benefits. The problem is the Army still has a personnel system that rewards performers, first and leaders second. Performers achieve the short-term results, but many times, they undermine and even destroy unit effectiveness; which contradicts a facet of Stabilization.

Command climate and culture must encourage mentorship. This could mean that protecting those you mentor may result in the loss of your career. The ultimate secret of mentorship though is that when you mentor or teach you do not appear to be doing so.

At some point in the evolution toward becoming mentally yet subtly selected as a mentor by someone else, the mentor or mentor to be places them in a situation that requires two-way trust. This can come in any type of situation, but it must occur. It could be indirectly, like a junior observing the instructor “walking the talk.” However, mentoring is not signing a quarterly junior officer professional development plan form (JOPDP) to meet inspection criteria; it is constant interaction along evolutionary adaptability.

The Key Enabler: How to Teach

Leaders chosen for the ability to lead or to teach aspiring leaders to think lay the foundation for the adaptive leader's course. This comes first and should be paramount. Imagine giving the student access to an array of tools (tasks) that they are familiar with to solve problems. It is essential to teach evolving leaders how to think, how to imagine and be able experiment before introducing them to specific tasks. Let them ask or find out what they think they might have needed or thought they needed to solve a particular program. Let them seek the answers.

The key to having an adaptive leader's course is the instructor's ability to **teach-facilitate-mentor** and **evaluate** adaptability. How the Army certifies the leaders it chooses to teach at these courses is critical. This goes far beyond today's demand of “task mastery” or using an online course consisting of multiple-choice tests to certify people as instructors.

Instructors must understand tasks, but beyond reinforcement of the memorization on how to perform a certain task, they must be taught how to understand the threads of knowledge that allow a leader to choose the appropriate number and type of tasks in combination to solve complex challenges. The instructors must also understand how to

innovate by creating new tasks while also adapting existing tasks to overcome new challenges.

The first demand of teachers at an adaptive leader's course is that it must be prepared to erase its collective memory of earlier training and development. However, this theme to these newcomers of how to teach adaptability must always be along the lines of using positive challenges and striving to overcome and understand these challenges lead to great awards. New instructors must "come in with an open mind, and be prepared to be shocked."

Second, the environment of the course is going to be one that treats, relies and trust cadre as professionals. If certified on how to teach in such an environment, they in turn will treat their students, be it cadets or lieutenants the same way. This approach will alleviate the course of wasting time and resources on being used to enforce trivial and insignificant events such as prescribed times, control measures for participants of the course such as signing in and out, or using techniques to control masses of people such as drill and ceremony or marching students to an event in formation.

Principles with TDG and Facilitation

When the instructor is determining the method of delivering the SEA, the number of students and the adaptability objectives are the determinants. The instructor is most likely going to use a TDG to deliver a SEA. The three basic methods to play a TDG are solitaire, seminar or force on force (dynamic and multi-resource).

The solitaire method requires the player to solve the problem in a fashion similar to solving a crossword puzzle or brainteaser. The paper TDG is the ideal application for the solitaire game in that the individual reads the problem, produces a solution, compares a response with the one provided, and then reflects on the rationale that is used to determine the solution.

The seminar forum involves a designated facilitator and a group of players. The facilitator presents the information and guides the solution produced by the players. Ideally, the number of cadets should be limited to 12 or less.

"Force-on-Force" is the dynamic, multi-resource method is a more advanced version that evolves along a timeline. Players may represent opposing or adjoining forces and must respond to changing situations. When playing from opposing perspectives, the teams simultaneously solve the TDG from opposing viewpoints. The instructor also assumes the role of an observer controller facilitating and comparing the two solutions and generates a new scenario based on how the two scenarios match up.

The instructor uses judgment to assess outcomes or casualties of the solutions. In this case, the facilitator must control the evolution of the TDG with the purpose of generating new tactical challenges. The new challenges must be "on the spot" or

intuitive decisions vice the collaborative thinking and planning used for the initial scenario. After four or five engagements, the opposing side will have completed an engagement.

Limiting Force-on-Force Play is limiting the size of the teams when using the force-on-force forum to four to six cadets. Larger or smaller sized teams limits the amount of interactivity, increases the amount of time to play the TDG, expands the decision-making capacity of the players, and is harder to direct and control the objectivity of the game.

Leadership of the SEA

Effective SEA leadership is incorporating as many of the following guidelines when conducting a SEA by infusing enthusiasm, crafting tactical proficiency, and interactive perspective into the SEA, different tools can accomplish different traits of the SEA. Enthusiasm is the ability to realistically paint the scenario and place the participant into the play is crucial. Enthusiasm is contagious and necessary to build the scenario.

Proficiency and Respect is when the instructor knows the skills and abilities of the participants, the SEA through the appropriate delivering tool can be used to challenge students without overwhelming them. It is crucial that the instructor not to over design the SEA and pick the right delivery tool beyond the scope of their capabilities. An instructor should conduct a self-analysis of their own skills and abilities, and keep the SEA to where it generates positive results, not professional embarrassment.

Mental Agility and Adaptability are paramount. The instructor should demonstrate the ability to react to unanticipated solutions and responses. Incorporating critical and creative thinking requires the instructor to adapt to the response and redirect the play as required. Becoming mentally mired in as the facilitator could limit the decision-making and experiential learning potential.

Stimulate Player Interest starts with design and development, but finesse in execution is even more important. Do not beat concepts or observations into the ground. Keep the play and discussion rolling at a light and brisk pace. Leave room for mental maneuver.

Ideally, the instructor will be a senior approaching the SEA from the position of a mentor. Positive communication and approach increases the effectiveness of the SEA. The seminar can target areas such as teaching or illustrating warfighting or tactical concepts, teaching warfighting or operational techniques, and relate the importance and development of implicit communication.

Critiques of student decisions and actions are essential to recap the play of the SEA and create lessons learned. The game facilitator will have to make notes during the game to analyze and capture the thought processes used to make decisions during the

SEA. Critiques can identify adaptability objectives that can be implemented in future SEA, curriculums, and field applications.

In the POI of the adaptive leaders course, the instructor has direct input on the schedules or may do the actual planning, so the results from SEAs can be used to create similar situations for future SEAs as well as what tool will be decided upon to deliver them.

Conduct Discussions during or after every SEA enhances the lessons learned since it requires the players or observers to think critically. Discussion is the oral application of decision making, since it requires the players assess the information and then provide feedback to the SEA facilitator and other players. Critiques, discussions, and after action reviews are all similar, but can be directive, interactive, and informational respectively depending on the personality and approach of the facilitator and the training objectives that support the design of the SEA and the appropriate delivery tool.

Manage the SEA is where the instructor attempts to set a tone of open candor when the group participating in the SEA is made up of varying experience levels.

Facilitator Responsibilities

The instructor facilitating the SEA should be able to incorporate the following concepts to create the desired benefits from the SEA based on delivery method include preparing the exercise, presenting the scenario, choosing students to present solutions, enforcing the time limit rule, enforce the “decisions as instructions” rule, question the thought process, and applying lessons learned.

Prepare for the Exercise is when the instructor must have a thorough knowledge of the SEA, and be prepared to address a variety of possible decisions made by the players. The experience and expertise of the teacher has to be at such levels that it makes them excellent SEA facilitators, but it also requires them to think “tactically.”

Thinking tactically is not necessarily thinking in terms of combat, but more so in conceptual perspective of warfighting. Creating an atmosphere that forces the “game play” to utilize the rapid decision making process intuitively, can be challenging with novice players. Designing SEAs that unroll quickly for more advanced players requires the controller to combine warfighting, tactics, techniques, and occupational specifics to speed up the decision-making process faster and more effectively.

The instructor presents the scenario to the group with an explanation supplemented with an orientation of a map or sand table, as applicable. The controller should also be prepared to answer any questions that the cadets may have about the situation. Answering questions does not mean that the controller should eliminate all uncertainty.

Choose students to present solutions are better than asking for volunteers. The player should not feel as though they can escape the challenge by simply not volunteering. Creating a SEA environment that makes the players feel as if they have as much chance as anyone else is important since it adds to the stress of the TDG. The controller should not tolerate players that actively try to avoid presenting a solution.

Enforce the "Time Limit" rule holds the players to a set time limit, it forces them to act quickly. Time compression creates stress, which is normally part of the decision-making process especially under operational conditions.

Enforce "Decisions as Instructions" rule is when the instructor should require the players to issue their decisions as combat orders utilizing the appropriate format. The player should be prepared to discuss the decision made later in the game. The facilitator should ensure that the SEA forum is focused on "Decide now, discuss later."

Question the Thought Process is when the SEA facilitator should question the thought process by inquiring as to the rational used to make the decision present. Useful questions include, what was your reasoning for that action? what was your overall estimate of the situation? What would you have done if...? What were your assumptions? What was the biggest concern about your plan?

Lessons Learned summarizing is done at the conclusion that the SEA produced, and it is essential to create greater decision-making ability.

Brief Instructions

The facilitator should provide the players with a briefing and clear instructions for the SEA. The briefing and instructions should convey the following essential information: Overview of the situation is to include elements or anticipated changes in the situation that could significantly influence the actions of the unit; Mission and commander's intent is what the task is, why it needs to be done, and what the intended end result of the action is; Coordinating instructions that state what each unit is to do and when; Communication methods between individuals and between adjoining forces; Identification of known hazards and planned controls of those hazards.

Facilitation Techniques

Successful conduct of SEA, regardless of tool used, incorporates the following facilitation techniques, the art of asking questions, teaching to objective, while briefing clear instructions. Art of Asking Questions is the asking of questions to allow the facilitator to shape the dilemma that the student is expected to respond to. It requires the facilitator to incorporate two basic techniques of active listening and questioning. Active Listening is important in that it prompts the facilitator to ask questions, how to ask and answer questions, and how to defer questions or bounce them off the rest of the group.

The TDG facilitator must probe the player's thought process to get the player to explain their rationale. Questioning Techniques is using questions to prompt thought in the student, the facilitator should avoid leading questions. Provided below are suggested examples:

- Example: "Wouldn't this have been a more effective course of action?"
 - Alternate: *"Did you consider any other alternatives?"*
- Example: "Do you really think that will work?"
 - Alternate: *"On a scale of 1 to 10, what do you think is your probability of success?"*
- Example: "So by using air support, you really think that you can still use direct attack on this flank?"
 - Alternate: *"What would you do if the air delivered munitions missed the target?"*
- Example: "Don't you think that hill is too steep for a dozer?"
 - Alternate: *"What information did you use in choosing a dozer for this assignment? Is there anything else you should consider before using a dozer?"*

Objective Focus is the facilitator's primary responsibility is to ensure that the exercise and discussion does not stray away from the purpose of the evolving toward adaptability. Additionally, the facilitator should refrain from lecturing and allow the participants to teach each other. In order to meet these two requirements, the facilitator should have provoking questions prepared to stimulate activity and limit discussion. The following guidelines can assist the facilitator.

Teaching to the Objective is SEAs set up with specific learning objectives in mind, and it is the facilitator's responsibility to ensure that the exercise and discussions do not stray away from the adaptability purpose. Refocusing on the Objective is where the objective of the SEA is decision making. A SEA is not an academic test, but rather an exercise in thinking and application of information, and experience to improve the decision-making process. The questions selected to prompt activity should help the player clarify that information inputs are consciously and subconsciously important to them. Additionally, how the player used information should rationalize the decision-making process.

Conclusion: Teaching is Fun

In the ALC SEA execution, there is no 'right' answer, only better ones. All responses have some benefit, and highlight your perception of the problem. There is nothing to stop you from coming up with more than one response. Recognizing, however, that there are many ways to approach a problem, we did not limit the student to one pass-or-fail school solution.

This is hard when using the SEA through the TDG for example to evaluate decision-making ability during an examination, but it can be done.

We used four evolving questions when grading the TDG exams and quizzes.

- First and foremost was a decision made?
- If so, we jump to two was it communicated to their subordinates effectively?
- Then, we ask was the decision made in support of the commander's intent (long-term contract), and mission (short-term contract)
 - From there, if it was not, then the instructor asks himself was the cadet solution based on changing conditions that made it a viable decision even if it violated the original mission, but supported the intent?

Failure in the SEA occurs when the student cannot make a timely decision or no decision at all. On the other hand, in the course of briefing their course of action, or while the instructor is assessing the SEA, the cadet changes their decision because the instructor challenged the cadet's choice. Here, the student demonstrates the need to go along with the instructor ("higher"). Even if the instructor feels that the cadet's decision is a sound one, they may challenge or test the cadet's character in the face of adversity, to see how much the cadet believe in themselves.

In the end, SEAs executed through the right tool, mostly TDGs, provide an excellent educational approach for building a Future Leader's strength of character. The current Army POI of most courses uses process and task training to train potential officer on "what to think." In most of our wars, with the U.S. coming in late, and after the Germans were bled down and almost already beaten, it made it appear in the "glow of victory," that our system of officer production was the right one.

Today in Iraq junior leaders are being forced to improvise on their own to overcome what they were not taught in peacetime. The Army must realize that the foundation of an effective officer corps in the future must begin early. Military education must change radically to establish "how to think" and create leaders that are adaptable and have intuition. If we are going to really "Transform" the future force, we need to start now with the next generation.

Endnotes

¹ This paper originally evolved from notes on techniques used to teach adaptability written into a draft instructor's manual on how to teach adaptability with Sergeant First Class Jeffery Roper while teaching at Georgetown Army ROTC.

² There are several examples of similar versions of ALC. I have to contribute the ideas and execution of the earlier version of ALC at Georgetown Army ROTC to Major John Schmitt's input to me through several e-mails. Major Schmitt was the USMC cadre at Loyala Army ROTC and implemented several of the concepts presented here.

³ Data gathered from six years of observing ROTC cadets practicing adaptability using tactical decision games and free play exercises, as well as feedback from 39 commissioned officers who were exposed to the case study approach.

⁴ Created by Major Mark Tribius, US Army, while serving as a battalion S1. From a briefing to COL Rickey Smith, Director U.S. Army Training and Doctrine Command Future's Forward, November 7, 2005.

Annex B

Understanding Adaptability¹

“Adaptability” is a somewhat elusive term and its meaning can vary between two extremes. Adaptation can be passive or dynamic, or one can be either shaped by or shape the situation to his or her own advantage. Innovation, being able to “think on one’s feet” and “improvise” is a prerequisite for dynamic, but not passive adaptability. Thus, to develop *Dynamically Adaptive Leaders*, the Army must develop *Innovative* ones first, which is a very tall order and suggests why the “Journey” will be time consuming and less than straightforward. Developing *Innovative, Adaptive Leaders* forces two very basic questions: **What** Leader attributes should Army development efforts address and **How** is the Army going to grow them? The remainder of this section explores these two basic issues.

The Question of WHAT?

Competencies, including lower-order associated knowledge, skills, and abilities, are what we conventionally use to describe leader development needs. Two recent studies identify critical ‘Strategic Leader’ competencies to ‘paint’ a ‘portrait’ of the Strategic Leader, the upper anchor of leader development initiatives, in competency terms. Army Chiefs of Staff commissioned both reviews and they yielded similar findings summarized below.

The mid-80’s investigation,² based upon interviews with about 2/3 of all then three- and four-star incumbents about their work and its nature, boiled their findings down to these:

- Multi-National (Global) Perspective
- Philosophy of Role of the Army Within Society(ies)
- Strategic Skills – Political, Combat, Organizational Culture & Values
- Communicative – Systems (Mass Media, Organizational), Persuasive (Consensus Building Among ‘Players’), Networking & Collegiality
- Systems/Organizational – Building/Engineering Systems & Organizations and/by Establishing Purpose, Values, and Shaping Culture

A more recent study,³ a review of all relevant literature, concludes that Strategic Leaders should possess these competencies:

- Identity – Who Am I? or ‘Self-Awareness’
- Mental Agility
- Cross-Cultural Savvy
- Interpersonal Maturity
- World Class Worrier

- Professional Astuteness⁴

These two sets, though identified through different methods and at different times, are remarkably similar.⁵ Reading between the lines and based upon other empirical and theoretical⁶ work, there are two monolithic capabilities that underpin both.⁷ They are truly developmental, in the sense used in the Behavioral Sciences literature, and are *Cognitive & Social-Emotional* in nature.⁸

For example, “World Class Warrior” presupposes a well-developed Cognitive Capability to deal with high levels of abstraction, complexity, and ambiguity – to “read” situations well, even those global in scope. The same is implied by “Mental Agility,” “Multi-National (Global) Perspective,” and “Systems/Organizational – Building/Engineering Systems & Organizations and/by Establishing Purpose, Values, and Shaping Culture.” Similarly, “Social-Emotional Capability” must be highly developed to demonstrate “Interpersonal Maturity” at the Strategic Level and “Identity” – “Self-Awareness” and “Professional Astuteness” as well. In fact, “Self-Awareness” is one way of defining level of achieved “Social-Emotional Capability,” that is, “Self-Awareness” grows as “Social-Emotional Capability” develops.

Competencies are what Leaders have. They are composed of specific knowledge, skills, and ability complexes and manifest in specific behavior – what Leaders can do and how well Leaders can do it. Apache flight certification assures the Army that the individual possessing it is competent to fly, but it says nothing about how one might employ this asset with others in a combat situation against who for what purposes with what anticipated outcomes; however, the state of development of leaders’ Capabilities—Cognitive & Social-Emotional—will provide substantial clues.

Capabilities determine “what we are” – they manifest themselves more globally in the nature of our Frame-of-Reference, or our ‘eye on the world,’ what we use to make sense of the environment and events happening to others and us. Thus, there are substantial differences between Competencies and the Capabilities, as outlined in Table 1.

Table 1
CAPABILITIES VS. COMPETENCIES

Capabilities Are:

- ‘What You ARE’
- Developed Across Time
- Cut Across Specific KSAs & Job Tasks/Subtasks
- ‘Foundational’ to all Competencies
- Determiners of ‘Level’ of Competency Proficiency
- Reflected in ‘Stages’ or ‘Levels’ of Current & Potential Growth

Competencies Are:

- ‘What You HAVE’
- Developed within Time
- Related to Specific KSAs & Job Tasks/Subtasks
- Specific to Jobs & ‘Job Families’
- Reflected in Current Competency Performance
- Only Reflected in Current Performance

Taking another example, competence as a “Strategic Planner” means entirely different things depending on the level of Cognitive & Social-Emotional development. For example, at the lowest levels of Cognitive development, planning “strategically” will mean a few hours up to a day or two, while at the higher levels it will mean from one to as many as 20 years or more, that is, to be able to project the consequences of actions taken today out that far. Consequently, Capabilities underlie how leaders use their Competencies – they are all about how Leaders make “*meaning*,” or sense, of the world, issues, others, and themselves. They determine what Leaders think of them and how Leaders behave towards the outside world.

Cognitive & Social-Emotional Development (CD & ED) occurs by “Levels” and in “Stages” for these two forms of development respectively. *Nature*, what we were born with, establishes how far we can progress, our potential, and *nurture* provides the experiences that help or hinder reaching it.⁹ Capabilities and Competencies are two monolithic underpinnings depicted below in Figure 1.¹⁰

Figure 1.

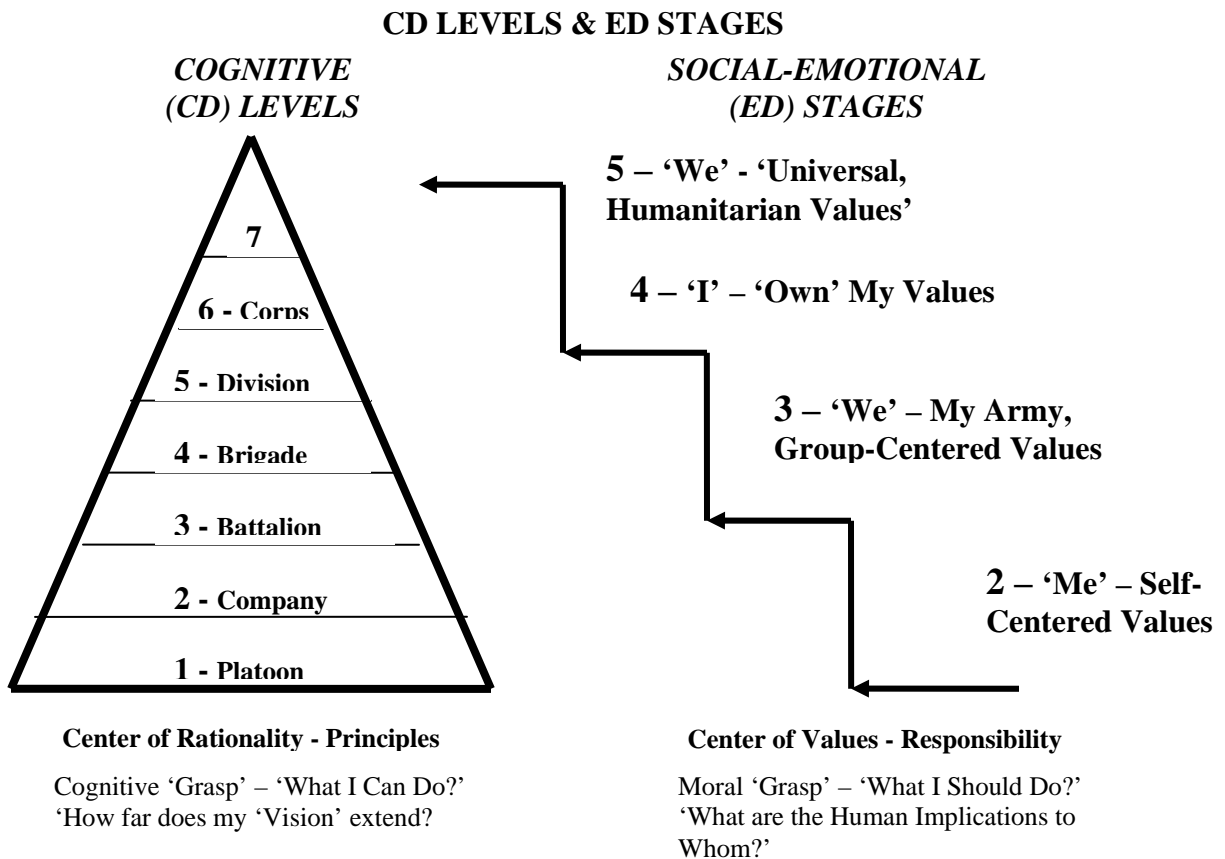


Figure 1 shows that CD, our Cognitive “Grasp,” the breadth, depth, and scope of the “map” in our heads of how “I” or “we” – the person, himself or herself, teams, groups, organizations, nations, and the global community conduct business, varies widely among individuals. In large part, it determines “WHAT I CAN DO.” In terms of how

Army forces have been traditionally echeloned, leaders possess a broad grasp at each one. Span of control and discretion for decision making varies widely from very little at the platoon level to very large at Corps & echelons above, whatever these, if any, are defined to be, depending upon the scope of force engagements globally.

Future force structures must envision fewer echelons, more flexible, agile, maneuverable units. This suggests that leaders must be *more capable earlier than heretofore has ever been the case*. In short, we should expect, for example, company commanders to be as, if not more, CD capable relative to today's Battalion or even Brigade commanders. Therefore, we must find ways of **accelerating** development over and above what our training and educational system has traditionally been capable of achieving.

In relative terms, ED is more important than CD, although the two are significantly correlated ($r=.46$, $df = 32$, $p < .01$).¹¹ ED defines what has been called our "Center-of-Gravity,"¹² or the center of their emotions, actions, and decisions at some point in time. Whereas CD will determine the scale and scope of problems and operations an individual can effectively take on and the logic behind them, ED determines, in large part, the why – people's motivation – of what they do.¹³ Put simply, it is all about "WHAT SHOULD I DO AND FOR WHOM?" Successively higher achievement on this dimension determines how **objective** the individual can be about their strengths and limitations, which also reflects how open they are to learning and discovery about themselves and others.

According to ED logic, people's self-identity, and feelings of self-worth, are defined by two distinct perceptions: their own, and what they believe others think of them, especially the views held by significant others. Our social identity springs from these two sources. As shown in Figure 1 (right-hand side), development on this dimension also results either in a focus on "self" (Stages or levels 2 & 4) or "others" (levels 3 & 5). Consequently, how much we are concerned about what others think of us varies systematically over the life span. ED progression directly relates to the need to have agency over (control) situations, others, and even the self.

Five distinct Stages of ED, roughly corresponding to CDs identify and describe qualitatively and quantitatively Seven Levels. Adult growth stages classified four of them (with intermediate points totaling 15 stages & sub-stages).¹⁴ Most adults (about 55%) progress from an exploitative, self-centered 'teenage' Stage 2 into the broader "community" oriented Stage 3. Far fewer (about 25%) reach a self-authoring, "I own my values and principles of operation" Stage 4, and fewer still (< 10%) ever manage to achieve Stage 5, where the individual is able to construct true 'learning organizations' in themselves and the broader social context that can be self-sustaining.

The focus of one's concerns or their "Center-of-Gravity" systematically changes over time. The "We" at Stage 5 is very much different from what it was at Stage 3. In this case, instead of being "pulled" in the direction of prevailing Army norms, a person at Stage 5 will view them only as a point-of-departure. Nor will they view using the

institution as an extension of themselves, to do their bidding as they *uniquely* see fit, as they would at Stage 4. At Stage 5, they can “de-center” from their own unique Stage 4 self and will work towards change that will have better overall universal outcomes for “their” group, institution, system, regardless of how well it might suite or benefit their unique way of doing business. Table 2 summarizes salient characteristics of each development Stage.

Table 2.
CHARACTERISTICS OF ED STAGES

STAGE:	2	3	4	5
VALUES:	‘Law of Jungle’	Community/Team	Self-Determined	Humanity
Organizational Orientation:	Careerist	Good Citizen	Organizational Leader	System’s Leader
Communication :	Unilateral Win-Lose	Exchange 1:1 – Win-Lose	Dialogue Consensus –Win & Lose	Collaboration Win & Win
Need to Control:	Very High	Moderate	Low	Very Low
View of Others:	‘Objects’ – Pawns to be Used for My Purposes	‘Game’ Competitors	‘Contemporaries’, Respectful of ‘Their’ Views	‘Colleagues’ Their Views Complement & Round-Out Mine
Self-Awareness:	Very Low-Low	Low-Moderate	Moderate-High	High-Very High

Without an intervention a person within a Stage has 20-20 hindsight, they can clearly “see” and de-center from what they were retrospectively – “Oh my God, could I really have been so naïve to think, feel, and act in that way?” Yet, they have great difficulty in totally grasping their present view – imbedding them in it. For example, in the “I”-ness of Stage 4, where the person has built a solid sense of who they are, they fail to understand that their views, regardless of how well thought through, are just one of many equally valid. When they begin sensing this, to begin accepting other equally valid points-of-view and *synthesizing* them into more comprehensive, robust ones, Stage 5 perspectives emerge and the relative sterility of their Stage 4 understandings becomes obvious. They have just discovered that a new vantage point exists for them to achieve, should they care to make the effort that will be required to achieve it.

Table 3 shows theoretical expectations for CD & ED achievement by traditional position level within private sector organizations and the Army. It also describes, in very basic behavioral terms, what we expect of incumbents by level and what past research suggests that they should be able to do.¹⁵

We should realize that CD and ED reflect themselves in the twin pillars we use to define organizations, aside from assigning mission(s). FM 3-0 stipulates, on the one hand, our “Operational Principles,” the logic of what we do. Stated along side these are our “Values,” defining the ‘how’ of what we do: *How the operational principles and values are realized in everyday, action defines Culture.* They are the sin qua non of what we are and there is usually a disparity between what we claim we are and what we actually are; that is, a significant delta between “what we say” and “what we actually do,” a topic that will be addressed later. The extent of this delta is directly related to how difficult bringing significant cultural change about is likely to be.¹⁶

Table 3.
Summary of Combined CD & ED Developmental Milestones to Leadership & Organizational Structure

STAGES Of ED	LEVELS Of CD	LEVELS OF ORGANIZATION		GENERAL TASK REQUIEWMENTS
		LEVELS OF LEADERSHIP	POSITION/RANK	
5	VII	STRATEGIC – Mission, Culture, Strategy, Vision	**** Echelons Above Corps/Army Staff General/Global CEO-Board of Directors	Create and Integrate Multiple Commands/ Separate Business Units, Create Policy, Vision, & Establish Present & Future Directions & Missions. Brokers the Organization with outside influences: Press, Competitors, Suppliers, Partners, Congressional Constituencies, etc.
	VI		****/*** Corps/Separate Command Corporate Executive VP	Oversees Internal Operations of HQ, Subordinate Divisions, Strategic Business Units (SBU's); allocates resources, sets Policy into motion and Monitors Progress towards achieving Mission Objectives
4	V	ORGANIZATIONAL - Operational Policy, Mission, Objectives, SBU Climate	***/** Division Cmd SBU CEO	Direct Operations of complex Support and Direct Subordinate Units; Allocates assigned Resources; Implements Directives & Corporate Policy
	IV		**/* Separate Bde/ADC Senior VP	Direct Operations of Direct Subordinate Units; Taylor or Task Organize Resource Allocations to Interdependent Subordinate Programs and Sub-Units; Put Policy Directives into Operational Motion
			0-6 Brigade Cmd Division Director/Junior	
3	III	DIRECT/PRODUCTION – Translate & Implement Policy Through Operational	0-5 Battalion Cmd Department Director	Develops & Executes Plans & Task Organizes Sub-Units; Prioritizes Resources; Translates & Implements Policy at the Working Level within

				Assigned Mission Constraints
	II	Procedures	0-3 Company Cmd 2 nd Line Supervisor	Directly Supervises Subordinate Units' Performance; Anticipates & Solves Problems in Real-Time; Constantly Shifts Resources with Situational Demands; Translates Policy
2	I		02-01 Platoon/Squad Leader 1 st Line Supervisor	Direct Performance of Work; Uses Practical Judgment to Solve Ongoing-Immediate Problems

Table 3 helps understand CD & ED achievement in relation to potential individual and organizational effectiveness. How they interact with one another defines yet a third crucial element of leader growth: Knowledge Development (KD). Infer a robust KD from level of assessed CD & ED.

Knowledge Development (KD) represents the combined product of CD and ED and is the platform for our Frame-of-Reference - FOR, the outcome state that, in turn, drives behavior patterns. CD and ED are the *vertical* growth dimensions and the nature of their *nexus* is **critical** to leader development. Both are statistically related. These findings and others suggest develop CD and ED *in synchrony*, to maximize knowledge development, KD, generally. CD lays open to the individual a landscape of choices, while ED determines whether he or she makes the RIGHT CHOICES under prevailing circumstances. As a result, educational and training efforts that do not develop CD and ED in tandem are predictably suboptimal, especially for military officers. Without ED being as fully developed as CD, they would know “What” but not “Who” they are!

Another way of saying this is that what is not marked “in your gut” is lean on *meaning*. “Performance” has an experiential component, and competence per se does not—learning to ride a bicycle from a book without ever mounting one represents the CD component, while actually riding it provides KD’s ED complement. Thus, CD and ED together provide a complete grasp of a person, object, situation, issue, etc. Focusing on CD alone, as many educational and training experiences do leaves out a critical part of the *meaning making* process (comes through using simulation assisted learning). So, while CD => KD = **competence** is necessary for acting ‘knowledgeably,’ it is not sufficient for acting ‘responsibly,’ or with a full understanding of the social – emotional consequences, on whatever scale, of the course of action one chooses to pursue. Synchronous CD & ED growth promotes holistic understandings, which must be a part of any well-defined Army leader development process.

Perceptual & Learning Processes:

The final piece of the puzzle that the Army must consider in developing future leaders is itself a rather complicated process. Substance is to substrate in emulsions as competencies are to capabilities in human development. How competencies combine

with capabilities to produce development *across* time occurs through *Learning*, but that is, in turn, dependent upon our senses – what we see, hear, taste, touch, and smell. Some would rightly add a sixth that defies rational explanation or concrete definition – *Intuition* – What we know or feel without explicit knowledge of how.

Our senses provide the food for learning—the gatherers of raw information. “Rote” learning is the food not processed before it is stored. Learning Research has shown that humans can only deal with about seven raw pieces of information (number, letters, etc.) at one time.¹⁷ Given this limitation, people develop conceptual strategies that store higher orders of information or datum in the form of “concepts,” and process further into concepts of yet higher orders, pillaring one conceptual layer on top of the other. Rote learning occurs in concepts. Someone else has processed the raw inputs constituting them, or the receiver can process the information himself or herself into the higher order. Learning consists of both processes, but one is passive and the other active.

How to produce the next Generation

Understanding how to develop and nurture adaptability must be undertaken, in concert with extant Army plans for revamping the officer Education & Training process, for the institution itself to produce Future Leaders who will have the FOR necessary to change the Army's culture in ways I and others have suggested:

Adapt the model of development suggested in favor of alternative approaches that have not achieved the ends intended for at least two generations, if not more. Those teaching at the Adaptive Leader's Course need to focus on the essential elements of development, as defined here, and as suggested from the best available findings about human development and transformation available today.

Develop measures of both the Essential Elements themselves and their behavioral manifestations. Measures of ED and CD do exist, but develop as “user friendly” and usable on a Army wide-scale basis. Metrics cannot be the current leader evaluation card used by Cadet Command that is very complicated and forces leader observers to focus on the card and not the actions of the student leaders and their units. A tool for new metrics can be a simple card with just a printed “name,” “mission,” “time,” and name of “evaluator.” The rest is space to write observations. Given a number of these observations over time, through demanding situations enabling adaptability provide a measurable evaluation of adaptability. Complementary measures of P&L exist as well. Clearly, if we cannot measure the Essential Elements, they do not matter; hence, we must find ways of measuring these elements for two purposes:

- **Intensive confidential** individual assessment, feedback, and development planning at each school house entry or career gateway. The issue is to provide the foundation needed to guide development during the educational experience and in follow-on assignments.

- **Systemic feedback.** Each officer should be anonymously assessed at each gateway point to provide a feedback loop at the systems level, to determine if the programs and processes set in motion are having their intended effects. This will provide an interlocking chain of continuity to each Officer's development from the time of pre-commissioning onward. With such a continuity thread, it will be possible to monitor progression towards our objectives: Generically, the crucial question is developing the Army's talent at the right time and place needed in terms of the Essential Elements.

Establishing the blend of instructional technologies to use, particularly in the institutional setting, is critical to promoting synchronous growth in CD, ED, and, consequently, KD. Present instructional approaches lack opportunities for experiencing the EMOTIONAL TRAUMA OF FAILING WITHIN A SAFE, FACE SAVING ENVIRONMENT that is needed to promote ED. The technologies coequal focus must be on CD to teach critical and reflective thinking, or how to think. This should replace the now almost total emphasis on **what** to think (content) to permit building richer and deeper understandings of the self and alternative worldview, an understanding of which will enrich one's own.

The Army's highly technical environment demands that the emphasis from the outset be on *transformation*, on growing by learning-to-learn, not information alone. This annex has focused on the **what**, but there are going to be sequels to address the **how**, which is critical to the overall eventual success of these recommendations. In many senses, the **how** is a more difficult issue, but evidence exists that gives us strong clues about what its nature must be.¹⁸

Conclusion

The only way the Army can produce a future leaders with the wherewithal to define and develop a "Culture of Innovation" are from inside the individual out. It will only be possible by growing a cadre of people with a more advanced FOR than evidence suggests exists now. Thus, the transformation our recommendations envision will take place over a protracted period as the next generation is produced. If the Army starts in earnest now to focus on development as we have described it, rather than on its manifestations - behavioral "eaches" or "meta-eaches," The Army can reinvent itself in the ways current trends suggests it must: "*Adapt or Die:*" The Imperative for a Culture of Innovation in the United States Army."¹⁹

If the Army truly wants to raise itself to the next level, it must be prepared to grow a new, more advanced Leader at all levels, and marshal the "military continuity" – that sustained, dedicated, focused sense of purpose – that will be necessary to make it happen. As long as the Army culture mirrors more than less the culture at large, it will never produce the change it seeks. A culture supportive of the Profession of Arms, where mistakes are measured in lives, not dollars. The Army has the talent, if only the

institution will take the initiative and engage the appropriate, extended effort that will be required to develop it.

ENDNOTES

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- ¹ I would like to thank Dr. Steven Stewart who assisted me in writing this one for the Army. Dr. Stewart assisted in the founding of the Army's School of Advanced Military Studies, and taught a cognitive development course at the War College.
- ² Jacobs, T. O., & Jaques, E. (1987). Leadership in complex systems. In J. Zeidner (Ed.), *Human productivity enhancements: Vol. 2. Organizations, personnel, and decision making* (pp. 7-65). New York: Praeger.
- ³ Wong, L., Gerras, S., Kidd, W., Pricone, R., & Swengros, R. (2003). *Strategic Leadership Competencies*, Carlisle Barracks, PA: Strategic Studies Institute.
- ⁴ Stewart, S. R. (1992). *Leader Development Training Needs Assessment of U.S. Army Battalion Commanders*. U.S. ARI Technical Report 969.
- ⁵ Stewart, S. R. (1987). *Leader Development Training Assessment of U.S. Army TRADOC Brigade Commanders*. U.S. ARI Research Report 1454.
- ⁶ Stewart, S. R. (1988). *Correlates of Problem Solving and an Evaluation of Training to Increase Problem Solving Effectiveness*. Ann Arbor, MI: Bell & Howell (order no. 9022825).
- ⁷ Lasky, O. (2001). Linking Two Lines of Adult Development: The Developmental Structure/Process Tool. *Bulletin of the Society for Research in Adult Development (SRAD)*, 10.1, 8-11
- ⁸ Demick, J. & Andreoletti, C. (Eds., 2003). *Handbook of Adult Development*. New York: Kluger Academic/Plenum Publishers.
- ⁹ Kegan, R. (1982). *The Evolving Self: Problems and process in human development*. Cambridge, MA: Harvard University Press.
- ¹⁰ Jaques, E. (1989). *Requisite Organization*. Arlington, VA: Cason Hall.
- ¹¹ Lewis, P. (1995). *An Exploration of Leader Conceptual Capacity*. Paper presented at the 103rd Annual Meeting of the American Psychological Association, New York, NY, August 11, 1995.
- ¹² Graves, (1981). *Summary Statement: The Emergent, Cyclical, Double-Helix Model of Adult Human Biopsychosocial Systems*, Boston, May 20. [quoted in Wilber, K., *Integral Psychology*, Boston: Shambhala, 2000.
- ¹³ Lewis, P. & Jacobs, T. O. (1992). *Individual Differences in Strategic Leadership Capacity: A Constructive/Developmental View*. In R. L. Phillips, and J. G. Hunt (Eds.), *Strategic Leadership: A Multiorganizational-Level Perspective* (pp. 121-137). Westport, CT: Quorum Books.
- ¹⁴ Kegan, R. (1984). Ibid.
- ¹⁵ Jacobs, T. O. & Jaques, E. Ibid.
- ¹⁶ Department of the Army (2001). *Field Manual 3-0, Operations*. (pp. 1-7). Washington, D.C. U.S. Government Printing.
- ¹⁷ Simon, H. A. (1969). *The Sciences of the Artificial*. Cambridge, MA: MIT Press.
- ¹⁸ Stewart, S. R. (1989). *Correlates of Problem Solving and an Evaluation of Training to Increase Problem Solving Effectiveness*. Unpublished Doctoral Dissertation. Carbondale: Southern Illinois University.
- ¹⁹ Fastabend, D. A., & Dimpson, R. H. (2003). Ibid.