

USAWC STRATEGY RESEARCH PROJECT

**PROSPECTS FOR STRATEGIC THINKING AND INNOVATION:  
A SURVEY OF WAR COLLEGE STUDENTS**

by

Lieutenant Colonel William H. Snow  
United States Army National Guard

Chaplain (Colonel) Daniel K. Nagle  
Project Adviser

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U.S. Army War College  
CARLISLE BARRACKS, PENNSYLVANIA 17013

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## ABSTRACT

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A major goal of senior service education is the development of leaders able to think critically and innovatively at the strategic level. Each year the various Senior Service War Colleges in the United States graduate hundreds of senior leaders who are encouraged to bring their newly refined intellectual skills back to their individual areas of government service. But, will War College graduates return to find their enhanced thinking styles welcomed or will they become frustrated by intellectual contributions devalued or ignored? This research project explores the positive and negative expectations of U.S. Army War College students enrolled in the Class of 2006 through a web based survey. It explores the reasons for their expectations, and suggests how to achieve competitive advantage through fostering a culture and climate supportive of critical, innovative and strategic thinking.



## PROSPECTS FOR STRATEGIC THINKING AND INNOVATION: A SURVEY OF WAR COLLEGE STUDENTS

A major goal of senior service education is the development of leaders able to think critically and innovatively at the strategic level. Each year the various Senior Service War Colleges in the United States graduate hundreds of senior leaders who are encouraged to bring their newly refined intellectual skills back to their individual areas of government service. But, will War College graduates return to find their enhanced thinking styles welcomed or will they become frustrated by intellectual contributions devalued or ignored? This research project explores the positive and negative expectations of U.S. Army War College students enrolled in the Class of 2006 through a web based survey. It explores the reasons for their expectations, and suggests how to achieve competitive advantage through fostering a culture and climate supportive of critical, innovative and strategic thinking.

### Strategic Thinking and Leadership

During the Spanish American War a major weakness in the education and training of senior officers and their staffs was uncovered. Strategic thinking in solving military problems was severely lacking so a major revamping of military education was instituted by Secretary of War and future Nobel Laureate Elihu Root. One of his reforms was the founding of the United States Army War College to offer academic studies in the form of "a post-graduate course" where the Army's best officers would "study and confer upon the great problems of national defense, of military science, and of responsible command."<sup>1</sup> The United States Army War College is still about the mission of fostering strategic thinking and leadership. The *Curriculum Catalog* describes this mission as "To prepare selected military, civilian and international leaders for the responsibilities of strategic leadership".<sup>2</sup> This emphasis is further elaborated in the War College's *Strategic Leadership Primer* as the "coin of the realm", "...a study of important and enduring concern to the Army".<sup>3</sup>

This "coin of the realm" has two sides. One side is about the leadership process while the other side is about strategic thinking. The complete leader must know how to think properly before leading people to ensure that they know where they are going (ends), that they have chosen the right course of action (ways) and that they have the right resources (means) to get there.<sup>4</sup> The War College's stated core competencies include critical thinking, collaboration, an open exchange of ideas and innovation and other accepted best practices. It encourages personal and professional reflection, critical assessment and consideration of a variety of issues that make up a volatile, uncertain, complex and ambiguous world.<sup>5</sup> It further states that it wants

graduates to "...challenge personal and organizational assumptions, beliefs and values to determine their relevance for the future".<sup>6</sup> The ideal leader today still possesses boldness but more than ever must exercise great forethought before taking action.

As expressed in the article *Adapt or Die*, forward thinking and innovation are imperative to keep the Army ready and relevant for future conflict.<sup>7</sup> A culture that promotes honest self examination and institutional introspection is foundational to the kinds of critical and strategic thinking processes required for such innovation to thrive.<sup>8</sup> Leonard Wong and Don Snider believe the deliberate shaping and formation of such institutional cultures is as strategic as choosing a weapons system.<sup>9</sup> Cultural changes have long term implications, render important third and fourth order effects, and contribute to mission outcome. Senior leaders must understand their role in ensuring the outcome is one of success. Wong and Snider provide four suggestions to help understand and align institutional culture with future mission requirements:<sup>10</sup>

- Understanding the operational environment as well as the broader national and world context.
- Maintaining and adapting the profession's expert knowledge to the changing demands of the national and world culture.
- Clarifying the legal, ethical, moral and professional boundaries and limitations of the military profession.
- Conforming and aligning the Army's professional development programs to produce properly educated and trained professionals.

Senior leaders would likely voice their agreement with Wong and Snider that culture is important and the four suggestions are reasonable. But, grand ideas and good intentions compete with the demands of the current, fast paced, high OPTEMPO environment. It is not clear that the current culture and climate truly fosters or allows strategic thinking, critical analysis and ultimately the innovative solutions required for future success.

#### The Nature of Culture and Climate

What are culture and climate, how are they related and why are they important? Culture is the unique character of the organization and is composed of the shared attitudes, values, beliefs, norms and customs.<sup>11</sup> It is identifiable through public statements, language and symbols as well as the similarities of the leadership and members. Culture is difficult to describe but for those immersed in the organizational milieu, the positive and negative influences are real. Culture supports and culture constrains thinking and action. Climate generally reflects the overall mood within the people of the organization. Climate is related to

traditional military concepts like morale and esprit de corps. Culture and climate together matter as they are foundational to instituting organizational processes and procedures. If there is a supportive culture and the emotional climate is positive, then proposed changes have a fertile ground for germination and growth. If there is a resistant culture and the emotional climate is suspicious and distrustful, then even good ideas may wither up and die.

The military generally understands the value of culture and climate and does an excellent job in articulating preferential states. Military services describe cultural ideals in their manuals, develop advertisement campaigns to communicate them, and conduct classes to ensure they are well understood. Unit climate profiles measure organizational attitudes and individual evaluations report on the level of individual support. Culture and climate are force multipliers and can serve to maximize the human potential contained within organizations.

Culture and climate are important force multipliers for senior leaders as well. The Chief of Staff of the Army, General Peter J. Schoomaker, asserts, the "Development of a culture of innovation will not be advanced by panels, studies or this paper. Cultural change begins with behavior and the leaders who shape it."<sup>12</sup> He goes on to describe innovative cultures as ones typified where, "People are encouraged to try alternative paths, test ideas to the point of failure, and learn from experience."<sup>13</sup>

The United States Army War College's statements support the Chief of Staff's concern over the human dimensions of leadership. It advocates getting the best ideas from people by understanding and influencing the culture to create healthy, innovative organizations.<sup>14</sup> The War College's *Strategic Leadership Primer* reiterates this responsibility for managing organizational climate, shaping culture and promoting positive change. It states, "It is strategic leadership that transcends the organization by orchestrating internal events, in concert with personal and organizational influence on the external environment, to achieve an organizational vision."<sup>15</sup>

Today's strategic leaders are called upon to act as cultural leaders. They must collaborate, cast vision, mentor and guide a process that extends their influence beyond their immediate subordinates. It is their responsibility to foster a climate and culture that allows ideas to germinate, emerge and fully develop into practical innovative solutions. The cultural advantage is theirs to gain or lose.

#### Culture as Advantage

History demonstrates the power of cultural advantage. Sun Tzu is one of the earliest examples of a leader who knew what he wanted in this realm having clearly written out his principles in *The Art of War*.<sup>16</sup> He actively shaped his leadership culture and climate through

education and influence to form a cadre of military generals open to learning and change. One principle states that "Prior to war it is best to conduct analysis in the temple before going off to war." He goes on to state, "...with many calculations one can win. With no calculations one has much less chance of victory."<sup>17</sup> Sun Tzu's calculations were not merely force ratios and numbers. Calculations represented a detailed understanding and knowledge about self and opponent. Leaders who act with understanding and knowledge are far more likely to prevail than those who do not, a simple concept, but, one that is not practiced consistently, even today.

Machiavelli articulated his own set of principles. In advocating a culture of conversation and learning he suggested, "A prudent prince should adopt a third course, bringing wise men into his council and giving them alone free license to speak the truth, and only on points where the prince asks it, not on others. But, he should ask them about everything, hear his advisors out, and make his decision after thinking things over, according to his own style. But, apart from these counselors, he should not listen to anyone..."<sup>18</sup> Machiavelli understood the value of conversation and learning, but, was himself constrained by the suspicious culture of Italian political intrigue. He was fearful of allowing too much openness as it could have been construed as weakness. Thus, he felt the need to exercise fear and intimidation, behavior today considered as toxic, but, unfortunately, still in use by some.

Admiral Nelson at the Battle of Trafalgar is an example where superior culture and climate provided strategic advantage over a numerically superior force. Charles Pringle and Mark Kroll in *Why Trafalgar Was Won before It Was Fought: Lessons from Resource-Based Theory* describe Nelson's victory over the French fleet.<sup>19</sup> They outline how culture, experience, training, teamwork, and leadership enabled the British to overcome the physical advantages of their French opponents. People and culture were the British secret weapons.

So what kinds of organizational resources provide competitive advantage? J. Barney in the *Journal of Management* describes four types:<sup>20</sup>

- Resources that are valuable
- Resources that are scarce
- Resources with no substitute
- Resources that are difficult to imitate

Admiral Nelson's victory fits perfectly into Barney's model of resource competitiveness and advantage. The numerically inferior British fleet overcame the odds with superior human and organizational capacity that resulted from a long seafaring heritage, a winning naval tradition and superior leadership.<sup>21</sup> These human and organizational differences were clearly undervalued by some but clearly understood as force multipliers by Nelson.

The human and organizational strengths of the British were scarce within the French Navy. Napoleon could get money to build ships, but, could not easily get quality seamen and naval leaders. He found leaders can rush the procurement of combat hardware, but, developing skilled personnel and mature organizations takes time.

Finally, even if the French forces had more time they would not be able to imitate the same conditions that allowed the British fleet to prevail. The seafaring nature of the British culture developed as a result of its own unique geography, position off the coast of mainland Europe and protective isolation provided by the Atlantic Ocean and English Channel. The British were uniquely a sea based military culture and the French a land based military culture.

Ultimately, Napoleon had no choice but to challenge the British on the high seas to expand his empire. He attempted to compensate for French human and organizational weakness with numerical superiority, but, to no avail. Without losing a single ship, Admiral Nelson and the British fleet conquered the French fleet and captured 18 of their ships.<sup>22</sup>

Strategic leaders today must foster cultures and climates that provide competitive advantage over competitors. It is still not enough to rely solely upon numerically and technologically superior weapons systems. Leaders must get the most out of their people and help them navigate today's volatile, uncertain, complex, and ambiguous (VUCA) environments.<sup>23</sup> Success is most certain if people are provided the best combination of superior training, equipment and culture.

In order to gain competitive advantage, leaders must continually adopt new ways of observing, conceptualizing and managing their organizations. Peter R. Scholtes in *The Leader's Handbook* suggests seven important competencies for gaining and retaining the advantage:<sup>24</sup>

- Thinking and leading in terms of systems.
- Understanding the complexity and variability of human performance in planning and problem solving.
- Understanding how people learn, develop and improve.
- Leading true learning and improvement.
- Understanding people and what motivates and guides their behavior.
- Understanding the interdependence and interaction between systems, variation, learning and human behavior and knowing how each affects the other.
- Giving vision, meaning, direction and focus to the organization.

Scholtes' competencies are valid for any leader. If practiced, they help leaders see organizations and their inherent challenges from new perspectives. They help clear away some of the intellectual fog and suggest alternative approaches and potential new solutions. Unfortunately, the systems perspective is highly conceptual and not all leaders grasp the more abstract implications. But, for those who do a leadership competitive advantage is promised.

Scholtes' systems oriented competencies are similar to Peter Senge's'.<sup>25</sup> Senge built upon the general social systems model and constructed an advanced theory of organizational learning. He describes learning organizations as possessing cultures and climates promoting continuous environmental scanning, the identification of opportunities and challenges, and the ongoing modification of organizational systems to maintain competitive advantage. Learning organizations excel by learning faster and outpacing their competitors in their use of innovation.<sup>26</sup>

Model learning organizations embed this adaptive ethos into their culture, climate, orientation, and assessment processes.<sup>27</sup> Rather than micro-managing people and bureaucratic details, they manage the broader environment. Senge describes the ideal strategic "systems" leader as someone who thinks in terms of systems and looks for solutions in the complex interactions of their own system with that of their environment. This ideal leader aligns the energies of people with commonality of purpose and shared vision.

If the leader fails to think strategically and instead focuses on simply replacing people, organizational flaws remain. Senge states that people generally work very hard but even the most intelligent people often work at cross purposes to each other in a phenomenon characterized as misalignment. Misaligned individual effort does not translate into team effort, and thus, is wasted effort. It is a problem with the organizational system, not the people. Peter Scholtes agrees and states, "All the empowered, motivated, teamed-up, self-directed, incentivised, accountable, reengineered and reinvented people you can muster cannot compensate for a dysfunctional system".<sup>28</sup> In contrast, great organizations empower people by aligning their efforts, making their work more productive, ensuring work is meaningful, and consequently, releasing them to make a real and noticeable difference.

The modern military concept of Effects Based Operations (EBO) is a positive step in getting leaders to think systemically.<sup>29</sup> EBO thinking moves the perspective of the leader beyond that of kinetic effects to the more abstract but important psychological and cultural effects. In EBO the actions of both military and non-military players are harmonized to achieve desired political, military, economic, social, infrastructure and information (PMESII) changes. The focus moves beyond placing ordinance down range to altering the thinking and behavior of

the enemy through a process of effects planning, execution and assessment. EBO is worth developing as a broader organizing model for leadership thought processes. Military organizations and leaders who master EBO concepts effectively understand the larger context in which problems reside and the second and third order consequences of potential actions.

### Cultures of Conversation

Peter Schwartz suggests that to gain competitive advantage, leaders must anticipate the future, build and maintain intelligence systems, and prepare for *Inevitable Surprises*.<sup>30</sup> But, for Schwartz this warrants more than a technological fix. He believes leaders must engage in ongoing strategic conversations in which cohorts and colleagues observe, interpret and ultimately comment on the future forces that we will face; developing a culture of observation, reflection and conversation. Simply stated, leaders must talk with and listen to others to gain the best perspective on predicting and managing the future.

Kouzes and Posner, authors of *The Leadership Challenge* add their assent to the importance of true dialogue and conversation. In their view, "Collaboration is the critical competency for achieving and sustaining high performance, especially in the internet age!"<sup>31</sup> Collaborative processes take advantage of the strengths of the group and produce a level of knowledge and intelligence that surpasses the sum of the individual contributions.

A stated goal of Effects Based Operations (EBO) is to facilitate communication through a Collaborative Information Environment (CIE). The EBO view of collaboration tends to focus on communication improvement through better computerization, networks, software and a common operating picture transmitted across secure communication lines. But, the human aspects of collaboration, communication and participation are critical as well. Technology cannot fix the human obstacles that prevent honest and open sharing of information and ideas.

Undoubtedly, the Department of Defense has its share of senior leaders who prefer an autocratic style, effectively reducing the level of dialogue within their organizations. Having achieved advanced rank and status, they may never have felt the need to fully embrace words like dialogue, conversation and collaboration. They even might have shared some of Machiavelli's misgivings that allowing free discussion in open public forums can lead to a challenge of ideas, a loss of personal prestige and diminished authority.<sup>32</sup> But, the research actually shows the opposite.<sup>33</sup> Consultative and participative styles when used in the right context are both preferred by subordinates and advantageous to ongoing organizational success.<sup>34</sup> Consultative and participative styles take advantage of the full range of intellectual diversity present within an organization.<sup>35</sup> They build upon the various members' personal

strengths and unique perspectives.<sup>36</sup> Dialogue, conversation and collaboration help foster a culture where people are free to express alternative and creative ideas, thus, increasing the likelihood of coming up with tomorrow's better solutions.

Another potential obstacle to good communication and dialogue within the organization is the leader's mental set or personal metaphor for understanding subordinate relationships.<sup>37</sup> Dickenson and Filiberti suggest asking a leader what best describes their style in achieving team success: symphony conductor, soccer coach or leader of a jazz ensemble. Conductors demand that their symphony members stick to the score, pay close attention to their baton and never improvise. Symphony conductors are clearly autocratic. The soccer coach listens to player advice, devises and communicates a strategy and during the game screams from the sidelines to influence on-field events. Soccer coaches are more consultative. The jazz ensemble is truly participatory in that everyone must understand each other, remain sensitive to alterations to the program, and ultimately, react smoothly to the inevitable variations that occur around a common but loosely devised theme. The jazz metaphor speaks of an inherent adaptability, flexibility and responsiveness, qualities highly valued and predictive of success in modern organizational environments. In all three cases the group effectiveness is inherently inefficient if the various elements are not coordinated, but, for long term success the specific style of coordination matters. Modern successful leaders are more about jazz than symphony.

Historically the military has rewarded leaders who get the job done no matter what methods or styles of leadership were used. But, it is no longer acceptable to simply focus on tasks and ignore the relational features of military service.<sup>38</sup> Today's leaders need to keep one eye on achieving operational and strategic objectives with the other on the social-emotional climate of the organization. Missions are not achieved without recruiting and retaining good people on the team. But maintaining a quality force requires a positive command climate, officer development and good mentoring relationships. The *ATLDP Officer Study Report to the Army* found most officers wanted mentors, but, said they had none. Instead of more mentoring, the report found an overall deterioration in the level of senior-subordinate interaction.<sup>39</sup> The climate and culture were found lacking and more mandated programs were not viewed as the answer. As expressed in *The Road to Mentoring: Paved With Good Intentions*, people do not want formal programs, what they prefer is a conversation based upon genuine interest in shared aspirations.<sup>40</sup> It is interesting to note that the culture and climate issues found in the ADLDP study were similar in junior grades as well as the higher ranks. The study found that field grade officers had a sense of feeling undervalued, micro-managed and definitely overworked. They clearly felt their concerns were not heard or understood.

Current doctrine articulates the value of leader-subordinate communication and sets it out as the mark of a good leader. The *Army Field Manual 22-100, Leadership: Be, Know, Do* outlines leadership responsibilities in achieving a positive organizational climate as:<sup>41</sup>

- Communicating
- Dialogue
- Negotiating
- Achieving Consensus

It further describes leadership responsibility in developing a healthy culture, collegial networks, intellectual capital and a mindset of learning and adaptation. The military leader is clearly chief communicator, facilitator of the learning organization, and thus, chief custodian of future military preparedness. Organizational culture and climate are clearly leadership responsibilities.

So, what are the required conditions to facilitate communication, dialogue, honest negotiation and true consensus? David Bohm posits three:<sup>42</sup>

- Suspension of assumptions
- Participation as colleagues
- External facilitation

The suspension of assumptions allows the examination of ideas considered sacrosanct and immutable. Participation as colleagues temporarily suspends hierarchies to allow each person to speak freely. Finally, an honest broker without a vested interest is required to keep everyone focused, manage conflict and deal with power differentials. Power differentials are an important factor in the inherent hierarchical culture of the military. The chain of command has its place and respect for authority is a must, but there are situations where power differentials do not allow valued insights from subordinates to surface. Many leaders already provide non-attribution forums with external facilitators to garner subordinate insights. Dialogue even in hierarchy driven organizations is possible if properly planned and orchestrated.

#### Creating Coalitions for Change

Austin Bay in *Military Creativity* notes, "... history is filled with examples where creative and sound military ideas and concepts have been dismissed or ignored".<sup>43</sup> Competitive advantage is lost when controversial, but well reasoned insights are discarded. For example, Colonel Billy Mitchell not only advocated the increased role of airpower in the United States Military, he predicted how future enemies would use it against us. After a visit to Hawaii in 1924 he described the Island's vulnerabilities and how in a future war Japan would likely initiate an

attack using carrier based aircraft against Pearl Harbor.<sup>44</sup> However, there were those who thought Mitchell's thinking was misguided. It was not until five years after his death that his prophetic insights were validated. On 7 December 1941 the Japanese attacked Pearl Harbor as Billy Mitchell had predicted.

Billy Mitchell's story is an example of how a strategic leader has to achieve a measure of social consensus and cultural change to alter ways of thinking in addressing problems in new ways. In Mitchell's case, partly because of his radical ideas and partly because of his own personality and style, he was not able to garner the required support. The situation is the same today. Leaders will not achieve their vision without developing a supportive constituency to include the senior leaders of the profession.

John P. Kotter in *Leading Change* puts the task of creating a coalition of change agents just second after creating a sense of urgency. He is insistent that real, long term, systemic change will not occur without a coalition of the willing to get the process started.<sup>45</sup> Once changes are instituted it must then be anchored in the culture of the organization. Ultimately if there is no team, there is no change and no success.

Senior leaders can easily become skeptical and slow to jump on the innovation bandwagon. Before they commit they may need convincing that proposed creative solutions are truly advantageous. Twenty plus years of experience may have taught them that creative thinking and change processes are inherently unmanageable, producing much work with questionable payoff.<sup>46</sup> In their long careers they likely observed a bias for action and change, the implementation of untested ideas and radical organizational re-designs that disrupted proven systems. As Anderson strongly points out though, "No structure, process, incentive system or management reorganization is going to make your firm creative, unless you first help the individuals within those structures and systems to unlock their willingness to try".<sup>47</sup> Undoubtedly there are those who still need convincing over the merit of innovation.

#### Critical Research Questions

A year in the intellectually rich War College academic environment clearly raises expectations for critical, innovative and strategic thinking. Senior leaders such as the Chairman of the Joint Chiefs of Staff, General Peter Pace reinforce those expectations. In his guidance to the Joint Staff he stated, "Our Challenge is to apply our experience and expertise in an adaptive and creative manner, encouraging initiative, innovation, and efficiency in the execution of our responsibilities".<sup>48</sup> Graduates are prepared and eager to contribute in this manner, however, will

senior leaders welcome these enhanced thinking styles or will graduates become frustrated by intellectual contributions devalued and ignored?

After reviewing the relevant literature, the following three questions were chosen to determine the state of leadership culture and climate in fostering strategic, critical and innovative thinking.<sup>49</sup>

- How much acceptance and support do senior leaders provide to think critically, innovatively and strategically?
- What is the quality of dialogue expected between subordinates and senior leaders to include their openness to alternative and challenging ideas?
- How will time and resource constraints impact the ability of leaders to think and act strategically?

The following sections describe a research project that was undertaken in the spring of 2006 to answer these and related questions.

#### A Survey of Expectations: The Senior Leadership Culture and Climate

Assessing senior leadership culture and climate from the perspective of United States Army War College students required five steps:

1. Selecting the appropriate research model.
2. Recruiting research participants.
3. Instituting research procedures and controls.
4. Data collection.
5. Analyzing survey results.

#### Research Model

Given limited time and resources, a survey emerged as most efficient. It takes advantage of low cost web based administration, the ability to reach a wide audience at minimal expense and complete anonymity to participants. With the appropriate representative sample it is possible for the survey results to provide valid insights into the larger military and DOD culture.

#### Research Participants

The Department of Defense provided the perfect sample for the survey, the student population of the United States Army War College at Carlisle Barracks. Table 1 describes the breakdown by service of the Academic Year 2006 resident class of United States Government students. The War College resident student population represents an elite corps of field grade officers (O-5 and O-6) and U.S. Government civilians (GS/GM-14 and higher), the top of their

peer group. Each was selected on the basis of a proven record of performance. All have between 16 and 23 years of service, and generally, have a history of promotions that matches or exceeds their contemporaries. They also possess at least a Baccalaureate degree with 75% having a Masters or Doctorate.

This pool of participants is representative of future commanders, senior staff and general officers (See Table 2). It serves as a panel of highly experienced and trained experts with special qualifications and insights into their respective services and departments. Each shares a common education in the concepts and procedures of strategic thinking and leadership having just completed coursework in:

- Fundamentals of Strategic Thinking
- Theory of War and Strategy
- Strategic Leadership
- National Security Policy and Strategy

Out of a potential 299 War College students 222 participated for a 74.2% participation rate. There is strong confidence that the responses reflect the opinions, perceptions and attitudes of the resident student population. There is also reasonable confidence that responses reflect the opinions, perceptions and attitudes of current and future senior leaders of the United States Military, Department of Defense and related departments.

#### Procedures and Controls

War College resident students first received an email invitation to participate. A printed invitation was later placed in their mail box with a free pen as an advanced token of appreciation to increase a sense of obligation and response rates. A statement of anonymity was included on all correspondence and repeated on the welcome screen during the web survey administration. Respondents were assured that there was no possibility of connecting them or their computer terminal to any response.

#### Data Collection

Beginning 19 January 2006 the selected participants were invited by email to a special link which connected them to the survey web site. It began with a welcome screen and then presented 17 questions, 13 of which addressed the critical research questions (Tables 3 and 4), three were demographics and one was an open ended question. The thirteen critical research questions had 5 choice Likert scales and were completed by selecting an on-screen push button. The demographic responses were chosen using drop down choice boxes. The final

open ended question invited each participant to, "Please provide other suggestions on how to best encourage strategic thinking." Respondents could complete the entire survey in five to eight minutes.

<b>PROFILE OF THE WAR COLLEGE CLASS VERSUS THE SURVEY RESPONDENTS</b>			
<b>UNIFORMED SERVICES</b>	<b>Student Population</b>	<b>Survey Respondents</b>	<b>Rate of Response</b>
Army (USA)	162	111	68.5%
Army Reserve (USAR)	22	15	68.2%
Army National Guard (ARNG)	23	23	100.0%
Air Force (USAF)	29	29	100.0%
Air National Guard (ANG)	3	3	100.0%
Air Force Reserves (USAFR)	4	2	50.0%
Navy (USN)	19	16	84.2%
Navy Reserve (USNR)	2	1	50.0%
Marines (USMC)	11	7	63.6%
Marine Reserve (USMCR)	5	3	60.0%
Coast Guard (USCG)	1	1	100.0%
<b>SUB-TOTAL</b>	<b>281</b>	<b>211</b>	<b>75.1%</b>
<b>US GOVT CIVILIANS</b>			
DA Civilians	9	6	66.7%
Defense Leadership & Management Program	1	1	100.0%
Department of State	5	2	40.0%
National Security Agency	2	1	50.0%
Department of Homeland Security	1	1	100.0%
<b>SUB-TOTAL</b>	<b>18</b>	<b>11</b>	<b>61.1%</b>
<b>GRAND TOTAL</b>	<b>299</b>	<b>222</b>	<b>74.2%</b>

Table 1

(Note: 40 International Fellows at the War College were not included in the study as the focus of the project is U.S. Government students.)

<b>Expected Follow-On Assignment After War College</b>		
Command	34	15%
Primary Staff	39	18%
Secondary Staff	86	39%
Special Staff	24	11%
Do Not Know	39	18%
<b>GRAND TOTAL</b>	<b>222</b>	<b>100%</b>

**Table 2**

Three additional reminders were sent out over a week period and finally the window of opportunity was closed on 30 January 2006. At the close 222 responded with 77 also answering the open ended free response question. Results were downloaded then statistically analyzed.

#### Survey Results

The data was used to answer three major research questions. The first was, "How much acceptance and support do senior leaders provide to think critically, innovatively and strategically"? Major findings included:

- 83.8%- Acts of initiative are encouraged. (Table 3- Q5)
- 79.3%- Critical and strategic thinking is encouraged. (Q2)
- 63.4%- Innovation and creativity is encouraged. (Q4)
- 46.8%- Senior leadership shares the emphasis on strategic thinking and leadership. (Q1)
- 28.4%- Challenging organizational assumptions is encouraged. (Q3)

It appears that most expect support for their initiative, strategic thinking and creativity but less support for challenging organizational assumptions. Over half do not believe senior leaders are firm believers in the usefulness of strategic thinking processes.

The second question asked, “What is the quality of dialogue you expect between subordinates and senior leaders to include openness to alternative and challenging ideas”?

Major findings included:

- 73.9%- Will tolerate alternative and contradictory views. (Table 3 – Q7)
- 56.8%- Will engage in moderate to frequent amounts of dialogue. (Q6)
- 34.3%- It is best to use caution in challenging flawed ideas and concepts from superiors.

The majority expect a moderate amount of dialogue with their senior leaders and within that dialogue a fair amount of tolerance for alternative and contradictory perspectives. The results also show that most will exercise caution in challenging flawed ideas and concepts to avoid a negative impact on career progression and promotion.

The third question asked, “How will time and resource constraints impact the ability of leaders to think and act strategically”? Major findings included:

- 84.2%- Due to time, resource and political constraints the room for innovation is limited. (Table 4-Q9)
- 80.2%- There is only time for high priority items. (Q11)
- 47.8%- There is only minimal time at best even for high priority items. (Q11)
- 53.6%- The personnel and resource level to support command and staff strategic processes are minimally adequate at best. (Q12)
- 39.2%- Short term demands take precedent over long term strategic demands. (Q10)
- 5.9%- Concerned about the quality of information available to support decision making.(Q13)

Time, resources and political constraints seem to present a severe limitation in promoting strategic thinking and innovation. Most expressed the belief that available personnel and resources will only provide minimal support for command and staff strategic processes. High priority issues and short term demands will take attention away from lower priority and long term demands. The availability of quality information does not seem a problem. The problem is having enough the time for adequate assimilation and analysis.

<b>Expectations for Senior Leadership Reactions To Critical and Strategic Thinking Related Activities</b>					
<b>Notes:</b> 1. Sample size = 222 2. The shaded number represents the statistical mode, the most frequent choice	Definitely Yes	Mostly Yes	Unsure	Mostly No	Definitely No
<b>Q1:</b> Do you expect senior leaders in your next assignment to share the War College's emphasis on strategic thinking and leadership?	7.2%	39.6%	35.1%	16.2%	1.8%
	Strong Encouragement	Encouragement	Tolerance	Discouragement	Strong Discouragement
<b>Q2:</b> In your future assignment how much encouragement do you expect to think critically and strategically?	18.0%	61.3%	19.4%	1.4%	0.0%
<b>Q3:</b> What do you expect to happen if you challenge organizational assumptions in your thinking?	1.8%	26.6%	54.1%	15.3%	2.3%
<b>Q4:</b> How do you expect leadership to respond to any innovative and creative solutions you present?	7.7%	55.7%	30.8%	5.4%	0.5%
<b>Q5:</b> Describe the response you expect during your next assignment when you demonstrate initiative?	10.8%	73.0%	13.5%	2.7%	0.0%
	Frequent Dialogue	Moderate Dialogue	Some Dialogue	Minimal Dialogue	No Dialogue
<b>Q6:</b> Describe the level of dialogue and discussion you expect to engage in with your senior leaders at your next assignment	21.2%	35.6%	29.7%	13.5%	0.0%
	Very Tolerant	Tolerant	Indifferent	Displeased	Very Displeased
<b>Q7:</b> How do you expect your future senior leaders to respond to any alternative and contradictory points of view you may express?	3.6%	70.3%	10.4%	14.0%	1.8%
	Challenge Boldly	Challenge Often	Challenge when Mission Critical	Challenge Cautiously	Never Challenge
<b>Q8:</b> Assuming you want to stay competitive for future promotions, describe the recommended manner in dealing with flawed ideas and concepts you may receive from your superiors?	2.3%	16.2%	47.3%	32.9%	1.4%

**Table 3**

Table Five (Trends in Expectations of Support) provides a visual impression of the survey results. The 13 scales are ordered from those responses most supportive to those responses least supportive for strategic, critical and innovative thinking. A single black line connects the mean response for each question. Nine of the 13 scales have means from neutral to supportive. Four are from neutral to non-supportive. Overall the pattern is more supportive than non-supportive.

### Discussion

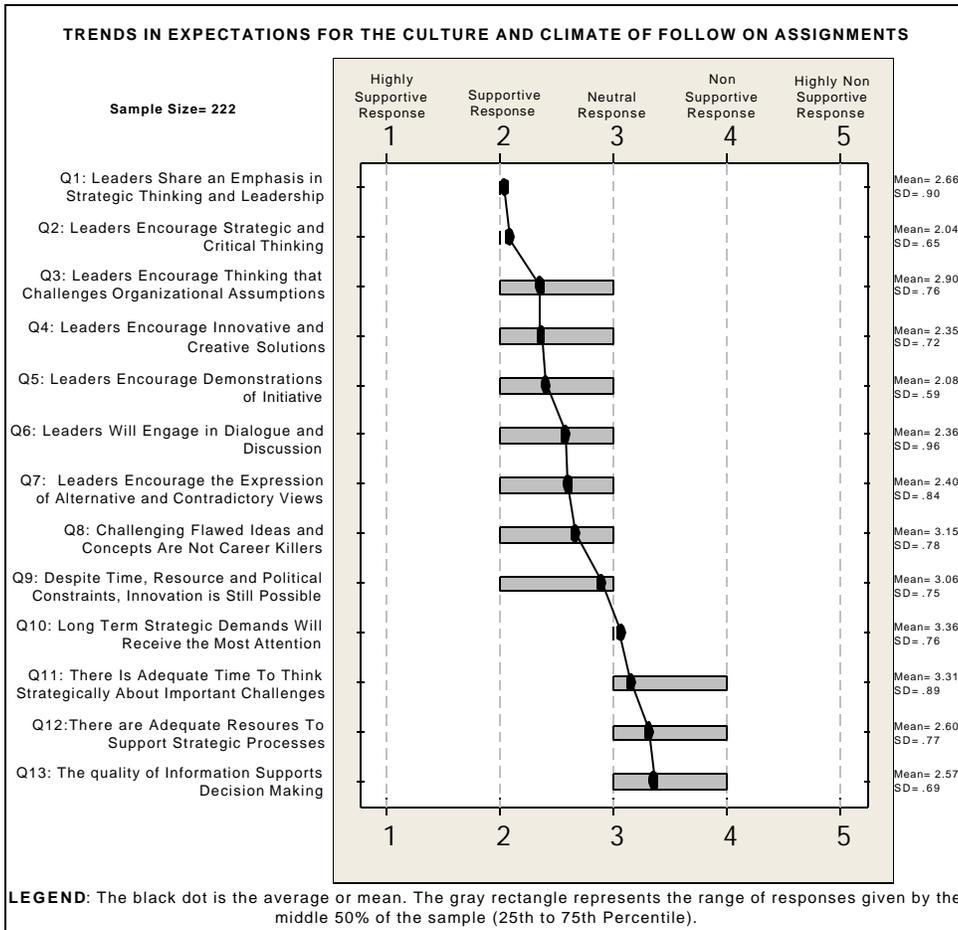
John Nagl in his seminal work on counter-insurgency observes, "Even under the pressures for change presented by ongoing military conflict, a strong organizational culture can prohibit learning the lessons of the present and can even prevent the organization's acknowledging that its current policies are anything other than completely successful."<sup>50</sup> What do the collective survey results reveal about the current support for innovation and adaptation?

War College students perceive the culture and climate as somewhat supportive of critical and strategic thinking, but, not fully open to examining and challenging organizational assumptions and beliefs. Although they expect at least moderate amounts of dialogue, they express caution about speaking honestly and openly to superiors when advancement and promotion is at stake. Personnel and equipment resources are deemed adequate but limited time only allows high priority items to receive even minimally adequate attention. Short term crises continue to prevail over detailed planning for long term strategic needs.

It appears that time pressures present the biggest obstacle. High OPTEMPO, increasing workloads and staff shortages can dampen the best of intentions to improve cultures. Requirements to rush plans can lead to inadequate staff work. Because dialogue and discussion take time, there is a temptation to work and generate products in isolation or with minimal group input at best. Thinking that is rushed will likely not take into account the second and third order effects. Time is an increasingly scarce, highly valued and irreplaceable commodity. There is no substitute.

<b>Expected Time, Information and Resources to Support Critical and Strategic Thinking Activities</b>					
<b>Notes:</b> 1. Sample size = 222 2. The shaded number represents the statistical mode, the most frequent choice	Great Room for Innovation	Much Room for Innovation	Some Room for Innovation	Little Room for Innovation	No Room for Innovation
<b>Q9:</b> Given the kinds of constraints placed upon leaders due to time, resources and politics, how much room is there for innovative thinking and action?	3.6%	12.2%	60.4%	22.0%	1.8%
	Definitely Long Term Strategic Demands	Mainly Long Term Strategic Demands	Mix of Short and Long Term Demands	Mainly Short Term Demands	Definitely Short Term Demands
<b>Q10:</b> When advocating courses of action in your future assignment, what kinds of demands do you believe will prevail?	2.3%	4.5%	54.1%	33.3%	5.9%
	Adequate Time for Low, Medium and	Adequate Time for Medium and	Adequate Time for High Priorities	Minimal Time for High Priorities	Inadequate for
<b>Q11:</b> How much time do you expect to have during your next assignment to think critically and strategically about important challenges?	1.8%	18.0%	32.4%	42.8%	5.0%
	Very Good	Good	Minimally Adequate	Poor	Very Poor
<b>Q12:</b> Please rate the resource level (personnel and equipment) you expect to have to support command and staff strategic processes at your next assignment.	5.0%	41.4%	43.2%	9.5%	0.9%
	Excellent Quality	Above Average Quality	Average Quality	Below Average Quality	Poor Quality
<b>Q13:</b> Rate the quality of information you expect to have to support your decision making at your next assignment.	5.9%	36.7%	51.6%	5.9%	0.0%

**Table 4**



**Table 5**

General Peter Pace and General Peter Schoemaker have both expressed their solid commitment to promoting learning, innovation and adaptation.<sup>51</sup> There is still some work to do in fostering a culture and climate conducive to such efforts. Leaders should focus on improving:

- Support for subordinate critical, strategic and innovative thinking.
- Subordinate dialogue and communication.
- Openness to questioning personal and organizational assumptions.
- Time and resources to support command and staff strategic processes.

In order for these concepts to take root and flourish they must become deeply embedded into the organizational culture. Edgar Schein suggests six primary mechanisms for embedding.<sup>52</sup>

- Ongoing attention and expressions of commitment.
- Seized opportunities for demonstrating and reinforcing priorities.
- Allocation of resources to reinforce priorities.
- Deliberate role modeling, teaching and coaching.
- Promotions and awards.
- Recruitment, selection and retention practices.

Senior leaders should closely examine current practices to ensure that cultural embedding today achieves the intended consequences for tomorrow in preserving a cultural advantage of innovation.

### Conclusion

Brigadier Nigel Aylwin-Foster of the British Army notes that Army transformation requires a genuinely adaptive workforce with more emphasis on the human aspects of change.<sup>53</sup> Innovative advanced technologies require innovative advanced leadership in order to achieve maximum synergy between hardware and human systems. The human systems though are the most change resistant and need dedicated and deliberate attention.

The survey reveals room for improvement in current levels of dialogue, critical, innovative and strategic thinking. Unless changed, the current time and resource constraints will likely frustrate deep thinkers, stifle the creative and hinder the process of organizational learning and adaptation. The goal of achieving advantage through transformational processes is at risk.

The United States is still the leading innovator in most respects. It is an unrivaled world power with no peer competitors. However, the events of 11 September 2001 demonstrate that vulnerabilities exist. The United States is currently fighting enemies around the globe who study our every move. They learn from mistakes and adapt accordingly. In the end the United States will learn and adapt but how long will it take? It is the one who observes, learns and adapts the fastest who prevails. Leaders must actively shape and embed the culture now to ensure the competitive advantages enjoyed by today's forces continue with the forces of tomorrow.

### Endnotes

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<sup>6</sup> Stephen Gerras, *Strategic Leadership Course Directive* (Carlisle, PA: U.S. Army War College, 2006), 1.

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<sup>15</sup> Department of Command Leadership and Management, 19.

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<sup>20</sup> J. Barney, "Firm Resources and Sustained Competitive Advantage.," *Journal of Management*, vol. 17 (1991): 105-112.

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<sup>22</sup> Ibid., 72.

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