

Technical Report 1148

Competency Based Future Leadership Requirements

Jeffrey Horey
Caliber Associates

Jon J. Fallesen
U.S. Army Research Institute

Ray Morath
Brian Cronin
Robert Cassella
Will Franks, Jr.
Jason Smith
Caliber Associates

July 2004



**United States Army Research Institute
for the Behavioral and Social Sciences**

Approved for public release; distribution is unlimited.

U.S. Army Research Institute for the Behavioral and Social Sciences

A Directorate of the U.S. Army Human Resources Command

**ZITA M. SIMUTIS
Director**

Research accomplished under contract
for the Department of the Army by

Caliber Associates

Technical Review by

Jean L. Dyer, U.S. Army Research Institute
Kathleen A. Quinkert, U.S. Army Research Institute

NOTICES

DISTRIBUTION: Primary distribution of this Research Report has been made by ARI. Please address correspondence concerning distribution of reports to: U.S. Army Research Institute for the Behavioral and Social Sciences, Attn: DAPE-ARI-PO, 2511 Jefferson Davis Highway, Arlington, Virginia 22202-3926

FINAL DISPOSITION: This Technical Report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The views, opinions, and findings in this Technical Report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision unless so designated by other authorized documents.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

1. REPORT DATE (DD-MM-YYYY) July 2004		2. REPORT TYPE Final		3. DATES COVERED (From - To) Nov 2002 – Mar 2004	
4. TITLE AND SUBTITLE Competency Based Future Leadership Requirements				5a. CONTRACT NUMBER DASW01-98-D-0049-DO32	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER 622785	
6. AUTHOR(S) Jeffrey Horey (Caliber Associates), Jon J. Fallesen (U.S. Army Research Institute), Ray Morath, Brian Cronin, Robert Cassella, Will Franks, Jr., and Jason Smith (Caliber Associates)				5d. PROJECT NUMBER A790	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) AND ADDRESS(ES) Caliber Associates, Inc. 10530 Rosehaven St., Suite 400 Fairfax, VA 22030				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences 2511 Jefferson Davis Highway Arlington, Virginia 22202-3926				10. SPONSOR/MONITOR'S ACRONYM(S) ARI	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S) Technical Report 1148	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT The purpose of this research was to develop leadership requirements for the future Army. A competency framework that is used consistently throughout the force and that focuses on the functions of leadership will help align training, development, and performance management processes and better convey what leaders need to do. Numerous considerations were combined to generate the framework including: identification of the future of technological, geopolitical, and demographic factors; review of leadership theory; review of the evolution of Army leadership doctrine; identification of literature sources of leadership requirements; specification of the relationships leaders have with others; and comparisons of competency frameworks from the other military services. Through an iterative process, analysts developed competencies, components, and sample actions that were then reviewed by subject matter experts. A core leadership competency framework was developed that includes eight competencies and 55 components. The proposed core leadership competency framework serves to provide an analytically based description of leader requirements for the future. The incorporation of the framework into leader development processes is discussed as well as how the framework can be presented in doctrine.					
15. SUBJECT TERMS Leadership Leader development Theory Roles Competencies Model Functions Performance assessment					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON Jon J. Fallesen
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified			Unlimited

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39.18

Technical Report 1148

COMPETENCY BASED FUTURE LEADERSHIP REQUIREMENTS

Jeffrey Horey
Caliber Associates

Jon J. Fallesen
U.S. Army Research Institute

Ray Morath
Brian Cronin
Robert Cassella
Will Franks, Jr.
Jason Smith
Caliber Associates

Leader Development Research Unit
Stanley M. Halpin, Chief

U.S. Army Research Institute for the Behavioral and Social Sciences
2511 Jefferson Davis Highway, Arlington, Virginia 22202-3926

July 2004

Army Project Number
20262785A790

Personnel Performance and
Training Technology

Approved for public release; distribution is unlimited.

FOREWORD

This report provides documentation on the development of a standard organizational framework for core leadership roles and functions in the U.S. Army. This framework was developed through careful analysis and has been presented to the U.S. Army's Center for Army Leadership (CAL) and its parent organizations to permeate policies and practices associated with leadership training, development, and performance management. The intent of the competency framework is to provide a focused set of requirements to go into Army doctrine that will help establish a core set of organizational competencies. These competencies can be used to reinforce professionalism and promulgate a model of Army leader identity similar to what initiatives on Army values and warrior ethos have done.

The initial presentation of this research on 11 March 2004 to CAL and the Deputy Commandant of the Command and General Staff College were well received. The framework was endorsed by CAL and was presented as a work in progress to a Joint Leader Competencies Symposium on 24 March 2004, the Leadership Council of Colonels on 23 April 2004 and to the Training and Leader Development General Officer Steering Committee on 19 May 2004. CAL is proceeding with plans to incorporate the framework into the next round of Army leadership doctrine and is staffing concept papers on it to obtain additional feedback. This research and the products that resulted provide an excellent example of effective partnerships that can form among Army researchers, policy proponents, private industry, and Army leadership.

BARBARA A. BLACK
Acting Technical Director

ACKNOWLEDGEMENTS

The authors would like to acknowledge and thank the following people who assisted with this research and report. LTC Keith Beurskens provided important review comments during the construction of the competency framework and graciously shared his review notes on leadership doctrine. The three peer reviewers, Jean Dyer, Kathleen Quinkert and Guy Siebold, provided diligent reviews of an unwieldy and complex draft and provided substantive comments for improvement. Informal reviews were also provided by Steve Aude, Annalisa Gramlich, Heidi Keller-Glaze, Debora Mitchell, Rebecca Reichard, and Michelle Zbylut. Any remaining concerns are the sole responsibility of the authors and not these reviewers. The subject matter experts who reviewed the draft framework also contributed greatly to its creation and remain unnamed in accordance with ARI's non-attribution policy for data sources. The authors would like to acknowledge the instrumental roles and encouragement of Clark Delavan, CAL Deputy Director, COL Kim Summers, CAL Director, and Stanley M. Halpin, ARI Leader Development Research Unit Chief.

COMPETENCY BASED FUTURE LEADERSHIP REQUIREMENTS

EXECUTIVE SUMMARY

Research Requirement:

The Army Training and Leader Development (ATLD) Panel has been instrumental in measuring current Soldier and civilian perceptions of institutional and unit training, self-development and culture related to leadership and leader development. The ATLD study did not provide much speculation about the requirements on future leaders. The Center for Army Leadership (CAL) requested this research to address what leaders of the future need to be prepared to do. By knowing this the systems, policies and practices can have a better chance of being established to develop effective future leaders. Army leadership doctrine is the starting point for all leadership initiatives so a review of the existing leadership framework contained in current leadership doctrine, FM 22-100, Army Leadership, will help ensure suitability with the Army transformation to the Future Force.

More and more, organizations are using competency frameworks to describe the expectations and requirements of their leaders. But the methods, definitions, and results of leadership competency modeling vary greatly across organizations. For leader development purposes, a competency framework that focuses on the functions of leadership will help align training, development, and performance management processes and better communicate how leadership contributes to organizational success. It is particularly important to focus on the behavioral aspects of leadership in an organization that promotes only from within and expects all its members to become leaders.

Procedures:

This research used an analytical approach to develop a competency-based Army leadership framework. The framework was analytically derived based on future projections of the contexts for leadership, leadership theory, leadership doctrine, experts' projections of leadership requirements, identification of the core functions that Army leaders perform across organizational levels, and comparisons of competency frameworks from the other U.S. military services. Through an iterative process, analysts developed competencies, components, and sample actions that were then reviewed by subject matter experts in the field of military leadership. Modifications based on these recommendations were made and a core competency model of Army leadership was produced. The new model frames requirements as a set of competencies that describe appropriate leadership functions and actions that are more homogeneous than the current set of doctrinal requirements based on a mixture of knowledge, skills, attributes and actions.

Findings:

An Army core leadership competency framework was developed that includes eight competencies and 55 components. Sample actions indicative of these competencies and

components are also provided. Additional information relating these competencies to the existing Army leadership framework, the processes of leadership assessment, development, and feedback, and prevalent leadership theories is also provided. A final Army leadership competency framework is presented and recommendations for validation and integration into existing doctrine are provided. The competency framework, as opposed to the values, attributes, skills and actions of the existing framework in FM 22-100 is projected to be a more straightforward and descriptive concept of leadership requirements. The competencies, amplifying components and sample actions were reviewed and validated by selected subject matter experts.

- Leading others to success
- Exemplifying sound values and behaviors
- Vitalizing a positive climate
- Ensuring a shared understanding
- Reinforcing growth in others
- Arming self to lead
- Guiding successful outcomes
- Extending influence

The first letters of the first words in the eight competencies spell the word LEVERAGE. It is intended that the competencies provide a framework that reminds leaders how to influence people to get things done. LEVERAGE in leadership, as in physics, is intended to be a way to get greater results from one's efforts.

The benefits of a core organizational competency model will be fully realized when it is incorporated into leader development policies and practice. Links are appropriate to leader performance evaluation and feedback, assignment, leader education and training. The proposed framework is grounded in the roles deemed appropriate for leaders. Since the framework is general and aimed at essential organizational aspects of the Army it will always be limited in terms of how prescriptive it will be. Development work will need to continue to verify and refine the preferred actions for effective performance and that will fit the range of missions, teams and subordinates that leaders will influence.

Utilization of Findings:

The proposed Army core leadership competency framework can provide the central basis of leadership requirements for the U.S. Army. The framework helps establish what roles leaders should have to influence others and what should be measured so growth in the competencies can be tracked. The framework has been received by the Center for Army Leadership and the Command and General Staff College for incorporation into the replacement for FM 22-100, that will be designated FM 6-22. The next step in development will be an opportunity for major Army commands to review the competency based concepts. As the framework is incorporated into new Army leadership doctrine opportunities will be taken for further validation and refinement.

COMPETENCY BASED FUTURE LEADERSHIP REQUIREMENTS

CONTENTS

	Page
Introduction	1
Purpose	1
Competency-based Approach to Army Leadership	2
Method to Develop a Leadership Competency Framework	3
Groundwork for Competency Framework Development	5
Evolution of Army Leadership Doctrine	5
Future Environmental Influences on Leadership	12
Service Framework Comparison	17
Review of Leadership Theories	19
Review of Future Leadership Requirements	26
Development of the Army Leadership Competency Framework	38
Expert Review of Initial Army Leadership Competency Framework	39
Army Leadership Competency Framework	41
Support for Proposed Leadership Competencies	50
Conclusions and Recommendations	56
Integration of Competency Framework into Leader Development Process Model	56
Validating Competencies for Use in Leader Development Processes	58
Establishing a Framework of Leadership Competence	59
Integrating the Competency Framework into Doctrine	60
Extending the Application of the Leadership Framework	62
Capitalizing on Technology	63
Examining Competency Balance and Mix	63
Summary	64
References	66

List of Appendixes

	<u>Page</u>
Appendix A. Army Leadership Framework Comparison Crosswalk: 1958, 1973, 1999.....	77
B. Articles Considered in Army Leadership Requirement Mining	83
C. Crosswalk of Leadership Requirements by Source.....	90

List of Tables

Table 1	Select Army Leadership Doctrine Publications	6
2	23 Identifiable Qualities of Leadership from FM 22-5 (1946)	6
3	11 Principles of Leadership from FM 22-10 (1951).....	6
4	Leadership Traits of FM 22-100 (1953)	7
5	Values and Factors of Leadership from FM 22-100 (1983)	7
6	Nine Leadership Competencies of FM 22-100 (1990)	8
7	Be, Know, Do Framework from FM 22-100 (1999)	9
8	Comparison of Service Framework Constructs	18
9	Relationships of Leaders to Others and Direction of Relationship	25
10	Future Army Leadership Requirements Literature Coding Definitions	28
11	Army Leadership KSAO Requirements Proposed in Literature	29
12	Army Leadership Competency, Task, and Role Requirements Proposed in Literature	30
13	Positions of SMEs	40
14	Leadership Competency Descriptions	42
15	Leadership Competencies, Components and Sample Actions	43
16	Crosswalk of Competencies and Components from Leadership Framework to Source Literature	51
17	Proposed Army Leadership Competencies with Supporting Theories	54

List of Figures

Figure 1.	The Relationship of Competencies to Leadership Values, Qualities, Actions, and Results	4
2.	Diagram of the Leadership Competency Development Process	5
3.	Spectrum of Operations	16
4.	A depiction of how Leadership Competency Supports Assessment, Training and Education, and Performance	57
5.	Graphical Representation of Army leadership Competencies	59

COMPETENCY BASED FUTURE LEADERSHIP REQUIREMENTS

Introduction

The Army Training and Leader Development (ATLD) study has produced the most comprehensive assessment to date of the institutional, operational, and cultural factors affecting Army leader development. In the original ATLD study charter, the Chief of Staff of the Army (CSA) specified “an Army Panel to review, assess and provide recommendations for the development and training of 21st Century leaders.” Further he required the study to “Identify Objective Force leader characteristics and skills” and “Assess the viability of the existing leader development model to meet mission requirements in full-spectrum operations” (Chief of Staff, 2000). The U.S. Army Training and Doctrine Command letter of instruction to the Combined Arms Center Study Director specified task 9, “Determine if current training doctrine satisfies the tactical and operational requirements and personal expectations of the current force and supports transition to the objective force; provide guidance for doctrinal rewrite as appropriate.” None of the first four ATLD phases focused extensively on the utility of the current Army leadership framework (a single question was asked regarding FM 22-100 during the NCO phase only). However, ATLD findings regarding expectations of leader development indicate such a focus is warranted to assess the value of the current perspective to address the requirements of an uncertain and high stakes future.

The Center for Army Leadership (CAL) requested this research to establish a projection of the leadership requirements for the Army Future Force (up to year 2025) that can be used to inform Army leadership doctrine. CSA General Erik Shinseki announced that the Objective Force¹ would be “strategically responsive and dominant across the spectrum of operations.” Recent descriptions indicate the Future Force will be “a more relevant and ready force – a campaign-quality Army with a Joint and Expeditionary mindset” (Army Strategic Communications, 2003). Field Manual (FM) 22-100, Army Leadership, (Department of the Army, 1999) establishes the doctrine for Army leadership. Since the release of this field manual, many changes have occurred as the Army has moved toward the Future Force and has been employed in two combat theaters. The potential and actual threats have evolved, and the Army is continually working to adjust to the changes. Additional shifts in technological, geopolitical, and demographic factors will also continue to present significant challenges to Army leadership development. In order to meet these challenges the Army must regularly look ahead at the leader performance requirements of the future and provide needed updates to leader development.

Purpose

The research team undertook the current effort to examine and expand upon the current perspective of Army leadership, specifically focused on the Future Force and with the hopes of refining the current framework of Army leadership for greater applicability to the Future Force environment and leadership development processes. The thrust behind implementing a competency framework for leadership follows from ATLD Study recommendation 7A1². If used

¹ In 1999 when this statement was made the Future Force was known as the Objective Force.

² ATLD officer recommendation 7A1: Develop, fund, and maintain a central Army-wide Warrior Development Center using information technology, where soldiers, units, and leaders can go to find standards, training, and

properly, a competency framework encourages consistent reference to leadership requirements across a leader's entire career and his or her growth as a leader. Similarly competencies provide an organizing framework for the Army's leader development initiatives. The purpose in establishing competencies for leaders is to define what functions leaders must perform to make themselves and others in their organization effective. Competencies are a means to define and communicate leadership requirements in organizationally relevant terms.

A Competency-based Approach to Army Leadership

Behavioral scientists and organizational analysts use competencies to describe various behaviors, activities, processes, and personal characteristics associated with leadership, management, supervisory, and other prevalent positions within organizations (Spencer & Spencer, 1993). Many different competency definitions exist (see Newsome, Catano, & Day, 2003 for examples), some based on the underlying characteristics of individuals and some based on the behaviors that are necessary for success in target positions. For leadership, competencies should describe what effective leaders do to influence individual and organization success (Kravetz Associates, 1998). Consistent with the Army view of leadership as action, leadership competencies should represent leadership functions and how those functions are related to actions. However, this does not fully describe the nature of a competency. The research team further defined a competency as a cluster of knowledges, skills, abilities, and other characteristics (KSAOs) that underlies effective individual behavior leading to organizational success. Competencies, if well defined and comprehensive, should provide individuals and organizational processes with the roadmap that identifies successful performance of leadership duties and responsibilities.

Competencies are a means to define and communicate leadership requirements in organizationally relevant terms. The competencies that are essential, or core, to all Army leaders will focus their developmental efforts on attaining Future Force capabilities. Gayvert (1999, p.21) argues that Army leadership "ought to be identified, taught and discussed as a function, or set of functions, different from management, administration or command." For the purposes of leader development, the research team believes that the best description of future leadership requirements is in terms of functional competencies.

An Army leadership framework that incorporates core competencies provides a common denominator for leader development. Like values, core competencies are portable across: time, levels of authority, levels of responsibility, and unforeseen situations. While individual situations or missions may stress the use of different competencies, components, or behaviors, leadership competencies as a whole are enduring across leader positions, assignments, and time. Just as values shape the character of leaders, competencies can be used to guide leader behavior.

Core competencies can be structured to ensure that leader development efforts are focused on the attainment of high levels of individual and organizational performance. They can also be structured to be enduring even as resources diminish, demands increase, and priorities and strategies shift. Competencies provide a basis for and a common language to discuss

education publications; doctrinal manuals; assessment and feedback tools; and access distance and distributed learning programs for self-development and lifelong learning.

selection, development, and evaluation processes as well as a foundation for a logical progression of professional development.

Competencies are different from KSAOs. While competencies are related to KSAOs as they both can provide a foundation of Army values and leader qualities, KSAOs are typically derived from detailed job analyses. “Unlike traditional job analysis, the focus on identifying competencies is not on the technical requirements or specific knowledge and skills to perform a particular job.... Instead, this approach emphasizes the characteristics desired across individuals and jobs within an organization.... The more global competencies are expected to not only predict behavior across a wide variety of tasks and settings but also provide the organization with a set of core characteristics that distinguish the company from others in terms of how it operates its business and treats its employees” (Goldstein & Ford, 2002, p. 271-2). The Army’s increased focus on versatile leaders and multi-function Soldiers corresponds precisely with the goals of a competency approach. Traditional job analyses can produce useful information but are short-lived for rapidly changing conditions and organizations. Job analyses are appropriate for individual jobs, but less so for groups of jobs or for personnel across an organization. The Army desires leader requirements that are portable, enduring, and that characterize the profession of Soldiering.

Because the output or results of a competency (for example a productive counseling session) may be observed and judged, a person could be assessed to be performing well or not so well with respect to a given competency. It is impractical to expect an upper limit on the level of “competence” (i.e., the degree of success in performance on a particular competency). Thus, evidence of a competency is demonstrated by actions that can be observed and assessed to allow one to distinguish the levels of performance in that competency.

While individual and organizational performance is multi-dimensional, the results of that performance can be assessed either in terms of accomplishment of missions or attainment of readiness objectives. The practical value of a competency model is to define the actions that are used to guide and assess individual leaders’ performance. Figure 1 depicts this view of leadership and how leadership impacts mission accomplishment through results.

In any enterprise, resources are invested to produce results. Properly identified and defined, competencies can improve today’s individual and collective results and be an investment in the anticipated requirements of the future (Plum International, Inc., 2004).

Method to Develop a Leadership Competency Framework

It is impossible to describe all the processes, actions, or attributes that will make Army leaders successful in the future. However, it is possible to provide a framework for developing sound fundamentals by systematically identifying the functions that successful leaders need to perform and providing the components and sample behaviors associated with these functions. In developing a model of Army leadership competency capable of representing core leadership



Figure 1. The relationship of competencies to leadership values, qualities, actions, and results.

components and flexible enough to allow for the addition of future components and other relevant aspects of leadership (i.e., levels) the research team took account of the following:

1. The existing Army leadership doctrine, its evolution, and development methods.
2. The environmental, social, geopolitical, and economic factors likely to influence leadership in the future.
3. Comparisons of the constructs included in other U.S. leadership competency frameworks.
4. The major findings regarding leadership theory in the behavioral science literature.
5. The relationship of leaders to others and the direction of their relationship.
6. The requirements proposed in a relevant set of written articles, reports, and other documents.
7. The choice of specific wording labels for the competencies, components, and sample actions representing Army leadership.
8. The recommendations of a selected group of military leadership SMEs.

This research on future leader requirements began in November 2002 with the search for literature relevant to future Army leadership. Competency modeling was conducted throughout the summer of 2003. This effort included a subject matter expert review of the framework during the fall of 2003 and subsequent refinements in the model in the winter of 2003 and 2004. This report documents all aspects of these efforts and the final proposed Army leadership model for consideration in future Army leadership doctrine. Figure 2 shows the various steps used to develop competencies and to transition them to use.

The following sections provide an overview of the evolution of Army Leadership doctrine leading up to the current model followed by a comparison of recent frameworks, additional detail on the current leadership framework and a summary of Army leadership

doctrine. Subsequent sections provide the research method used in developing a competency-based leadership model, the results of the modeling effort, and recommendations for validating and integrating the model into existing Army doctrine and training.

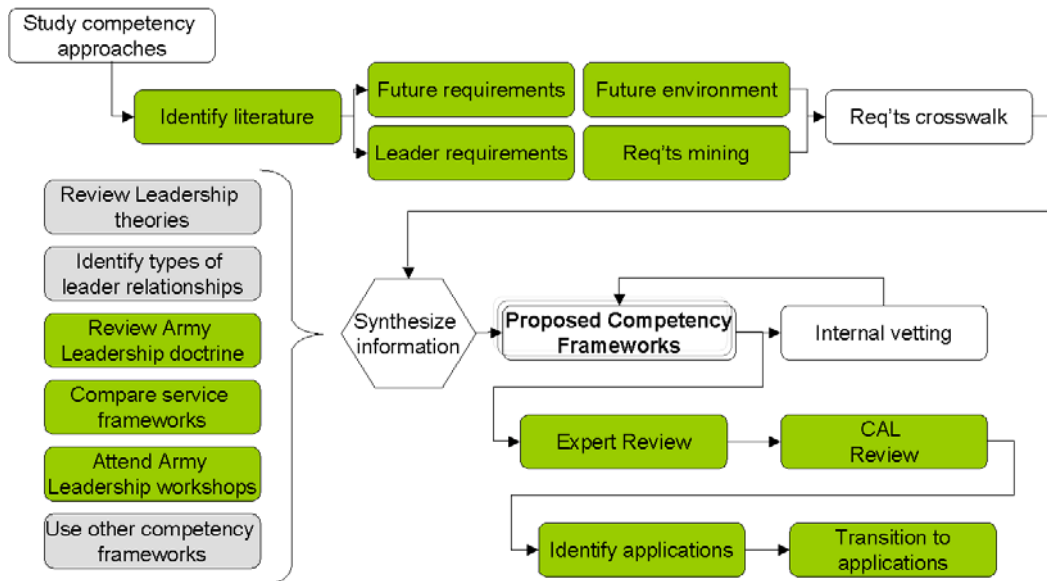


Figure 2. Diagram of the leadership competency development process.

Groundwork for Competency Framework Development

Evolution of Army Leadership Doctrine

In order to forecast leadership requirements, it is important to first gain a clear understanding of the current Army leadership doctrine framework. It is also helpful to consider the evolution of Army leadership requirements over the past 20 to 30 years. Army leadership doctrine has evolved over time and through various field manuals and other publications. Table 1 identifies some of the documents integral to this evolution. Much of the following discussion is taken from an unpublished manuscript by Beurskens (2003). This review is a summary of the evolution of Army leadership doctrine and is not comprehensive of the changes.

According to Beurskens, the first doctrinal publication devoted to leadership in the Army was Field Manual 22-5, *Leadership Courtesy and Drill* (U.S. War Department, 1946). This publication defined leadership as “the art of influencing human behavior” and identified two primary leader responsibilities: accomplish the mission and look out for the welfare of your men. This manual also identified the 23 qualities of leadership indicated in Table 2.

In 1948, Department of Army Pamphlet 22-1, *Leadership*, expanded the definition of Army leadership to include the notion of “influencing human behavior through the ability to directly influence people and direct them to a specific goal.” In 1951, FM 22-10, *Leadership*, introduced a section on ethics and the 11 principles of leadership identified in Table 3. The 1951

manual also relabeled the leadership qualities of the 1946 manual as traits and reduced them to a list of 19.

Table 1
Select Army Leadership Doctrine Publications

Publication and Title	Publication Date
Field Manual 22-5, Leadership Courtesy and Drill	1946
DA PAM 22-1, Leadership	1948
Field Manual 22-10, Leadership	1951
Field Manual 22-100, Command and Leadership for the Small Unit Leader	1953
Field Manual 22-100, Military Leadership	1958
Field Manual 22-100, Military Leadership	1961
Field Manual 22-100, Military Leadership	1965
Field Manual 22-100, Military Leadership	1973
Field Manual 22-100, Military Leadership	1983
Field Manual 22-100, Military Leadership	1990
Field Manual 22-100, Army Leadership	1999

Table 2
23 Identifiable Qualities of Leadership from FM 22-5 (U.S. War Department, 1946)

Self-confidence	Obedience	Loyalty	Neatness
Precision	Dependability	Friendliness	Self-Control
Endurance	Decisiveness	Courage	Truthfulness
Humor	Sincerity	Resourcefulness	Initiative
Honesty	Decency	Thoughtfulness	Enthusiasm
Justice	Impartiality	Coolness in battle	

Table 3
11 Principles of Leadership from FM 22-10 (Department of the Army, 1951)

Know your job.
Know yourself and seek self improvement.
Know your men and look out for their welfare.
Keep your men informed.
Set the example.
Ensure the task is understood, supervised and accomplished.
Train your men as a team.
Make sound and timely decisions.
Seek responsibility and develop a sense of responsibility among subordinates.
Employ your command in accordance with its capabilities.
Take responsibility for your actions.

In 1953, the first version of Field Manual 22-100 was published, entitled *Command and Leadership for Small Unit Leaders*. This manual expanded upon FM 22-10 by adding indicators of leadership and reduced the number of leader traits from 19 to the 12 identified in Table 4.

Table 4
Leadership Traits of FM 22-100 (Department of the Army, 1953)

Bearing	Courage	Decisiveness	Dependability
Enthusiasm	Initiative	Integrity	Endurance
Justice	Tact	Unselfishness	Knowledge

In 1958, Field Manual 22-100 was renamed *Military Leadership*, which it retained until the 1999 revision. The number of leadership traits grew to 14, with the addition of Loyalty and Integrity to those listed in Table 4. The 1961 version of FM 22-100 introduced Maslow’s hierarchy of needs (1954) in a chapter on human behavior and introduced the concept of leadership climate as well as a chapter on leadership in higher commands. In the 1965 version of FM 22-100, supervising was added as a concept of leadership. Also, a section devoted to relations with local civilians appeared for the first time in which a need to develop interpersonal skills for dealing with local nationals during combat operations was presented.

The 1973 version of FM 22-100 introduced a focus on mission to the definition of leadership that included “a process of influencing men in such a way as to accomplish the mission.” The term *leadership development* was also introduced in this version along with two domains of development: academic and self-learning, and the real world environment. Authoritarian and democratic leadership styles were also introduced in this version.

The 1983 version of FM 22-100 introduced the first leadership framework and the concept of Be, Know, Do. The principles of leadership were still a part of the framework but the traits of early versions were replaced with the eight values and four factors presented in Table 5. A chapter on leader and unit development programs was also added while the previously included indicators of leadership and leadership development were removed. This version also included the introduction of the ethical decision making process, which remains a part of the current doctrine.

Table 5
Values and Factors of Leadership from FM 22-100 (Department of the Army, 1983)

Values		Factors
Loyalty to National and Army Ideals	Loyalty to Unit	The Led
Personal Responsibility	Selfless Service	The Leader
Courage	Competence	The Situation
Candor	Commitment	Communications

Several other leadership doctrinal manuals were introduced throughout the 1980’s including: FM 22-101, Leadership Counseling; FM 22-102, Soldier Team Development; and FM 22-103, Leadership and Command at Senior Levels. Additionally a training circular series

on leader development for instruction at Platoon/Squad, Company/Battery, and Battalion levels was also published. *Executive Leadership* (DA PAM 600-80, Hq DA, 1987), was also published which addressed direct, indirect, and executive levels of leadership. Mentoring was first introduced in this pamphlet.

The 1990 version of FM 22-100 introduced an expanded perspective on leader development and assessment based upon the research of Clement and Ayres (1976) to establish the nine leadership competencies indicated in Table 6.

Table 6
Nine Leadership Competencies of FM 22-100 (Department of the Army, 1990)

Communications	Supervision	Teaching and Counseling
Technical and Tactical Proficiency	Decision Making	Planning
Use of Available Systems	Professional Ethics	Soldier Team Development

Leadership responsibilities were dropped from this version and four elements of Army ethics (loyalty, duty, selfless service, and integrity) were added in the area of what a leader must BE. In concept and content, this leadership model had many similarities to previous versions but introduced the concept of leadership competencies. While FM 22-100 was the principal leadership doctrinal manual, other manuals and regulations remained in existence (e.g., AR 600-100 *Army Leadership*; DA PAM 600-15, *Leadership at Senior Levels of Command*; FM 22-103, *Leadership and Command at Senior Levels*).

The 1999 version of FM 22-100 was retitled *Army Leadership* and in contrast to the 1990 version was the Army’s capstone leadership manual.

- “FM 22-100 is a single source reference for Army leaders. Its purpose is threefold:
- To provide leadership doctrine for meeting mission requirements under all conditions.
 - To establish a unified leadership theory for all Army leaders: military and civilian, active and reserve, officer and enlisted.
 - To provide a comprehensive and adaptable leadership resource for the Army of the 21st century. (Department of the Army, 1999, p. vii).
- “Specifically, FM 22-100 serves as:
- The basis for leadership assessment.
 - The basis for developmental counseling and leader development.
 - The basis for leadership evaluation. A reference for leadership development in operational assignments. A guide for institutional instruction at proponent schools.
 - A resource for individual leaders’ self-development goals and initiatives.” (Department of the Army, pp. vii-viii).

This version was also the first to address leadership at all levels and “superseded four publications—FM 22-101, *Leadership Counseling*; FM 22-102, *Soldier Team Development*; FM 22-103, *Leadership and Command at Senior Levels*; and DA Pam 600-80 *Executive*

Leadership—as well as the previous edition of FM 22-100” (Department of the Army, 1999, preface). The document synthesizes information from these publications into a comprehensive view of leadership as well as links concepts to other publications and processes that the Army uses to develop leaders. AR 600-100, Army Leadership remains in effect, however, and establishes leadership policy as the basis for leadership and leader development doctrine and training.

The 1999 version also uses a different approach to establish a framework of leadership than any of the previous versions. This version identified 39 components specifying what a leader of character and competence must be, know, and do. Within this framework are a “be” dimension consisting of seven values, three attribute categories and thirteen attributes; four skill categories in the “know” dimension; and a “do” dimension consisting of three principal actions and nine sub actions (see Table 7).

Among the approaches used to derive these components was one that identified *people*, *things*, and *ideas* as critical to administrative job success (Katz, 1955). The 1999 framework translated these topics into interpersonal, technical, and conceptual skill areas and added an additional skill labeled ‘tactical’ to reflect the importance of Army tactics.

Table 7
Be, Know, Do Framework from FM 22-100 (Department of the Army, 1999)

Be		Know	Do
Values	Attributes	Skills	Actions
Loyalty	Mental	Interpersonal	Influencing
Duty	-Will		-Communicating
Respect	-Self-Discipline	Conceptual	-Decision Making
Selfless Service	-Initiative		-Motivating
Honor	-Judgment	Technical	Operating
Integrity	-Self-Confidence		-Planning/Preparing
Personal Courage	-Intelligence	Tactical	-Executing
	-Cultural Awareness		-Assessing
	Physical		Improving
	-Health Fitness		-Developing
	-Physical Fitness		-Building
	-Military & Prof. Bearing		-Learning
	Emotional		
	-Self-Control		
	-Balance		
	-Stability		

The most recent version of FM 22-100 still relies heavily on the traits of leaders as found in the values and attributes that remain essential elements of the leadership framework, and it still asks the leader to assess situations and subordinates to select the most appropriate behavioral response for achieving goal attainment. The 1999 version also identifies five leadership styles

(directing, participating, delegating, transformation, and transactions) that leaders may decide to employ depending upon the types of situations they face. Included is a brief description of the basic tenets of these styles and how the leader may use these styles to their advantage.

The 1999 framework further makes a distinction between the skills and the actions of leaders at direct, organizational, and strategic levels. According to the 1999 framework skill, sub-skill and sub-sub-skill categories represent the ‘know’ aspect of the framework for each level of leadership while actions represent the ‘do’ aspect. In practice and for developmental purposes, it may prove difficult to distinguish skills and actions in this way. For example, for direct leaders to learn the difference between the skills of communication and the actions associated with communications as written may prove confusing. Those wishing to develop their communication skills may find a competency approach more straightforward. Due to the above mentioned factors, the 1999 version may be more difficult for leaders (junior leaders in particular) to quickly grasp, and as a result, may be less easily applied by Army leaders.

The evolution of Army leadership doctrine has obviously been facilitated by the findings and theories from leadership research. Fitton (1993) provides a brief history of the evolution of Army leadership content through doctrinal changes and proposes that much of the content of Army leadership manuals was influenced by the leadership research trends of academia. While the earlier leadership doctrine relied primarily on trait theories of leadership, later Army versions included elements of other leadership theories as well. These later versions maintained the trait theory as an essential element within their frameworks, but they also included elements from humanistic theories (Maslow, 1965), situational/motivational theories (House, 1971; Vroom, 1964), and transformational approaches (Bass, 1985). For example, editions of the leadership manual produced from the 1950’s through the 1970’s addressed the hierarchy of human needs ranging from basic physical needs (e.g., shelter, food) to higher order needs (e.g., social approval, recognition, self fulfillment) and their influence on behavior. Similarly, FM 22-100 (Department of the Army, 1973) explicitly discussed the role of subordinate expectations on subordinate motivation and the need for the leader to facilitate the path to subordinate’s goal attainment (House, 1971; Vroom, 1964). Transformational theory had an influence on the 1999 version as reflected through the actions of improving the organization through developing others as leaders, building teams, applying learning to one’s self, and leading change.

Army Leadership Framework Comparison: 1958, 1973, 1999

A comparison of the 1958, 1973, and 1999 manuals was performed to investigate content and structural changes in the leadership framework over time. The research team created a crosswalk that compared the leadership requirements proposed by each of the three documents. The most noticeable aspect that emerged was that the 1958 version and 1973 versions were highly similar in both their structure and handbook-like presentation of their models. Meanwhile the 1999 version offered a different, if not more complex and encompassing, framework. One differentiating characteristic of the 1999 version was that it presented leader requirements as values, attributes, skills, and actions (some of these also included sub-dimensions) that were organized in the Be-Know-Do model, while the earlier versions presented leader requirements as traits and principles.

The 1999 version also differs from previous models in that it no longer included lists of activities or methods that leaders could use to develop their leadership skills and abilities. Appendix A presents a crosswalk of the three manuals and their leadership requirements and the representation of similarities between the three. The crosswalk indicated that 24 of the 33 requirements that were presented in the 1999 model were addressed in the 1958 and 1973 versions and four more were addressed by earlier versions of Army leadership manuals. Ten of the 29 requirements were found to have almost one-to-one correspondence in which their labels were either identical (e.g., the same label of Loyalty was used across models) or highly similar (e.g., Unselfishness vs. Selfless Service). Eleven of the 1999 requirements were mapped to 1958 and 1973 model requirements with different labels but whose descriptions were the same or highly similar³. The review found that there was considerable overlap between this and older versions in terms of the content used to describe leadership.

The four requirements from the 1999 version that were not linked to requirements from the 1958 and 1973 versions were Self-Confidence, Intelligence, Cultural Awareness, and Health Fitness. These requirements seemingly represent vital additions in the face of the new missions that the Army faces in today's world. Self-discipline, Self-control, and Balance are attributes that seem indistinguishable as described in the 1999 manual and are not reflected in previous versions. Additionally, one requirement from the earlier frameworks (Enthusiasm) was not linked to any of the 33 requirements in the 1999 model.

The 1999 version contains more detail than previous frameworks with respect to the categorization of leader requirements (e.g., the actions of Influencing, Operating, and Improving each contain specific sub-actions) and the process flow of leadership. The 1999 version is also more sophisticated in its specification of framework components and subcomponents and their interrelationships with one another. It attempts to disentangle the single category of leader traits into more appropriate categories of values, attributes, and skills and describe the differences in these categories of requirements. This framework also replaces the leadership principles prescribed in earlier frameworks with actions and sub-actions and describes how values, attributes, skills, and actions are maintained within the Be-Know-Do framework.

However, this most recent version of FM 22-100 is not without its shortcomings. The 1999 manual was of considerably greater length (almost twice as many pages as the 1973 version) and complexity than previous versions. This version also appears to be less precise in terms of helping the leader identify particular activities to develop their leadership skills. The 1999 version is inconsistent in the level of specificity across requirements.

³ Duty (1999): Duty begins with everything required of you by law, regulation, and orders; but it includes much more than that. Professionals do their work not just to the minimum standard, but to the very best of their ability. Dependability (1973): The certainty of proper performance of duty; To carry out any activity with willing effort; To continually put forth one's best effort in an attempt to achieve the highest standards of performance and to subordinate personal interests to military requirements. Dependability (1958): The certainty of proper performance of duty. A constant and continuous effort to give the best a leader has in him. Duty demands the sacrifice of personal interests in favor of military demands, rules and regulations, orders and procedures, and the welfare of subordinates.

Army Leadership Doctrine Summary

This review of Army leadership doctrine revealed that although the Army leadership frameworks have evolved in complexity, much of the content of these frameworks has persisted over several decades. The review of the evolution of the leader requirement frameworks also found that the earlier frameworks were more simplistic and straightforward in format and possessed the look and feel of handbooks. While these frameworks provided clear descriptions of the requirements they also had fewer numbers of requirements to describe and fewer levels of specification. For example, all requirements were categorized under traits or principles. These early frameworks were practical and utilitarian and their strengths lay in their parsimony and explicit descriptions, yet they were relatively limited in terms of their theoretical underpinnings. For example, all competency requirements related to the individual leader were labeled under the single category of traits even though some of these requirements were clearly not traits (e.g., knowledge).

In summary, Army Leadership doctrine has used a variety of methods to derive very different types of leadership frameworks. While there is no single correct method for establishing Army leadership requirements, there are several important considerations when attempting to develop a framework that prescribes those requirements. Among these is methodological rigor in development, ability to communicate the framework to the audience, comprehensiveness of the framework, consistency of the dimensions within the framework, and endurance and flexibility of the framework over time (adapted from Cooper, 2000; Lucia & Lepsinger, 1999). With these considerations in mind, a systematic method toward establishing future leadership requirements was set forth.

Future Environmental Influences on Leadership

The research team believed it important to clarify the future environmental and threat conditions because the team believes that Army leadership requirements flow from mission requirements, which themselves flow from environment and threat conditions. Thus, the research reviewed the environment and threat conditions that were likely to exist in the future that would influence leadership requirements.

While the future environment cannot be described precisely or with certainty, the purpose of this part of the research was to provide a view of the future that integrates conditions, circumstances and influences as well as environmental variables that could affect Army leadership. To do so, the research team has synthesized the results of research with projections of future operational environments and threat factors as well as Future Force characteristics and capabilities.

The primary environmental factors affecting future Army operations can be categorized as political-economic, technological-scientific, demographic-cultural and operational. Other influential environmental factors that must be considered are U.S. force vulnerabilities and weaknesses and the nature of threat to be faced. These factors will affect the land power

component that will continue to be an essential element of U.S. security strategy into the foreseeable future.

Political and Economic Factors

The dominant political and economic trends that began in the 21st Century, will likely continue into the foreseeable future. While national interests will continue to drive future confrontations, non-state entities representing the interests of transnational and factional ethnic, religious, criminal and terrorist groups – or alliances of these groups will be the source of future conflict (Huntington, 1996).

The differences that exist between and within sovereign states will cause instability in regions where socio-economic inequality is exacerbated by urbanization, famine, and lack of adequate sources of water. While increasing globalization is expected to eventually bring more stability around the globe, its progression will be turbulent at times and might lead to greater disparities in economic conditions between wealthier and poor nations (TRADOC PAM 525-2-60) (U.S. Army Training, 2002).

Countries will continue to use war to achieve political objectives and land combat will continue as the salient feature of conflict (Rudesheim, 2001). The combat systems and military technology—including nuclear technology, chemical, and biological agents—needed to prosecute war will continue to be readily available to paying customers (U.S. Army Training, 2002).

The shifting and unstable balance of power at the national and sub-national levels in many regions of the world will threaten U.S. and allies' interests. Concurrently, the United Nations will be involved in protecting trans-national or global interests – with both these interests depending on the military capability of the United States. At the same time, U.S. military capability may be negatively affected by a tendency toward reduced end-strength and force structure and constrained fiscal resources (U.S. Army Training, 2002). The activities and actions of the U.S. military will be subject to constant, near-real-time scrutiny by the American and world public due to the presence of the 'unblinking eye' of the professional media (U.S. Army Training, 2002). Criticism of and sanctions against individual leaders for their decisions and the actions of their units are consequences of that media scrutiny.

The above political and economic factors make salient the need for leaders who possess a keen social and political awareness and the ability to respond to arising issues/demands in an adroit and socially intelligent manner. Thus, communication skills and the ability to effectively interpret and respond to a rapidly changing social and political environment are likely to be requirements of leaders well into the future.

Technological and Scientific Factors

Advances in technology and science will enhance the readiness of the U.S. military. These enhancements will increase force capabilities to conduct surveillance and reconnaissance, to collect and process intelligence and to provide information at a volume, level of accuracy, and

speed never seen before (U.S. Army Training, 2002). Technology and science also have the potential to increase military capability and reduce human vulnerability by increasing leader, unit, and Soldier performance. The concept of 'technological overmatch' – to save force structure and lives by exploiting leading edge technological advances – may encourage a tendency to over-rely on technology and science in efforts to mitigate the higher casualty rates from interpersonal contact and combat.

This dependency on technology also has the potential to be used against the Army. In the future, attacks against U.S. satellite systems, made possible with even primitive nuclear and missile technologies can render many of these systems inoperable (Gritton & Antón, 2003). Enemies will also seek to exploit the nation's reliance on Internet based resources by increasing cyber-attacks, attempts to gain access to military systems to either gain control or disrupt their functioning via the World Wide Web.

While the United States currently holds a sizable advantage in satellite technologies, providing crucial surveillance and reconnaissance functions, the technological gap with other nations may diminish in coming years with the proliferation of new technologies and capabilities to other countries. Likewise, older, yet still potent, nuclear, biological, and chemical technologies will continue to spread across nations and will be more difficult to control (National Intelligence Council, 2000).

Other, more mundane technologies will also have the potential to challenge Army operations. For example, cell and satellite phones and Internet resources have been used by terrorist organizations in the past to coordinate attacks. These same technologies also provide a cheap and effective method to both state and non-state entities for facilitating the coordination of synchronized actions (National Intelligence Council, 2000).

The evolution of technological and scientific factors highlights numerous challenges to be faced by future leaders. To address these challenges, future leaders will require the appropriate application of technical and tactical skills, which will in-turn require such attributes as critical thinking, technical and tactical knowledge, strategic thinking/vision, the ability to shape the environment, and continued self-improvement.

Cultural and Demographic Factors

Changing cultural factors within the U.S. population will be reflected in the U.S. military of the 21st century as both leaders and those to be led will be more ethnically and culturally diverse in the future. More Hispanics, compared to Asians, Blacks and other racial or ethnic minorities, will enter the leader development process. In view of this trend, many Soldiers will be bilingual and will speak English as their second language (Heffner & Legree, 2002).

The majority of leaders and followers will continue to be male but the percentage of females will continue to increase; also, more of these leaders and followers will be the product of non-traditional families. Those children who have grown up in a fatherless home may be more likely to have trainability, discipline, and performance difficulties (Shields, 1996). Future enlisted Soldiers are likely to be high school graduates and, compared to past recruits, will be

more technologically astute and will have a greater tendency to be overweight (Heffner & Legree, 2002).

In the future, as in the past, failure to access and retain quality Soldiers and to develop leaders will complicate the achievement of uniformly high states of readiness. These cultural and demographic challenges faced both by today's Army and that of the Future Force will require leaders with high levels of cultural awareness and communication skills and an ability to lead-by-example in a manner that transcends cultural and demographic demarcations.

Operational Factors

Leaders will perform on an operational landscape that will extend across the spectrum of conflict and non-conflict environments. Routinely, operations and activities will involve two or more Services, governmental agencies, and non-governmental agencies. Operations and activities will also involve other nations' Services, other governments' agencies, non-U.S. agencies and international agencies. Task-organized forces and 'matrixed' work groups will perform alongside integral organizations and units to accomplish routine and special missions and tasks (The Joint Chiefs of Staff, 1997).

These organizations and work groups can be expected to be composed of some combination of assigned active and reserve military; they may also have attached DOD civilians, private military contract (PMC) and/or foreign nationals. Former military personnel may be called back into service and the regulations governing moving between active, reserve, and non-military status may change rapidly. Additionally, organic and ad hoc organizations and work groups may utilize liaisons to coordinate their activities. These circumstances will change the designed leader-to-led ratio of U.S. organizations thus increasing and complicating the span of control of leaders at all levels. Part of this complication will increase the authority of military over non-military leaders, causing a need for swift and consistent communication of rules within these teams. Rumsey (1998) offers that junior leaders will likely be required to exercise higher order cognitive abilities due to increased responsibilities and task complexity.

By design, U.S. forces will possess greater lethality with smaller force presence and will rely on information technology to acquire, distribute, and process data. These forces will be deployed regularly and frequently to conduct operations in diverse geographical environments. Forces will be alerted, deployed, and employed in theaters of operations with little opportunity to become acclimated to the physical and psychological environment (TRADOC PAM 525) (U.S. Army Training, 2001). Technological factors may also drive unit reorganization as well as doctrinal changes based on increased unit lethality and distribution across the mission space. Additionally, the span of direct leadership may increase as units increase in lethality and speed and capability to influence.

Operations and activities will span the spectrum of war and other operations-other-than-war; with operations-other-than-war becoming more prevalent (see Figure 3 below). These operations and activities will be conducted autonomously at a higher tempo and may tend to be continuous and simultaneous with few significant pauses and with rapid transitions between types of operations. Operations and activities will be more widely dispersed in time, distance,

and purpose (U.S. Army Training, 2002)]. In addition, operations will increasingly be conducted in complex and urban terrain that may degrade U.S. technological advantage. Non-combatants in areas of operations will complicate the tactical situation by deliberately or inadvertently merging with antagonists (U.S. Army Training, 2001).

In response to these various operational factors likely to influence the Future Force, leaders will need to possess both strong technical and tactical knowledge as well as the skill to appropriately apply such knowledge. Leaders will also require the ability to manage and shape the performance of Soldiers, units, organizations, and systems—thus requiring high levels of reasoning and critical thinking skills, communication skills, adaptability, and knowledge of procedures and practices within and across organizations and systems.

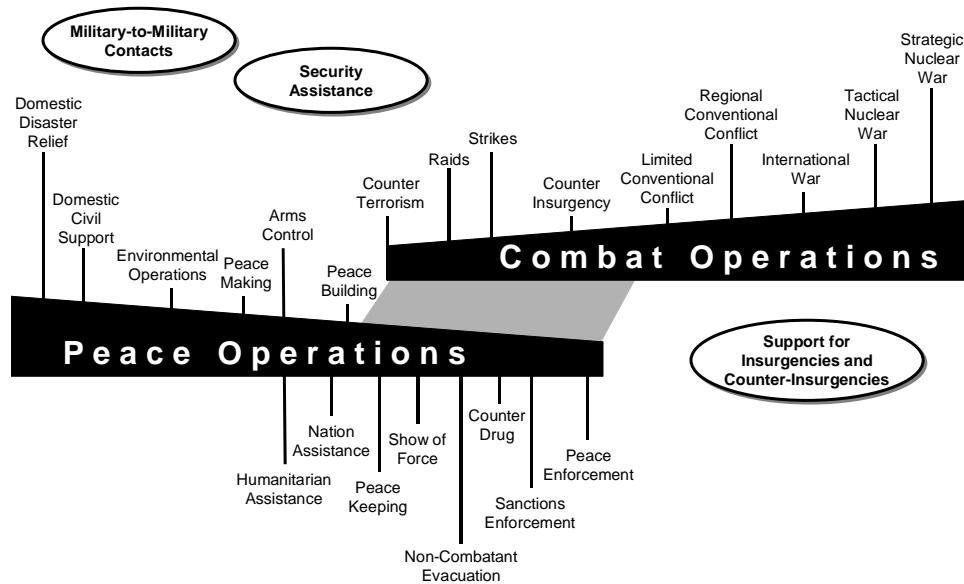


Figure 3. Spectrum of Operations

Vulnerabilities

Adversaries will always seek to direct their capabilities against opponents' vulnerabilities and weaknesses in order to achieve tactical, operational, or strategic success. Some U.S. force multipliers – such as technological and information dominance, robust logistical support, and the capability for stand-off attack – may be manipulated to their advantage by 'thinking' opponents.

Other cultural or traditional factors that are ascribed to the 'American way of war' can also be manipulated and used against U.S. forces. These factors include the tendency to engage in coalition warfare, sensitivity to public opinion, and an aversion to unnecessary casualties (U.S. Army Training, 2001). Future leaders will need to constantly monitor unit vulnerabilities, be aware of the indicators and consequences of opponents' actions, and establish systems to minimize these consequences.

The Nature of the Threat

The 21st Century adversaries will have had a greater opportunity to evaluate U.S. force capabilities and vulnerabilities than the U.S. will have had to assess every potential adversary. This understanding will influence them to employ active and passive means to defeat U.S. forces operationally, psychologically and politically. Future threats are likely to come from non-state actors that are neither controlled nor dependent upon any particular country to carry out operations against the U.S. These entities may not respond to deterrents. Such actors will pose new challenges to the Army by attempting to disrupt operations while providing an elusive target. Adaptive enemies will learn to avoid U.S. strengths, to exploit U.S. vulnerabilities and weaknesses and to take advantage of U.S. adherence to doctrine and rules of engagement. In order to achieve tactical or operational success, adversaries will change their tactics or will attempt to force U.S. units into rapid and continuous transitions to negate U.S. advantages on the battlefield (U.S. Army Training, 2001).

U.S. force vulnerabilities and threat factors highlight the need for leaders who will possess the creativity, vision, and awareness to step outside the box and analyze problems from different perspectives. These leaders must also possess the communication skills, persuasiveness, self-confidence, and conviction to be willing to gain support for their positions in the face of unpopular opinion and opposition. However, it will be of equal importance that future leaders also possess the objectivity, judgment, and wisdom allowing them to adjust and re-align their perspectives based upon data and information that may be inconsistent with their previously existing views and opinions.

A set of 13 factors was identified from various authors writing about how the future will affect the Army, ranging from changes in demographics to unit structure to weapons capabilities to geo-political situations. The implication of the factors was used in the generation of the leadership competencies. For example, the changing ethnicity mix of Soldiers requires leaders that have a high level of cultural awareness, versatile communication skills and an ability to lead-by-example that transcends cultural or demographic categories. Political and economic projections emphasize the need for leaders who can interpret and respond to rapidly changing social and political environments. Common throughout the factors, the Army will require leaders who can influence others by a variety of direct and indirect means and who have superior situational awareness, sound judgment and adept communication abilities.

These factors present a significant challenge to establishing a set of leadership requirements. With these issues in mind, the research team began the next phase of the method – conducting a review and comparison of military service frameworks. This phase is described below.

Service Framework Comparisons

The research team examined a variety of existing military, civilian, and private industry leadership models before organizing the Army leadership requirements into a competency framework. Particular attention was given to the constructs and structures of the U.S. military

and Civilian Executive Core Qualifications.⁴ The comparisons are illustrated in Table 8 and additional details of this analysis are provided in Horey and Fallesen (2003).

The constructs that appear to have the greatest similarity across the six models (represented in 4 or more frameworks) are performing/executing/accomplishing mission; vision/planning/preparing; problem solving/decision making; human resource management; process/continuous improvement; motivating/leading people; influencing/negotiating; communicating; team work/building; building/developing partnerships; interpersonal skills; accountability/service motivation; values; learning (including components of adaptability, flexibility, awareness); and technical proficiency. Other constructs that are common across three of the frameworks are driving transformation/leading change; strategic thinking; diversity management; mentoring/developing people; and physical/health/endurance.

Among the 41 constructs across the six sources, 20 are included in three or more frameworks, 15 are included in two, and six are unique to a single framework. In about half the cases, the frameworks appear to cover the same constructs but there are also significant differences in terms of what is included, or at least the level at which it is included in the leadership framework.

Table 8
Comparison of Service Framework Constructs

USCG	USA	USMC	USAF	USN	ECQ
Performance	Executing; operating	Accomplish tasks	Driving execution	Accomplishing mission	Results driven
Influencing Others	Influencing		Influencing & negotiating	Influencing & negotiating	Influencing & negotiating
Working with others	Motivating		Leading people & teams	Leading people; working w/people	Leading people
Mgt & process improvement	Improving	Initiative	Driving cont. improvement	Continuous improvement	
Effective communication	Communi-cating	Keep Marines informed	Fostering effect. communication	Oral/written communication	Oral/ written communication
Develop vision & implement	Planning; preparing		Creating/demonstrating vision	Vision	Vision
Decision-making; problem solving	Conceptual; DM	Make sound decisions	Exercising sound judgment	Problem solving; decisive	Problem solving decisive
Group dynamics	Building, developing	Train team	Fostering teamwork	Team building	Team building
Self aware; learning	Learning	Know self & improve	Assessing self		Continual learning
Technical proficiency	Technical	Technical proficient		Technical credibility	Technical credibility
Aligning values	7 values "LDRSHIP"	7 values	Leading by example	Integrity	Integrity, honesty

⁴ See '<http://leadership.au.af.mil/sls-skil.htm>' website for a comprehensive presentation of military leadership frameworks and related information.

In the course of this comparison the development team also recognized variation in the types of constructs represented within a particular framework, overlap among the components, and different levels of detail across the frameworks. Crosswalks of other existing leadership competency frameworks were also considered for formatting and structural details in developing the initial competency constructs. This review proved insightful as comparison frameworks often combined leadership processes, functions, and attributes at the competency level. The research team believes this leads to confusion when communicating the model to the target audience and attempted to eliminate such confounding in the framework.

Review of Leadership Theories

In preparing to develop a competency-based framework of Army leadership the research team felt it was important to consider relevant leadership theories and research from the civilian literature. This section presents an overview of these theories, many of which are reflected in the evolution of Army leadership doctrine as previously presented.

Over the last five decades, researchers have constructed different theories to describe and explain various aspects of leadership. Leadership theories are important because they help clarify different perspectives. They address what leaders are, who they are, what they do, how leadership occurs, and what processes result in effective leadership. The various theories provide a backdrop for specification of leadership competencies. The main lines of theory and research address characteristics of the leader, the situations that leaders operate in, the behaviors and skills that leaders utilize, perceptions of the followers, and combinations of these and other factors.

Trait Approaches

Historically, leadership research first attempted to identify universal traits and characteristics that all effective leaders possessed. This line of research supposes that personal characteristics can be used to distinguish between leaders and followers. Simply put, trait theories suggest that leaders are defined by who they are. Personal traits are more enduring than states that an individual may experience. They include personality, social, intellectual or physical factors such as need for achievement, extraversion, generalized intelligence and stature. Stodgill's (1948) extensive review showed that traits are associated with reliable differences between those who are leaders and those who are followers, but there was no consistent trait or set of traits that were related to leadership across situations. A basic limitation of trait studies is that traits do not differentiate along a dimension of leadership effectiveness (Caruana, 1998). However, recently some characteristics have been tied to effectiveness. For example, military cadets who had greater confidence in their leadership abilities were rated as superior performers (Chemers, Watson & May, 2000).

Role of Power

Leaders can be characterized by the nature of how they assume or demonstrate power in influencing others. French and Raven (1959) describe five forms of power relevant to leadership.

Coercive power occurs when forcing others to do something against their will, in order to gain compliance. It is, of course, generally undesirable in a leadership position but may be necessary in certain circumstances. Army leaders demonstrating the importance of discipline and standards often use coercive power early in training. Reward power can include anything seen as reinforcement or punishment. Legitimate power emanates from one's position, and in the Army this may include power derived from rank, formal role, or military custom. Referent power results from others admiring or otherwise desiring to be like the person in power. Expert power is the final form, and it is derived from the knowledge and skill that the leader brings to a situation. Leaders in the Army may use any combination of these power types.

Leader Behavior Categories

While trait approaches sought to identify universal traits, behavioral approaches attempted to identify universal behaviors that lead to success. Two categories of leader behavior emerged in the literature: leader behaviors that targeted productivity and leader behaviors that targeted group affect. Variations have labeled the categories as directive and supportive behaviors (Blanchard, Zigarmi & Zigarmi, 1985), concern for production and concern for people (Blake & Mouton, 1985), and initiation of structure and consideration (Hellriegel, Slocum & Woodman, 1995) and transactional and transformation leadership (Bass & Avolio, 1990.).

Some even categorized the difference as management or leadership (Kotter, 1990). Kotter offered that management is concerned with providing order through deliberate steps of planning, organizing, and controlling resources to produce business outcomes; while leadership is concerned with motivating people to accomplish organizational goals. Bennis and Nanus (1985, p. 221) commented that "Managers are people who do things right and leaders are people who do the right thing."

GEN Edward C. Meyer, the 29th CSA, stressed the importance of both leading and managing in his remarks about Army leaders (Information Management Support Center, 1997),

"The leadership goal and the management goal occasionally become confused in the minds of officers. In an effort to simplify the difference let me say that your success will be a function of your ability to lead people and manage resources (p. 290)." "Every job at every level demands a complement of leadership and management skills (p. 379)."

Leadership and management are both necessary for the organization; they are not so separate as to represent different functions - but are two sides of the same coin. Although some different categories of behaviors were identified from this line of investigation, the best leader performance occurred from leaders high on both initiating structure and consideration.

Contingency Models

The failure of previous researchers to find a universal set of effective leader traits or behaviors led to a focus on the interaction between leadership and the context in which it occurs. Contingency models presume that different types of leadership may be required for different

types of situations. Fiedler's contingency model was one of the first to look at the interaction between leader traits and situations (Fiedler, 1967). He operationally defined possible differences in leader style by identifying characteristics of a leader's group of subordinates. The theory's basic premise is that effectiveness is contingent on having a match between leader and follower styles. Fiedler identified the degree of cooperation offered by followers (commitment), clarity of the group's task (structure), and the leader's formal authority to direct and reward followers (power), which he referred collectively to as the degree of situational control (or favorableness). Favorableness was measured by the Least Preferred Coworker scale.

The contingency model assumed that a leader's style is fixed and that a leader cannot be sensitive to both the task and to followers. A training program was developed where the leader learns to change the situation to fit his or her style (Fiedler & Chemers, 1984), but it was found to have questionable success (Jago & Ragan, 1986). The contingency model does not explain why leader-situation matches or mismatches occur (Northouse, 2004). Other theories contend that leaders' personalities do not matter as much as their self-awareness regarding their style, and how they use this self-awareness or self-knowledge to adapt to the situation (rather than trying to adapt the situation to them) (Northouse, 2004).

Normative Decision Theory

Another situational approach is normative decision theory. Normative decision theory proposed that the effectiveness of a leader's decision making style is contingent upon situational factors (Vroom & Yetton, 1973). The theory states that when the task is familiar and followers supportive, then it is appropriate for a leader to adopt an autocratic style. When the task is ambiguous, then the leader should use consultative strategies, and when follower support is in question, then the leader should use a participative strategy. This theory is mainly prescriptive and does not address what leaders actually do when faced in a particular situation. The theory is also limited to decision making and neglects other important leadership elements such as motivation and development of followers.

Situational Leadership

While contingency and normative decision approaches are both types of situational theory, a more widely recognized approach is offered by Hersey and Blanchard (1969). This theory contends that the amount of task and people focus that a leader adopts depends on the level of subordinates' commitment and competence. The greater the level of commitment and competence, then the less that a leader has to provide task-based and relation-based leadership. However, the prescriptions for matching leader actions (or style) to subordinates do not appear to be a straightforward matching process (e.g., Fernandez & Vecchio, 1997; Vecchio, 1987). Preferences for leadership styles also vary by follower demographics (e.g., experience, age, gender) (Vecchio & Boatwright, 2002).

Path-goal Theory

House (1971) developed a path-goal theory by combining behavioral and motivational approaches. Path-goal theory assumes that the leader's purpose is to provide subordinates

anything that is missing in the situation and to help subordinates overcome limitations in their abilities (Northouse, 2004). Path-goal theory states that the main goal is for a leader to motivate subordinates. This is done by showing them how their task-related performance will help them to achieve their personal goals. A leader is shown how his or her task direction or consideration behaviors might affect subordinate motivation and performance. When structure is already inherent in the task, then a follower would interpret the leader's direction as excessive and unnecessary. When he or she saw the situation as intrinsically interesting, then a leader's consideration behaviors would similarly be seen as unnecessary.

The leader should adapt behavior to the task, to subordinates' needs, and to how his or her efforts will be perceived by subordinates. Task characteristics include task structure, group norms, and degree of authority. Subordinate characteristics include need for affiliation, locus of control, and self-efficacy. Nine types of leader behavior styles have been identified with respect to path-goal theory: directive, supportive, participative, achievement-oriented, interaction facilitation, work facilitation, group-oriented decision process, work-group representation and networking, and value-based leadership (House, 1996). One concern with the theory is its failure to delineate how a leader could employ different techniques or styles to influence subordinates' expectations or motivation (Northouse, 2004).

Emergent Leadership

Another descriptor of leadership occurs when status as a leader emerges among group members. Emergent leadership situations are ones where, at least initially, there is no clearly established position power or authority. Research on emergent leadership often looks at the personality traits that correspond to the phenomenon. Emergent leaders tend to be verbally engaged in the group (Fisher, 1974), and they demonstrate more dominance, intelligence and self-confidence than their peers (Smith & Foti, 1998). Emergent leadership is important in situations where there are no apparent or agreed upon chain of command.

Leadership Attribution

Trait and behavioral theories fail to provide explanations as to why certain leadership behaviors or phenomena occur, while leadership attribution theories attempt to describe underlying reasons. One theory focuses on implicit leadership theories of followers, while the other leadership attribution theory focuses on attributions made by the leader.

The recognition of various rating errors led researchers to develop the leader attribution theory. Researchers found that actual ratings of leader behavior were very similar to expected behavior of imagined leaders (Staw, 1975). The issue came to be important because in much of the research the legitimacy of the leader was based on follower perceptions. Leaders were being defined or the quality of their leadership was being judged based on follower's ratings. The theory holds that people have assumptions about what an effective leader is and does, and they judge the leader's actual behaviors in terms of their implicit theories. Lord (1985) proposed that leader are seen as effective when there is a high overlap in what a follower expects of a generic leader and what they perceive in a specific leader. Also Lord believes that inferential processes occur so when a team is successful then the leader is seen as displaying effective leadership.

Several factors could influence these attributions, including: (a) past attribution of good leadership is likely to continue; (b) if a leader's characteristics don't match with a follower's preconceived ideas about what a good leader is like, then leadership is likely to be rated poorly; (c) extreme outcomes are likely to be attributed to leadership instead of other causes. The approach indicates that "leadership" may reside beyond the actions or traits of the leader in the perceptions of the followers.

Leaders also make attributions about their followers' behaviors. Kelley (1967) describes leader attribution theory as a way a leader interprets follower behaviors and attributes cause to those behaviors. The theory suggests that leaders assess follower behavior by considering whether it occurs in a specific task or across tasks, how often the behavior occurs, and whether it is unique to an individual. Leaders do this in an effort to diagnose problem performance, to understand the reasons for success, or to anticipate the consequences of what they might choose to do (Mitchell, Green & Wood, 1981).

The attribution approaches highlight the possibility of various individual biases entering into effectiveness ratings, and are limited to how followers or leaders perceive leadership. Attribution theory does not address what leaders or leadership should be.

Leader-member Exchange Theory

Like leadership attribution theory, leader-member exchange (LMX) theory looks beyond the leader to say what leadership is. LMX addresses the interactions between leaders and followers (Dansereau, Graen & Haga, 1975). While many theories of leadership adopt the approach that leadership is the process by which leaders influence followers, LMX theory suggests that leadership is a process of mutual influence. LMX suggests that followers influence leader behavior. Rather than focusing solely on the behaviors of the leader, leadership can be better understood by examining the quality of the relationship between a leader and follower.

LMX allows that leaders may have a different style of working with each follower. The theory brings attention to the processes between dyads (i.e., leader-follower pairs). One of the main premises is that followers are often treated differently as part of an "in-group" or "out-group" depending on what they are perceived to contribute to the organization. Those in an in-group receive more attention, feedback and concern from the leader than those in an out-group (Dansereau et al., 1975). The in-group is more responsive, committed, and forthcoming than the out-group (Dansereau et al., 1975).

A second premise of LMX theory is that good leader-follower exchanges are related to better job attitudes, improved job performance, lower turnover, and higher rate of promotion, among others (Graen & Uhl-Bien, 1995).

LMX theory emphasizes the importance of effective communication, including the nature of the relationship of the parties involved in the communication as well as the tone and content. The relational aspect is similar to consideration aspects of the leader behavioral theory. Research associated with LMX theory shows that attention to communications and relationships with people can have positive effects on the organization in terms of climate, commitment, and

creativity (Graen & Uhl-Bien, 1995). However, LMX appears to have some shortcomings: it recognizes that individuals are treated differently which runs counter to principles for equitable treatment, and it does not provide many details about how to build the mutual trust and effective partnerships that it values (Northouse, 2004).

Transformational Leadership

While LMX research focused on the exchanges between leaders and followers, transformational leadership theory attempted to capture the practice of the best leaders (Avolio & Bass, 1991). Burns (1978) initiated the line of work by contrasting transactional and transformational styles of leadership. Transactional leaders consider a traditional approach to leadership where leaders look at the relationship with their followers as a “quid pro quo” transaction. In contrast to transactional assumptions, transformational leaders appeal to followers to transform the organization whereby members focus on organizational results instead of working to achieve personal goals (Bass & Avolio, 1990). Transformational leadership combines elements of trait, behavioral, situational and attributional approaches into a more encompassing structure. Transformational actions are designed to appeal to and arouse followers’ unconscious needs for affiliation, achievement, and power.

Transformational theory is related to charismatic leader theory. Charismatic leader theory is a sophisticated trait approach that focuses on the transcendent qualities of extraordinary leaders (House, 1976). Charismatic leaders are believed to be those who operate from high moral beliefs, have a strong need to influence others, use dramatic ways of articulating goals, model desired attitudes and behaviors, appeal to followers’ high ideals, and have an ability to move followers to action. Transformational leaders also display behaviors consistent with most of these charismatic traits.

The transactional-transformational duality was extended to a full-range model of leadership that included laissez-faire leadership, management by exception, contingent reward (primarily transactional), idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (the last four types are transformational factors) (Avolio & Bass, 2002). The full range model asserts that different types of behavior may be appropriate in different situations, and leaders will use them to different extents.

The concepts of transformational theory are broad, so they are hard to define and measure. The Multifactor Leader Quotient is the primary way to measure transformational leadership and has factors that are correlated with each other and with transactional and laissez-faire types of leadership. Similar to other theories, transformational theory does not provide specific guidance about how to assess various aspects of situations and act accordingly. It allows that ideal performance should tend to rely on transformational qualities in general.

Consideration of Leader Relationships

In developing a competency-based leadership framework, the research team built on the leadership theories and considered the various relationships that leaders have with others and the typical direction of influence (see Table 9). Leaders can have direct influence on others when

giving direction, feedback, or counseling and training. They can also have indirect influence on others by acting as role models and through their role in creating a climate in which work and social activities are carried out. Army leaders typically operate within a chain of command consisting of superiors, peers, and subordinates. Army leaders typically are members of one or more teams and may be a designated leader of the team or may serve as a functional or technical authority. Leaders may obtain their authority and responsibility by the position they are assigned to, by designation from superiors, by policy or customary practice, or by initiative taken. Additionally, Army commanders (a position designation) have some leadership responsibilities to subordinates' family members. Outside a formal Army chain of command Army leaders may perform leadership functions in conjunction with Joint, Interagency or Multinational (JIM) groups; with non-governmental organizations (NGO); and local citizens in their area of operations. Army leaders have other relationships with the American public (e.g., public affairs communiqués). The relationships draw to various degrees on leadership competencies, as well as technical, tactical, and conceptual competencies, and on Army and societal values. Emerging trends in leadership relationships include that leadership is required beyond a formal chain of command and that leadership is not solely a top-down phenomenon.

Table 9
Relationships of Leaders to Others and Direction of Relationship

Relationship	Direction
Leader – subordinates, followers	Vertical down
Leader – fellow, peer leaders	Horizontal, parallel
Leader in a team of leaders	Horizontal, integrated
Leader – superiors	Vertical up
Leader – joint, interagency, multinational (JIM) forces & leaders	Multi-directional
Leader – Others (Non governmental organizations, subordinates' families, American public, noncombatants or neutrals in area of operations)	Multi-directional

Leadership Theory Summary

The leadership theories reviewed suggest several important, common aspects of leadership. One of these is that leaders can have a positive or negative influence on their followers. Another aspect that many of the theories have in common is that leaders can operate to influence subordinates' effectiveness by degree of task-structure or consideration of individual emotional and psychological needs. Either means of influence is moderated by – or contingent upon – the situation and the followers. Leaders can influence performance by their sensing of the situation-follower interaction, the followers' expectations, and the followers' needs. These needs can be task related or people related. Leaders can influence by providing task direction, what impression they make, who they are perceived to be, how they motivate followers, how they choose to communicate with others, and what level or position of power they adopt. Trust, confidence, and legitimacy are indicators of the leader-follower relationship (Chemers, 2000).

Another consistent theme across the leadership theories deals with the differences that situations impose. The situational theories are important because they emphasize the flexibility that leaders should exercise in what they do. There are many sources of variation in the environment, the organizations, the followers, and other factors so leaders should develop multiple styles or sets of strategies. Considering how essential variables interact is an important step for the leader to take to ensure relevance and increase suitability. Once the ways that variables could interact are identified, the leader should take account of the situational variables and adjust what they choose to do. Most of the situational theories address what variables are important to adapt to, and less about how a leader should assess what levels are active and what actions to take because of them. Yet the concept of adapting oneself to the situation is an important one. It is a given that the future operating environment will not be entirely predictable. As such, leaders will need to be astute at scanning and assessing the environment and others to determine when significant change has occurred and determining what impact this change will have.

A leadership competency framework should account for differences in styles and situations. Actions associated with these differences can be indicated. For example, task versus relations orientation, transactional versus a transformational interaction process, and directive versus participative style – each have their place in Army leadership. A need for situational leadership is apparent when considering the range of Army missions and nature of different types of combat. There are immediate situations when no other style than directive leadership will do. It becomes clear that many different styles of leadership are necessary as leaders are increasingly required to participate in joint, interagency, and multinational missions; their role is better understood as an enduring builder of climate, morale, and vision; and technology is integrated into the methods of influence to address the complexities.

Review of Future Leadership Requirements

The research team performed an extensive search of the literature from November 2002 through May of 2003 with the goal of identifying future Army leadership requirements. Specifically, the research team searched all available documents that included information regarding leadership requirements of the Future Force. Research databases that were searched included Army institutions and task forces (e.g., websites for The Objective Force Task Force, TRADOC, Army Science Board, Army War College, Combined Arms Research Library, Army Research Institute and Defense Technical Information Center database). Also well-known consulting (e.g., RAND) and general sources (e.g., Google web search) were used.

Screening Documents

The initial search resulted in approximately 100 documents which included research reports, journal and magazine articles, book chapters, white papers, and other various published and unpublished documents (see Appendix B). The method involved two analysts scanning each document and deciding which were logically descriptive of military leadership in the future. The screening procedure resulted in 35 documents. The eliminated documents provided general background but did not sufficiently substantiate the proposed competencies. Two analysts

independently studied each of the 35 selected documents to identify potential leader or leadership requirements and to generate a list of those requirements. The two lists were then compared and discrepancies were resolved during face-to-face discussions to obtain a list of 142 leadership requirements.

Crosswalk of Screened Leader Requirements

The reviews of leader requirements found that many of the individual requirements from the various source documents used different labels. To address this issue the research team created a table consisting of the 35 source documents as column headings and entered row headings with the leadership requirements as they were identified. (This crosswalk appears as Appendix C.) The analysts used this crosswalk to identify potential redundancies and to resolve them. Where there appeared to be significant overlap of terms identified by a source, the research team indicated this by placing a mark in the appropriate cell and by placing the actual requirement or term used by the author in the cell in parentheses; e.g., if an author used the term cognition, “cognition” was placed in the cell corresponding to the author column and the cognitive ability row. This method of designation directed the research team to consider and resolve whether similar terms were indeed the same construct or different constructs (e.g., adaptability and flexibility). The research team also provided definitions for terms or constructs and documented the source of those definitions. At the completion of the crosswalk the research team had reduced the 142 requirements to 125.

Sorting Requirements into Categories

The method consisting of a review of future Army environmental and threat conditions, an Army leadership literature search and review, document screening, requirements identification and crosswalk yielded an extensive and diverse list of terms, concepts, and constructs that were classified as 125 leadership requirements. In order to better understand these requirements, there was a need to sort them into appropriate categories. In a general sense, leadership requirements can be described in either behavioral terms with respect to the actions leaders must perform or in attribute terms with respect to what KSAOs they must possess. Previous Army leadership frameworks found within the FM 22-100 series have categorized leader requirements as either behaviors (e.g., principles, actions, what the leaders should “DO”) or attributes (e.g., traits, values, attributes, skills, what the leader should “BE” and “KNOW”).

The research team began the process of sorting the requirements into the seven categories of knowledge, skills, abilities, other characteristics, composites, tasks, and roles. The research team recognized the subjective nature of this exercise, as others may sort the items differently. This coding exercise was completed by four analysts and used the definitions in Table 10 as a decision making guide. Coding differences between team members were discussed as a group until a final category for each requirement was agreed upon. The importance of the exercise was in considering each of the listed constructs and how they relate to one another for representation in the competency framework rather than the final result of how the constructs are categorized or sorted.

Table 10
 Future Army Leadership Requirements Literature Coding Definitions

Term		Definition*
Knowledge		Familiarity, awareness, or understanding gained through experience or study.
Skill		An acquired aptitude.
Ability		An enduring attribute of an individual's capability for performing a particular range of different tasks.
<i>Other Characteristics</i>	Attributes	A characteristic or fundamental property of an individual.
	Traits	A characteristic (inherited or acquired) which is consistent, persistent, and stable.
Composites		Constructs that represented more than one KSAO combined and not otherwise characterized as a KSAO.
Task		An action or series of actions (i.e., behavior or series of behaviors) performed closely together in time and directed toward an objective, goal, or outcome.
Role		A broad subdivision of one's job composed of a group of tasks that are related because of the nature of the work or behavior involved.

*These definitions are compatible with those contained in TRADOC 350-70 (Department of the Army, 1999) and the Uniform Guidelines on Employee Selection Procedures (Equal Employment Opportunity Commission, 1978).

The complete lists of Army leadership requirements the research team considered and coded are presented in Tables 11 and 12. The requirements presented in these tables were used as the basis for the initial framework development and each requirement listed was considered for inclusion in this framework. A summary of these requirements organized by the categories of knowledge, skills, abilities, other attributes, composites, tasks, and roles is presented below.

Knowledge. The five categories of knowledge presented in Table 11 represent the explicit information that a leader should understand through experience or study. Future leaders will provide information to troops continually, whether it is in preparation for the battlefield or to ensure that goals of the Army are attained; therefore, their knowledge will be persistently tested. For this reason, future leaders' knowledge will be vital. Doctrine knowledge will be important because leaders will need to understand the intent, structure, and procedures of the Army in order to effectively lead their troops (Yukl, 1999). Without a basic knowledge of Army guidelines to ground leaders, it will be difficult for them to motivate, guide, and train their subordinates particularly in a turbulent future environment. Likewise, it will be important for leaders of the Future Force to have a working knowledge of the use of military power and operations knowledge so they can understand how their role/mission fits with the greater goals of the Army (Nogami, Brander, & Slusser, 1997; Yukl, 1999).

Future leaders will need to be equipped with a sense of history to teach their troops and make sound decisions (Vandergriff, 2002). The Joint Chiefs of Staff (1997) note that, "the

Table 11
Army Leadership KSAO Requirements Proposed in Literature

Knowledge	Skills	Abilities	Other Characteristics	
Doctrine knowledge	Social and interpersonal skills	Cognitive ability	Achievement Drive	Accountability
Operations knowledge	Tactical skills	Cognitive/ conceptual	Autonomy	Awareness
Sense of history	Technical skills	Communication	Competitive	Confident
Tactical expertise		Conceptual/frame of reference	Conscientiousness	Courage
Technical credibility		Creativity	Determination	Decisive
Use of military power		Handle ambiguity	Dedicated	Disciplined
		Insight	Endurance	Emotional stability
		Integrating	Energy	Ethics
		Judgment	Experience	Flexibility
		Language ability	Fortitude	Honesty
		Mental agility	Initiative	Integrity
		Meta-cognitive skills	Lifelong learner	Moral
		Oral communication	Motivation to perform	Openness
		Physical agility	Patience	Persuasion
		Problem solving	Physical fitness	Positive attitude
		Reflective thought	Positive self-image	Pride
		Strategic thinking	Presence	Professionalism
		Systems thinking	Psychomotor aptitude	Resilience
	Use technology	Responsibility	Self-motivated	
Vision	Self-confidence	Will to destroy the enemy		
Written communication	Willingness to exploit opportunities	Values		
		Versatility		

Table 12
 Army Leadership Competency, Task, and Role Requirements Proposed in Literature

Composites	Tasks	Roles	
Aware	Awareness of subordinates strengths and weaknesses	Battlefield coordination and management	Change management
Competence	Coordination	Concern for Soldier quality of life	Conflict management
Competent in peacekeeping/non traditional mission	Counsel others	Counselor	Continual learning
Ideological savvy	Decision-making	Establish success conditions	Execute operations
Negotiating	Delegate	Exploit opportunities	Financial management
Political savvy	Empower	Function in a JIM environment	Human in the loop
Resourceful	Impart direction and purpose	Human resource management	Information management
	Initiate action	Leveraging diversity	Manage
	Instill trust/confidence	Mentor	Mission focus
	Issue orders	Motivating others	Performance management
	Take risks	Plan and conduct training	Plan operations
		Program management	Role model
		Represent the organization	Responsibility for subordinates
		Risk management	Supervising
		Sustain high states of readiness	Team building
		Team player	Technology management
	Time management	Train	

application of principles of war that guide operations at the strategic, operational, and tactical levels has remained essentially the same over many years (p. 1),” so it is likely that it will remain similar in the future. For this reason, it is paramount that future leaders understand the lessons of the past so that they can avoid mistakes and successfully direct their troops in tomorrow’s environment.

Technical credibility will be critical to future leaders as well. Leaders will need to understand how technology impacts their functions and missions and they must possess the necessary technical knowledge to complete their objectives and remain informed of the latest developments in their particular field (Tremble & Bergman, 2000; The Joint Chiefs of Staff,

1997). The reason this knowledge is important is twofold. First, leaders will need to leverage technology to accomplish their objectives in an effective and efficient manner. Second, leaders should display technical credibility in order to gain the confidence of their subordinates (Tremble & Bergman, 2000; The Joint Chiefs of Staff, 1997) and thus provide the best chance of victory on the battlefield.

Skills. There are three skills that were identified as critical to future leaders: social and interpersonal skills, tactical skills, and technical skills. The literature describes social and interpersonal skills as the capacity of leaders to interact with a wide range of personalities and motives (Magee, 1998; Rumsey, 1998; The Wexford Group International, 2002; White & Olmstead, 1997; Winkler et al., 1998). Magee explains that this is an important skill set because leaders must interact with a variety of internal and external entities. For example, with respect to internal entities, leaders should have the ability to build consensus and to negotiate in order to shape or influence their environment. Externally, leaders may function as members of policy formulation teams that help to determine national interest and objectives and must draw upon their social and interpersonal skills in communicating, persuading, and building consensus across a potentially broad array of communication forums (Magee, 1998).

Tactical skills and technical skills are also fundamental to the success of future leaders (Kelley, 1996; Gumbert, 1998; Nogami, Brander, & Slusser, 1997; Steinberg & Leaman, 1990a, 1990b; Yukl, 1999). Gumbert explains that, “leaders must have extensive personal mastery of tactical and technical methods to affect their decisions. There must be a development process of rich, elaborate, mental models capable of providing the background knowledge needed to understand the situation” (p. 5). These skills will provide leaders the tools to make precise and timely decisions, which will be fundamental to the missions of the Future Force.

Abilities. Abilities made up the third category used to classify the initial list of future leader requirements. The abilities list describes enduring attributes or characteristics of future leaders for performing a particular range of tasks. Abilities differ from skills in that they are the attributes the individual has inherited or acquired in previous situations and brings to the new task situation, while a skill is linked more closely to the performance of specific tasks and includes the sequence and precision of task specific behaviors (Fleishman, 1972). For the purposes of the current research, the requirements on the abilities list in Table 12 that are similar in nature will be described together.

Given that the construct of cognitive ability is similar in definition to other requirements identified by the literature review (i.e., conceptual ability, mental agility, meta-cognitive skills, and reflective thought), it was important that existing research and theory be referenced regarding the specification of this important leader requirement. Schmidt and Hunter (1998) show the practical significance of cognitive ability in their review of 85 years of personnel selection literature. They found that differences in cognitive ability do indeed predict differences in job performance. Correlations as high as .58 have been found between intelligence and professional-managerial jobs (Hunter & Hunter, 1984).

There have been many taxonomies and means of categorizing the various dimensions of cognitive ability. The two main conceptualizations are based on cognitive ability being thought

of as a unified whole “g” or thought of as a collection of intelligence facets. For example, Charles Spearman (1927) proposed a theory of “Universal unity of the intellectual function” and is credited with coining the term “g”. He developed a two-factor model of intelligence with “g” at the center and other sensory-motor and personality traits, “s” factors, surrounding the central “g” factor, and he proposed that measures of “g” best indicated a person’s overall intelligence. Spearman later acknowledged an intermediate set of factors “group factors” that lie between “g” and “s” and include such abilities as linguistic, mechanical, and mathematical ability.

Raymond Cattell (1943) also proposed a two-factor model of intelligence with the two factors consisting of fluid intelligence and crystallized intelligence. The abilities that comprise fluid intelligence are “nonverbal” abilities such as memory for numbers and are relatively free from cultural influences. Crystallized intelligence is heavily dependent on culture and informal and formal education. Cattell’s theory of intelligence proposed that crystallized intelligence develops through the use of fluid intelligence and that the two are highly correlated.

Robert Sternberg developed a triarchic theory of successful intelligence that is comprised of analytical, creative, and practical skills and states that, successfully intelligent people are those who have the ability to achieve success according to their own definition, within their sociocultural context (Sternberg, 1988). Meanwhile, Carroll (1993) has used factor analysis to derive a three-level, hierarchical model of cognitive abilities with general intelligence as the highest order factor and eight second-order factors (fluid intelligence, crystallized intelligence, general memory and learning, broad visual perception, broad auditory perception, broad retrieval ability, broad cognitive speededness, and processing speed) whereby these second-order factors are each comprised of between three and sixteen primary factors. Carroll’s model encompasses Spearman’s “g”, Cattell’s model (fluid and crystallized intelligence), and several of Thurstone’s primary mental abilities. Carroll defined cognitive abilities as “variations in individuals’ potential for present performance on a defined class of tasks” (Carroll, 1993, p. 16).

Fleishman developed a taxonomy of abilities (Fleishman & Quaintance, 1984; Fleishman & Reilly, 1992) that was based upon decades of programmatic research investigating the factor structure of human performance across a wide range of tasks (Buffardi, Fleishman, Morath, & McCarthy, 2000; Fleishman, 1967; Fleishman, 1975). He identified 7 second-order and 21 first-order factors of cognitive ability (Fleishman & Reilly, 1992). These same second and third-order ability dimensions have also been used to specify cognitive ability within the current Department of Labor’s Occupational Information Network (O*NET) database and the O*NET taxonomies (Peterson, Mumford, Borman, Jeanneret, & Fleishman, 1999).

Cognitive ability has also been described as the ability to gather, integrate, and interpret information (Zacarro, 1999; Magee, 1998). It is a critical component of a future leader requirement framework because the leaders of the Future Force will be required to process enormous amounts of information and handle multiple responsibilities in their daily routines, thus requiring high levels of cognitive ability. Gumbert (1998) notes that cognitive demands become greater every day because of rapid technological change in the global environment, requiring leaders to formulate strategies, solve problems, and make correct decisions.

Creativity has been identified as an important ability of future leaders as well. Creativity is the ability to form novel ideas or to produce new solutions to complex problems (Pritchard, 1999; The Joint Chiefs of Staff, 1997; The Wexford Group International, 2002) and is an essential for helping leaders face and meet the challenges of the future (White & Olmstead, 1997). Similarly, handling ambiguity will be important to leaders as it involves the ability to function in uncertain situations (Nogami, Brander, & Slusser, 1997; Noble & Fallesen, 2000; Rumsey, 1998). It is quite possible that these two abilities will be complementary in future environments.

Insight, judgment, integrating, problem solving, and vision have similar properties. Each of these requirements involve the ability to retain, retrieve, and apply information as well as the ability to react to new problem situations by applying previous experience, education, and training effectively (Chilcoat, 1995; Rumsey, 1998). Insight and vision also involve an element of planning and predicting for future events (Winkler et al., 1998; The Wexford Group International, 2002). Their value in an uncertain future is implicit.

The future environment will involve increasing amounts of information transfer as a result of technological advances; therefore, written communication and oral communication will be vital. Both will be important because leaders will need to receive information and disseminate it to their subordinates or to their superiors (Ford, Campbell, Campbell, Knapp, & Walker, 2000; Tremble & Bergman, 2000; White & Olmstead, 1997). Both oral and written communication will be critical because leaders are often the impetus of change and they must be able to express themselves in a manner that allows their superiors, peers, and subordinates to understand them. Whether it be on the battlefield during the fog of war or in simple daily communication, it is important that leaders are able to direct and report to the people around them. Ability to speak a second language is also a likely requirement for future leaders (Rumsey, 1995).

Systems thinking is the ability to analyze how the goals and operations of one's unit are interrelated with those of other units and systems, and how a unit's actions affect the performance of other units. This requirement has become more important over time and will continue to increase in criticality in the future (Hooijberg, Bullis, & Hunt, 1999). Grossman et al. (2002) explain that the Future Force will be hierarchical in nature and involve the use and power of distributed command and control. They note that tactical units will cover a much larger geographic unit than their counterparts in the legacy force, and all units will have instantaneous or near instantaneous access to information through networked command. For these reasons, it will be imperative that leaders are able to know and understand the operations and interrelations of the various systems that impact them. Leaders in the future will need to develop knowledge structures regarding how their actions influence other systems and how the actions of other leaders in other systems influence them.

The final requirement in the list of abilities is the use of technology. This ability is unique from technical credibility and technical skill in that it involves the implementation of technological advances typically associated with information and communication processing (Grossman et al., 2002). Rumsey (1998, pp. 3-4) elaborates on this issue by pointing out that 'It is the rapid growth of technology that is supporting the advancements in transmission of information as well as the new equipment that facilitates battlefield agility. A major element of

the officers' future operating environment will involve dealing with advanced technology and rapid technological advancements." The presence of this requirement in leaders will aid them by making them more efficient (Ford et al., 2000). At issue is not so much the technical operation of specific systems as policies for systems training are well-established and easily monitored. The more important issue for key leaders at all levels in combat, institutional and system acquisition fields is to understand the capabilities, limitations, and organizational employment of technology. Information and communications technology also has the potential to make leaders more efficient in the performance of their leadership functions.

Other Characteristics. In addition to the knowledge, skills, and abilities categorized above, there are also other characteristics, including attributes, traits, and experiences that are required by leaders to be successful. The research team identified forty-three additional requirements that were not grouped into KSAs that the research team refer to here as 'other characteristics.'

Achievement drive, competitiveness, dedication, initiative, self-motivation, determination, motivation to perform, and willingness to exploit opportunities are seven 'other characteristics' that have similar definitions. All of these requirements include a desire for success and self-fortitude, which are important elements for completing difficult tasks and attaining excellence (Ford et al., 2000; Noble & Fallesen, 2000; Rumsey, 1995). As Rumsey explains, "this emphasis on motivation is consistent with findings in the Army's selection and classification project, Project A, in which two separate kinds of performance were identified: "can do" and "will do" (p. 8). The literature on the future environment suggests that this set of requirements will remain important well into the future.

The review of leader requirements also found that leaders will be required to function autonomously in their future leadership roles. For this reason, they will need to possess high levels of awareness, and be self-confident, self-sufficient, and comfortable when working alone (White & Olmstead, 1997). Similarly, future leaders also maintain high levels of conscientiousness and pride in completing their mission(s) successfully. These requirements suggest that the leader maintains the highest standard of quality for their own satisfaction and for the good of the organization, which is vital in an autonomous setting (Hooijberg et al., 1999; White & Olmstead; Rumsey, 1995). These requirements are also important for maintaining order around the leader and for completing work as assigned (Grossman et al., 2002).

Discipline, responsibility, accountability, and professionalism complement the attributes previously discussed. The definitions of these requirements suggest that future leaders should demonstrate a general attitude or philosophy that reflects a high value on professional conduct on and off the job (White & Olmstead, 1997). In addition, they should display reliability in carrying out instructions and meeting requirements despite hardship, obstacles, personal problems, distractions, and danger (Rumsey, 1995; White & Olmstead). These traits will be crucial to future leader success as leaders gain more independence on and off the battlefield. Without direct supervision, it will be important that leaders remain responsible, professional, and accountable for their work.

The future environment will continue to require that leaders be confident, courageous, and decisive as they are able to adapt to the increasing speed of information transmittance both within and outside the Army (Rumsey, 1995). These three requirements necessitate that leaders be able to act on their own convictions even in the face of severe consequences and are able to choose the more difficult right path over the easy wrong path when necessary (McGuire, 1999; Swengros, 2002). To complement these requirements, leaders should also possess a positive self-image and a positive attitude (Hamburger, 1984). Both of these qualities will enable leaders to be confident, courageous, decisive, and psychologically fit to lead.

If the research team assumes that the future environment will require more from leaders than ever before, then it will also be important that leaders possess endurance, energy, and resilience (Pritchard, 1999). These three qualities imply that the leader should also possess high levels of vitality, physical stamina, and stress tolerance (White & Olmstead, 1997; Yukl, 1999). It has also been emphasized that leaders be flexible and versatile in their positions (Ford et al., 2000; Rumsey, 1998). In other words, leaders must have high energy levels, endurance, and resilience yet have the ability to adjust to situations as an aspect of general intelligence or social prowess (Ford et al., 2000; McGuire, 1999; Rumsey, 1998).

The future will necessitate that leaders know and learn from the past. With this in mind, previous experience is a requirement that will be vital to leader success (Hamburger, 1984). Familiarity with Army goals and objectives will help to develop and foster required values in the leader that are also critical for leader achievement such as honesty, integrity, moral courage, and solid ethics (William E. Simon Center, 2001). As The Army Officership Concept indicates, the Army strives to exhibit America's values and to be a professional organization but the Army can only achieve these standards if each of its leaders holds these attributes. Values, in turn are demonstrated through actions and behaviors.

Along with being prepared ethically for the challenges of being a leader, future leaders will also need to be physically fit and possess psychomotor aptitude (Rumsey, 1995; William E. Simon Center, 2001). Physical fitness involves meeting the Army's standards for weight, conditioning, and strength while psychomotor aptitude involves the ability to coordinate the simultaneous movements of ones' limbs to operate single controls or to operate multiple controls simultaneously. Considering that the future environment may present situations where leaders are required to interact with technology to complete multiple tasks simultaneously and fill multiple roles, physical fitness and psychomotor aptitude will be critical to success. Both qualities will help to allow leaders to meet the demands placed on them during the broad range of missions they face in the future.

There are several additional requirements on the 'other characteristics' list that may prove critical to future leadership. These include mental stability, emotional stability, presence, openness, persuasion, and the will to destroy the enemy. Mental and emotional stability involve the ability to remain focused and stable under pressure (William E. Simon Center, 2001). Presence is a requirement that is particularly influential in the Army and refers to the idea that a leader is respected and revered by their followers (Blackwell & Bozek, 1998; Yukl, 1999). This requirement is complementary to a leader's ability to persuade their subordinates to accept a new idea. Likewise, openness is also an important attribute, in that, it suggests leaders are receptive to

different points of view and new experiences themselves (McGuire, 1999; Rumsey, 1995; 1998). Finally, a leader's will to destroy the enemy is important in the context of battle.

Composites. The research team considered a requirement a composite if they felt the requirement was causally related to successful leadership performance, but they could not clearly identify it as a single KSA or other attribute, and it could not be considered a task or role of a leader. The literature review and coding exercise yielded six of these requirements. The first composite requirement was awareness. This characteristic involves the leader understanding themselves and the situation around them (Noble & Fallesen, 2000). To this end, awareness also implies that the leader must monitor their actions and the context in which these behaviors occur. This will be particularly important in the future with the media covering military actions more closely and as the Army continues to work with multiple external organizations during their missions. Noble and Fallesen point out that, "(better leaders) are aware of the effect their actions have on other friendly units and on the plan's compatibility with the mission of the larger unit" (p. 40).

The other 5 composites identified are similar in definition. General competence, competence in peacekeeping and non-traditional missions, negotiating, political and ideological savvy, and resourcefulness all include a consideration of one's responsibilities and the requirements of the environment. Further, each includes an element of the leader analyzing how the goals and operations of their unit are interrelated with other units and systems, and how their unit's actions affect the performance of other units (Ford et al., 2000; The Wexford Group International, 2002; Tremble & Bergman, 2000). The literature seems to clearly suggest that such analytical thinking will be valued in the complex future environment.

Tasks. The literature review identified 10 tasks that were influential for successful leaders. A task was defined in this research as an action or series of actions (i.e., behavior or series of behaviors) performed closely together in time and directed toward an objective, goal, or outcome.

The first set of tasks that will be defined here center around the leader to subordinate relationship. These seven tasks are awareness of subordinates strengths and weaknesses, empowering, imparting direction or purpose, initiating action, instilling trust or confidence, delegate and issuing orders. Intuitively, awareness of subordinate strengths and weakness is the task that is the backbone of these other tasks. This involves the leader understanding the knowledge, skills, abilities, and other characteristics that his/her subordinates possess so that they can be leveraged to complete the unit's goals (Yukl, 1999). With this awareness, leaders can then intelligently empower and impart direction as well as initiate action, instill trust, delegate, and issue orders decisively to their troops.

After considering their unit's resources, leaders will ultimately have to lead and for this reason the remaining tasks on the screened list are essential aspects of success. First, coordination involves many of these previously discussed requirements and is basically the capacity of a leader to stitch together working teams, with a variety of cultural backgrounds, at the command, operational, and unit levels to complete a mission (Gurstein, 1999; Ralph et al., 2001). Second, decision-making is closely related to this task because it involves the facility to

analyze problems, search for alternative solutions, consider the impact of alternatives, and solve problems. The last task on the list is take risks and this task is inherent in both coordination and decision-making because it involves taking action when the outcome is uncertain (Nogami, Brander, & Slusser, 1997). Each of these three tasks will be important in the global, cross-cultural missions predicted in the future.

Roles. Roles are broad subdivisions of one's job composed of a group of tasks that are somewhat related because of the nature of the work or behavior involved. Leaders are required and will be required to perform a variety of diverse and complex roles in their positions. Each, however, will be important to maintaining an exceptional Future Force. When considered from an organizational perspective, the common roles across jobs can serve to identify the desired competencies in an organization. The literature from the review led to 35 potential leader roles for Army leaders.

Subordinate support is an area of leader roles that is imperative to leader and unit success. This area includes roles such as counselor, mentor, and a general responsibility and concern for subordinates. As a counselor, leaders will need to help support their subordinates when facing adversity (Nogami et al., 1997). Similarly, as a mentor, leaders must proactively participate in the development of each subordinate through observing, assessing, coaching, teaching, developmental consulting, and evaluating their subordinates (William E. Simon Center, 2001; The Wexford Group International, 2002). Clearly, these are important roles for a future leader to fulfill. Nogami et al. (1997) note that these are critical because caring for Soldiers and families at all levels and the counseling and mentorship that leaders provide ultimately builds the next set of leaders for tomorrow. Likewise, establishing success conditions, managing, motivating, training, and supervising subordinates are five roles that are closely related to counseling and mentoring. Each of these five roles involves the leader providing guidance and direction to their followers so that their subordinates can be successful (Chilcoat, 1995; Ford et al., 2000).

In order to be successful, future leaders will also need to be able to execute operations and exploit opportunities. This implies that leaders will need to fulfill their duties and take advantage of opportunities when they arise (Hamburger, 1984; The Joint Chiefs of Staff, 1997). In order to be proficient in these two roles, there are a number of other roles that leaders will need to fulfill. For example, battlefield coordination and management will be crucial during wartime to enable leaders to execute operations. It is a vital role because it involves the capability to apply and effectively integrate multiple battlefield functions simultaneously (Campbell, Knapp, & Heffner, 2002). Campbell et al., 2002 explain that future leaders will need to integrate direct and indirect fires, communications, intelligence, and combat services as part of battlefield coordination in order to achieve tactical goals. Also, inherent in the role of battlefield coordination is the role of planning operations, which involves the development of mission strategy (Ford et al., 2000).

Similarly, as is it important to coordinate external operations, it is also imperative that future leaders manage internal operations. Leaders will be called upon to be responsible for change, financial, human resource, information, performance, programs, risk, technology, and time management within their unit. Each of these management areas requires that the leader is able to apply any and all appropriate tactics to coordinate the relevant issues concerned

(Steinberg & Leaman, 1990a). And, each area mandates that the leader is able to discern which strategy is most likely to provide the best solution for the particular matter of concern (Campbell et al., 2002; Steinberg & Leaman, 1990a). These management areas will continue to be important in the future environment because the leader will be required to maintain the functioning of their unit at all times as they are in today's Army.

Each of the roles defined above feed into one of the most important roles that the team identified, which was maintaining high states of readiness. This is crucial because leaders must be able to prepare their unit for a mission on a moments notice and still demand the highest possible standards from their subordinates (Blackwell & Bozek, 1998; Rumsey, 1998). In order to maintain high states of readiness, leaders must also continually learn, plan and conduct training, and be role models. Future leaders who set these roles as a priority will have a higher likelihood of being successful at maintaining their unit's readiness.

An additional role of leaders being able to function in joint, interagency, and multinational environment is rapidly becoming the norm in peacekeeping and combat situations and to span boundaries across organizations and functions. This role requires a number of other KSAs, such as cognitive skill and creativity, competencies of negotiation and political savvy, and a variety of personal attributes such as self-confidence and determination to perform successfully.

Finally, leaders will also need to be team builders and team players. These two roles are critical to high performance because the Future Force will be team-based. The Army Officership Concept (William E. Simon Center, 1997) emphasizes that the Army's leaders leverage teamwork as a force multiplier. Further, Campbell et al., (2002) indicate that leaders should communicate team goals as well as organize and reward effective work. In sum, as the research indicates, it is critical that leaders foster a team atmosphere in their units to help facilitate cohesion and goal accomplishment.

Development of the Army Leadership Competency Framework

In developing a competency-based framework of leadership requirements, the research team used the definition of leadership from FM 22-100, which is "influencing people – by providing purpose, direction, and motivation – while operating to accomplish the mission and improving the organization" (p. 1-4). This definition was important as the research team chose not to attempt to describe all work behaviors or tasks a leader may perform in his or her position but only those that influence his or her subordinates, peers, or others in the context of operating to accomplish mission and improving the organization.

The research team synthesized the leadership requirements presented in Tables 11 and 12 into competencies representing the broad array of constructs represented in these tables. Two analysts working independently developed initial competency constructs, and then conferred on a single representation that consisted of competencies, components, and sample actions associated with Future Force Army leadership.

Two analysts worked on multiple iterations to refine the draft framework. With the initial draft content they screened and modified terms to select ones that were likely to have the best understanding. They selected labels to incorporate as much parallelism and symmetry as possible. They also focused on concepts dealing exclusively with leadership, rather than all things that leaders do, such as from the tactical, technical and conceptual realms. They sought minimal overlap among competencies and the explanatory components, though recognized the impracticality of a set of pure, discrete competencies. Various concepts were moved from competency to component categories and others from component to competency in order to achieve a framework that had symmetry in meaning and organization, yet capture the broad spectrum of requirements.

A separate team of four different analysts then examined this draft framework and modifications and additions were made. The result of this collaboration was a draft framework consisting of eight competencies, 59 components and sample actions. Competency labels were developed to describe the major functions that leaders perform that influence others and lead to organization success. This set of eight competencies were most like the roles identified from the literature review (Table 12). While a role is a requirement that the organization has for leadership, competencies are the requirements of the roles that leaders themselves must possess. Components were developed for each competency to describe the most critical general ‘tasks’ associated with each competency. Sample actions were generated by linking the behavioral indicators from Appendix B of FM 22-100 to the components and through the development of new actions. This provided an initial, draft Army leadership framework that the research team then submitted to subject matter expert (SME) review for further development. This review process is covered in detail in the following section.

Expert Review of Initial Army Leadership Competency Framework

Judgments and opinions were sought from subject matter experts (SMEs) in the field of military leadership. SMEs were contacted individually and asked to spend a day studying, reviewing and rating the framework on the adequacy and appropriateness of the proposed competencies, components, and sample actions, the relationship of the environmental factors to the competencies, and the best means for developing the competencies. General instructions were provided on the purpose of the competency framework and each section contained more specific instructions regarding how to complete that section. Demographic items related to current position, prior experience in leadership research, familiarity with existing Army leadership doctrine, experience conducting job analysis or competency modeling, and highest rank of military service were included.

SMEs representing Army field grade officers, senior enlisted, and warrant officers, Air Force and Navy representatives, and academia and other behavioral science leadership experts were identified and contacted by project staff to determine their willingness to participate in this project. SMEs were initially identified as authors of articles related to future Army leadership or as having participated in the ATLD STUDY Phases. The group was expanded to include representatives from the other services and foreign military leadership experts. Twenty-two SMEs agreed to participate in the research. Current positions or key prior positions of the SMEs

are shown in Table 13. Five of the SMEs were from the active component of the Army and one from the USAF. One was an Army civilian and member of the reserve forces. Four SMEs were retired active component officers. Five of the SMEs were civilian employees of the government. Four SMEs were from academia, and one was a foreign defense scientist.

Table 13.
Positions of SMEs*.

Brigade Commander
Brigade Commander
Director, a military center for leadership
Chair, a military strategic leader studies
Former Commandant, a senior service college
Former Commander, a TRADOC combat center
Former branch chief, Warrant Officer Career Center
Sergeant Major, instructor
Research professor, a senior service college
Former chair of national security & strategy, senior service college
Chief, selection & assignment, a military personnel research organization
Research psychologist, selection & classification, private firm
Military scientist and liaison at military training command
Research psychologist, selection & assignment, a military personnel research organization
Team leader, leadership technologies, a military personnel research organization
Head, leadership policy & training, a civilian branch of military
Director, workforce effectiveness and planning, a federal agency
President, a commercial leadership institute
Professor and director, a university center for leadership studies
Professor, industrial/organizational psychology, a university
Professor of psychology & principal scientist, a university
Head, team & cognitive studies, a research organization from a NATO country

*All SMEs have experience of serving in or working in the Army or military, most have written on leadership requirements themselves.

Results of SME Review

All 22 respondents indicated the framework was beneficial. Seventeen SMEs indicated the framework provided the basic functions that leaders perform and serves in some way to assist leaders in determining what they should do and what actions exemplify successful performance. Other benefits identified were to assist educators, trainers, and learners in developing leadership skills and as a thorough presentation of the leadership domain in specific terms. Thirteen SMEs provided recommended changes to the existing competencies or the addition of missing competencies, and thirteen SMEs indicated changes or suggestions for components. Detailed SME comments and analyst recommendations for incorporating these comments into the framework regarding the value of the framework, the competencies, components, and sample actions are provided in Horey, Cronin, and Fallesen (in preparation). The research team felt it

was necessary to address each SME recommendation for the framework given the qualifications of the SMEs and the methodical approach toward development.

Framework Limitations

Four SMEs commented on limitations of the framework with respect to a lack of representation of the impact of level of leadership in the framework. Several of these comments also included limitations as to the lack of a depiction of the relationship between the competencies and suggested a hierarchical structure or reflection of criticality as necessary components in a leadership framework. Several comments also indicated redundancy in the competency components and a desire on the part of the reviewer to know the development process involved in the establishment of the competencies and components. Other relevant miscellaneous comments on the limitations of the framework were related to the framework not being exhaustive or complete, not knowing how the framework would be applied, a need for a differentiation between combat and non-combat competencies, and a need for the use of wording that is more contemporary and common to emerging systems and concepts. Finally, several reviewers commented on the significance of the sequence of the components within the competencies, and the analyst team reconsidered all component sequencing to reflect the importance and logical timing of the component within the competency.

Army Leadership Competency Framework

The proposed Army Leadership Competency Framework was generated by incorporating multiple perspectives and sources of information into an organized and unified set of functions. These sources included those topics previously described: preview of past and current U.S. Army Leadership doctrine; review of contemporary and projected environmental conditions; review of leadership theories; an extensive review of literature sources on leaders' work requirements; consideration of various competency definitions and purposes and the generation of a hybrid approach; review of selected industry and military competency models; criteria for desired competency models; hand-picked subject matter expert review; and iterative refinement. These sources were combined into a set of eight U.S. Army leadership competencies (see Table 14). The competencies are described with subordinate components and sample actions (see Table 15). The number of components ranges from four to ten per competency. The sample actions range from two to eight per component. The actions are considered illustrative and are qualified as "sample" because there are a vast number of actions that leaders could and should perform with regard to the competencies and components. Together, the competencies, components, and sample actions make up a core framework for Army leadership.

Table 14.
Leadership Competency Descriptions

Leading Other to Success: A leader motivates and influences others to take initiative, work toward a common purpose, accomplish tasks, and achieve organizational objectives.

Exemplifying Sound Values and Behaviors: Maintaining standards and providing examples of effective behaviors influences others to behave and perform similarly. All Army leaders should model Army values continuously. Modeling provides tangible evidence of desired behaviors and reinforces verbal guidance through demonstration of commitment and action.

Vitalizing a Positive Climate: A leader has a responsibility to establish and maintain positive expectations and attitudes which produce the setting for positive attitudes and effective work behaviors.

Ensuring Shared Understanding: By understanding the nature and power of communication and practicing effective communication techniques, one can better relate to others and translate goals into actions. Communication is essential to all other leadership competencies.

Reinforcing Growth in Others: Assisting others to grow as individuals and teams facilitates the achievement of organizational goals and is a primary function of leadership.

Arming Self to Lead: Only through being prepared for missions and other challenges, being aware of self and situations, and the practice of career long learning and development can one fulfill the responsibilities of leadership.

Guiding Successful Operations: Ultimately, a leader's purpose is to provide guidance and maintain control over the work environment in order to increase efficiency and effectiveness in one's own and subordinate's activities.

Extending Influence: Leaders need to influence beyond their direct lines of authority and beyond chains of command; this influence may extend to joint, interagency, inter-governmental, multinational, and other groups.

Table 15.
Leadership competencies, components and sample actions.

Leading Others to Success

Component	Sample Actions
Establish and impart clear intent and purpose	Determine the course of action necessary to reach objectives and fulfill mission requirements. Restate the higher headquarters' mission in terms appropriate to the organization. Communicate instructions, orders, and directives to subordinates. Ensure subordinates understand and accept direction. Empower and delegate responsibility and authority to subordinates.
Convey the significance of the work	Inspire, encourage, and guide others toward mission accomplishment. When appropriate, explain how tasks support mission and missions support organization objectives. Emphasize the importance of organizational goals.
Maintain and enforce high professional standards	Reinforce importance and role of standards. Perform individual and collective tasks to standard. Recognize and take responsibility for poor performance and address it appropriately.
Balance requirements of mission with welfare of followers	Assess and routinely monitor the impact of mission fulfillment on mental, physical, and emotional attributes of subordinates. Monitor morale, physical condition, and safety of subordinates. Provide appropriate relief when conditions jeopardize success of mission or present overwhelming risk to personnel.
Create and promulgate vision of the future	Interpret data about the future environment, tasks, and missions. Forecast probable situations and outcomes and formulate strategies to prepare for them. Communicate to others a need for greater understanding of the future environment, challenges, and objectives.

Table 15 (continued).
 Leadership competencies, components and sample actions.

Exemplifying Sound Values and Behaviors

Component	Sample Actions
Model Army values consistently through actions, attitudes, and communications	Set the example by displaying high standards of duty performance, personal appearance, military and professional bearing, physical fitness and health, and ethics. Foster an ethical climate. Complete individual and unit tasks to standard, on time, and within the commander's intent. Be punctual and meet deadlines. Demonstrate determination, persistence, and patience.
Exemplify warrior ethos	Remove or fight through obstacles, difficulties, and hardships to accomplish the mission. Demonstrate physical and emotional courage. Communicate how warrior ethos is demonstrated.
Demonstrate commitment to Nation, Army, unit, Soldiers, community, and allies	Demonstrate enthusiasm for task completion, and if necessary, methods of accomplishing assigned tasks. Be available to assist peers and subordinates. Participate in team tasks and missions without being asked to do so.
Display confidence, self-control, composure, and positive attitude especially under adverse conditions; be resilient	Remain decisive after discovering a mistake. Act in the absence of guidance. Don't show discouragement when facing setbacks. Remain positive when the situation becomes confusing or changes. Encourage subordinates when they show signs of weakness.
Demonstrate technical, technological, and tactical knowledge and skills	Meet mission standards, protect resources, and accomplish the mission with available resources using technical and tactical skills. Display appropriate knowledge of equipment, procedures, and methods.
Understand the importance of conceptual skills and model them to others	Display comfort working in open systems. Make logical assumptions in the absence of facts. Identify critical issues to use as a guide in both making decisions and taking advantage of opportunities. Recognize and generate innovative solutions. Relate and compare information from different sources to identify possible cause-and-effect relationships. Use sound judgment and logical reasoning.
Seek and be open to diverse ideas and points of view	Encourage respectful, honest communications among staff and decision makers. Explore alternative explanations and approaches for accomplishing tasks. Reinforce new ideas, demonstrate willingness to consider alternative perspectives to resolve difficult problems. Use knowledge sources and subject matter experts. Recognize and discourage individuals seeking to gain favor from tacit agreement.

Table 15 (continued).
Leadership competencies, components and sample actions.

Vitalizing a Positive Climate

Component	Sample Actions
Foster team work, cohesion, cooperation, and loyalty	Encourage people to work together effectively. Promote teamwork and team achievement to build trust. Draw attention to the consequences of poor coordination. Acknowledge and reward successful team coordination. Integrate new members into the unit quickly.
Encourage subordinates to exercise initiative, accept responsibility, and take ownership	Involve others in decisions and keep them informed of consequences that affect them. Allocate responsibility for performance. Guide subordinate leaders in thinking through problems for themselves. Act to expand and enhance subordinates' competence and self-confidence. Reward initiative.
Create a learning environment	Use effective assessment and training methods. Encourage leaders and their subordinates to reach their full potential. Motivate others to develop themselves. Express the value of interacting with others and seeking counsel. Stimulate innovative and critical thinking in others.
Encourage open and candid communications	Show others how to accomplish tasks while remaining respectful, resolute, and focused. Communicate a positive attitude to encourage others and improve morale. Reinforce the expression of contrary and minority viewpoints. Display appropriate reactions to new or conflicting information or opinions. Guard against group think.
Encourage fairness and inclusiveness	Provide accurate evaluations and assessments. Support equal opportunity. Prevent all forms of harassment. Encourage learning about and leveraging diversity.
Express and demonstrate care for people and their well-being	Encourage subordinates and peers to express candid opinions. Ensure that subordinates and their families are provided for, including their health, welfare, and development. Routinely monitor morale and encourage honest feedback.
Anticipate people's on-the-job needs	Recognize and monitor subordinates' needs and reactions. Show concern for the impact of tasks and missions on subordinates' morale.
Set and maintain high expectations for individuals and teams	Clearly articulate expectations. Create a climate that expects good performance, recognizes superior performance, and does not accept poor performance. Challenge others to match one's example.
Accept reasonable setbacks and failures	Communicate the difference between maintaining professional standards and zero defects mentality. Express the importance of being competent and motivated, but recognize the occurrence of failure. Emphasize learning from one's mistakes.

Table 15 (continued).
Leadership competencies, components and sample actions.

Ensuring Shared Understanding

Component	Sample Actions
Listen actively	Listen and watch attentively. Make appropriate notes. Tune into content, emotion, and urgency. Use verbal and nonverbal means to reinforce with speaker that you are paying attention. Reflect on new information before expressing views.
Determine information sharing strategies	Share necessary information with subordinates. Protect confidential information. Coordinate plans with higher, lower, adjacent individuals and affected organizations. Keep higher and lower headquarters, superiors, and subordinates informed.
Employ engaging communication techniques	Speak enthusiastically and maintain listeners' interest and involvement. Make appropriate eye contact when speaking. Use gestures that are appropriate but not distracting. Use visual aids as needed. Act to determine, recognize, and resolve misunderstandings.
Convey thoughts and ideas to ensure understanding	Express thoughts and ideas clearly to individuals and groups. Use correct grammar and doctrinally correct phrases. Recognize potential miscommunication. Use appropriate means for communicating a message. Communicate clearly and concisely up, down, across and outside the organization.
Present recommendations so others understand advantages	Use logic and relevant facts in dialogue. Keep conversations on track. Express well-thought-out and well-organized ideas.
Be sensitive to cultural factors in communication	Maintain awareness of communication customs, expressions, actions or behaviors. Demonstrate respect for others.

Table 15 (continued).
 Leadership competencies, components and sample actions.

Reinforcing Growth in Others

Component	Sample Actions
Assess current developmental needs of others	Observe and monitor subordinates under different task conditions to establish strengths and weaknesses. Note changes in proficiency. Evaluate subordinates in a fair and consistent manner.
Foster job development, job challenge, and job enrichment	Assess tasks and subordinate motivation to consider methods of improving work assignments, when job enrichment would be useful, methods of cross training on tasks, and methods of accomplishing mission. Design tasks to provide practice in areas of subordinates' weaknesses. Design ways to challenge subordinates and improve practice. Encourage subordinates to improve processes.
Coach, counsel, and mentor	Improve subordinate understanding and proficiency. Use past experience and knowledge to improve future performance. Counsel, coach, and mentor subordinates and subordinate leaders.
Facilitate ongoing development	Maintain awareness of existing individual and organizational development programs and remove barriers to development. Support opportunities for self development. Arrange training opportunities as needed that help subordinates improve self-awareness, confidence, and competence.
Support institutional-based development	Encourage subordinates to pursue institutional learning opportunities. Provide information about institutional training and career progression to subordinates. Maintain resources related to development.
Build team skills and processes	Present challenging assignments for team interaction. Provide resources and support. Provide feedback on team processes.

Table 15 (continued).
 Leadership competencies, components and sample actions.

Arming Self to Lead

Component	Sample Actions
Maintain mental and physical health and well-being	Recognize imbalance or inappropriateness of one's actions. Remove emotions from decision making. Apply logic and reason to make decisions or when interacting with emotionally charged individuals. Recognize the sources of stress, maintain appropriate levels, and use it for motivation. Take part in regular exercise, leisure activities, and time away from routine work. Stay focused on life priorities and values.
Maintain self awareness; employ self understanding, and recognize impact on others	Evaluate one's strengths and weaknesses. Consider feedback on performance, outcomes associated with actions, and actions taken by others to achieve similar goals. Seek feedback on how others view your actions. Routinely determine personal goals and progress toward those goals. Develop capabilities where possible, but accept personal limitations. Seek opportunities where your capabilities can be used appropriately. Understand self-motivation under various task conditions.
Evaluate and incorporate feedback from others	Determine areas in need of development. Judge yourself with the help of feedback from others.
Expand knowledge of technical, technological, and tactical areas	Keep informed about developments and policy changes inside and outside the organization. Seek knowledge of systems, equipment, capabilities and situations, particularly information technology systems.
Expand conceptual and interpersonal capabilities	Understand the contribution of concentration, critical thinking (assimilation of information, discriminating relevant cues, question asking), imagination (decentering), and problem solving in different task conditions. Learn new approaches to problem solving. Apply lessons learned. Filter unnecessary information efficiently. Reserve time for self development, reflection, and personal growth. Consider possible motives behind conflicting information.
Analyze and organize information to create knowledge	Reflect on what you've learned and organize for future application. Consider source, quality or relevance, and criticality of information to improve understanding. Identify reliable sources of data and other resources related to acquiring knowledge. Set up systems to store knowledge for reuse.
Maintain relevant cultural awareness	Learn about issues of language, values, customary behavior, ideas, beliefs and patterns of thinking that influence others. Learn about results of previous encounters when culture plays a role in mission success.
Maintain relevant geo-political awareness	Learn about relevant societies outside the United States experiencing unrest. Recognize Army influences on other countries, allies, and enemies. Understand the factors influencing conflict and peacekeeping, peace enforcing, and peacemaking missions.

Table 15 (continued).
Leadership competencies, components and sample actions.

Guiding Successful Operations

Component	Sample Actions
Prioritize, organize and coordinate taskings for teams	Use planning to ensure each course of action achieves the desired outcome. Organize groups and teams to accomplish work. Plan to ensure that all tasks can be executed in the time available and that tasks depending on other tasks are executed in the correct sequence. Limit over-specification and micromanagement.
Identify and account for individual and group capabilities and commitment to task	Consider duty positions, capabilities, and developmental needs when assigning tasks. Conduct initial assessments when beginning a new task or assuming a new position.
Designate, clarify, and deconflict roles	Establish and employ procedures for monitoring, coordinating, and regulating subordinates' actions and activities. Mediate peer conflicts and disagreements.
Identify, contend for, allocate, and manage resources	Allocate adequate time for task completion. Keep track of people and equipment. Allocate time to prepare and conduct rehearsals. Continually seek improvement in operating efficiency, resource conservation, and fiscal responsibility. Attract, recognize, and retain talent.
Remove work barriers	Protect unit from unnecessary taskings and distractions. Recognize and resolve scheduling conflicts. Overcome other obstacles preventing full attention to accomplishing the mission.
Recognize and reward good performance	Recognize individual and team accomplishments and reward them appropriately. Credit subordinates for good performance. Build on successes. Explore new reward systems and understand individual reward motivations.
Seek, recognize, and take advantage of opportunities to improve performance	Ask incisive questions. Anticipate needs for action. Analyze activities to determine how desired end states are achieved or affected. Act to improve the organizations' collective performance. Envision ways to improve. Recommend best methods for accomplishing tasks. Leverage information and communication technology to improve individual and group effectiveness. Encourage staff to use creativity to solve problems.
Make feedback part of work processes	Give and seek accurate and timely feedback. Use feedback to modify duties, tasks, procedures, requirements, and goals when appropriate. Use assessment techniques and evaluation tools (especially AARs) to identify lessons learned and facilitate consistent improvement. Determine the appropriate setting and timing for feedback.
Execute plans to accomplish the mission	Schedule activities so the organization meets all commitments in critical performance areas. Notify peers and subordinates in advance when their support is required. Keep track of task assignments and suspenses. Adjust assignments, if necessary. Attend to detail.
Identify and adjust to external influences on the mission and organization	Gather and analyze relevant information about changing situations. Determine causes, effects, and contributing factors for problems. Consider contingencies and their consequences. Make necessary, on-the-spot adjustments.

Table 15 (continued).
Leadership competencies, components and sample actions.

Extending Influence

Component	Sample Actions
Understand sphere of influence, means of influence, and limits of influence	Assess situations, missions, and assignments to determine the parties involved in decision making, decision support, and possible interference or resistance. Understand role of individuals and units in building partnerships. Understand boundary of own and Army involvement. Learn relevant policies, doctrine, and lessons learned. Learn about the types of power and their use in different situations. Learn about the role of negotiation, mediation, partnering, and psychological operations in accomplishing mission.
Build trust	Be firm, fair, and respectful to gain trust. Identify areas of commonality. Engage other members in activities and objectives. Follow through on actions related to expectations of others. Keep people informed of actions and results.
Negotiate for understanding, consensus, and to resolve conflict	Leverage trust to establish agreements and courses of action. Clarify the situation. Identify individual and group positions and needs. Identify roles and resources. Facilitate understanding of conflicting positions. Generate and facilitate generation of possible solutions.
Build and maintain alliances	Establish contact and interact with others that will share an interest in your development, reaching your goals, giving advice, introducing you to others, and other common interests. Maintain friendships, business associations, interest groups, and support networks. Understand the value of and learn from partnerships, associations, and other cooperative alliances.

Support for Proposed Leadership Competencies

Coverage of Leadership Requirements Identified in Literature

Table 16 provides a crosswalk of the competencies and components from the proposed leadership framework to the requirements identified in the selected literature on Army future leadership requirements. Reference numbers correspond to the postscripts in the reference section.

The ATLD Officer phase and related articles (Steele & Walters, 2001; Schwartzmann, 2003) have reinforced the importance of self-awareness and adaptability as enduring competencies for future Army leaders. Yet these constructs are fairly abstract. If the Army is concerned with leadership as action, then a more relevant concern may be how adaptability and self awareness are operationalized within the processes of leadership. Perhaps they are best viewed as attributes and will be none the less important for all future Soldiers to exhibit. By themselves they do not fully describe leadership nor the core of what will make leaders

Table 16

Crosswalk of Competencies and Components from Leadership Framework to Source Literature

Competency/Components	Source Literature (Numbers stand for citations in references)
Leading Others to Success	
Establish and impart clear intent and purpose	9,17,29,34,35
Convey the significance of the work	2,3,4,7,18,22,26,27
Maintain and enforce high professional standards	9,20,21,28,31
Balance requirements of mission with welfare of followers	4,7,20,27,29,34
Create and promulgate vision of the future	1,3,4,9,10,14,17,25,26,28,34
Exemplifying Sound Values and Behaviors	
Model Army values consistently through actions, attitudes, and communications	1,5,7,19,11,12,13,15,17,28,20,27,29
Exemplify warrior ethos	3,4,18,26,31
Demonstrate commitment to Nation, Army, unit, Soldiers, community, and allies	5,15,20,21,22,25,27,29,33,34
Display confidence, self-control, composure, and positive attitude especially under adverse conditions; be resilient	1,3,4,5,7,11,12,16,17, 18,20,21,22,25,26, 29
Demonstrate technical, technological, and tactical knowledge and skills	3,7,8,9,10,13,14,17,23,26,27,28,29,31,34
Understand the importance conceptual skills and model them to others	2,4,7,9,10,15,16,19,20,21,25,27,28,29,31,34,35
Seek and be open to diverse ideas and points of view	15,20,21
Vitalizing a Positive Climate	
Foster team work, cohesion, cooperation, and loyalty	3,4,6,7,8,9,14,15,17,18,19,21,22,25,26,27,28, 29,31,33,34,35
Encourage subordinates to exercise initiative, accept responsibility, and take ownership	1,9,20,25,31,32,34
Create a learning environment	3,4,9,13,14,18,31,32,34
Encourage open and candid communications	15,20,21
Encourage fairness and inclusiveness	1,9,13,22,25,34
Express and demonstrate care for people and their well-being	3,7,10,11,24,27,29,34
Anticipate people's on-the-job needs	4,34
Set and maintain high expectations for individuals and teams	9,11,27
Accept reasonable setbacks and failures	20,25

Table 16 (Continued)

Crosswalk of Competencies and Components from Leadership Framework to Source Literature

Competency/Components	Source Literature (Numbers stand for citations in references)
Ensuring Shared Understanding	
Listen actively	23
Determine information sharing strategies	8,20,23,31
Employ engaging communication techniques	3,14,20,28,31,32,34
Convey thoughts and ideas to ensure understanding	2,3,7,8,9,10,14,15,16,17,23,25,26,27,28,29,30,31
Present recommendations so others understand advantages	4,10,14,28,35
Be sensitive to cultural factors in communication	20,21,34
Reinforcing Growth in Others	
Assess current development needs of others	4,15,25,29,34
Foster job development, job challenge, and job enrichment	3,15,17
Coach, counsel, mentor	3,10,11,17,24,27,29,34
Facilitate ongoing development	3,4,7,8,9,17,26,28,29
Support institutional-based development	3,4,7,8,9,13,14,17,26,28,29
Build team skills and processes	3,4,7,8,9,15,17,18,22,26,27,31,33,34,35
Arming Self to Lead	
Maintain mental and physical health and well-being	3,7,11,16,20,21,25,27,31,34
Maintain self awareness; employ self understanding, and recognize impact on others	4,8,11,12,15,21,25,27,28,31,34
Evaluate and incorporate feedback from others	20,31
Expand knowledge of technical, technological, and tactical areas	7,10,12,13,14,15,26,27,28,29,31,32,34
Expand conceptual and interpersonal capabilities	3,4,9,18,31,32,34
Analyze and organize information to create knowledge	1,4,5,6,7,8,14,16,17,21,32,34,35
Maintain relevant cultural awareness	3,16,20,21,34
Maintain relevant geo-political awareness	15,17,20,22

Table 16 (Continued)

Crosswalk of Competencies and Components from Leadership Framework to Source Literature

Competency/Components	Source Literature (Numbers stand for citations in references)
Guiding Successful Operation	
Prioritize, organize, and coordinate taskings for teams	7,9,10,11,17,19,27,28,34,35
Identify and account for individual and group capabilities and commitment to task	4,14
Designate, clarify, and deconflict roles	10,34,35
Identify, contend for, allocate, and manage resources	3,17,28,34
Remove work barriers	3,10,14,28,31,32,34,35
Recognize and reward good performance	3,4,7,9,17,21,22,26,27,34
Seek, recognize, and take advantage of opportunities to improve performance	3,14,28,31,32,34,35
Make feedback a part of work processes	3,10,11,17,24,27,29,34
Execute plans to accomplish the mission	11,16,27,28,32
Identify and adjust to external influences on the mission and organization	1,3,5,7,8,10,14,15,16,18,25,27,28,29,31,32,34
Extending Influence	
Understand sphere of influence, means of influence, and limits of influence	7,8,15,16,17,22,25
Build trust	5,9,14,15,34
Negotiate for understanding, consensus, and to resolve conflict	4,10,14,28,35
Build and maintain alliances	17,34,35

successful in the Future Force. So, while the research team embraced the concepts behind leaders maintaining greater awareness and understanding the opportunities and consequences of adapting, they felt the best way to express the importance of these ‘meta-competencies’ is within the components and actions of the proposed framework.

Support from Leadership Theory Research

As covered in the method section of this report, leadership theory has a long history and has resulted in extensive research regarding how leadership is manifested in organizations and individuals. All the proposed competencies have support from multiple leadership theories. Table 17 presents an overview of the theories and research in support of the proposed Army leadership competencies. The name of the theory is shown along with a key construct and characteristic reference citation.

Table 17
Proposed Army Leadership Competencies with Supporting Theories

Competency	Theory – relevant aspects	Example Theory References
<p><u>Leading Other to Success:</u> A leader motivates and influences others to take initiative, work toward a common purpose, accomplish tasks, and achieve organizational objectives.</p>	Leader behavior - concern for people	Blake & Mouton, 1985
	Leader behavior – supportive behaviors	Blanchard, Zigarmi & Zigarmi, 1985
	Leader behavior - consideration	Hellriegel, Slocum & Woodman, 1995
	Leader behavior – leadership definition	Kotter, 1990
	Contingency model – leader member relations	Fiedler, 1967
	Normative decision theory – autocratic, consultative & participative strategies	Vroom & Yetton, 1973
	Situational leadership – development level of followers	Hersey & Blanchard, 1969
	Leadership attribution theory – leadership depends on perceptions of leaders and followers	Lord, 1985
	Path-goal theory – facilitate the path to followers’ goals	House, 1971
	Leader-member exchange theory – tailored interactions with individuals	Graen & Uhl-Bien, 1995
	Transformational leadership – inspirational motivation	Avolio & Bass, 1991; 2002
	Charismatic leadership - operate from high moral beliefs, model desired attitudes and behaviors; out front setting a vision and advocating change	House, 1976
<p><u>Exemplifying Sound Values and Behaviors:</u> Maintaining standards and providing examples of effective behaviors influences others to behave and perform similarly. All Army leaders should model Army values continuously. Modeling provides tangible evidence of desired behaviors and reinforces verbal guidance through demonstration of commitment and action.</p>	Trait approach – self-confidence, determination, integrity	Stodgill, 1948, 1974
	Leadership attribution theory – legitimacy of leader depends on perceptions of followers	Lord, 1985
	Transformational leadership – idealized leadership; provide good role models for desired attitudes and behaviors, empower followers to achieve higher standards; Charismatic leadership – image building	Avolio & Bass, 1991; 2002; House, 1976
	Other theories (non leadership) - vicarious learning	Bandura, 1999

Table 17 (continued)

Proposed Army Leadership Competencies with Supporting Theories

Competency	Theory – relevant aspects	Example Theory References
<p><u>Vitalizing a Positive Climate:</u> A leader has a responsibility to establish and maintain positive expectations and attitudes which produce the setting for positive attitudes and effective work behaviors.</p>	Leader-member exchange theory – “leadership making,” climate & commitment	Graen & Uhl-Bien, 1995
	Transformational leadership – social architects that shape the organization; motivate followers to transform the organization; intellectual stimulation	Avolio & Bass, 1991; 2002
<p><u>Ensuring Shared Understanding:</u> By understanding the nature and power of communication and practicing effective communication techniques, one can better relate to others and translate goals into actions. Communication is essential to all other leadership competencies.</p>	Leadership attribution theory – legitimacy of leader depends on perceptions of followers	Lord, 1985
	Leader-member exchange theory – effective communications	Graen & Uhl-Bien, 1995
	Transformational and charismatic leadership – dramatic ways of articulating goals	Avolio & Bass, 1991; 2002; House, 1976
	Other theories (non-leadership): communication maxims, shared mental models, sensemaking	Grice, 1975; Salas, Cannon-Bowers, Johnston, 1997; Weick, 1995
<p><u>Reinforcing Growth in Others:</u> Assisting others to grow as individuals and teams facilitates the achievement of organizational goals and is a primary function of leadership.</p>	Transformational leadership – individualized consideration; motivate followers transform the organization; attention to the growth of followers	Avolio & Bass, 1991; 2002
	Path-goal theory – facilitate the path to followers’ long term goals	House, 1971
	Leader-member exchange theory – “leadership making”	Graen & Uhl-Bien, 1995
<p><u>Arming Self to Lead:</u> Only through being prepared for missions and other challenges, being aware of self and situations, and the practice of career long learning and development can one fulfill the responsibilities of leadership.</p>	Contingency model – assess own style in light of the situation	Fiedler, 1967
	Normative decision theory – assess situation and match degree of autocracy/participation	Vroom & Yetton, 1973
	Path-goal theory – adapt to how self & own efforts will be perceived by subordinates	House, 1971
	Transformational leadership – development and training	Bass, 1996

Table 17 (continued)
Proposed Army Leadership Competencies with Supporting Theories

Competency	Theory – relevant aspects	Example Theory References
<u>Guiding Successful Operations:</u> Ultimately, a leader’s purpose is to provide guidance and maintain control over the work environment in order to increase efficiency and effectiveness in one’s own and subordinate’s activities.	Leader behavior - concern for production	Blake & Mouton, 1985
	Leader behavior - directive behaviors	Blanchard, Zigarmi & Zigarmi, 1985
	Leader behavior - initiating structure	Hellriegel, Slocum & Woodman, 1995
	Leader behavior – management def.	Kotter, 1990
	Contingency model – task leadership	Fiedler, 1967
	Normative decision theory – autocratic style	Vroom & Yetton, 1973
	Situational leadership – adapt to followers’ commitment & competence	Hersey & Blanchard, 1969
	Path-goal theory – adapt to task characteristics	House, 1971
<u>Extending Influence:</u> Leaders need to influence beyond their direct lines of authority and beyond chains of command; this influence may extend to joint, interagency, inter-governmental multinational, and other groups.	Leader-member exchange theory – build trust with all who are involved	Graen & Uhl-Bien, 1995
	Transformational leadership – full range model applied to high levels of organization or society	Avolio & Bass, 1991; 2002
	Charismatic leadership – strong need to influence and dominate others	House, 1976

Conclusions and Recommendations

Integration of Competency Framework into Leader Development Process Model

The Center for Army Leadership (CAL) has the charter to maintain Army leadership doctrine and ensure training and educational experiences produce leaders of competence and character. CAL requested this research to explore how well the current Army leadership framework supports leadership assessment, development, and preparation for the future environment. The results of this research have far reaching implications for all aspects of leader development. Figure 4 simply illustrates that a competency framework relates to leadership assessment, development, and performance. The competency framework is relevant to aspiring and current leaders, program developers, and anyone responsible for developing Army leaders. Depicted in Figure 4 is a continuous cycle of leader development that includes assessment, training and education, and performance. This cycle overlaps with the stages of

career progression that include accession, advancement, transfer, and separation. Distinguishing the competencies of core Army leadership from those of specific ranks and positions is not an easy undertaking. A framework that focuses on leadership functions helps provide this distinction and assists in identifying, developing, and rewarding leadership behaviors across the cycle of leader development and the stages of career progression. In the Army, one should never stop growing as a leader, and feedback from new assignments, formal training and education, and other sources supports career long learning. The competency framework provides the basis for interpreting this feedback, understanding how training and development ties in with the functions of leadership, identifying areas of deficiency, and tracking progress in this never complete journey.

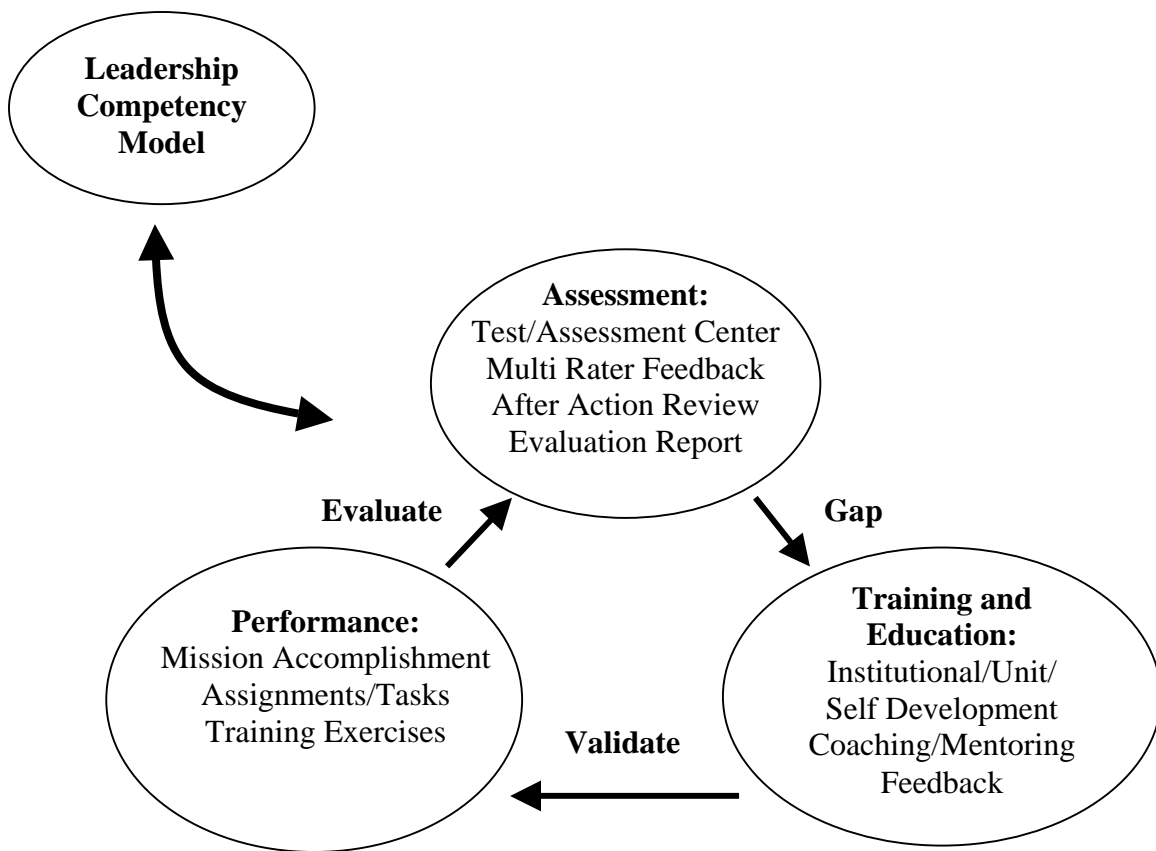


Figure 4. Leadership competencies support assessment, training, education, and performance.

Objective assessment comes in many forms including aptitude and personality tests, performance-based simulations, and other types of formal tests. Tests of leadership potential can be selected based upon how well they measure the competencies and components of the leadership framework. Once Soldiers have begun their careers, other types of subjective assessments (e.g., multi-rater feedback) can then provide information structured according to the leadership framework. Such assessments are more likely to be employed as evaluations of specific situations, missions, or performance over time. After action reviews and other leader evaluation reports can also provide additional feedback based upon leadership competency.

Regardless of the type and timing of assessment, gaps in leader development may be detected and these gaps provide the needs assessment for training and development. A competency framework provides the structure by which leadership training and development objectives should be organized. All leadership development content should be related to the components and competencies of the framework yet the framework remains flexible to incorporate evolving areas of leadership function. Assignments can (and should) be identified that provide the developmental experiences necessary to either improve current weaknesses or utilize strengths, depending on mission requirements and external situations (e.g., in times of war it may be too risky to rely on stretch assignments to develop leaders).

The effectiveness of leader training and development is only truly validated in operational circumstances and to a lesser extent through simulation exercises. Operational missions and training exercises provide the conditions in which the leadership competency framework and subsequent training and development can be evaluated for contributions to individual and unit success. Deficiencies in mission accomplishment and task performance can be measured through objective and subject means and correlated with leader assessments. Identified deficiencies can then be addressed in follow-up training and education as part of the continuous cycle of development.

Validating Competencies for Use in Army Leader Development Processes

Validation of tests that affect employment decisions made regarding selection, promotion, classification, and even training should they lead to other employment decisions are provided by the *Uniform Guidelines on Employee Selection Procedures* (Equal Employment Opportunity Commission, 1978). While the Uniform Guidelines do not necessarily apply to competency models used as frameworks for employee development, the instructions contained therein provide a basis for determining how the content of any test or assessment instrument used in employment decisions should be derived. The validation recommendations are based upon information contained in the guidelines.

The most common approach toward validating a competency model is to establish if the content of the model is descriptive of success or otherwise representative of those characteristics necessary to be successful in the positions in question. This typically involves gathering additional judgments from incumbents to determine if the content of the model is consistent with their experience and opinion regarding what competencies leaders in similar positions will need to be effective in the future. Content approaches often extend the original development method through a sort of cross-validation with different SMEs than those used to do the original framework or model development. Such a validation effort could be conducted on the proposed model by gathering a representative (normally 3 or more from each category) set of Army leaders of each category (sufficient representation of leaders across rank cohorts) included and having them review the model for applicability and thoroughness. Modifications to the model would be made at this time if supported by the judgments of the incumbents.

Empirical validation of the model through criterion-related approaches involves establishing a statistical relationship between measures of the competencies and measures of leadership performance. This requires collecting predictor and criterion data. Predictors could

come in the form of standardized or developed tests of the competency constructs, multi-rater assessments, institutional or other coursework performance, or other measures directly related to the competencies or components of the model. The Army training environment offers several possible criterion measures including performance ratings during unit training exercises, unit operational readiness measures, observer controller ratings and objective battlefield measures during formal Training Center exercises, and current evaluation reporting ratings. Operational measures of performance are more difficult to collect but still offer potential. Significant correlations between ratings or other predictors based on the framework competencies and criterion measures would validate those dimensions of the framework. Non-significant correlations would provide areas in need of further research or refinement. Validation can be viewed as an on-going task as the framework is introduced and itemized in assessment and training applications.

Establishing a Framework of Leadership Competencies

Leadership competencies should represent how leaders use their skills and other attributes to achieve organizational objectives. Figure 5 depicts how the proposed leadership competencies might appear in a graphical representation.

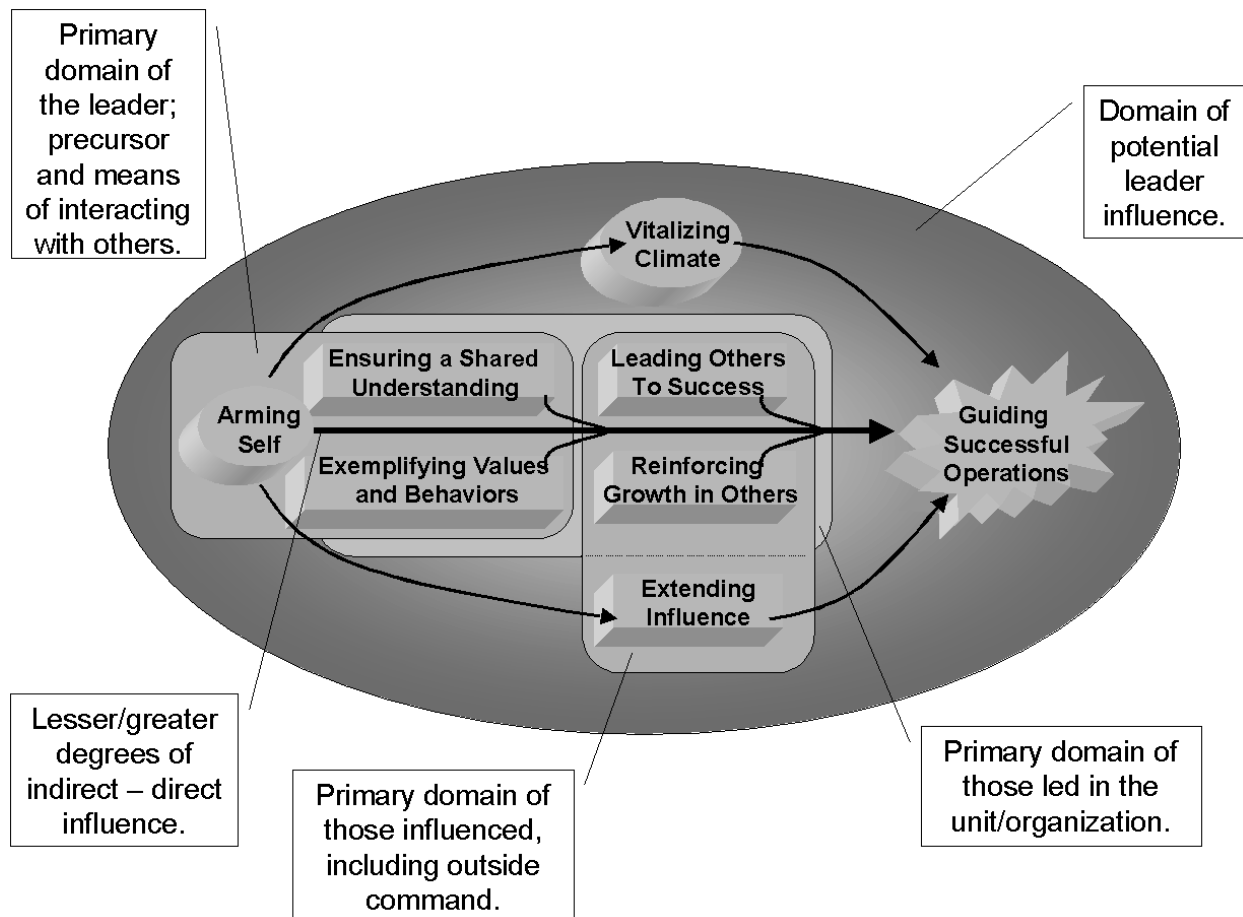


Figure 5. Graphical representation of proposed Army leadership competencies.

In this representation, the ultimate goal of leadership is to advance organizational objectives in terms of successful operations. This is the result of Vitalizing Climate, Leading Others to Success, Reinforcing Growth in Others, and Extending Influence. Preparing or arming self is the antecedent to performing in any of the other competency areas. Arming Self represents the “Be” aspect of the current model in that values, conceptual skills, technical, tactical and technological proficiency allow one to then enact leadership through communication and other behaviors (Ensuring Common Understanding and Exemplifying Sound Values and Behaviors, respectively). Leaders affect change in their environment and others through written and oral communications and through their actions. The primary areas of influence on others come through Shaping climate, Leading Others to Success, Reinforcing Growth in Others, and Extending Influence. While illustrative, this representation is more linear and sequential than occurs in actuality, however. For example, Arming Self is a continual process to meet the challenges implied by the other competencies and not simply the starting point for competency.

Leadership competencies require appropriate knowledge, skill, and other attributes, each of which are developed over time, through different experiences, and manifested in different ways. The difficulty in representing competency constructs through graphical means is related to the geometric challenge of properly indicating interactions, evolution, and contextual factors of behavioral constructs in two-dimensional space. Still, one of the purposes of establishing a leadership framework is to better communicate how leadership behaviors can be manifested. If graphical representations serve to extend this communication without misrepresentation then further attempts at modeling these competencies within the larger Army leadership development context should be made.

Integrating the Competency Framework into Doctrine

The existing Army leadership framework is based upon values, attributes, skills, and actions represented in a Be, Know, Do structure. A competency framework essentially integrates each of the dimensions of the existing framework into a more parsimonious representation of how leadership is manifested for operational and organizational success. A competency framework is completely consistent with the current Army leadership framework but extends the interpersonal skills represented in the current framework into a more complete and structured presentation of the actions of leadership. The proposed framework is also consistent with the doctrinal concept of leaders of character and competence and actually more logically extends the construct of competence as presented. A logical integration would be to retain the character portion of leadership as described in the existing Army values and skills (conceptual, technical, and tactical) but now reflect the competence portion (interpersonal) in the eight leadership competencies identified in this research. Support for this contention can be found in Day and Halpin (2004, p.8) where they propose “it may be argued that leaders must have the fundamental skills to accomplish their job (Technical skills), they must be able to understand how to employ their own talents and others’ to achieve organizational goals (Tactical and Conceptual Skills), and they must know how to work with and through others to accomplish these goals (Leadership Skills).”

Describing leadership interpersonal skills in terms of competencies also helps distinguish the leadership portion of one's job. Technical and tactical skills are components of leadership but their influence on others occurs through leader interpersonal behavior. The proposed framework includes coverage of how these skills are manifested in the competency components. In contrast with technical skill, conceptual complexity increases as one ascends through leadership positions. Indeed, conceptual capacity may be a primary indicator of leadership potential. Yet everyone in an organization uses conceptual skills and makes decisions but they are not necessarily leading when doing so. Additionally, there could be other skill areas represented at the same level as conceptual, tactical, and technical which are not included in the existing model such as observational, perceptual, strategic, and diagnostic (Wright & Taylor, 1994).

In this revised model, the existing content in FM 22-100 on values, and technical, tactical, conceptual content areas can serve as foundational material to better describe how the competencies and components are supported, developed, and maintained. Valuable attribute content from the existing manual could be adapted to the competency section and tied to specific components to better illustrate how they are related to leadership actions. Detail regarding conceptual skills, such as how critical reasoning and reflective thinking may be applied to carry out various leadership competency components or actions would be an effective method of linking skills with functions. The research team recommends additional research to determine the best methods for describing how these skills relate to the leadership competencies.

As a result of the ATLD study recommendations and other initiatives, there have been other efforts related to Army leadership competencies. A set of Army leadership competency maps was developed to guide officer, NCO, and warrant officer education systems (Cubic, 2002). The intent of this effort was to transform formal leadership education into a competency-based system that focuses more on development and education than on task-based training (Cubic, 2002). The maps identify competencies, skills, behaviors, and supporting performances. The seven competencies consist of the four skills (conceptual, interpersonal, technical, and tactical) and the three actions (improving, influencing, operating) from the existing FM 22-100 framework. In the maps, a competency is defined as 'an underlying (fairly deep and enduring) characteristic of an individual that causes or predicts behavior and performance measured on a specific criterion or standard' (Cubic, 2002, p. 1-6). In review of the competency maps the research team found issues similar to review of the FM 22-100 with multiple and possibly unnecessary category distinctions and instances of item classifications that lacked consistency.

While this current research presents a core model of future Army leadership requirements, there may be other aspects of development that will improve integration of this model into the next version of Army Leadership doctrine, designated FM 6-22 (in accordance with joint publication numbering system). With the exception of the U.S. Air Force leadership competency framework that depicts levels of leadership at tactical, operational, and strategic levels, the other U.S. military service competency models do not reflect differences in competency by level or otherwise attempt to organize competencies into anything but a simple framework. However, the existing FM 22-100 does designate different leadership skills and actions for direct, organizational, and strategic leaders, apparently derived from Jaques' Stratified Systems Theory (Jaques, 1988). The application of managerial accountability, time

span, and cognitive complexity concepts, while appropriate to strict management functions, may prove misleading for future leader development initiatives. For example, ‘dealing with ambiguity and uncertainty’ is first mentioned as a conceptual skill necessary for strategic leaders. The research team believes such a skill is necessary at all levels and whose development at least needs to be encouraged at initial levels. While informative and consistent with previous research on the cognitive demands of managers (Jacobs & Jaques, 1987), the impact of level of leadership must be rethought in the context of a core Army leadership competency model. The research team recommends a thorough review of the skills and actions portion of the existing FM 22-100 to determine how they can be better integrated into the proposed competency framework.

Extending the Application of the Leadership Framework

An aspect of the Army leadership competency model that requires mention is to ensure the doctrine of the new FM 6-22 is being consistently and properly integrated into all aspects of leader development, assessment, and evaluation as intended. FM 22-100 provides instructional material as well as doctrine. Chapters 5, 6, and 7 prescribe how direct, organizational, and strategic leaders can use decision making, problem solving, and other actions to achieve end goals. For example, the 1999 version of FM 22-100 reads:

“To assess your subordinate leaders, you must—

- Observe and record leadership actions. Figure 2-1 is a handy guide for organizing your thoughts.
- Compare what you see to the performance indicators in Appendix B or the appropriate reference.
- Determine if the performance meets, exceeds, or falls below standard.
- Tell your subordinates what you saw; give them a chance to assess themselves.
- Help your subordinate develop a plan of action to improve performance.” (p 5-13)

This information is most useful if it is supplemented in existing educational courses by examples of application and outcomes. This material provides the introduction to leadership concepts that should then be further explored through institutional instruction, application on the job, and self-development activities. In other words, leadership development does not occur through merely reading of doctrinal materials. It is important that the concepts and framework established in this doctrine be supported consistently throughout the three developmental domains and through feedback from evaluation and assessment mechanisms.

A second, related issue is that competency frameworks or models are designed to provide the foundations of leadership, but are always limited to some extent. While sample actions provide information related to how one manifests a component of a competency, it is difficult to provide adequate detail regarding the timing, environments and conditions, and other specific action detail to completely eliminate ambiguity associated with competencies and components. For example, a sample action under the component ‘Establish and impart clear intent and purpose’ is ‘Ensure subordinates understand and accept direction.’ This guidance does not indicate the methods one might use to determine understanding, when or how frequently this action must be done, or what constitutes ‘understanding and acceptance’ of direction. There will always be room for interpretation related to competency models, and this is beneficial. The goal is not to completely describe all actions leaders must perform to make the organization

successful – but to provide the basis for how leaders will interpret situations and use their own unique skills and attributes to implement proven leadership actions.

Capitalizing on Technology

As the Army explores methods for more rapid inculcation of key leadership competencies and continues to build its knowledge management database, technology can serve both purposes. Army Regulation 350-1, Army Training and Education (Department of the Army, 2003) makes it clear that technology (high level architecture; training aids, devices, simulators, simulations; tactical engagement simulation, etc.) will be involved in all aspects of training and leader development. Distributed learning, scenario based simulations, remote mentoring, just in time lessons learned, personal digital assistants, and other technology-based instruction and job aids will continue to change the nature of the way leaders learn and apply their skills. However, only by using a common set of leadership requirements can the research team most efficiently coordinate the impact of these new technologies on future leader success.

Training and education translate and reinforce the concepts contained in Army doctrine into the behaviors necessary for successful missions. While documentation is essential for reference purposes, there may be more efficient means to conceptualize, develop, and store the information contained in doctrine. The 1999 version of FM 22-100 expanded the presentation of leadership concepts by including quotes from Army leaders and vignettes of leadership from past battles. This provides alternative stimulus for learning but there is room to capitalize on technology to store, reshape, and expand the message. Alternative means of integrating doctrinal information into training and development content should be explored such as the representation of concepts via computer media that allow interactivity of learner with content. Other ways include expanding the presentation of training concepts through scenario-based simulations of leadership constructs (Hill, Douglas, Gordon, Pighin, & van Velsen, 2003), the integration of self assessment instruments into content, and the development of doctrinal information chunks as the antecedents to Army knowledge management and educational content.

Examining Competency Balance and Mix

A core leadership competency model serves as a foundation for depicting leadership functioning within an organization, however, no two leaders or leadership situations are ever alike. More than likely, success is influenced by a good match between the leader and the situation. Yet, the very nature of a competency model is to establish a structure for examining the actions of leaders that are likely to predict success across situations. However the structure alone does not tell the entire story.

Leaders within an organization must balance their time invested in the competency areas and their level of development across these areas. Conger (1990) and others have explored the dangers of charismatic leaders who are driven only by their vision or previous success. These same dangers exist for those who rely on a few competencies to the exclusion of the entire set. As an extreme example, an over reliance on adaptability may prove detrimental in situations

where external parameters are well established and rote decision making related to known probabilities is necessary. Adaptability for adaptability sake could well be a leadership indulgence that is dangerous on the battlefield.

Likewise, a leader who accomplishes the mission without regard to resources, morale, or long-term commitment may be recognized and promoted but risks the continued support of his or her unit. The consequences of this support may cut short promising subordinate careers and have ripple effects throughout the Army and into the future. Similarly, a leader who excels at oral communication but doesn't live Army values may lose his or her audience at the most crucial moments.

It is this balance of competency that builds the most successful leaders. It is also the balance that holds the most challenge for leader assessment and development. As all kinds of leaders are assessed into the Army, how can the Army assure developmental experiences match these needs for balance across the full range of competencies? The research team recommends further investigation of the proposed competencies and components during the validation research to assess aspects of competency balance and mix, and additional guidance to minimize the potential danger of competency over-focus or exclusion.

Summary

Many consider the Army to be one of America's top leader development organizations. While a range of factors contributes to this perspective, systematic and regular examination of the processes, content, and strategies associated with leader development reinforce the foundation for success. The ATLD study is an example of the investment the Army makes in its own future.

The Army concept of leadership has undergone significant refinement and evolution since its introduction in doctrine in the 1920's. However, the need for a clear representation of responsibilities and an efficient method for communicating these responsibilities to Army leaders will always be necessary. This effort has attempted to extend the current view of Army leadership to incorporate leadership requirements projected 20 years into the future by proposing a competency-based model of leadership functioning. Feedback obtained from the research team, subject matter experts, and CAL give all indication at this point that the proposed leadership competency framework is sound and can provide a basis for leadership development in the Army.

The Army has been successful in the past for many reasons, but most certainly because of the quality of leadership provided. Success in the future will likewise depend on strong leadership, and systematic assessment of leadership competency allows the organization to monitor and adjust aspects of leader development. Only by using a common leadership model, can all aspects of leader development be truly coordinated and individual progress against this model be recorded and monitored. Objective and subjective methods of assessing leadership skills and competencies can be used to provide feedback for individual development, program evaluation, career advancement, and personnel management systems. The real test of the

framework and the determination of whether modifications will be needed will come as the framework is applied to assessment, education and training. It is expected that the framework can best be enhanced through application and refining the sample actions. If and when the framework is implemented it should be evaluated and refined as necessary.

The Army leadership competency model proposed in this research, once validated, represents a foundation from which Army training and education processes can recalibrate their content and programs of instruction. The model provides the structure for a roadmap of assessment, development, and feedback that individuals and organizations can refer for success in an uncertain future. Just as new construction changes roadmap features, so too will new technologies and environmental influences introduce possible change in the model components by which Army leaders are grown. Only through such an established model and regular assessment of these influences can institutions, units, and individuals chart the course to best prepare for this complex and challenging future.

References⁵

- Army Strategic Communications. (2003). *The way ahead. Our Army at war . . . relevant and ready. Moving from the current force to the future force . . . Now!* Washington, DC: Author.
- Avolio, B. J., & Bass, B. M. (Eds.) (1991). *The full range of leadership development: Basic and advanced manuals*. Binghamton, NY: Bass, Avolio & Associates.
- Avolio, B. J., & Bass, B. M. (Eds.) (2002). *Developing potential across a full range of leadership. Cases on transactional and transformational leadership*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bandura, A. (1999). Social cognitive theory of personality. In L. A. Pervin and O. P. John (Eds.) *Handbook of personality: Theory and research* (2nd ed.) (pp. 154-196). New York: Guilford Press.
- Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1996). *A new paradigm of leadership: An inquiry into transformational leadership*. Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bass, B. M. & Avolio, B. J. (1990). The implications of transactional and transformational leadership for individual, team, and organizational development. *Research in Organizational Change and Development*, 4, 231-272.
- Bennis, W. G., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York: Harper & Row.
- Bergman, C. K. (1996). Challenge of 21st century leadership: The cornerstone and future building blocks. (Air War College Report). Maxwell Air Force Base, AL: U.S. Air War College. (1)
- Beurskens, K. (2003). A history of military leadership doctrine: Traits, principles, and competencies. Unpublished manuscript.
- Blackwell, P. E., & Bozek, G. J. (1998). Leadership for the new millennium. *Military Review*, 78, 41-46. (2)
- Blake, R. R., & Mouton, J. S. (1985). *The Managerial Grid III*. Houston, TX: Gulf.
- Blanchard, K., Zigarmi, P., & Zigarmi, D. (1985). *Leadership and the one minute manager: Increasing effectiveness through situational leadership*. New York: William Morrow.

⁵ Numbers in parentheses after a reference citation indicate that this was one of the key documents that leadership requirements were drawn from. These numbers are indexed in Table 16.

- Buffardi, L. C., Fleishman, E. A., Morath, R. A. & McCarthy, P. M. (2000). Relationships between ability requirements and human errors in job tasks. *Journal of Applied Psychology*, 85, 551-564.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Campbell, R. C., Knapp, D. J., & Heffner, S. T. (2002). *Selection for leadership: Transforming NCO promotion*. (Special Report 52). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. ADA407790 (3)
- Carroll, J. B. (1993). *Human cognitive abilities: A survey of factor-analytical studies*. New York: Cambridge University Press.
- Caruana, S. (1998). *The influence of leadership on combat participation: Literature review and operational analysis modeling*. (DERA/CHS/TR980181/1.0). Farnborough, UK: Defence Evaluation and Research Agency.
- Cattell, R. B. (1943). The measurement of adult intelligence. *Psychological Bulletin*, 40, 153-193.
- Chemers, M. M. (2000). Leadership research and theory. A functional integration. *Group Dynamics: Theory, Research and Practice*, 4, 27-43.
- Chemers, M. M., Watson, C. B., & May, S. (2000). Dispositional affect and leadership effectiveness: A comparison of self-esteem, optimism and efficacy. *Personality and Social Psychology Bulletin*, 26(3), 267-277.
- Chief of Staff of the Army (2000, June). Army Training and Leader Development Panel Charter. Memorandum for Commanding General, U.S. Army Training and Doctrine Command. Washington, DC.
- Chilcoat, R. A. (1995). *Strategic Art: The new discipline for the 21st century leaders*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U.S. Army War College. (4)
- Clement, S. D. & Ayres, D. B. (1976). *Leadership for the 1970s. A matrix of organizational leadership dimensions*. (Leadership monograph series no. 8). Ft. Benjamin Harrison, IN: Army Administration Center.
- Conger, J. A. (1990). The dark side of leadership. *Organizational Dynamics*, 19(2), 44-55.
- Cooper, K. C. (2000). *Effective competency modeling and reporting*. New York: American Management Association.
- Corbett, A. J. (2000). Proliferating decision makers: Root Cause of the next revolution in military affairs. In D. V. Johnson II (Ed.), *Future leadership, old issues, new methods*

- (Strategic Studies Institute Monograph). (pp. 27-52). Carlisle Barracks, PA: Army War College. (5)
- Cubic Defense Applications Group. (2002). *U.S. Army leader development campaign plan OES needs analysis final report*. Report submitted to U.S. Army, Command and General Staff College.
- Dansereau, F., Graen, G. G., & Haga, W. (1975). A vertical dyad linkage approach to leadership in formal organizations. *Organizational Behavior and Human Performance*, 13, 46-78.
- Day, D. V., & Halpin, S. M. (2004). Growing leaders for tomorrow: An introduction. In D. V. Day, S. J. Zaccaro, & S. M. Halpin (Eds.) *Leader development for transforming organizations: Growing leaders for tomorrow*. (pp. 1-40). Hillsdale, NJ: Lawrence Erlbaum Assoc.
- Department of the Army. (1948). *Leadership*. (Department of the Army Pamphlet 22-1). Washington, DC: Author.
- Department of the Army. (1951). *Leadership*. (Field Manual 22-10). Washington, DC: Author.
- Department of the Army. (1953). *Command and Leadership for the Small Unit Leader*. (Field Manual 22-100). Washington, DC: Author.
- Department of the Army. (1958). *Military Leadership*. (Field Manual 22-100). Washington, DC: Author.
- Department of the Army. (1961). *Military Leadership*. (Field Manual 22-100). Washington, DC: Author.
- Department of the Army. (1965). *Military Leadership*. (Field Manual 22-100). Washington, DC: Author.
- Department of the Army. (1968). *Leadership at Senior Levels of Command*. (Department of the Army Pamphlet 600-15). Washington, DC: Author.
- Department of the Army. (1973). *Military Leadership*. (Field Manual 22-100). Washington, DC: Author.
- Department of the Army. (1983). *Military Leadership*. (Field Manual 22-100). Washington, DC: Author.
- Department of the Army. (1985). *Leadership Counseling*. (Field Manual 22-101). Washington, DC: Author.
- Department of the Army. (1987). *Army Leadership*. (Army Regulation 600-100). Washington, DC: Author.

- Department of the Army. (1987). *Executive Leadership*. (Department of the Army Pamphlet 600-80). Washington, DC: Author.
- Department of the Army. (1987). *Leadership and Command at Senior Levels*. (Field Manual 22-102). Washington, DC: Author.
- Department of the Army. (1987). *Soldier Team Development*. (Field Manual 22-103). Washington, DC: Author.
- Department of the Army. (1990). *Military Leadership*. (Field Manual 22-100). Washington, DC: Author.
- Department of the Army. (1993). *Army Leadership*. (Army Regulation 600-100.) Washington, DC: Author.
- Department of the Army. (1999). *Army Leadership* (Field Manual 22-100). Washington, DC: Author.
- Department of the Army. (1999). *Systems approach to training management, processes, and products* (TRADOC Regulation 350-70). Fort Monroe, VA: Headquarters, United States Army Training and Doctrine Command.
- Department of the Army. (2003). *Army Training and Education*, (Army Regulation 350-1). Washington, DC: Author.
- Eden, S. J. (1999). Leadership on the future fields: Remembering the human factor in war. *Military Review*, 79, 35-38. (6)
- Equal Employment Opportunity Commission, Civil Service Commission, Department of Labor, & Department of Justice (1978). Uniform guidelines on employee selection procedures. *Federal Register*, 43, 38290-38315.
- Fernandez, C. F., & Vecchio, R. P. (1997). Situational leadership theory revisited: A test of an across-jobs perspective. *Leadership Quarterly*, 8(1), 67-85.
- Fiedler, F. E. (1967). *A theory of leadership effectiveness*. New York: McGraw-Hill.
- Fiedler, F. E., & Chemers, M. M. (1984). *Improving leadership effectiveness: The LEADER MATCH concept*. New York: John Wiley & Sons.
- Fisher, B. A. (1974). *Small group decision making: Communication and the group process*. New York: McGraw-Hill.
- Fitton, R. A. (1993). *Development of strategic-level leaders*. Executive Research Project S23. Washington, DC: National Defense University.

- Fleishman, E. A. (1967). Performance Assessment Based on an Empirically Derived Task Taxonomy. *Human Factors*, 9, 349-366.
- Fleishman, E. A. (1972). On the relation between abilities, learning, and human performance. *American Psychologist*, 27, 1017-1032.
- Fleishman, E. A. (1975). Toward a taxonomy of human performance. *American Psychologist* 30, 1127-1149.
- Fleishman, E. A., & Quaintance, M. K. (1984). *Taxonomies of human performance*. Academic Press, New York.
- Fleishman, E. A., & Reilly, M. E. (1992). *Handbook of human abilities*. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Ford, L. A., Campbell, R. C., Campbell, J. P., Knapp, D. J., & Walker, C. B. (2000). *21st century Soldiers and noncommissioned officers: Critical predictors of performance*. (Technical Report 1102). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (7)
- French, R. P., Jr. & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.) *Studies in social power*. Ann Arbor, MI: Institute for Social Research.
- Gayvert, D.R. (1999). Leadership and doctrinal reform. *Military Review*, 79, 18-22.
- Goldstein, I. L. & Ford, J. K. (2002). *Training in organizations: Needs assessment, development, and evaluation* (4th ed.). Belmont, CA: Wadsworth Group.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level, multi-domain perspective. *Leadership Quarterly*, 6(2), 219-247.
- Grice, H. P. (1975). *Logic and conversation*. New York: Academic Press.
- Gritton, E. C., & Antón, P. S. (2003). Headlines over the horizon, *The Atlantic Monthly*, 292, 84-90.
- Grossman, J. R., Burnside, B. L., Flynn, M. R., Dannemiller, B., Mauzy, R., & Black, B. A. (2002). *Command group training in the objective force*. (Research Report 1793). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. ADA406176 (8)
- Gumbert, J. (1998). Leadership in the digitized force. *Military Review*, 78, 1-10. (9)
- Gurstein, M. (1999). Leadership in the peacekeeping Army of the future. In J. G. Hunt, G. E. Dodge, & L Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century*

- Army and other top-performing organizations* (pp. 195-218). Stamford, CT: JAI Press. (10)
- Hamburger, K. E., (1984) *Leadership in combat: An historical appraisal conduct by the Department of History U.S. Military*. West Point, NY: U.S. Military Academy Department of History. (11)
- Heffner, T. S., & Legree, P. J. (2002). *Soldier Demographics for the Objective Force: Report to the Army Science Board*, Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Hellriegel, D., Slocum, J., & Woodman, R. (1995). *Organizational Behavior*, 7th Ed., Minneapolis, MN: West Publishing.
- Hersey, P. & Blanchard, K. H. (1969). Life-cycle theory of leadership. *Training and Development Journal*, 23, 26-34.
- Hill, R., Douglas, J., Gordon, A., Pighin, F., & van Velsen, M. (2003). Guided conversations about leadership: Mentoring with movies and interactive characters. *Proceedings of the Fifteenth Innovative Applications of Artificial Intelligence Conference (IAAI-03)*. Menlo Park, CA: AAAI Press.
- Hooijberg, R., Bullis, R. C., & Hunt, J. G. (1999). Behavioral complexity and the development of military leadership for the twenty-first century. In J.G. Hunt, G.E. Dodge, & L Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century* (pp. 111-130). Stamford, CT: JAI Press. (12)
- Horey, J. D., Cronin, B., & Fallesen, J. J. (in preparation). Future leadership competency framework review. (Research Note). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Horey, J. D., & Fallesen, J. J. (2003, November). *Leadership competencies : Are we all saying the same thing ?* Paper presented at the 45th Annual International Military Testing Association Meeting, Pensacola, FL.
- House, R. J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly*, 16, 321-338.
- House, R. J. (1976). A 1976 theory of charismatic leadership. In J. G. Hunt & L. L. Larson (Eds.), *Leadership: The cutting edge* (pp. 189-207). Carbondale, IL: Southern Illinois University Press.
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *Leadership Quarterly*, 7(3), 323-352.
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin*, 96, 72-98.

- Huntington, S. P. (1996). *The clash of civilization and the remaking of world order*. New York: Simon & Schuster.
- Jacobs, T. O., & Jaques, E. (1987). Leadership in complex systems. In J. Zeider (Ed.), *Human productivity enhancement*. (pp. 7-65). New York, NY: Praeger.
- Jago, A. G., & Ragan, J. W. (1986). The trouble with LEADER MATCH is that it doesn't match Fiedler's contingency model. *Journal of Applied Psychology*, 71, 555-559.
- Jaques, E. (1988). *Requisite organization*. Arlington, VA: Cason-Hall and Co. publishing.
- Katz, R. L. (1955, January-February). Skills of an effective administrator. *Harvard Business Review*.
- Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.) *Nebraska Symposium on Motivation*. Lincoln, NE: University of Nebraska Press.
- Kelley, J. W. (1996). Brilliant Warrior. (Research Paper presented to Air Force 2025). Maxwell Air Force Base, AL: Air University Press. Retrieved January 24, 2003 from <http://www.au.af.mil/au/2025/volume1/chap08/v1c8-1.htm> (13)
- Kotter, J. P. (1990). *A force for change: How leadership differs from management*. New York: Free Press.
- Kravetz Associates. (1998). *Training best practices*. Bartlett, IL: Author.
- Lord, R. G. (1985). An information processing approach to social perceptions, leadership, and behavioral measurement in organizations. In B. M. Staw & L. L. Cummings (Eds.) *Research in organizational behavior*. Greenwich, CT: JAI Press.
- Lucia, A. D., & Lepsinger, R. (1999). *The art and science of competency models: Pinpointing critical success factors in organizations*. San Francisco: Josey Bass.
- Magee II, R. R. (Ed.). (1998). Strategic leadership primer. (Department of Command, Leadership, and Management Primer). Carlisle Barracks, PA: U.S. Army War College. (14)
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Row.
- Maslow, A. H. (1965). Humanistic science and transcendent experiences. *Journal of Humanistic Psychology*, 5, 219-227.
- McGuire, M. A. (1999). *What do senior leaders say about strategic leader development?* (Executive Research Project). Fort McNair, Washington, DC: National Defense University. (15)

- Mitchell, T. R., Green, S. C., & Wood, R. E. (1981). An attributional model of leadership and the poor performing subordinate: Development and validation. In B. M. Staw and L. L. Cummings (Eds.) *Research in Organizational Behavior*. Greenwich, CT: JAI Press.
- National Intelligence Council. (2000). *Global trends 2015: A dialogue about the future with nongovernment experts* (NIC 2000-02). Washington, DC: Government Printing Office. Retrieved 15 Mar 2002 from http://www.odci.gov/nic/NIC_globaltrend2015.html
- Newsome, S., Catano, V. M., & Day, A. L. (2003). *Leader competencies: Proposing a research framework*. Kingston, ON: Canadian Forces Leadership Institute.
- Noble, S. A., & Fallesen, J. J. (2000). Identifying conceptual skills of future battle commanders. (Technical Report 1099). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. ADA374875 (16)
- Nogami, G. Y., Brander, C. D., & Slusser, K. A. (1997). *21st century strategic leader competencies: from the Army general's perspective*. Paper presented at the annual meeting of the International Military Testing Association, Sydney, Australia. (17)
- Northouse, P. G. (2004). *Leadership theory and practice*. 3rd ed. Thousand Oaks, CA: Sage Publications.
- Peterson, N. G., Mumford, M. D., Borman, W. C., Jeanneret, P. R., & Fleishman, E. A. (1999). *An occupational information system for the 21st century: The development of O*NET*. Washington, DC: American Psychological Association.
- Plum International, Inc. (2004). Performance plus: Managing performance with competence. Retrieved January 22, 2004 from <http://www.pluminternational.com/pdf/PerfPlus.pdf>
- Pritchard, K. H. (1999). Competency-based leadership for the 21st century. *Military Review*, 79, May-June, 23-26. (18)
- Ralph, J. R., O'Neil, H. F., Drenz, C. F., Freeman, M., Hofmann, M., & Lowenstam, S., (2001). *Army science board 2001 special study: Final Report: Manpower and personnel for Soldier systems in the Objective Force*. Washington, DC: Army Science. (19)
- Rudesheim, F. S. (2001). *Discovering the Army's Core Competencies*, Carlisle Barracks, PA: U.S. Army War College.
- Rumsey, M.G. (1995). The best they can be: Tomorrow's Soldiers. In R.L. Phillips & M.R. Thurman (Eds.), *Future Soldiers and the quality imperative: The Army 2010 conference*. (pp.123-157). Fort Knox, KY: U.S. Army Recruiting Command. (21)
- Rumsey, M. (1998). 21st century lieutenants. Paper presented at Cadet Command Study Group, Norfolk, VA. (20)

- Salas, E., Cannon-Bowers, J. A., & Johnston, J. H. (1997). How can you turn a team of experts into an expert team?: Emerging training strategies. In C. Zsombok & G. Klein (Eds.), *Naturalistic decision making* (pp. 359-370). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, *124*, 262-274.
- Schwartzmann, R. D. (2003, May-June). Transforming leader development through lifelong learning. *Military Review*, *83*, 63-67.
- Shamir, B., & Ben-Ari, E. (1999). Leadership in an open Army? Civilian connections, interorganizational frameworks, and changes in military leadership. In J.G. Hunt, G.E. Dodge, & L Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century soldier* (pp. 15-40). Stamford, CT: JAI Press. (22)
- Shields, P. M. (1996). Changing family demographics and the impact on accession, trainability, motivation, character, and performance. In R. Phillips & M. Thurman (Eds.) *Future soliders and the quality imperative*. Washington, DC: United States General Accounting Office.
- Smith, J. A., & Foti, R. J. (1998). A pattern approach to the study of leader emergence. *Leadership Quarterly*, *9*(2), 147-160.
- Spearman, C. (1927). *The abilities of man*. London: MacMillan.
- Spencer, L.M. & Spencer, S.M. (1993). *Competence at work: Models for superior performance*. New York: John Wiley & Sons.
- Staw, B. M. (1975). Attribution of the “causes” of performance: A general alternative interpretation of cross-sectional research on organizations. *Organizational Behavior and Human Performance*, *13*, 414-432.
- Steele, W. M., & Walters, R. P. (2001). 21st century leadership competencies. *Army Magazine*. *51*(8).
- Steinberg, A. G., & Leaman, J. A. (1990a). *The Army leader requirements task analysis: commissioned officer results*. (Technical Report 898). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (23)
- Steinberg, A. G. & Leaman, J. A. (1990b). *Dimensions of Army Commissioned and Noncommissioned Officer Leadership*. (Technical Report 879). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (24)
- Sternberg, R. (1988). *The Triarchic mind: A new theory of intelligence*. New York: Viking Press.

- Stodgill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, 25, 35-71.
- Stodgill, R. M. (1974). *Handbook of leadership: A survey of theory and research*. New York: Free Press.
- Swengros, R. W. (2002). *Strategy for developing the right leaders for the objective force – An opportunity to excel*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U.S. Army War College. (25)
- The Joint Chiefs of Staff. (1997). *Concept for future joint operations*. Fort Monroe, VA: Joint Warfighting Center. (27)
- The Information Management Support Center (1997). *The Chiefs of Staff, United States Army: On Leadership and The Profession of Arms. General Edward C. Meyer, 1979-1983. General John A. Wickham, Jr., 1983-1987. General Carl E. Vuono, 1987-1991. General Gordon R. Sullivan, 1991-1995*. Washington, DC: Author. Retrieved January 30, 2004 from <https://call2.army.mil/call/Products/CSA/titlepg.asp>
- The Wexford Group International (2002, January). Civilian workforce planning & analysis: Strategic Army Workforce Core Competencies. Vienna, VA: author. (28)
- Tremble, T. R., & Bergman, M. B. (2000). Continued emphasis on leadership: One solution for future Soldier effectiveness. (Research Note 200-11). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. ADA380925 (29)
- U.S. Army Training and Doctrine Command. (2001). *Objective Force Operational Concepts, Organization Design Constructs, and Materiel Needs Implications* (TRADOC Pamphlet 525). Fort Monroe, VA: author.
- U.S. Army Training and Doctrine Command. (2002). *The Operational Environment and Threat: A View of the World to 2020 and Beyond* (TRADOC Pamphlet 525-2-60, Draft). Fort Monroe, VA: Author.
- U.S. War Department. (1946). *Leadership, courtesy and drill*. Washington, D.C.: Government Printing Office.
- Varlijen, P. J. (2001). *Leadership: More than mission accomplishment*. (Strategic Studies Institute Monograph) Carlisle Barracks, PA: U.S. Army War College. (30)
- Vandergriff, D. (2002). *Path to victory: America's Army and the revolution in human affairs*, New York: Ballantine Books.
- Vecchio, R. P. (1987). Situational leadership theory: An examination of a prescriptive theory. *Journal of Applied Psychology*, 72(3), 444-451.

- Vecchio, R. P., & Boatwright, K. J. (2002). Preferences for idealized style of supervision. *Leadership Quarterly*, 13, 327-342.
- Vroom, V. (1964). *Work and Motivation*. New York: Wiley.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision making*. Pittsburgh: Univ. of Pittsburgh Press.
- Weick, K. E. (1995) *Sensemaking in Organizations*. London: Sage Publications.
- White, R. A., & Olmstead, J. (1997). *Identification of potential combat effectiveness variables*. (Research Note 98-01). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. ADA338775 (31)
- William E. Simon Center for the Professional Military Ethic. (2001). *The Army Officership Concept* Developed by the., West Point, New York: United States Military Academy. (26)
- Winkler, J. D., Shukiar, H. J., Dewar, J. A., Lewis, M. W., Benjamin, B. A., Sollinger, J. M., Peters, J. E., & Thie, H. (1998). *Future leader development of Army Noncommissioned Officers: Workshop Results* (CF-138-A). Santa Monica, CA: Rand Corporation. (32)
- Wong, L. (2002). *Stifled innovation? Developing tomorrow's leaders today*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U.S. Army War College. (33)
- Wright, P. L. and Taylor, D. S. (1994). *Improving leadership performance: Interpersonal skills for effective leadership* (2nd ed.). London: Prentice Hall.
- Yukl, G. (1999). Leadership competencies required for the new Army and approaches for developing them. In J.G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box-leadership: Transforming the Twenty-first-century Army and other top-performing organizations* (255-276). Stamford, CT: JAI Press. (34)
- Zaccaro, S. J. (1999). Social complexity and the competencies required for effective military leadership. In J.G. Hunt, G.E. Dodge, & L. Wong (Eds.), *Out-of-the-box-leadership: Transforming the Twenty-first-century Army and other top-performing organizations* (pp. 131-151). Stamford, CT: JAI Press. (35)

Appendix A

Army Leadership Framework Comparison Crosswalk:
1958, 1973, 1999

FM 22-100 (1999)	FM 22-100 (1973 & 1958)	
	<i>Traits</i>	<i>Principles</i>
<p>Overarching Definition Leaders of character and competence act to achieve excellence by developing a force that can fight and win the nation's wars and serve the common defense of the United States. (Leader Character-- who the leader is-- is comprised of values and attributes.)</p>	<p>Overarching Definition The concept of leadership for the United States Army is based on accomplishing the organizational mission while preserving the dignity of the Soldier.</p>	<p>Overarching Definition Leadership is the art of influencing and directing men in such a way as to obtain their willing obedience, confidence, respect loyal cooperation in order to achieve the mission.</p>
BE		
<p style="text-align: center;"><i>Values</i></p> <p>Leader values describe the leader's worth of people, concepts, and other things. "Everything starts here."</p>	<p>These versions of FM 22-100 describe leadership characteristics in 'traits' rather than values or attributes. The 14 traits presented in the 1973 manual are mapped on the 1999 version below.</p>	<p>In addition, these versions also present a list of 11 principles that are provided to illustrate effective leadership. These map onto the 1999 Be- Know-Do version as well.</p>
<p>1. <u>Loyalty</u>: Loyalty is a two-way street: you should not expect loyalty without being prepared to give it as well. Soldiers fight for each other—loyalty is commitment to your comrades and your country</p>	<p><u>Loyalty</u>: Loyalty is the quality of faithfulness to country, the Army, seniors, subordinates, and peers.</p>	
<p>2. <u>Duty</u>: Duty begins with everything required of you by law, regulation, and orders; but it includes much more than that. Professionals do their work not just to the minimum standard, but to the very best of their ability.</p>	<p><u>Dependability</u>: The certainty of proper performance of duty; To carry out any activity with willing effort; To continually put forth one's best effort in an attempt to achieve the highest standards of performance and to subordinate personal interests to military requirements.</p>	
<p>3. <u>Respect</u>: In the Army, respect means recognizing and appreciating the inherent dignity and worth of all people. This value reminds you that your people are your greatest resource.</p>	<p><u>Tact</u>: The ability to deal with others in a respectful manner The leader who displays tact in dealing with superiors and subordinates encourages courteous treatment in return.</p>	
<p>4. <u>Selfless Service</u>: Selfless service means doing what's right for the nation, the Army, your organization, and your people—and putting these responsibilities above your own interests.</p>	<p><u>Unselfishness</u>: The unselfish leader is one who avoids providing for his own comfort and personal advancement at the expense of others.</p>	
<p>5. <u>Honor</u>: Honor provides the "moral compass" for character and personal conduct in the Army. Though many people struggle to define the term, most recognize instinctively those with a keen sense of right and wrong, those who live such that their words and deeds are above reproach.</p>		
<p>6. <u>Integrity</u>: Leaders of integrity make their principles known and consistently act in accordance with them.</p>	<p><u>Integrity</u>: The uprightness and soundness of moral principles, the quality of truthfulness and honesty describe integrity.</p>	

FM 22-100 (1999)	FM 22-100 (1973 & 1958)	
	<u>Traits</u>	<i>Principles</i>
7. <u>Personal Courage</u> : Personal courage isn't the absence of fear; rather, it's the ability to put fear aside and do what's necessary. It takes two forms, physical and moral. Good leaders demonstrate both.	<u>Courage</u> : Courage is a mental quality that recognizes the fear of danger or criticism, but enables a man to proceed in the face of it with calmness and firmness.	
Attributes Leader attributes are a person's fundamental qualities and characteristics.		
Mental Attributes		
1. <u>Will</u> : Will is the inner drive that compels Soldiers and leaders to keep going when they are exhausted, hungry, afraid, cold, and wet—when it would be easier to quit.		
2. <u>Self-Discipline</u> : Self-disciplined people are masters of their impulses. Self-discipline allows Army leaders to do the right thing regardless of the consequences for them or their subordinates.		
3. <u>Initiative</u> : Initiative is the ability to be a self-starter—to act when there are no clear instructions, to act when the situation changes or when the plan falls apart.	<u>Initiative</u> : Initiative is the taking of action in the absence of orders.	
4. <u>Judgment</u> : Good judgment is the ability to size up a situation quickly, determine what's important, and decide what needs to be done.	<u>Judgment</u> : Judgment is the ability to logically weigh factors and possible solutions on which to base decisions.	
5. <u>Self-Confidence</u> : Self-confidence is the faith that you'll act correctly and properly in any situation, even one in which you're under stress and don't have all the information you want.		
6. <u>Intelligence</u> : Intelligent leaders think, learn, and reflect; then they apply what they learn.	<u>Knowledge</u> : The leader should develop a program of learning to keep himself abreast of current developments in his military specialty, command policies, and his local and world communities.	

FM 22-100 (1999)	FM 22-100 (1973 & 1958)	
	Traits	Principles
<p>7. <u>Cultural Awareness</u>: Culture is a group's shared set of beliefs, values, and assumptions about what's important. As an Army leader, you must be aware of cultural factors in three contexts:</p> <ul style="list-style-type: none"> -You must be sensitive to the different backgrounds of your people. -You must be aware of the culture of the country in which your organization is operating. -You must take into account your partners' customs and traditions when you're working with forces of another nation. 		
Physical Attributes		
<p>1. <u>Health Fitness</u>: Health fitness is everything you do to maintain good health, things such as undergoing routine physical exams, practicing good dental hygiene, maintaining deployability standards, and even personal grooming and cleanliness.</p>		
<p>2. <u>Physical Fitness</u>: Unit readiness begins with physically fit Soldiers and leaders. Combat drains Soldiers physically, mentally, and emotionally. To minimize those effects, Army leaders are physically fit, and they make sure their subordinates are fit as well.</p>	<p><u>Endurance (1)</u>: the mental and physical stamina measured by the ability to withstand pain, fatigue, stress, and hardship, is akin to courage. It is an important quality that leaders must have to merit respect from subordinates.</p>	
<p>3. <u>Military and Professional Bearing</u>: As an Army leader, you're expected to look like a Soldier. Know how to wear the uniform and wear it with pride at all times. Meet height and weight standards. By the way you carry yourself and through your military courtesy and appearance, you send a signal: I am proud of my uniform, my unit, and myself.</p>	<p><u>Bearing</u>: A man's bearing is his general appearance, carriage, deportment, and conduct. The bearing of the leader establishes the standard by which affects subordinates, peers, and superiors.</p>	
Emotional Attributes		
<p>1. <u>Self Control</u>: Leaders control their emotions. No one wants to work for a hysterical leader who might lose control in a tough situation.</p>		
<p>2. <u>Balance</u>: Emotionally balanced leaders display the right emotion for the situation and can also read others' emotional state.</p>		
<p>3. <u>Stability</u>: Effective leaders are steady, levelheaded under pressure and fatigue, and calm in the face of danger. These characteristics calm their subordinates, who are always looking to their leader's example.</p>	<p><u>Endurance (2)</u>: the mental and physical stamina measured by the ability to withstand pain, fatigue, stress, and hardship, is akin to courage. It is an important quality that leaders must have to merit respect from subordinates.</p>	
<i>KNOW</i>		

FM 22-100 (1999)	FM 22-100 (1973 & 1958)	
	<u>Traits</u>	<u>Principles</u>
1. <u>Interpersonal skills</u> : These skills affect how you deal with people. They include coaching, teaching, counseling, motivating, and empowering.		<u>Keep Your Men Informed (1)</u> : It is important to provide Soldiers with the reason and logic of decisions to improve teamwork and enhance moral.
2. <u>Conceptual skills</u> : Conceptual skills enable you to handle ideas. They require sound judgment as well as the ability to think creatively and reason analytically, critically, and ethically.		
3. <u>Technical skills</u> : These are job-related abilities. They include basic Soldier skills. As an Army leader, you must possess the expertise necessary to accomplish all tasks and functions you're assigned.		<u>Be Technically and Tactically Proficient (1)</u> : A leader must demonstrate to his men that he is well- qualified to lead his unit. He must be competent in combat operations and training as well as in the technical and administrative aspects of his duties.
4. <u>Tactical skills</u> : Tactical skills apply to solving tactical problems, that is, problems concerning employment of units in combat. You enhance tactical skills when you combine them with interpersonal, conceptual, and technical skills to accomplish a mission.		<u>Be Technically and Tactically Proficient (1)</u> : A leader must demonstrate to his men that he is well- qualified to lead his unit. He must be competent in combat operations and training as well as in the technical and administrative aspects of his duties.
<i>DO</i>		
1. <u>Communicating</u> : Communicating involves displaying good oral, written, and listening skills for individuals and groups.		<u>Keep Your Men Informed (2)</u> : It is important to provide Soldiers with the reason and logic of decisions to improve teamwork and enhance moral.
2. <u>Decision making</u> : This involves selecting the line of action intended to be followed as the one most favorable to the successful accomplishment of the mission. This involves using sound judgment, reasoning logically, and managing resources wisely.		<u>Make Sound and Timely Decisions</u> : The leader must be able to make a rapid estimate of the situation and arrive at a sound decision.
3. <u>Motivating</u> : Motivating involves inspiring and guiding others toward mission accomplishment.		<u>Insure that the Task is Understood, Supervised, and Accomplished</u> : The leader must insure that the orders are properly executed by either checking personally or by using his chain of command.
4. <u>Planning and preparing</u> : These involve developing detailed, executable plans that are feasible, acceptable, and suitable; arranging unit support for the exercise or operation; and conducting rehearsals.		
5. <u>Executing</u> : This involves meeting mission standards, taking care of people, and efficiently managing resources.		

FM 22-100 (1999)	FM 22-100 (1973 & 1958)	
	<u>Traits</u>	<u>Principles</u>
6. <u>Assessing</u> : Assessing involves evaluating the efficiency and effectiveness of any system or plan in terms of its purpose and mission.		
7. <u>Developing</u> : Assessing involves investing adequate time and effort to develop individual subordinates as leaders. It includes mentoring.		<u>Developing a Sense of Responsibility in Your Subordinates</u> : A way to show your men that you are interested in their welfare is to give them the opportunity for professional Development.
8. <u>Building</u> : Assessing involves spending time and resources to improve teams, groups, and units and to foster an ethical climate.		<u>Know Your Men and Look out for their Welfare</u> : The leader must understand what makes his men tick--their values, attitudes-- and help them achieve their needs.
9. <u>Learning</u> : Learning involves seeking self-improvement and organizational growth. It includes envisioning, adapting, and leading change.	<u>Know Yourself and Seek Self-improvement</u> : Honest self evaluation to determine his own strengths and weaknesses is of paramount importance to a leader.	
	Additional Traits Beyond 1999	Additional Principles Beyond 1999
		<u>Set the Example</u> : A leader must be a good example for his men through integrity, courage, administrative knowledge, professional competence, personal appearance, and personal conduct.
	<u>Enthusiasm</u> : Enthusiasm is the display of sincere interest and zeal in the performance of duties.	<u>Train Your Men as a Team</u> : It is the duty of the leader to train the members of his unit so that they will be tactically and technically proficient, and so they work as a team.
	<u>Justice</u> : The military leader gives rewards and punishments according to the merits of the case in question.	<u>Employ Your Unit in Accordance with It's Capabilities</u> : A good leader must know what his unit is trained to do as well as their capabilities. Then, he must employ the unit based on it's capabilities.
	<u>Decisiveness</u> : The leader should be able to make decisions promptly and state them in a clear, forceful manner.	

Appendix B

Articles Considered in Army Leadership Requirement Mining

- Army Chief of Staff. (1997, July). Knowledge and speed. The annual report on the Army After Next project to the Chief of Staff of the Army. Washington, DC: Author.
- Army Strategic Communications. (2003). The way ahead. Our Army at war . . . relevant and ready. Moving from the current force to the future force . . . Now! Washington, DC: Author.
- Atwater, L. E., Avolio, B., Dionne, S., Camobreco, J., & Lau, A. A. (1999). *A longitudinal investigation of leadership development*. Paper presented at the 41st Annual Conference of the International Military Testing Association, Monterey, CA.
- Baptism to command. (n.d.). Unpublished manuscript.
- Bass, B. M. (1996) *A new paradigm of leadership: An inquiry into transformational leadership*. Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bass, B., M. & Avolio, B., J. (2000). *Platoon readiness as a function of leadership, platoon, and company cultures*. (Technical Report 1104) Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA364116
- Bergman, C. K. (1996). *Challenge of 21st century leadership: The cornerstone and future building blocks*. (Air War College Report) Maxwell Air Force Base, AL: US Air War College.
- Bergner, J. K. (2000). Information, knowledge and wisdom: Leader development implications for the Army After Next. In D. V. Johnson II (Ed.), *Future leadership, old issues, new methods* (pp. 27-52). (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- Biddle, S. (2002). *Afghanistan and the future of warfare: Implications for Army and defense policy*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- Blackwell, P. E., & Bozek, G. J. (1998). Leadership for the new millennium. *Military Review*, 78, 41-46.
- Campbell, R. C., Knapp, D. J., & Heffner, S. T. (2002). *Selection for leadership: Transforming NCO promotion*. (Special Report 52). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA407790
- Chan, K. (2001). *Measuring the motivation to lead over time: A 2-year study*. Paper presented at the 43rd Annual Conference of The International Military Testing Association, Canberra, Australia.
- Chilcoat, R. A. (1995). *Strategic Art: The new discipline for the 21st century leaders*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- Clement, S.D. & Ayres, D.B. (1976). Leadership for the 1970s. A matrix of organizational leadership dimensions. *Leadership monograph series no. 8*. Ft. Benjamin Harrison, IN: Army Administration Center.
- Corbett, A. J. (2000). Proliferating decision makers: Root Cause of the next revolution in military affairs. In D. V. Johnson II (Ed.), *Future leadership, old issues, new methods* (pp. 27-52). (Strategic Studies Institute Monograph). Carlisle Barracks, PA.
- Crossing, H. (1997). *A case study: The selection and development of a manager with leadership in mind*. Paper presented at the 39th Annual Conference of the International Military Testing Association, Sydney, Australia.
- de Czege, H.W., & Biever, J. (1998). Optimizing future battle command technologies. *Military Review*, 78, 15-21.
- Department of the Army (1999). *Army Leadership*. Field Manual 22-100. Washington, DC: Author.

- Department of the Army (2001). *Operations. Field Manual 3-0*. Washington, DC: Author.
- Department of the Army. (2002). Concepts for the Objective Force. Retrieved December 15, 2002 from <http://www.objectiveforce.army.mil>.
- Eden, S. J. (1999). Leadership on the future fields: Remembering the human factor in war. *Military Review*, 79, 35-38
- Fitton, R.A. (1993). *Development of strategic-level leaders* (Executive Research Project S23). Washington, DC: National Defense University.
- Ford, L. A., Campbell, R. C., Campbell, J. P., Knapp, D. J., & Walker, C. B. (2000). *21st century soldiers and noncommissioned officers: Critical predictors of performance* (Technical Report 1102). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA380044
- Gardner, J. W. (1990). *On Leadership*. New York: The Free Press.
- Gayvert, D.R. (1999). Leadership and doctrinal reform. *Military Review*, 79, 18-22.
- Gilbert, D. A. (1996). Leader XXI campaign plan. *Military Review*, 76, 50-55.
- Grissmer, D., Kirby, S. N., Berends, M., & Williamson, S. (1995). Our changing youth: A threat to future recruiting? In R. L. Phillips & M. R. Thurman (Eds.), *Future soldiers and the quality imperative: The Army 2010 conference*, pp. 203-245. Ft. Knox, KY: U. S. Army Recruiting Command.
- Grossman, J. R., Burnside, B. L., Flynn, M. R., Dannemiller, B., Mauzy, R., & Black, B. A. (2002). *Command group training in the Objective Force* (Research Report 1793). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA406176
- Gumbert, J. (1998). Leadership in the digitized force. *Military Review*, 78, 1-10.
- Gurstein, M. (1999). Leadership in the peacekeeping Army of the future. In J. G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century Army and other top-performing organizations* (pp. 195-218). Stamford, Connecticut: JAI Press.
- Hamburger, K. E. (1984). *Leadership in combat: An historical appraisal conducted by the Department of History U. S. Military*. West Point, NY: U. S. Military Academy Department of History.
- Heffner, T. S., & Legree, P. J. (n.d.). *Soldier demographics for the Objective Force: Report to the Army Science Board*. Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- Heffner, T. S. (2003). Maximizing 21st century Noncommissioned Officer performance (NCO21). *ARI Newsletter*, 13 (1), 1-7.
- Helme, W. H., Willemin, L. P., & Grafton, F. C. (1974). *Prediction of officer behavior in a simulated combat situation* (Research Report 1182). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- Hooijberg, R., Bullis, R. C., & Hunt, J. G. (1999.). Behavioral complexity and the development of military leadership for the twenty-first century. In J. G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century Army and other top-performing organizations* (pp. 276-320). Stamford, Connecticut: JAI Press.
- Hunt, J. G., & Phillips, R. L. (1996). *1996 Symposium: Leadership challenges of the 21st century. Executive Summary* (Research Note 96-63). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- Johnsen, W. T. (1998). *Force planning considerations for Force XXI*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.

- Johnsen, W. T. (1998). *Redefining land power for the 21st century*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- Johnson, D.V., II, (2000). *Future leadership, old issues, new methods* (Strategic Studies Institute). Carlisle Barracks: U.S. Army War College
- Kelley, J. W. (1996). Brilliant Warrior. (Research Paper presented to Air Force 2025). Maxwell Air Force Base, AL, Air University Press. Retrieved January 24, 2003 from <http://www.au.af.mil/au/2025/volume1/chap08/v1c8-1.htm>
- Kilcullen, R., Goodwin, J., Chen, G., Wisecarver, M., & Sanders, M. (2002). *Identifying agile and versatile officers to serve in the Objective Force*. Paper presented at the meeting of the 23rd Army Science Conference, Orlando, FL.
- Lee, D. (2001). *Measurement of goal orientation in military leadership development*. Paper presented at the 43rd Annual Conference of The International Military Testing Association, Canberra, Australia.
- Leed, M. (2000). *Keeping the warfighting edge: An empirical analysis of Army officers' tactical expertise over the 1990's* (DB-307-A). Santa Monica, CA: Rand Corporation.
- Magee, R. R., II, (Ed.). (1998). *Strategic leadership primer*. (Department of Command, Leadership, and Management Primer) Carlisle Barracks, PA: U. S. Army War College.
- McCausland, J. D., & Martin, G. F. (2001). Transforming strategic leader education for the 21st century Army. *Parameters*, Autumn, 17-33.
- McGuire, M. A. (1999). *What do senior leaders say about strategic leader development?* (Executive Research Project). Fort McNair: National Defense University.
- Neck, C. P., & Manz, C. C. (1999). In search of the self-led soldier: Army leadership in the twenty-first century. In J. G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century Army and other top-performing organizations* (pp. 153-176). Stamford, Connecticut: JAI Press.
- Nelsen, J. T., II, & Akman, A. (2002). *The multi-skilled soldier concept: Considerations for Army Implementation*. (Study Report 2002-6) Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA402901
- Newsome, S., Catano, V., & Day, A. (2003). *Leader competencies: Proposing a research framework*. Kingston, ON: Canadian Forces Leadership Institute.
- Noble, S. A., & Fallesen, J. J. (2000). *Identifying conceptual skills of future battle commanders*. (Technical Report 1099). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA374875
- Nogami, G. Y., Brander, C. D., & Slusser, K. A. (1997). *21st century strategic leader competencies: from the Army general's perspective*. Paper presented at the 39th Annual Conference of the International Military Testing Association, Sydney, Australia.
- Objective Force Task Force. (2002). The Objective Force in 2015 White Paper (Final Draft). Retrieved December 15, 2002 from <http://www.objectiveforce.army.mil>
- Office of the Secretary of Defense (1997). *Quadrennial Defense Review Report*. Washington, DC: Author.
- Office of the Secretary of Defense (2001). *Quadrennial Defense Review Report*. Washington, DC: Author.
- Paparone, C. R. (2001). U. S. Army Decision-making: Past, present and future. *Military Review*, 81, 45-53.

- Paquin, R. J. (1998). *World War I leadership characteristics that could make future military leaders successful*. (School of Advanced Military Studies Monograph). Fort Leavenworth, KS: U. S. Army Command and General Staff College.
- Pritchard, K. H. (1999). Competency-based leadership for the 21st century. *Military Review*, 79, 23-26.
- Pulakos, E. D., Sharon, A., Plamondon, K., & Kiechel, K. L. (1997). *Examining the feasibility of developing measures of stress adaptability*. (Technical Report 1068). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- Ralph, J. R., O'Neil, H. F., Drenz, C. F., Freeman, M., Hofmann, M., & Lowenstam, S., (2001). Army science board 2001 special study: Final Report: Manpower and personnel for soldier systems in the Objective Force. Washington, DC: Army Science Board.
- Rosenbach, W. E., & Taylor, R. L. (2001). *Contemporary issues in leadership* (5th ed). Boulder, CO: West View Press.
- Rost, J. C. (1991). *Leadership for the twenty-first century*. New York: Praeger.
- Rudesheim, F. S. (2001). *Discovering the Army's core competencies* (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- Rumsey, M.G. (1995). The best they can be: Tomorrow's soldiers. In R. L. Phillips & M. R. Thurman (Eds.), *Future soldiers and the quality imperative: The Army 2010 conference*. (pp.123-157). Fort Knox, KY: U. S. Army Recruiting Command.
- Rumsey, M.G. (1998). *21st century lieutenants*. Paper presented at Cadet Command Study Group, Norfolk, VA
- Savell, J.M., Tremble, T.T., Jr., & Teague, R.C. (1993). *Some lessons learned about leadership in Operation Desert Shield/Storm* (Study report 93-05). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA268947
- Scales, R. H., Jr. & Van Riper, P. K. (2001). Preparing for war in the 21st century. In R. H. Scales, Jr. (Ed.), *Future warfare anthology* (pp. 23-40). Carlisle Barracks, PA: U. S. Army War College.
- Scales, R. H., Jr. (2001). Cycles of war. In R. H. Scales, Jr. (Ed.), *Future warfare anthology* (pp. 9-22). Carlisle Barracks, PA: U. S. Army War College.
- Scales, R. H., Jr. (2001). Speed and power primal forces in the new American style of war. In R. H. Scales, Jr. (Ed.), *Future warfare anthology* (pp. 1-8). Carlisle Barracks, PA: U. S. Army War College.
- Schwartzmann, R.D. (2003). Transforming leader development through lifelong learning. *Military Review*, 83, 63-67.
- Shamir, B., & Ben-Ari, E. (1999). Leadership in an open Army? Civilian connections, interorganizational frameworks, and changes in military leadership. In J. G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century Army and other top-performing organizations* (pp. 15-40). Stamford, CT: JAI Press.
- Shields, P. M. (1996). Changing family demographics and the impact on accession, trainability, motivation, character, and performance. In R. Phillips & M. Thurman (Eds.) *Future soldiers and the quality imperative*. Washington, DC: United States General Accounting Office.
- Smidt, J.J. (1998). Army leadership: Doctrine and the new FM 22-100. *Military Review*, 78, 83-86.

- Snider, D. M., Nagl, J. A., & Pfaff, T. (1999). *Army professionalism*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- Steele, W. M. & Walters, R. P., Jr. (2001). Training and developing Army leaders. *Military Review*, 81, 2-9.
- Steinberg, A. G. & Leaman, J. A. (1990). *Dimensions of Army commissioned and noncommissioned officer leadership* (Technical Report 879). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. ADA224933
- Steinberg, A. G., & Leaman, J.A. (1990). *The Army leader requirements task analysis: commissioned officer results* (Technical Report 898). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA226543
- Stevenson, E. J., & Warn, J. R. (2001). *Effective leadership development: Creating better mental models*. Paper presented at the 43rd Annual Conference of the International Military Testing Association, Canberra, Australia.
- Stone, B. M., Turner, K. L., & Looper, L. T. (1997). *Effect of future demographic trends on the Air Force personnel system*. Paper presented at the 39th Annual Conference of the International Military Testing Association, Sydney, Australia.
- Swengros, R. W. (2002). *Strategy for developing the right leaders for the objective force – An opportunity to excel*. (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- The Joint Chiefs of Staff. (1996). *Joint Vision 2010*. Washington, DC: Author.
- The Joint Chiefs of Staff. (1997). *Concept for future joint operations*. Fort Monroe, VA: Joint Warfighting Center.
- The Joint Chiefs of Staff. (2000). *Joint Vision 2020*. Washington, DC.
- The Joint Chiefs of Staff. (2003). *An evolving joint perspective: U.S. joint warfare and crisis resolution in the 21st century*. Washington, DC: The Pentagon.
- The Wexford Group International. (2002). *Civilian workforce planning & analysis: Strategic workforce core competencies*. Vienna, VA: Author.
- Tremble, T. R., & Bergman, M. B. (2000). *Continued emphasis on leadership: One solution for future soldier effectiveness*. (Research Note 2000-11). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA380925
- U. S. Army Command and General Staff College. (1999). *TLS strategy: Change, readiness, and the human dimension of training, leader development, and soldiers*. Fort Leavenworth, KS: Author.
- U. S. Army Training and Doctrine Command. (2001). *Objective Force Operational Concepts, Organization Design Constructs, and Materiel Needs Implications* (TRADOC Pamphlet 525), Fort Monroe, VA: Author.
- U. S. Army Training and Doctrine Command. (2002). *The Operational Environment and Threat: A View of the World to 2020 and Beyond* (TRADOC Pamphlet 525-2-60 Draft), Fort Monroe, VA: Author.
- Ulmer, W. F., Jr. (1997). Leadership learnings and relearnings. In B. Adam & S. Webster (Eds.), *KLSP: Transformational leadership, working papers*. College Park, MD: The James MacGregor Burns Academy of Leadership Press.
- Ulmer, W. F., Jr. (1998). Military leadership in the 21st century: Another bridge too far? *Parameters*. 28, 4-25.
- Van Hoose, D. (1996). Developing civilian leaders for Force XXI. *Military Review*, 76, 56-62.

- Vandergriff, D. (2002). *Path to victory: America's Army and the revolution in human affairs*, New York: Ballantine Books.
- Varlijen, P. J. (2001). *Leadership: More than mission accomplishment* (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- Welch, S. C. (n.d). From information delivery to knowledge management. Unpublished manuscript.
- White, R. A., & Olmstead, J. (1997). *Identification of potential combat effectiveness variables*. (Research Note 98-01). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.
- William E. Simon Center for the Professional Military Ethic. (2001). *The Army Officership Concept* Developed by the., West Point, New York: United States Military Academy.
- Winkler, J. D., Shukiar, H. J., Dewar, J. A., Lewis, M. W., Benjamin, B. A., Sollinger, J. M., Peters, J. E., & Thie, H. (1998). *Future leader development of Army Noncommissioned Officers: Workshop Results* (CF-138-A). Santa Monica, CA: Rand Corporation.
- Wong, L. (2002). *Stifled innovation? Developing tomorrow's leaders today* (Strategic Studies Institute Monograph). Carlisle Barracks, PA: U. S. Army War College.
- Yukl, G. (1994). *Leadership in organizations* (3rd ed). Englewood, NJ: Prentice Hall.
- Yukl, G. (1999). Leadership competencies required for the new Army and approaches for developing them. In J. G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century Army and other top-performing organizations*.
- Zaccaro, S. J. (1999). Social complexity and the competencies required for effective military leadership In J. G. Hunt, G. E. Dodge, & L. Wong (Eds.), *Out-of-the-box-leadership: Transforming the twenty-first-century Army and other top-performing organizations* (pp. 131-151). Stamford, Connecticut: JAI Press.
- Zaccaro, S. J., Klimoski, R. J., & Boyce, L. A. (1999). *The changing U.S. Army: A summary of future focused reports from 1990-1999*. (Technical Report 1747). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA371558
- Zaccaro, S. J., Klimoski, R. J., & Gade, P. A.. (1999). *Army leadership in the 21st Century: A proposed research framework*. (Research Note 99-34). Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences. ADA368441

Appendix C

Crosswalk of Leadership Requirements by Source

Requirements	Challenge of 21st Century Leadership-1	Leadership for the New Millennium-2	Selection: Transforming NCO Promotions - 3	Strategic Art: New Discipline for 21st Century Leaders-4	Proliferating Decisionmakers: Root Cause of RMA - 5	Leadership on Future Fields-6	21st Century Soldiers and NCOs-7	Command Group Training in the Objective Force-8	Leadership in the Digitized Force-9	Leadership in the Peacekeeping Army-10	Leadership in Combat-11	Behavioral Complexity & the Develop. of Leadership-12	Brilliant Warrior-13	Strategic Leadership Primer-14	What Do Senior Leaders Say - Strategic Ldr Develop.?-15	Identifying Conceptual Skills for Future Battle Cdrs-16	21st Century Strategic Leaders Competencies-17	Competency-Based Leadership - 21st Century - 18
Accountability																		
Achievement Drive							X											
Autonomy																		
Aware				X														X
Awareness		X						X			X	X			X	X		
Awareness of Subordinates Strengths & Weaknesses				X														
Battlefield Coordination and Management			X															
Change Management																		
Cognitive Ability				X			X								X			
Cognitive/ Conceptual Ability		X						X	X		X		X	X		X	X	
Communication							X						X		X	X	X	
Competence				X													X	
Competent in Peacekeeping/Non traditional Missions													X				X	
Competitive											X							
Conceptual/Develops Frames of Reference														X				
Concern for Soldier Quality of Life							X											
Confident	X										X	X				X	X	
Conflict Management																		
Conscientiousness							X											
Continual Learning			X	X					X									X
Coordination										X								
Counsel Others (Concern for soldiers)			X							X	X							
Counselor																	X	

Courage																						
Requirements	Challenge of 21st Century Leadership-1	Leadership for the New Millennium- 2	Selection: Transforming NCO Promotions - 3	Strategic Art: New Discipline for 21st Century Leaders-4	Proliferating Decisionmakers: Root Cause of RMA - 5	Leadership on Future Fields-6	21st Century Soldiers and NCOs-7	Command Group Training in the Objective Force-8	Leadership in the Digitized Force-9	Leadership in the Peacekeeping Army-10	Leadership in Combat-11	Behavioral Complexity & the Develop. of Leadership-12	Brilliant Warrior-13	Strategic Leadership Primer-14	What Do Senior Leaders Say - Strategic Ldr Develop.?-15	Identifying Conceptual Skills for Future Battle Cdrs-16	21st Century Strategic Leaders Competencies-17	Competency-Based Leadership - 21st Century - 18				
Creativity (Originality)			X	X				X							X						X	
Decision Making		X					X	X	X						X							
Decisive		X					X		X						X							
Dedicated																X						
Delegate																						
Determination																						
Disciplined					X											X						
Doctrine Knowledge																						
Emotional Stability			X				X									X						
Empower	X							X														
Endurance											X											
Energy							X															
Establish Success Conditions								X														
Ethics							X		X	X												
Execute Operations										X						X						
Experience										X												
Exploit opportunities						X				X												
Financial Management																						
Flexibility (Adaptability)			X	X			X	X							X						X	
Fortitude				X																	X	
Function in Joint, Interagency, Multinational Environments																				X		
Handle Ambiguity		X								X			X	X		X	X					
Honesty			X																			
Human in the loop																	X					
Human Resource Management			X																			
Ideological Savvy																						
Impart Direction and Purpose								X									X					

Persuasion					X																
	Challenge of 21st Century Leadership-1	Leadership for the New Millennium- 2	Selection: Transforming NCO Promotions - 3	Strategic Art: New Discipline for 21st Century Leaders-4	Proliferating Decisionmakers: Root Cause of RMA - 5	Leadership on Future Fields-6	21st Century Soldiers and NCOs-7	Command Group Training in the Objective Force-8	Leadership in the Digitized Force-9	Leadership in the Peacekeeping Army-10	Leadership in Combat-11	Behavioral Complexity & the Develop. of Leadership-12	Brilliant Warrior-13	Strategic Leadership Primer-14	What Do Senior Leaders Say - Strategic Ldr Develop.?-15	Identifying Conceptual Skills for Future Battle Cdrs-16	21st Century Strategic Leaders Competencies-17	Competency-Based Leadership - 21st Century - 18			
Requirements																					
Persuasion				X						X											
Physical Agility											X										
Physical Fitness			X																		
Plan and Conduct Training (Combat and other)			X				X														
Plan Operations							X				X					X					
Political Savvy (knowledge of inter-related units)							X	X							X		X				
Positive Attitude																X					
Positive Self- Image											X										
Presence		X				X			X												
Pride																					
Problem Solving			X											X							
Professionalism																					
Program Management										X											
Psychomotor Aptitude																					
Reflective Thought									X												
Represent the Organization														X							
Resilience			X	X																X	
Resourceful							X										X				
Responsibility					X										X						
Responsibility for Subordinates																					
Risk Management																					
Role Model											X			X	X						
Self-confidence (Decisiveness)		X									X										
Self-Motivated							X														
Sense of History																					
Social and Interpersonal Skills			X											X							

Strategic Thinking			X	X					X				X					
Requirements	Challenge of 21st Century Leadership-1	Leadership for the New Millennium-2	Selection: Transforming NCO Promotions - 3	Strategic Art: New Discipline for 21st Century Leaders-4	Proliferating Decisionmakers: Root Cause of RMA - 5	Leadership on Future Fields-6	21st Century Soldiers and NCOs-7	Command Group Training in the Objective Force-8	Leadership in the Digitized Force-9	Leadership in the Peacekeeping Army-10	Leadership in Combat-11	Behavioral Complexity & the Develop. of Leadership-12	Brilliant Warrior-13	Strategic Leadership Primer-14	What Do Senior Leaders Say - Strategic Ldr Develop.?-15	Identifying Conceptual Skills for Future Battle Cdrs-16	21st Century Strategic Leaders Competencies-17	Competency-Based Leadership - 21st Century - 18
Supervising							X			X								
Sustain High States of Readiness		X																
Systems Thinking								X				X						
Tactical Expertise																		
Tactical Skill									X			X					X	
Take risks												X		X		X		
Team Building			X	X			X	X	X					x		X	X	
Team Player				X		X							X			X		
Technical Credibility			X				X			X			X					
Technical Skill								X	X								X	
Technology Management			X															
Time Management			X															
Train							X											
Use Technology							X	X	X								X	
Values	X				X						X	X	X		X		X	X
Versatility		X						X				X					X	
Vision	X		X		X				X	X				X	X		X	
Will to Destroy Enemy																		
Willingness to Exploit Opportunities																		
Written Communication		X	X				X			X			X					

Requirements	Manpower & personnel for soldier systems - 19	21st Century Lieutenants-20	The Best They Can Be: Tomorrow's Soldiers-21	Leadership in an Open Army-22	Army Ldr Requirements Task Analysis: Officers - 23	Dimensions of Army Commiss. Officer & NCO Leadership-24	Strategy for Developing the Right Leaders-25	The Army Officership Concept-26	Concept for Joint Future Operations-27	Strategic Army Workforce Core Competencies-28	Continued Emphasis on Leadership-29	Leadership: More Than Mission Accomplishment - 30	Potential Combat Effectiveness Variables - 31	Future Leader Development of Army NCOs - 32	Stifled Innovation? Developing Tomorrow's Ldrs-33	Leadership Competencies Required for the New Army-34	Social Complexity and Military Leadership-35
Accountability			X		X		X		X	X	X		X				
Achievement Drive		X	X				X				X		X				
Autonomy			X										X				
Aware			X				X		X	X						X	
Awareness							X		X	X							
Awareness of Subordinates Strengths & Weaknesses																X	
Battlefield Coordination and Management								X									
Change Management										X							
Cognitive Ability	X	X	X							X	X		X			X	
Cognitive/ Conceptual Ability					X				X							X	X
Communication					X						X						
Competence									X								
Competent in Peacekeeping/Non traditional Missions																	X
Competitive		X															
Conceptual/Develops Frames of Reference							X									X	
Concern for Soldier Quality of Life																	
Confident																X	
Conflict Management																	X
Conscientiousness	X	X	X								X					X	
Continual Learning												X	X			X	
Coordination	X									X							
Counsel Others (Concern for soldiers)						X			X		X					X	
Counselor											X						
Courage			X				X		X							X	

Requirements	Manpower & personnel for soldier systems - 19	21st Century Lieutenants-20	The Best They Can Be: Tomorrow's Soldiers-21	Leadership in an Open Army-22	Army Ldr Requirements Task Analysis: Officers - 23	Dimensions of Army Commiss. Officer & NCO Leadership-24	Strategy for Developing the Right Leaders-25	The Army Officership Concept-26	Concept for Joint Future Operations-27	Strategic Army Workforce Core Competencies-28	Continued Emphasis on Leadership-29	Leadership: More Than Mission Accomplishment - 30	Potential Combat Effectiveness Variables - 31	Future Leader Development of Army NCOs - 32	Stifled Innovation? Dev-eloping Tomorrow's Ldrs-33	Leadership Competencies Required for the New Army-34	Social Complexity and Military Leadership-35
Initiate Action		X														X	
Initiative			X						X		X		X				
Insight														X			X
Instill Trust/Confidence																X	
Integrating		X							X							X	
Integrity		X	X					X			X					X	
Issue Orders																	
Judgment			X				X		X		X					X	
Knowledge of Use of Military Power																	
Language Ability			X													X	
Leveraging Diversity (Cultural Tolerance)			X													X	
Life long learning																X	
Manage								X	X							X	X
Mental Agility																X	
Mentor							X			X							
Metacognitive Skills																	
Mission Focus										X				X			
Moral			X				X									X	
Motivating Others				X				X	X							X	
Motivation to Perform												X					
Negotiating										X							X
Openness		X	X														
Operations Knowledge																X	
Oral communication				X			X	X	X	X	X	X	X	X		X	
Patience												X					
Performance Management										X							
Persuasion																	X
Physical Agility									X								

Requirements	Manpower & personnel for soldier systems - 19	21st Century Lieutenants-20	The Best They Can Be: Tomorrow's Soldiers-21	Leadership in an Open Army-22	Army Ldr Requirements Task Analysis: Officers - 23	Dimensions of Army Commiss. Officer & NCO Leadership-24	Strategy for Developing the Right Leaders-25	The Army Officership Concept-26	Concept for Joint Future Operations-27	Strategic Army Workforce Core Competencies-28	Continued Emphasis on Leadership-29	Leadership: More Than Mission Accomplishment - 30	Potential Combat Effectiveness Variables - 31	Future Leader Development of Army NCOs - 32	Stifled Innovation? Dev-eloping Tomorrow's Ldrs-33	Leadership Competencies Required for the New Army-34	Social Complexity and Military Leadership-35
Physical Fitness			X				X										
Plan and Conduct Training (Combat and other)			X			X				X	X						
Plan Operations									X		X					X	
Political Savvy (knowledge of inter-related units)		X		X							X						
Positive Attitude																	
Positive Self- Image																	
Presence																	X
Pride													X				
Problem Solving										X			X	X			X
Professionalism													X				
Program Management										X				X			
Psychomotor Aptitude			X														
Reflective Thought		X								X							
Represent the Organization																	
Resilience								X									
Resourceful																	X
Responsibility			X			X							X		X		
Responsibility for Subordinates		X		X		X		X			X						X
Risk Management						X											
Role Model				X													X
Self-confidence (Decisiveness)						X		X	X			X				X	X
Self-Motivated			X			X											
Sense of History									X								
Social and Interpersonal Skills										X		X	X				X
Strategic Thinking							X	X	X					X			X
Supervising											X						
Sustain High States of Readiness		X															

Requirements	Manpower & personnel for soldier systems - 19	21st Century Lieutenants-20	The Best They Can Be: Tomorrow's Soldiers-21	Leadership in an Open Army-22	Army Ldr Requirements Task Analysis: Officers - 23	Dimensions of Army Commiss. Officer & NCO Leadership-24	Strategy for Developing the Right Leaders-25	The Army Officership Concept-26	Concept for Joint Future Operations-27	Strategic Army Workforce Core Competencies-28	Continued Emphasis on Leadership-29	Leadership: More Than Mission Accomplishment - 30	Potential Combat Effectiveness Variables - 31	Future Leader Development of Army NCOs - 32	Stifled Innovation? Dev-eloping Tomorrow's Ldrs-33	Leadership Competencies Required for the New Army-34	Social Complexity and Military Leadership-35
Supervising											X						
Sustain High States of Readiness		X															
Systems Thinking									X		X			X			
Tactical Expertise									X	X						X	
Tactical Skill					X											X	
Take risks									X						X		
Team Building	X		X	X				X	X				X		X	X	X
Team Player				X			X			X	X					X	
Technical Credibility								X	X	X	X		X			X	
Technical Skill					X											X	
Technology Management									X	X							
Time Management						X				X							
Train									X		X					X	
Use Technology				X												X	
Values		X							X		X						
Versatility		X		X			X								X		
Vision							X	X		X						X	
Will to Destroy Enemy								X									
Willingness to Exploit Opportunities									X								
Written Communication							X		X	X	X		X	X		X	