Chapter One
INTRODUCTION

BACKGROUND

The Army has established The Army Distance Learning Program (TADLP) under the auspices of the U.S. Army Training and Doctrine Command (TRADOC). The intent of this program is to capitalize on the capabilities of distance learning (DL) technology to replace resident instruction with DL in those cases where the technique is suitable to teach the material. In effect, this means dividing existing courses into resident learning (RL) and DL phases or modules. Thus, TADLP will significantly change how individual training is conducted—how leaders and soldiers are developed—both in institutions and in the field.

The Army’s investment in distance learning amounts to about $630 million, covering infrastructure, expenses involved in developing courseware, fielding costs, and the management costs tied to program development and implementation. These costs have been estimated through the year 2015, but most of them ($440 million) are in the early and middle stages of that period.\(^1\) The infrastructure investment will provide networks and hardware (e.g., classrooms,

\(^1\)The source for these figures is TADLP’s Economic Analysis, published by the Program Management Office, TADLP, September 2000. In addition, the Army National Guard’s Distributed Training Program had about $220 million in investment and operating costs through FY00 that are not included in these figures. The Army also has other programs, currently outside the purview of TADLP, that are using or will be able to capitalize on DL technologies. These include computer-based training, DL support for the Army’s Continuing Education Program, and Army University Access Online, the new initiative to provide greater access to college courses.
computer workstations) for DL sites. As of April 1999, TADLP planned to support 844 DL sites in 454 locations in the continental United States (CONUS) and abroad. The investment in courseware provides for converting portions of 525 courses to DL.

The Army is pursuing these changes because it believes a number of benefits accrue from DL. These benefits amount to direct or indirect enhancements to training and personnel readiness. DL creates a potential for delivering targeted training on short notice, can facilitate access to education, and may provide more timely training than a resident course. And because technology can enhance the speed of learning, course lengths can decrease and soldiers may spend less time away from their units and less time between operational assignments. Finally, some resource savings may also be possible under DL. These could take the form of reduced travel costs and reductions in personnel resources devoted to the delivery of institutional training, allowing endstrength to be shifted from TDA to TOE organizations.

Several key features of the DL program determine how it will affect training, the soldiers and leaders being trained, and their units. First, DL moves a significant portion of training from the traditional schoolhouse into locations near where the soldiers reside, making it easier for them to attend. Second, DL offers, in lieu of traditional schoolhouse resources, emerging educational technology and media to provide increased access to training material and to deliver the training. Third, by not requiring soldiers to leave their units for RL courses elsewhere and by providing significant amounts of training in asynchronous (i.e., self-paced) modes, DL provides the potential for increasing flexibility and continuity in the timing of training. Finally, because it moves some training out of directly supervised classrooms and school environments, DL increases the responsibility of soldiers and their chain of command for ensuring timely completion of training.

While the distance learning program is under the purview of the Army’s training community (i.e., primarily TRADOC and the Army’s Deputy Chief of Staff for Operations and Plans (DCSOPS)), the program has broader implications for the Army as a whole. TADLP will directly affect the ways the Army will achieve three of its overall strategic goals: training, quality people, and leader development. All
three concern the Army at large; two of them—quality people and leader development—are a primary responsibility of the Army’s Deputy Chief of Staff for Personnel (DCSPER). Because of these wide-reaching potential effects, it is not just the training community, but also the Army as a whole and DCSPER in particular, that have a large stake in the development of the distance learning program and the direction it takes.

The personnel implications of TADLP (and thus a significant part of the Army’s stake in the program) boil down to readiness: can TADLP help to enhance the personnel readiness of the Army? Many of the features of DL—chief among them shorter overall training time, the availability of “on-demand” training packages, and greater flexibility in scheduling—can enhance personnel readiness if judiciously employed.

To examine DL’s potential effects on readiness, we look at personnel readiness at three levels: Army-wide, organizational, and individual (see Table 1.1). Army-wide personnel readiness depends on the overall natural abilities, training and education, and morale of the Army’s people (these are also components of individual readiness) and on the Army’s ability to develop, train, position, and motivate those people to accomplish their assigned missions. Organizational readiness includes the above considerations, and it looks more specifically at the degree to which the skills and qualifications of the soldiers in units and organizations match the skill and qualification requirements specified for those units and organizations. Of the three forms of readiness, this is the easiest to quantify: improving the match between the skills of the soldier inventory and the requirements of the organization improves organizational readiness.²

Individual readiness—the skills, training level, general aptitude, and motivation/morale of each individual—is the foundation for the two collective forms of readiness.

DL could potentially contribute to readiness at all three levels. The right-hand side of Table 1.1 specifies how DL could help in each area. Perhaps the key words in the table are “could help.” Aside from the concern over whether DL as a tool can actually deliver what its pro-

²The Army uses statistical measures of this match as part of its unit readiness assessments.
ponents promise—a legitimate concern that we address in Chapter Three—there is also the concern about what empirical evidence exists to support the claims that DL can help accomplish the bulleted items in the table. It is this concern that led to our research focus, a subject we turn to next.

**PURPOSE OF THIS REPORT**

We undertook empirical analyses for the DCSPER to determine how much DL can help improve personnel readiness in the three areas shown above. Our findings should be helpful both to the personnel community and to the Army at large in evaluating DL’s potential and

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<th>Readiness Level</th>
<th>Definition</th>
<th>How DL Could Help</th>
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| Army            | The degree to which the Army is able to develop, train, position, and motivate its personnel to accomplish their assigned mission. | • Enable increased course enrollment, graduation rates  
• Enhance ASI, other functional training  
• Speed promotion qualification  
• Reclassify, cross-train, consolidate MOSs |
| Organizational  | The degree to which soldiers’ skills and qualifications match the requirements of their units and organizations. Measured through the Unit Status Reporting System. | Above plus:  
• Shorten formal training time  
• Decrease time away from home  
• Increase available days to the unit  
• Enable improved mobilization processes  
• Provide refresher/new equipment training |
| Individual      | The skills, training level, general aptitude, and motivation and morale of each individual. | Above plus:  
• Enrich leader development  
• Expand opportunities for personal and professional development |
ways to capitalize on it. This report and a companion report present the results of our research.3

In this report we examine how DL can help the Army more quickly address active component manpower shortages in understrength skills. We look at DL’s potential to enable faster completion of re-classification training, faster NCO promotion qualification, and more efficient forms of additional skill training. Success in these areas would improve the skill mix component of the Army’s overall readiness posture4 and in turn also improve the skill content in units and organizations, enhancing organizational readiness.

Of course, the effect on organizational readiness also depends on the judicious distribution of the additional trained soldiers into units and organizations where there are shortfalls. Thus, we find that DL enables, but does not guarantee, better organizational readiness. A common theme in our research is that DL can serve as an enabler for certain institutional strategies that would be undesirable or infeasible in the absence of DL.

The companion research report (Leonard et al., 2001) takes a closer look at what DL programs might do to reduce the time soldiers spend away from both unit duties and their families, improving organizational readiness by enhancing stability in units and quality of life for soldiers and families. That report also describes some of the ways the DL program could help overall individual readiness: not only by improving skill qualifications and quality of life, but also by enriching leader development and expanding other opportunities for personal and professional development.

ORGANIZATION OF THIS DOCUMENT

The following chapters discuss how DL can help the Army alleviate personnel shortages among its enlisted personnel, starting in Chapter Two with a brief discussion of why personnel shortages are a readiness problem. Chapter Three discusses the strategies the Army

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4That is, bring the manpower fill in each skill area closer to requirements.
currently uses for alleviating these shortages and identifies areas where DL can be of help. This chapter also documents the approach we use to determine how useful DL could be. Chapters Four, Five, and Six describe the results of applying the approach to determine the effectiveness of DL-based approaches for three Army strategies to alleviate personnel shortages. Chapter Seven offers some general conclusions and next steps.