



**STRATEGY
RESEARCH
PROJECT**

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**ANALYSIS OF DISTANCE LEARNING AND
COMBAT MEDIC TRAINING**

BY

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ABSTRACT

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The United States government is in the midst of pursuing avenues to reduce the budget deficit and balance the budget. In efforts to support government strategies, the military as a whole must determine cost-savings alternative means to train its personnel while still training to standard and meeting the expectations of the field and the service members it trains. Distance learning strategies that will play a big part in the training of Army personnel are well-suited to the training of combat medics. In turn, the needs of the combat medic and the Army leadership will be fulfilled and contribute to Army readiness and the national military strategy.

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INTRODUCTION

It is no secret that over the past few years, hundreds of legislative and voluntary avenues have been explored to reduce the budget deficit and eventually balance the budget.¹ In support of this national strategy has come the U.S. National Military Strategy (USNMS) which mandates restructure of the military services to best utilize resources. The Army Modernization Plan (AMP) supports the USNMS through strategies that will maintain a CONUS-based Army force, rather than a forward deployed force. As part of the AMP Force XXI strategy, commanders and their soldiers must be able to rapidly access information technology to maintain battlefield operations at all levels.² Army Training XXI is the Army's strategy for training the force with technologies that will provide the capability to train soldiers, leaders and units when and where they need it. In turn, the Army Distance Learning Plan addresses distance learning (DL) applications and directs Major Commands to develop DL plans to meet their training requirements.³ The Medical Command's U.S. Army Medical Department (AMEDD) DL Plan, developed by the AMEDD Center and School, addresses the overall requirements of DL application for medical training.⁴ As a result of this progression, conversion of combat medic training into DL format has become a priority for continued readiness in the AMEDD. Thus, the thesis of this analysis is logically meant to support established strategies: DL will be conducted and learning will be sustained so that combat medics are deployable anytime, anywhere.

ASSUMPTIONS

Certain assumptions must be in place prior to implementing DL strategies in combat medic training:

- (1) Infrastructure is in place to support DL initiatives.
- (2) Training developers and trainers will be prepared to develop and conduct DL training format.
- (3) DL training methodology has been trained and affirmed in medical training.

TRAINING STRATEGY IDENTIFICATION AND ANALYSIS

OBJECTIVES

The first and foremost objective in converting combat medic training into DL format is to improve the combat medic's level of readiness which in turn will contribute to force readiness. It is imperative that combat medic training be designed and implemented to meet the soldier's training needs and capabilities as well as fulfill the mission needs of the soldier's unit.⁵ A tailored combat medic training program will serve to meet military occupational specialty qualification (MOSQ) requirements, sustainment needs, and advanced combat medic leadership training. Ability to access on-line combat medic training in garrison, in classrooms, on training ranges, and on the battlefield will afford individual soldiers and units the opportunity to conduct immediate just-in-time training without waiting for bureaucratic approval processes and delivery of training materials. The remote locations of units, particularly reserve component units, as well as frequent overseas deployment,

severely hinders the conduct of needed training.⁶ By meeting unit needs prior to and even during deployment, DL can better support combat medic preparation for the mission. Mission-specific combat medic training, such as, identification of indigenous diseases and treatment of those diseases can be made readily available in real time and in remote areas.

The combat medic DL training strategies will further enable the AMEDD to meet the second objective of providing standardized teaching methodology and content for all combat medics. Soldier's throughout the Army in garrison and in remote parts of the world will receive the standardized training through duplicate training/learning events,⁷ leaving little possibility for the response, "...but that's the way they taught me to do it at Ft. Hood." Standardized training can be mutually acquired across the services. Tasks such as "administer an intramuscular injection" can be developed in DL format and shared with the other services with no concern for differences in service orientation while eliminating duplication of effort and making efficient use of resources.⁸

The third objective of combat medic DL establishes personal accountability for readiness. Through both local (unit, Post Education Centers and home) computers, for example, the combat medic will access world wide web and bulletin board sites to obtain task demonstrations, digitized lessons, as well as newsletters.⁹ In many cases, the combat medic will have on-line access to training sites

(AMEDDC&S, Health Service Brigades) to obtain immediate responses to questions. The combat medic will no longer have to wait to interface with an on-site trainer, or training classes given at specified times, or not at all. He will log-in with a specific code and records of training will be automatic, identifying tasks trained and the time spent on each task, as well as documenting evaluation of performance. Thus, the combat medic will receive immediate feedback to identify performance proficiency or deficiency. Individual sustainment training and task proficiency will become the responsibility of the soldier.

The reduction of time in resident training will be the greatest contributor to resource savings. Analysis of the existing curriculum by the AMEDD indicates that approximately 60% of combat medic reserve component reclassification training and reserve and active component advanced combat medic training (Basic Noncommissioned Officer Course Common Leader Training (CLT), Career Management Field (CMF), and 91B Technical Training; Advanced Noncommissioned Officer Course CLT/CMF and 91B Track Training) can be eliminated. Analysis demonstrates anticipated savings for per diem, travel, permanent change of station, instructor manpower requirements, and instructor certification.¹⁰ Further, a reduction of time in resident training will generate more time for the combat medics to be in their units and to contribute to the first objective of increased readiness.¹⁰

CONCEPTS

MISSION/NEEDS/JOB ANALYSIS

To accomplish the above mentioned objectives, the mission of the combat medic will be evaluated. Is the mission of the combat medic the same under the Force XXI plan? Is more expected of the combat medic? Will the combat medic continue to be a jack-of-all trades...medic, vehicle mechanic, helicopter mechanic? Will there continue to be a downward shift of responsibilities? What should be the focus of training for the combat medic? To answer these questions, a detailed strategic plan will be formulated to ensure that all significant areas of concern and identified objectives are thoroughly evaluated to most effectively redesign combat medic training into DL format. If resources are to be used efficiently, if combat medic training is standardized, and if combat medics are to remain accountable for sustainment training and task proficiency, detailed analysis and planning are paramount.

An evaluation of the Table of Organization and Equipment (TOE) and the Table of Distribution and Allowances (TDA) will provide a mission statement for specified units. From these mission statements comes a draft mission list. (This procedure will be modified appropriately when a mission list exists that requires only review and minor modifications.) The draft mission list, with concentration on the combat medic's mission within the unit, will be

validated through one or more forms of analysis: (Information below on analysis and procedures are documented in TRADOC Regulation 350-70, Training: Training Development Management, Processes and Products.)¹¹

(1) Content analysis is basically a literature search of doctrinal manuals, combat medic soldier's manual, combat medic Army Occupational Surveys, and other documentation.

(2) Interview analysis consists of interviews with personnel assigned to key combat medic positions including supervisors of combat medics. This analysis will be conducted through both surveys and face-to-face interviews. Though this form of analysis can prove costly in both preparation time and survey administration, the results are often the most useful.

(3) Observation Analysis will be performed through on-site visits of organizations/combat medics performing their mission. Collective training exercises are also helpful in mission analysis, but are not solely representative of combat missions.

A mission matrices specific to the combat medic will then be compiled to identify various missions of combat medics at all echelons. This is a top-down evaluation of mission with each level building on the previous higher level. As this is accomplished, the developer will also identify actions that are part of collective and individual tasks. A separate list will be concurrently compiled to be used when developing the collective and individual task inventories. The final mission list will then be staffed to key

combat medic personnel, doctrine writers, and combat developers.

When the mission list is staffed and approved, the missions will be analyzed to determine collective tasks required to accomplish the mission. Collective tasks lists, both new and existing, will then be refined and expanded using the same analytical methods above. A task is considered a collective task:

- (1) if it requires group participation
- (2) has specific start and end points
- (3) results in a measurable, observable product or accomplishment
- (4) requires simultaneous performance of task steps.

Training tasks will not be identified if they are not critical to unit or combat medic performance, are not difficult to learn, are performed by only a small number of combat medics, are rarely performed, or if they will not produce undesirable effects if performed incorrectly. (The attempt is to delete tasks which would waste resources and train only significant tasks.)

Task titles will then be developed in a standard format. The format will resemble the same format used to develop the mission statement including an action verb, an object, and a qualifier. At this point, collective tasks will be further developed by a collective task analysis process. However, in order to proceed with the identification of distance learning for the individual combat medic this procedure will not be pursued at this time.

Hand-in-hand with the identification of collective tasks is the performance of job analysis. Surveys of commanders in the field, combat medic supervisors, and combat medics themselves will be developed to determine the existing, specific needs of job performance and leader expectations in both the active and reserve components.¹² Material and data that guide, direct, and explain the job activities of the combat medic will allow for integration of information to determine job tasks. New equipment data should also be incorporated in the job analysis.

INDIVIDUAL TASK IDENTIFICATION

Upon completion of the combat medic job analysis and evaluation of the results will be compiled based on duty positions and job tasks required by the duty positions, i.e., individual tasks. A task will be identified as an individual task if it:

- (1) Has identifiable start and stop points.
- (2) Has a verb and an object which are observable and measurable.
- (3) Is a definite and independent part of a duty that is performed for its own sake.
- (4) Is a specific action consisting of two or more distinct steps.
- (5) Is performed in relatively short periods of time.

Task titles will be developed using the same procedures as mission list development and collective task title development. Individual tasks will be compiled into a comprehensive individual

task inventory (CITI) which will be subsequently staffed with appropriate agencies. The CITI will be finalized based on input received during the staffing process.

Analysis will continue with the forming of a Combat Medic Training Task Selection Board (TTSB). The TTSB will be made up of seven to nine combat medics from the grade of Sergeant to Sergeant Major and supervisors of combat medics including Army Nurse Corps officers, Physician Assistants, and Medical Corps officers who will determine combat medic tasks performance. Criteria for TTSB voting member selection will include representatives from both reserve and active component, TOE/TDA experience, critical care or emergency trauma treatment experience, a minimum of five years of experience as a combat medic or supervisor of combat medics. It is preferable that TTSB members come from areas outside of the AMEDDC&S in order to minimize prejudices and preconceived notions about existing combat medic training. The TTSB president is a non-voting member and will be an AMEDD officer. Objectives of the TTSB:¹³

(1) To provide quantitative expert board decisions.

(2) To select tasks for training based on the systematic group consensus method.

(3) To produce a prioritized task list.

(4) To identify the appropriate skill level of task performance.

(5) To select tasks for mobilization and sustainment.

The TTSB will begin with a series of briefings including: an

unclassified threat briefing; personnel proponency issues and changes in career management field 91; combat and doctrine development issues and potential use of selected tasks in training development. Administrative guidance on selection procedures and training task prioritization will emphasize task modifications and prioritization.

Each individual task title on the CITI will be reviewed by the TTSB members to ensure that all titles accurately reflect job performance requirements. During this process, tasks will also be analyzed in a two stage process. First, the tasks will be assigned a select/nonselect score based on whether TTSB members judge that training is or is not required. This step can also be performed by the TTSB members prior to arriving for the TTSB with tasks titles being modified when the TTSB convenes. Tasks will be carefully reviewed to determine if they are true task statements and not steps of a task. All tasks receive a score of "0" for nonselect and "1" for select. The selection score will be an average of all TTSB members' decisions.

Task priority ratings are determined during the second stage. Tasks with 100% agreement will not require discussion. Tasks with variances in selection scores will be discussed and TTSB members will be permitted to change their selections. Tasks will then be prioritized using a seven-point rating scale. All resulting task priorities rated seven, six, or five are critical tasks; four, three, or two are mission essential tasks; one is other tasks. The

scores will then be averaged to produce an average priority rating (APR). An APR of 4.5 or greater is generally accepted as the standard for identifying critical tasks. This rating is the midpoint between critical and mission essential. Task category identification is as follows:

(1) Critical tasks are tasks determined to be essential to wartime mission, duty accomplishment, and/or survivability. The training base and/or unit will train all critical individual tasks. Many critical tasks will be included in the Soldier's Manual and other sustainment documents. (An APR of 4.5 to 7)

(2) Mission-Essential tasks are tasks necessary to support the stated mission of a combat medic in a peacetime environment. The training base/unit should train all mission essential tasks. (An APR of below 4.5 to 2.0)

(3) Other essential tasks contribute to the performance of critical or mission-essential tasks, but alone will not affect mission attainment (example: administrative tasks). (An APR of 1.0 to 2.0)

The relative order of tasks on the final list represents a training policy. A recommended training strategy is to choose tasks from the critical category. Once tasks have been identified by criticality, each task will be identified in the following categories:

(1) Skill level will identify the skill level where tasks will be trained.

(2) Mobilization tasks are necessary to perform a recognized combat or wartime job function; relates to Army Training Exercise Plan (ARTEP), threat, doctrine, or combat function.

(3) Sustainment training tasks are those tasks which require performance maintenance in order to sustain skill performance.

The voting results will be finalized and approved by the Commander, AMEDDC&S.

MEDIA SELECTION

Following approval, each task will then be analyzed by training developers and subject-matter experts to determine if the task can be trained in DL format and the appropriate DL media in which to train the task. Training developers will then develop tasks using a systematic approach.^{14,15} In order to select a delivery system for specific curriculum, Hardy, et.al. recommend that the program level and distance learning infrastructure must first be considered, followed by a formulation of instructional design and selection of appropriate technology based on instructional content and design. Goals and objectives will be clearly defined.¹⁶ Hardy, et. al. suggest that technology selection can be determined by placing curriculum in two categories: motion and non-motion. Motion indicates that motion is a mandatory part of the instruction delivery necessary for the student to grasp concepts.¹⁷ Practical exercises in combat medic training such as, initiating an intravenous infusion, require motion; in this case, hands-on performance of a specified task. Non-motion curricula are those

that do not require motion. Didactic and lecture modes of instruction fit into this category. Selection for distance learning strategies can be made from, but are not limited to, the following: paper-based instruction in the form of correspondence courses, training manuals, etc.; task-based videos; video teletraining; computer-based instruction; interactive video; on-line instruction (bulletin board, world-wide web).¹⁸

TRAINING DEVELOPMENT

Combat medic distance education training development will be preceded by a detailed learner profile of a large sample population.¹⁹ When analyzed, the profile information will assist training developers and instructors in the training development and instruction processes. Information obtained will enable the training developers to circumvent areas that may prove detrimental to the overall student population as well as enhance those areas that will produce successful learning.

Distance education students often experience little involvement with limited opportunities to ask questions or share ideas. When possible, interaction will be considered a key element in instructional development.²⁰ As much as possible, instruction will include meaningful interactions between and among the students, between instructors and student personnel, and with instructional materials. Two-way communications also motivate students and often results in student enjoyment. Appropriate practice and interaction are also critical to support and enforce learning outcomes.

Technologies are available that facilitate learning both in an individual setting and in a group or classroom setting. All available technologies must be investigated to determine the most appropriate use in all combat medic training environments. Technology selection must take into consideration characteristics of the target audience and the desired results of training.

Motivation is also a key factor and is enhanced by immediate feedback.²¹ Automation technologies that use branching techniques, for example, provide immediate feedback and enforce the student's selection of proper performance. This method provides a high level of motivation that traditional non-interactive computer-based can not provide. (Branching techniques allow the student to proceed until an error is made, at which point the student must return to the spot where he last performed a step of the task correctly.)

COMBAT MEDIC STUDENT EVALUATION

Combat medic student success will be evaluated through tests derived from a centralized test data bank. Each test generated for a specific area of concentration will be different from previous or successive tests. All students will take a criterion-based pretest and posttest and will be required to pass one of the two. If the pretest is successfully passed the student will be able to proceed to the next lesson. The student will also be required to pass hands-on proficiency tests where appropriate in order to ensure mastery of patient treatment tasks. If the student is unable to pass either the pretest or posttest, he/she will be given remedial

training and retested. As distance learning training is conducted, methodology will be adjusted as appropriate to best evaluate student learning.

COMBAT MEDIC PROGRAM ASSESSMENT

The success of the combat medic program will be determined by examining the effectiveness and worth of instruction which is based on the learners' needs. A pilot course validation will be conducted using a control group. Results of the training will be reviewed and evaluated by combat medic subject-matter experts and training developers to determine if there is need for revision including changes, additions, or different learning strategies. Student evaluation will be an integral element of the analysis and will confirm whether DL is the appropriate means of training and will contribute to analysis of overall program assessment.²²

Students will be asked to rate individual lessons and various instructional methodologies, including automation technology, printed materials, interactivity, hands-on training, and remediation training on a five-point Likert Scale using "not helpful" to "very helpful." Formative evaluation will be conducted throughout the training with feedback being used to ensure established goals are met and, in turn, modify strategies where needed.²³

In addition to individual summative evaluations, including student critiques, attrition rates, tests pass rates, program success will be analyzed through liaison team visits to specified units approximately six months after course graduation. Combat

medic course graduates and supervisors of combat medics will be interviewed to determine their opinions of successful learning of recent combat medic course graduates assigned to the unit. The feedback received here will be significant to determining course success. Modifications to training can then be made where appropriate.

RESOURCES

MANPOWER

Adequate numbers of training developers, experienced in DL training development strategies must be available. Training developers will modify existing training materials or develop new materials into effective distance learning design. A systems approach to training development as designed by TRADOC and various distance learning concepts will be incorporated by the training developers to best train specific tasks.

Distance education instructors will require both new and refined skills for distance teaching. These include: understanding of the application of the systems approach to training and training development; concepts of distance education; day-to-day management of the distance education classroom and materials; ability to use technology; effective presentation skills. Instructors will need to modify traditional classroom teaching techniques to include questioning strategies, student involvement activities, appropriate lesson pacing and feedback and motivating students.²⁴

Adequate manpower resources are key to the employment of DL

strategies. Trained instructors must be utilized to their fullest potential.²⁵ Many instructors are not prepared for instruction in the classroom and certainly not for DL training strategies. The "talking head" will prove unsuccessful at best and will easily lead to the downfall of DL training strategies.²⁶ Manpower staffing standards must be revised by TRADOC and the Medical Command to adequately identify instructor and training developer resources in the DL arena.

In addition to proper utilization of trained instructors, technology specialists/site facilitators must be readily available to operate and perform preventive maintenance on highly technical equipment.²⁷ Many students could suffer set backs and dollars could be wasted while waiting for maintenance and work orders to be processed and prioritized. The concept of technology specialists/site facilitators in the classroom is a new concept in combat medic training. The technology specialists/site facilitators will be highly skilled and will maintain and coordinate the use of technology. With 1800 combat medic students in various classes in a given day, site facilitators must be efficient and able to identify and solve automation problems and provide other technical assistance. They must ensure that the system is operative.

FUNDING

Funding for initial DL development of combat medic training is provided through TRADOC. It is a comprehensive, multi-phased approach that will encompass all aspects of DL training fiscal

requirements. Revisions and redesign in the out years will be funded by MEDCOM and AMEDDC&S. Requirements will be clearly and comprehensively identified to maintain up-to-date technology and combat medic technical performance and competency.

RISK ASSESSMENT

The risk assessment level is low. The benefits of providing standardized training to combat medics in remote areas provide no risks. The focus on student learning processes in DL, feedback to the student, and interaction among students and between students and teacher must be continually supported. Many civilian programs, both foreign and domestic, experience high drop out rates.²⁸ Though military students do not have the luxury of dropping out at will, the reasons for dropping out of DL-oriented training will plague combat medics as well if appropriate steps are not taken in the training development and instructor training processes. Reasons for drop out include learner isolation, which becomes more evident with the lack of feedback. Students "needs must be continually supported throughout the learning experience....The success of any distance education system is primarily dependent on the correct mix of human factors that support...learner needs."²⁹

Instructor training in DL strategies is mandatory for success and results in a high risk if not considered in the strategic planning process. The risks become exacerbated when initial training is conducted and instructors are then left to continue on their own. To minimize the risks, instructors should be provided

opportunities for seminars and access to electronic resources³⁰ that provide continued training and exchange of ideas among other distance training educators and developers. Seminars and workshops that focus on new concepts, available automation, and experiments in distance education may motivate and energize instructors and training developers to employ instructional strategies that will in turn energize students.

Further risks lie in the selection of appropriate automation equipment.³¹ Relying too much on automation or not properly evaluating and selecting technological strategies could prove costly. Time could be wasted in training development and instructor training if selections are not made systematically. Risks are multiplied if funding is not provided to maintain expensive infrastructure as well as to have technically qualified personnel dedicated to maintenance and upkeep of equipment and facilities.

CONCLUSION

Continuity exists from the national strategy to balance the budget through the national military strategy which mandates restructure of the military and through the Army Modernization Plan in support of Force XXI. The continuum is further delineated by the Medical Command to the AMEDDC&S which addresses plans and procedures for distance education training development in medical specialties including combat medic training as documented in A Plan for Transitioning Distance Learning into the Training Mission of the Army Medical Department.³² This continuum represents a portion of

the overall strategic plan of the AMEDD in training initiatives. All areas of strategic planning must be fully employed to meet the thesis of conducting and sustaining combat medics to achieve deployability anytime, anywhere. A detailed plan of analysis with stated objectives will support all aspects of the training concepts, including mission/needs/job analysis, individual task identification, medica selection, training development, student evaluation and program assessment. Resource requirements including funding in the out years for automation, personnel, and facilities as well as manpower requirements must be thoroughly researched and funded. The risks involved encompass significant areas that could potentially hinder the success of DL strategies not only for combat medic training, but for DL training in the AMEDDC&S.

The DL concept of training that is coming to fruition throughout the Army is well suited for combat medic training. When thoroughly and correctly analyzed through application of military strategy documented by Lykke,³³ the DL process can benefit all aspects of Army training and particularly combat medic training. The needs of the individual combat medic and the needs of the Army leadership will be fulfilled and in turn contribute to Army readiness, the national military strategy, and the national strategy in general.

ENDNOTES

¹Donald M. Snow and Eugene Brown, Puzzle Palaces and Foggy Bottom (New York: St. Mark's Press, 1994), 25-26.

²Training and Doctrine Command, "Distance Learning," Third Quarter Fiscal Year 96 (FY96) Update, (Fort Monroe, VA: HQs, TRADOC, 1996), 17.

³Training and Doctrine Command, Army Distance Learning Plan (ADLP) (Fort Monroe, VA: HQs, TRADOC, 3 Apr 96), 2-6.

⁴U.S. Army Medical Department Center and School (AMEDDC&S), A Plan for Integrating Distance Learning Into the Mission of the AMEDD (Fort Sam Houston, TX: MEDCOM, Sep 96), 1-3.

⁵Training and Doctrine Command, "Classroom XXI," Third Quarter Fiscal Year 96 (FY 96) Update. 17.

⁶Training and Doctrine Command, Army Distance Learning Plan (ADLP), iv-v.

⁷TRADOC Regulation 350-70, Training Development, Management, Processes and Products, (Fort Monroe, VA; HQs, TRADOC, 1995): ES-7.

⁸Training and Doctrine Command, "Military Training Structure Review (MTR),"
Third Quarter Fiscal Year 96 (FY96) Update, 20.

⁹Training and Doctrine Command, "Automation/Digitization,"
Third Quarter Fiscal Year 96 (FY96) Update, 19.

¹⁰Training and Doctrine Command, Army Distance Learning Plan (ADLP), iv.

¹¹TRADOC Regulation 350-70, "Individual Training Development,"
Training Development, Management, Processes and Products (Fort Monroe, VA; HQs, TRADOC, 1995), IV-1-1 thru V-5-3.

¹²Darcy W. Hardy, Judy C. Ashcroft, Michael D. Abbiatti, "Motion Curricula and Non-Motion Curricula in Distance Education: Technology Selection Reconsidered," Canadian Journal of Educational Communication, (Canada, 1995), 105-106.

¹³U.S. Army Medical Department Center and School, Letter of Instruction for Training Task Selection Board (Texas: AMEDDC&S, 1993), 1-5.

¹⁴TRADOC Regulation 350-70, Training Development, Management, Processes and Products, VI-3-1 thru VI-3-10.

¹⁵Training and Doctrine Command, "Total Army Training System (TATS) Course," Third Quarter Fiscal Year 96 (FY96) Update, 18.

¹⁶Darcy W. Hardy, Judy C. Ashcroft, Michael D. Abbiatti, 132.

¹⁷Ibid., 133.

¹⁸Training and Doctrine Command, Army Distance Learning Plan (ADLP), 2-10 thru 2-11.

¹⁹Daniel Granger and Meg Benke, "Supporting Students At A Distance," Adult Learning 7, no. 1. (Sep/Oct 1995): 22.

²⁰Amy Rose, "Expanding the Potential of Distance Education," Adult Learning 7, no. 1 (Sep/Oct 95): pp. 5 and 8.

²¹Daniel Granger and Meg Benke, 23.

²²Barry Willis, Editor, Distance Education: Strategies and Tools (Anchorage: University of Alaska, 1994), 99-101.

²³Barry Willis, Editor, Distance Education: A Practical Guide (New Jersey: Educational Technologies Publications, 1993), 61.

²⁴Daniel Granger and Meg Benke, 23.

²⁵Eric B. Allely, M.D. "The Medical Readiness Learning Initiative (MERLIN)," Workshop on Education and Training Technology, (Maryland: NIST, 1996), 64-65.

²⁶Barbara L. Martin and William J. Bramble, "Designing Effective Video Teletraining Instruction: The Florida Teletraining Project," ETR&D 44, no.1 (1996): 87.

²⁷Ibid., 87-88.

²⁸Rose, 5 and 8.

²⁹Chere C. and Terry L. Gibson, "Lessons Learned from 100+ Years of Distance Learning," Adult Learning 7, no. 1 (Sep/Oct 95): 15.

³⁰Marcia Baird, "Training Distance Education Instructors: Strategies That Work," Adult Learning 7, no. 1 (Sep/Oct 95): 24-26.

³¹Barbara L. Martin and William J. Bramble, 98.

³²Training and Doctrine Command, "Distance Learning Implementation," Army Distance Learning Plan (ADLP), 3-1 thru 3-18.

³³Arthur F. Lykke, Jr., "Toward an Understanding of Military Strategy," Military Strategy: Theory and Application, (Carlisle Barracks, PA.: U.S. Army War College, 1993), 3-7.

BIBLIOGRAPHY

- Allely, Eric B., M.D. "The Medical Readiness Learning Initiative (MERLIN)," Workshop on Education and Training Technology. Maryland: NIST, 1996.
- Baird, Marcia. "Training Distance Education Instructors: Strategies That Work," Adult Learning 7, no. 1 (Sep/Oct 1995): 24-26.
- Gibson, Chere C. and Terry L. "Lessons Learned from 100+ Years of Distance Learning," Adult Learning 7, no. 1 (Sep/Oct 1995): 15.
- Granger, Daniel and Benke, Meg. "Supporting Students At A Distance." Adult Living 7, no. 1 (Sep/Oct 1995).
- Hardy, Darcy W., Ashcroft, Judy C. and Abbiatti, Michael D. "Motion Curricula and Non-Motion Curricula in Distance Education: Technology Selection Reconsidered." Canadian Journal of Educational Communication (1995): 131-135.
- Lykke, Arthur F., Jr. "Toward an Understanding of Military Strategy". Military Strategy: Theory and Application Carlisle Barracks, PA.: U.S. Army War College, 1993.
- Martin, Barbara L. and Bramble, William J. "Designing Effective Video Teletraining Instruction: The Florida Teletraining Project." ETR&D 44, no. 1 (1996): 85-99.
- Rose, Amy. "Expanding the Potential of Distance Education." Adult Learning 7, no.1 (Sep/Oct 1995).
- Snow, Donald M. and Brown, Eugene. Puzzle Palaces and Foggy Bottoms. New York: St. Mark's Press, 1994.
- Willis, Barry, Editor. Distance Education: A Practical Guide. New Jersey: Educational Technologies Publications, 1993.
- Willis, Barry, Editor. Distance Education: Strategies and Tools. Anchorage: University of Alaska, 1994.
- Training and Doctrine Command (TRADOC). Army Distance Learning Plan (ADLP). Fort Monroe, VA: TRADOC, 3 Apr 96.
- Training and Doctrine Command, Third Quarter Fiscal Year 96 (FY96) Update. Fort Monroe, VA: TRADOC, 1996.

TRADOC Regulation 350-70, Training Development, Management, Processes and Products. Fort Monroe, VA: HQs, TRADOC, 1995.

U.S. Army Medical Department Center and School (AMEDDC&S). A Plan for Integrating Distance Learning Into the Mission of the AMEDD. Fort Sam Houston, TX: MEDCOM, Sep 96.

U.S. Army Medical Department Center and School (AMEDDC&S). Letter of Instruction for Training Task Selection Boards Fort Sam Houston, TX: AMEDDC&S, 1993.