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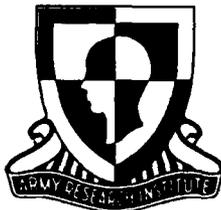
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# A Description and Evaluation of the Army Communicative Skills Program

Linda A. Baker  
University of Maryland

July 1988

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United States Army Research Institute  
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<p>The Army Communicative Skills Program is a recent effort by the Army to improve the writing, speaking, and reading effectiveness of all personnel. This report describes the program, the writing standard it mandates, the programs of instruction it offers, and its precursor, the Army Writing Program. The report also evaluates the potential of the program and considers its relevance to the missions of the U.S. Army Research Institute.</p> <p style="text-align: right;">Keywords: Communicative Skills Instructional Materials (SIM)</p>			
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**Technical Report 808**

**A Description and Evaluation  
of the Army Communicative Skills Program**

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## FOREWORD

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The Army Communicative Skills Office (ACSO) of the U.S. Army Training and Doctrine Command asked the U.S. Army Research Institute (ARI) to review a recently developed program designed to improve the writing, speaking, and reading effectiveness of all Army personnel. This report describes the regulations establishing the Army Communicative Skills Program (ACSP), previous efforts to improve Army writing, factors leading to the current effort, and programs of instruction in communicative skills developed for Army schools. The report evaluates these programs and discusses implications for ARI's research on the academic skills of noncommissioned officers. This report has been provided to the ACSO to use in reviewing current programs. ACSO staff have been briefed on the report's findings.



EDGAR M. JOHNSON  
Technical Director

# A DESCRIPTION AND EVALUATION OF THE ARMY COMMUNICATIVE SKILLS PROGRAM

## EXECUTIVE SUMMARY

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### Requirement:

The Army Communicative Skills Program (ACSP) is a recent effort by the Army to improve the writing, speaking, and reading effectiveness of all personnel. The purposes of this report are to describe and evaluate the various facets of the ACSP and its precursor, the Army Writing Program (AWP), and to consider the potential relevance of the program to the missions of the U.S. Army Research Institute (ARI).

### Procedure:

The first section of the report describes the original regulations establishing the AWP and the ACSP. The report then considers some previous efforts to improve Army writing and the factors leading to the current effort. The report next outlines the explicit guidelines for Army writing mandated by the AWP and describes and evaluates the AWP/ACSP programs of instruction in communicative skills developed for Army schools. The focus is on a writing course for staff and faculty who are to provide instruction for soldiers enrolled in various courses. The report concludes with a discussion of the implications of the ACSP for the ARI's task to improve the academic competencies of noncommissioned officers (NCOs).

### Findings:

The AWP/ACSP set a standard for effective writing: "Effective writing is writing that can be understood in a single rapid reading and is generally free of errors in substance, organization, style and usage." In order to maintain this common standard, the AWP/ACSP mandates broad diagnostic testing, a writing core in the curricula of Army schools, and sensible options for remedial work. The curricula developed to date have focused only on writing, but plans call for expansion to include speaking, listening, reading, and critical thinking skills.

The course for faculty and staff was very impressive: The lessons are well designed with exercises that promise to be very helpful in conveying and reinforcing the course content. Many of the recommendations included in the lesson plans are consistent

with current theory and research on writing and writing instruction. However, the courses for students in the Army schools are only half as long as the faculty course (16 hours as opposed to 32 hours). It is questionable that such abbreviated courses could really contribute much toward improving communicative skills.

**Utilization of Findings:**

The ACSP has the potential to make an important contribution, but its impact has so far been limited. It is too soon to tell whether the goals of the program will be achieved. However, at the present time the program has little to offer in terms of ARI's objectives for improving the academic competencies of NCOs. It may well be that the communicative skills instruction that the ACSP will incorporate into the Basic and Advanced Noncommissioned Officer Courses (BNCOC and ANCOC) can provide a starting point for building a more comprehensive program of instruction tailored to the actual MOS-related needs of NCOs. But, in the meantime, these needs still must be determined.



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A DESCRIPTION AND EVALUATION OF THE ARMY COMMUNICATIVE SKILLS PROGRAM

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# A DESCRIPTION AND EVALUATION OF THE ARMY COMMUNICATIVE SKILLS PROGRAM

## INTRODUCTION

The Army Communicative Skills Program (ACSP) is a recent effort by the Army to improve the writing, speaking, and reading effectiveness of all Army personnel. The regulation establishing the program was dated March 1987, but the program has actually been in place since 1985 under a different name, the Army Writing Program (AWP). The purposes of this report are to describe and evaluate the various facets of the ACSP and its precursor, the AWP, and to consider the potential relevance of the program to the missions of the U.S. Army Research Institute (ARI). Sources of information for the report include several Department of the Army (DA) and U. S. Army Training and Doctrine Command (TRADOC) regulations and pamphlets, one published book on military writing based on the AWP, two research reports prepared for the Army, miscellaneous memoranda and other correspondence, the instructor's manual and student workbook for a staff and faculty writing course, and a briefing by Major Larry Pizzi, head of the Army Communicative Skills Office (ACSO).

The first section of the report will describe the original regulations establishing the AWP and the ACSP. The report will then consider some previous efforts to improve Army writing and will summarize the precipitating factors leading to the current effort. The report will next describe the new Army writing standard established by the AWP and give the explicit guidelines for Army writing that have been mandated by the new standard. It will then describe and evaluate the AWP/ACSP programs of instruction in communicative skills developed for the Army schools. The focus in this section will be on one program of instruction, a writing course intended for staff and faculty who are to provide instruction to soldiers enrolled in various courses. These other courses, including those in place for the Officer Basic Course (OBC) and the Officer Advanced Course (OAC), will also be considered, as will efforts underway to improve literacy skills at the precommissioning level. The report will conclude with a discussion of the implications of the ACSP for the ARI's task to improve the academic competencies of noncommissioned officers (NCOs).

## REGULATIONS ESTABLISHING THE AWP AND THE ACSP

### The Army Writing Program

The Army Writing Program (AWP) was the precursor to the Army Communicative Skills Program (ACSP). The AWP was established by Army Regulation 600-70 dated 5 April 1985. The goals of the AWP were described as "setting an Army standard for effective writing

and providing training at all levels to teach officers, noncommissioned officers, and civilians to write in a simple and understandable style." The regulation also specified that the AWP was to be concerned with the "implementation, conduct, and evaluation of ongoing training in writing, speaking, and reading." Thus, in spite of the name suggesting a focus on writing alone, the initial conception of the program included speaking and reading as well.

The AWP set a standard for effective writing: "Effective writing is writing that can be understood in a single rapid reading and is generally free of errors in grammar, mechanics, and usage." For maintenance of this common standard, the regulation calls for broad diagnostic testing, a writing core in the curricula of Army schools, and sensible options for remedial work.

AR 600-70 lists the goals of the AWP as follows:

- a. Elimination of poor writing within the total Army.
- b. Establishment of a common standard for effective writing.
- c. Effective training, testing, monitoring, and consulting.
- d. Centralized coordination of training and consultation.
- e. Sustained command emphasis on the program.
- f. Cost effectiveness.

#### The Army Communicative Skills Program

The name of the AWP was officially changed to the ACSP in 1987. TRADOC Regulation 350-25, dated 1 March 87, describes the organization and goals of the program. The ACSP defines communicative skills as skills that allow a leader to receive information, analyze it, articulate, and act on it effectively and efficiently. Targeted communicative skills include critical thinking as well as reading, writing, and speaking. The ACSP "establishes the writing, speaking, and reading curricula of the TRADOC school system. It further establishes the communicative skills office at each school and describes the program's involvement in training and doctrinal publications and installation staff writing." The Army Communicative Skills Office (ACSO) at HQ TRADOC is responsible for the program. Its role is essentially that of a monitor and coordinator. Communicative Skills Offices are in place at each school, headed by an officer qualified in writing instruction.

The ACSP regulation sets the standards for effective communication in writing, speaking and reading. Effective writing "can be understood in a single rapid reading and is generally free of errors in substance, organization, style, and usage." Note the greater emphasis on higher-level features of writing in this regulation as contrasted to AR 600-70, which specifies that the writing should be generally free of errors in grammar, mechanics, and usage. Effective speaking "is immediately understandable, substantive, brief, and grammatically correct." The standard for reading is "the ability to read effectively and interpret those materials that soldiers need to do their primary duty."

The goals of the ACSP are similar to those of the AWP, but they reflect a greater emphasis on other communicative skills besides writing. In addition, they highlight the vital role that communicative skills play in a soldier's ability to communicate the commander's intent. In fact, a mission statement for the program is: "To improve the ability of soldiers and civilians at every level to communicate the commander's intent." The goals are as follows:

- a. Improvement of the ability of soldiers and Department of the Army (DA) civilians to communicate the commander's intent.
- b. Recognition of and adherence to a common standard for effective writing, speaking, and reading.
- c. Centralized coordination of training and consultation.
- d. Effective diagnosing, training, examining, monitoring, and consulting.
- e. Development of sensible options for skills improvement.
- f. Elimination of writing, speaking, and reading deficiencies.
- g. Cost effectiveness.

The "packaging" of the ACSP is in terms of leader development. This is a change in direction from the AWP, intended perhaps to garner a broader base of support. As Leiby (1987) suggested in a recent report on the Army Writing Program, the key to selling the AWP to the Army was to tie it to combat effectiveness. This is the approach that has been taken for the ACSP.

## HISTORY OF THE ACSP

### Past Efforts to Improve Army Writing

Leiby (1987) presents a discussion of previous efforts to improve Army writing. An early attempt was represented in a 1959 DA pamphlet, 1-10, "Improve your Writing". Some of the content of this pamphlet apparently is similar to the current regulation. For example, the rationale for a move to improve writing is as follows: "Much Army writing is stilted, verbose, and hard to understand. It wastes manpower by wasting the time of writers and readers." The pamphlet also includes many of the same guidelines that appear in the current regulation, such as using short paragraphs and short sentences. The pamphlet was distributed to the Total Army, but apparently had no lasting impact. Leiby suggests that the reason the effort was unsuccessful was that it was not part of a total program and there was no emphasis from top Army leaders for change.

A more recent effort to improve Army writing, initiated in 1977, was limited in scope, focusing on official Army publications. As described by Leiby, it provided for an editorial control section to enforce a more readable style and a traveling training team to visit field commands and provide instruction in writing improvement. The training team conducted 2-day effective writing workshops in 1979 and 1980, with a focus on writing Army regulations. Although some aspects of style were addressed, such as using active verbs, most of the emphasis was on improving readability by using readability formulas. The program was discontinued following funding cuts in 1980. According to Leiby, there was no evidence that the training carried over to any writing tasks besides regulations and the effects on regulations per se were undoubtedly also short-lived.

### The Impetus for the Current Program: Evidence of Need

Leiby (1987) and the ACSO identified four major precipitating events leading to the current AWP/ACSP effort:

1. Anecdotal reports suggested that there were serious literacy skills problems at TRADOC schools, even among soldiers who were college graduates.
2. TRADOC school commanders complained that they did not have time to read the heavy volume of written documents they received.
3. The Vice Chief of Staff was impressed by the Air Force Effective Writing Course and asked the United States Military Academy (USMA) to develop a comparable course for the Army.

4. Diagnostic testing of officers revealed serious literacy deficits. The Nelson-Denny Reading Test and the Missouri College English Test were given in 1984 to 6000 lieutenants and captains enrolled in Officer Basic and Advanced Courses (OBC and OAC). The reading standard was set at the 12th grade level and the writing standard was set at the 50% level for entering college freshmen. The failure rate for reading was 10-12%, while the failure rate for writing was 57%.

Further evidence of need for improvement in soldiers' writing skills comes from two additional sources: diagnostic testing of noncommissioned officers (NCOs) enrolled in the Basic and Advanced Noncommissioned Officer's Courses (BNCOC and ANCOG) and a large Reserve Officer Training Corps (ROTC) achievement testing program. The Sergeants Major Academy provided a computer print-out of scores on English and reading tests for BNCOC and ANCOG at various schools. The English test was the English Diagnostic Examination, Parts I and II. It is not a writing test per se, but rather is a multiple-choice assessment of basic grammar knowledge (e.g., subject-verb agreement, punctuation, pronouns, modifiers, sentence fragments, etc.). An average of 46% of the soldiers in BNCOC scored below the 9th grade level in English (21% in reading) and an average of 22% scored above the 12th grade level (40% in reading). For ANCOG, the respective figures were 26% (14%) and 45% (47%).

A massive achievement test program was undertaken at ROTC colleges during 1983-1984 and 1984-1985 academic years. The results are presented in a report by Hunter (1986). Cadets in Military Science I (MS I) and Military Science IV (MS IV) were administered the Missouri College English Test, a multiple-choice test designed to assess knowledge of the mechanics and effectiveness of written communication. They were also given the Nelson-Denny Reading Test and the Stanford Achievement Test: High School Mathematics. More than 20,000 MS I cadets were tested, and more than 7500 MS IV cadets were tested. Hunter's report summarizes the data according to ROTC region, gender, racial/ethnic group and academic major. Overall, the test confirmed the suspicion that the cadets were weak in basic skills (though no weaker than the general college population). Moreover, for both MS I and MS IV, the test results varied substantially across ethnic groups, with a much higher percentage of Black and Hispanic cadets earning low scores.

#### THE NEW ARMY WRITING STANDARD

##### ACSO Publications

The Army Communicative Skills Office has published several pamphlets and regulations designed to introduce the new Army writing standard. Included among these are TRADOC PAM 350-5,

Effective Staff Writing (15 Jan 1986); TRADOC PAM 350-6, Effective Staff Writing Exercise Booklet (15 Jan 1986); DA PAM 600-67, Effective Writing for Army Leaders (2 Jun 1986); AR 340-15 (12 Nov 1986). The pamphlets are written as training materials that serve to introduce the new Army writing style to Army staff and leaders. Examples of "good" and "bad" writing are given, and practice exercises are also included. Note that these documents were written when the ACSP was still the AWP, and so the focus is on writing, not on communicative skills more broadly defined to include speaking or reading.

The publications begin with a rationale as to why a new writing standard is needed. They suggest that Army writing does not communicate well and as a consequence wastes time and money. Poor writing is viewed as "largely the result of habit." The outdated style can no longer be afforded, given information overload and complexity of the modern Army. Accordingly, the Army Writing Program (AR 600-70) set new standards for Army Writing.

#### Changes Mandated by the New Standard

The new standard calls for changes in both structure and style. As Macintosh notes, the standard has a "reader-friendly bias."

Structural Changes. The essential change involves getting the "bottom-line" up front. The Army writer must always begin with the main idea. Many Army writers hide the main point. Writers should state the purpose of writing at the outset, starting with the "one sentence you would keep if you had to eliminate all the others."

A second structural change involves the use of "packaging," which is a "general framework of the new writing style" that allows for easy, quick reading. The guidelines for packaging are:

1. First, open with a short, clear purpose sentence.
2. Next, put the recommendation, conclusion, or most important information (the main point). (1 & 2 may be combined.)
3. Then, clearly separate each major section. Use short paragraphs, paragraph headings, or section titles.
4. Last, use a specific format if one is appropriate.

Style Changes. The main style guideline is to use active writing. The passive voice is used too frequently in Army writing. "The passive voice hides the doer of the sentence,

slows communication, and may destroy your reader's ability to understand your point." Another advantage of using the active voice is that it reduces the number of words in a sentence. The documents explain how a passive voice can be recognized (e.g., any form of the verb to be and a main verb ending in ed or en).

Additional Rules to Meet the Army Standard. In addition to the major style and structural changes outlined above, the new standard also calls for the writer to use the following rules:

1. Use short words (no more than 15 percent over two syllables long).
2. Use sentences averaging no more than 15 words.
3. Write paragraphs which, with few exceptions, are no more than one inch deep. (Macintosh suggests 5 sentences as a maximum length.)
4. Avoid jargon.
5. Use correct spelling, grammar, and punctuation.
6. Use I, you, we as subjects of sentences instead of this office, headquarters, etc.
7. Write normal staff papers that are no longer than one page.
8. Avoid sentences that begin with "It is...", "There is...", or "There are..."

(Note: Rules 4 and 8 appear in TRADOC PAM 350-5 but are not included in DA PAM 600-67.)

Editing Tools. The pamphlets detailing the new Army writing standard also introduce two different "editing tools". The pamphlet for Army leaders specifies that these editing tools will allow leaders to give subordinates "specific, quantifiable feedback."

The first tool is called the "quick screen edit". It is used after the writer has completed a piece of writing. The writer is to use a highlighter and mark problems in his or her text corresponding to the rules noted above. After revising the writing in accordance with these rules, the writer is supposed to move the "bottom line" to the beginning of the text if it is not already there and to check the writing for packaging.

The second editing tool is the "clarity index", a readability formula taking into account the number of words that contain more than two syllables (target is 15%) and the number of

words per sentence (the target here is 15). The goal for effective communication is a clarity index of 30, calculated by adding the percentage of words with three or more syllables and the average number of words per sentence. An index of 20 means the writing is too abrupt and an index of 40 means that the writing is too hard to understand. Readers are shown how to compute the index and are given practice using it on a sample of text.

The exercise pamphlet to go along with the Effective Staff Writing pamphlet (TRADOC PAM 350-6) provides many examples of the "old style ineffective communication" and gives the user different writing exercises for practicing the new style. It gives examples of sentences used by military writers that are long and vague and confuse the reader. The user is asked to rewrite several sentences to remove the abstract words and shorten the sentences. The user is also asked to rewrite a memo and put it in the packaging structure and to identify all occurrences of the passive voice in a paragraph and to rewrite it in the active voice. The pamphlet provides a passage for the user to practice doing a quick-screen edit and a paragraph for the user to practice calculating the clarity index. Finally, it provides a memo for the user to revise, first doing a quick screen edit, then restructuring the memo using packaging, then rewriting the memo using the 10 style techniques, and finally calculating the clarity index.

A Published Textbook describing the AWP. A book describing the Army Writing Program, Guide to Effective Military Writing, has been written by Macintosh (1986), a Lieutenant Colonel and West Point English Professor who helped develop the AWP. Macintosh's book describes all of the style and structure changes mandated in AR 600-7 that were summarized above. The book includes the following chapters:

1. Writing in the military (seven rules)
2. A standard for writing
3. When to write
4. Substance
5. Organization
6. Style
7. Correctness
8. Military formats
9. General formats

## 10. Editing techniques

In addition, the second half of the book provides a "Checklist of Grammar, Usage, and Mechanics." Overall, the book is an easy-to-read introduction to the new Army writing standard. The book is recommended as a resource by the ACSP.

### ACSP PROGRAMS OF INSTRUCTION

The regulations establishing the AWP/ACSP specified that new programs of instruction in communication skills were to be developed, "tailored to the ranks of the students and the needs of the Army". Some of these programs have already been developed and implemented while others are yet to be completed. Unfortunately, the amount of information made available to me regarding the programs has been limited, and so I will be able to present details for only one program of instruction. However, it appears that the general thrust of all the programs is to impress upon Army writers the need to adopt the structural and style guidelines mandated by the AWP that were summarized in the preceding section. Because the courses were developed to meet the goals of the AWP rather than the ACSP, the content is restricted to written communicative skills. These courses will soon be modified to reflect the broader goals of the ACSP, integrating reading, listening, and speaking skills into the curricula.

#### A Synopsis of the Staff and Faculty Writing Course

A 32-hour course for staff and faculty was prepared by the U.S. Army Air Defense Artillery School for the AWP and was published by the AWO in the summer of 1986. I received review copies of the Instructor Manual and Student Workbook for this course after I finished writing the summary of the new Army writing standard for the previous section. Because there is considerable overlap in the content of the course materials with the other AWP/ACSP publications, I will refer frequently to points made earlier.

The Instructor Manual is a very detailed description of exactly how the writing course should be taught. It consists of complete scripted lesson plans, copies of all the materials included in the student workbook, with answers to exercises as appropriate, and about 175 masters for vu-graphs. Altogether, it is a 447-page document. The instructor is told when to show specific vu-graphs, when to give practice exercises, when to give graded exercises, and even when to give the class coffee breaks. The intention is obviously to create uniformity of instruction across instructors and courses, and so the level of detail seems appropriate.

The Student Workbook, 198 pages in length, consists of "practical exercises" for each lesson and "desk references" to be used throughout the course and afterwards. The exercises are to be completed in class with immediate feedback. The desk references summarize the major factual content of the lessons, providing various kinds of rules for effective writing (to be discussed below).

During the course, the student completes 14 writing exercises (tests) that are graded by the instructor in terms of clarity, conciseness, completeness, and persuasiveness, as well as a final exercise/test. To earn a certificate of completion, the student must achieve a 70% average. I did not receive copies of the tests, and so I do not know exactly what they cover and how much guidance is provided for instructor grading.

The terminal learning objective for the course is given in the Instructor Manual as follows: "Apply the principles of the Army Writing Program to produce writing that is free of error in substance, organization, style, and usage and that the reader can understand in a single, rapid reading." In other words, the focus is on implementing the new Army writing standard mandated by AR 600-7. The course consists of nine lessons, each with its own set of enabling learning objectives.

Overall, I was very favorably impressed with the course. The lessons were well designed and the exercises should be very helpful in conveying and reinforcing the course content. Most of the examples and exercises had Army-relevant content, consistent with recommendations made by Sticht and others regarding basic skills instruction in the military. Finally, it is clear that the developers of the program are very knowledgeable about their subject area: many of the recommendations included in the lesson plans are consistent with current theory and research on writing and writing instruction. A synopsis of each of the lessons will now be provided.

#### Lesson 1: Communication.

The enabling learning objectives are:

1. Recognize the need for effective written communication.
2. Use the dictionary and usage book as writer tools.

One of the purposes of this lesson is to make the student aware of the limitations of written communication relative to face-to-face communication or telephonic communication (i.e., in terms of the loss of feedback regarding message comprehension). This point is an important one that is stressed in most recent conceptualizations of the writing process (Baker, 1986). A theme

running throughout the course is that oral communication is preferable to written; writing should be used only when absolutely necessary. The lesson also illustrates the problems of over-reliance on abstract, obscure words.

### Lesson 2: Tools of the Writer, and Grammar.

The enabling learning objectives are:

1. Label words in sentences with their parts of speech.
2. Identify and use subject-verb agreement, pronouns and their antecedents, and modifiers and participles to produce clear writing.
3. Sequence sentences into logical order to form paragraphs.

The focus of this lesson is on basic elements of correct usage, as is apparent in the learning objectives. The content is what you would expect to find in virtually any course on writing.

The instructor's manual provides clear and detailed explanations of the various parts of speech and rules of usage, and the student workbook provides desk references that identify the parts of speech and summarize the rules.

### Lesson 3: Correctness and Punctuation

The enabling learning objectives are:

1. Use grammatical constructions and punctuation to produce clear, effective sentences.
2. Punctuate sentences so they are understandable on the first reading.
3. Identify sentence fragments, comma splices, and run-on sentences.

This lesson also focuses on very basic skills of writing: punctuation and sentence construction. The content again is standard for courses on writing. The lesson introduces the idea that punctuation marks function as direction signals for readers, telling them when to stop, go, or proceed with caution. This "traffic-light" metaphor may be helpful to those writers who have weak punctuation skills.

## Lesson 4: Style

The enabling learning objectives are:

1. Recognize how style contributes to effective writing.
2. Identify and convert passive voice to active voice.
3. Take responsibility in writing by using the active voice and personal pronouns.

This lesson contains much useful information that could result in real improvements in communicative effectiveness. It goes beyond the basic skills to consider some important elements of style. It introduces the idea that Army writing frequently is intended to impress rather than express, a point well illustrated by a letter written by a West Point colonel. The student is urged to use "middle-style" words that are at an intermediate level of formality to express rather than impress. For example, stubborn is a middle-style word, contrasted with the formal recalcitrant and the informal hardnosed.

A desk reference accompanying this lesson contains a list of more than 200 "big" words and phrases that "plague military writing" and suggests alternatives. In general, the alternatives are simpler and shorter words, and their use should have the intended effect of making writing easier to read.

An important focus of this lesson is on the essential style change mandated by the AWP: to use the active voice rather than the passive voice. The rationale for using the active voice was mentioned earlier: it clarifies responsibility by telling who is the doer of the action in a sentence. The lesson, and all of the other AWP materials as well, gives the impression that the passive voice should always be avoided, not acknowledging that the passive voice serves an important communicative function. For example, it is the most appropriate voice to use for highlighting consequences and objects rather than doers.

Many guides to writing suggest that personal pronouns should be avoided and that one way to accomplish this is by using the passive voice. However, this lesson introduces the AWP recommendation that personal pronouns be used to make responsibility clear and to avoid a stilted writing style (e.g., by substituting I for this office). This recommendation is purely a matter of style.

One final style recommendation made in this lesson is to use action verbs rather than forms of the verb to be. This is a sound recommendation for increasing the clarity and precision of one's writing as well as the interest level.

## Lesson 5: Writing for Clarity

The enabling learning objectives are:

1. Reduce lengthy writing.
2. Use the Clarity Index.

The lesson includes a desk reference of tips for reducing the length of one's writing. It provides several rules of thumb that are similar to the rules listed above in the description of the Army writing standard: limit use of long words; do not use jargon; use sentences that are 12 to 20 words long; use paragraphs that are no longer than one thumb joint (a restatement of the one-inch rule); limit length to one or two pages. The desk reference also identifies several commonly used constructions that carry little meaning (e.g., "it is important to note that"). The reference also includes a checklist for achieving brevity, such as changing passive to active voice, removing unneeded information, and removing repetitions. Finally, the reference includes the Clarity Index formula.

The lesson content elaborates the principles presented in the desk reference. It offers the student several opportunities to use the Clarity Index (described in the section on the writing standard). Several other readability formulas used by the Army are also introduced, including the FORCAST reading difficulty level formula, the Fog Index, and the Kincaid Index. There has been much discussion recently in the reading literature on the limitations of readability formulas, and I was glad to see that the lesson acknowledged the limitations. It notes that readability does not depend solely on reading grade level: a piece of writing may have a low reading grade level but still be difficult to read. Also important are effective organization, directness, and logic. None of the other publications of the AWP/ACSP cautioned the student to be aware that his or her writing is not necessarily effective simply because the Clarity Index is at the target level.

This lesson also introduces the important idea that the writer must define the reader and direct his or her writing to the needs of the reader. This concern with audience sensitivity is a dominant theme in much of the current literature on the cognitive processes involved in writing (Baker, 1986). None of the other AWP/ACSP publications gave much attention to this issue which deserves serious consideration. The lesson includes a desk reference of key questions to ask to help define the reader: What is the education level of the reader? How much specific knowledge does the reader have about the subject? When will your writing "turn-off" the reader? (This last question is concerned with the style issues considered in previous lessons.)

## Lesson 6: Editing Skills

The enabling learning objectives are:

1. Use the Quick-Screen Edit technique.
2. Edit and revise written material.

A major focus of this lesson is on introducing and providing practice in using the quick-screen edit, discussed earlier in the section on the writing standard. The edit is quick because the writer does not spend time over every word; and the edit is a screen because only those errors that are distracting are highlighted. The procedure is recommended not only for one's own writing but also for the writing of others.

The lesson also focuses on the importance of developing good revision skills. It makes the point that "the key technique in learning to write clearly is learning to rewrite." This emphasis on revision as perhaps the most important process of writing is consistent with current models of writing (Baker, 1986). A desk reference gives several good tips for evaluating one's own writing. For example, it suggests giving one's writing three readings, each intended to focus on a different level of the text. On the first reading, check the content of the manuscript; on the second reading check the effectiveness of organization, and on the third reading check sentence structure, diction and typographical style. Specific features to check for on each reading are specified. This strategy of breaking the task into smaller, more manageable parts makes good sense given the inherent difficulty of revision.

The lesson also discusses the role of the editor in evaluating the writing of others. A desk reference called a Template for Editors uses the acronym DUNK-IT to specify a method "to transform the quality of writing, make your office more efficient, counsel subordinates concretely, and decrease wasted time". It's not clear how useful this acronym is, given that the words for which the letters stand are not that informative: D = Demand; U U = Use; N = Never; K = Keep; I = Incorporate; T = Trim. The user cannot apply the method simply by learning the words associated with the letters: specific knowledge about the intended meanings of the terms is necessary. For example, the meaning one is most likely to give to the word trim based on the lesson content is to reduce the length of the writing. The intended meaning, however, is to trim down the number of people who must approve each piece of writing.

## Lesson 7: Thinking Techniques

The enabling learning objectives are:

1. Identify the problem of getting started in writing.

## 2. Apply the mindmap process.

The focus of this lesson is on the initial stage of writing: planning what one will write. Research has shown that many writers have difficulty getting started because they try to write polished prose from the outset. They are overly concerned with structure and style and have difficulty generating fresh ideas. Accordingly, a common recommendation is for writers to ignore the needs of the reader at the very outset and to adopt some sort of technique for getting one's ideas down on paper quickly and efficiently. (See Baker, 1986, for a review.)

This lesson introduces one such technique, mindmapping, intended to help the writer get his or her thoughts down quickly and to organize them effectively. The lesson does not recommend traditional outlining as a tool to serve this purpose, and this too is consistent with current research on writing. Mindmapping is described as a technique intended to "reduce the gap between the capabilities of the mind and the hand to capture information that might otherwise be lost". Writing during mindmapping is quick, constant and abbreviated.

The basic steps involved in the use of the mindmap technique are as follows: Writers first write the topic of their paper in the center of a sheet of paper. Then, they write down everything they can think of about the topic in single words or brief phrases. Then, they look for ideas that are related and draw connecting lines around them to group them into natural relationships. Finally, they assign titles to the groupings. The lesson provides practice exercises for applying the technique, and a desk reference provides a complete sequence of 10 steps involved in mindmapping.

Overall, the mindmap technique is a sound one, consistent with current theory and instructional practice. It is important for writers to use some sort of technique, whether mindmapping, brainstorming, "nutshelling", or free associating, to get their ideas down on paper. The mindmap technique has the added advantage that it helps the writer identify relationships among ideas, another important preliminary planning step.

### Lesson 8: Organizing

The enabling learning objectives are:

1. Determine the purpose and audience of the writing product.
2. Select and sequence grouped ideas to support the aim of the paper.
3. Arrange the information under headings.
4. Write a draft of the paper.

The lesson focuses on three early decisions that are involved in writing after the initial mindmap has been made. The first is to determine purpose and audience. Once this is done, ideas included in the mindmap can be evaluated as to whether they are compatible with audience needs and aims. The organization of the paper should vary with different purposes and audiences.

The second decision (actually a recommendation) is to use headings. Headings are considered helpful to the reader in three ways: they provide brief overviews along the way; they help the reader read selectively; and they give the reader places to stop temporarily. Headings are also considered helpful to the writer because they relieve him or her of the need to write transition passages: "They provide all of the transition you need. They allow you to flow smoothly and easily from the end of one major idea to the beginning of the next." While I agree that headings are very helpful to the reader, I disagree with the assertion that they relieve a writer of the need to use transitions. The writer should at least have an implicit notion of how the topics are related and should convey this notion explicitly if it is not immediately obvious to the reader. Very often military writing appears choppy and disorganized because of exclusive reliance on headings to provide direction and organization. It is often as if the writer substituted headings for clear and logical thinking.

The third decision (again a recommendation) is to put the bottom line up front. This is the major structural change mandated by the AWP and discussed in the section on the writing standard. Writers are instructed to present recommendations, solutions, and conclusions early. This allows the reader who seeks only the main ideas to get the most important information first. The recommendation is certainly consistent with the AWP goal of increasing the efficiency of written communication, but the student should be informed that this is not standard practice for non-military writing.

### Lesson 9: Putting It All Together

The enabling learning objective is:

1. Apply the Army writing standard to produce a final written information paper.

The lesson provides desk references that review the writing and editing skills covered in earlier lessons. The Template for Effective Writers introduces the 2D2F rule: write two drafts and two finals. The first draft is the mindmap. During this planning stage the writer should answer what, when, why, how, and who questions about the topic. The second draft is to be written using the letters P. A. O. I. O. U. as a guide: P = Put the important material up front; A = Arrange your information under headings; O = One joint, one page rule; I = Include details; O = Organize material in a logical sequence; and U = use

the quick screen edit and the Clarity Index. The first final is a "fake final" to be edited and revised by the writer and reviewed by coworkers. The second final is the "final final".

The 2D2F rule is probably a reasonable one for writers to write by. My only reservation is that it perpetuates the idea that writing is a linear process: first comes planning, then comes writing, then comes revising. Research has shown that planning, translating (writing), and revising do not occur in a fixed sequence; good writers shift among the processes throughout the writing task (Baker, 1986). Constraining writers to a particular sequence of processes may cause the final product to suffer.

The lesson includes examples of Army writing in different formats written in "before" and "after" versions. The "before" versions illustrate typical Army writing and the "after" versions illustrate the new style. These materials are similar to those included in the other AWP/ACSP publications and training materials described earlier.

The lesson concludes with a 5-hour graded writing exercise. Upon completion, students are asked to complete a course evaluation form.

#### Programs of Instruction for Other Courses

The first sets of instructional materials that were developed for the AWP consisted of two 16-hour blocks of instruction for OAC and OBC, written in 1985 by West Point officers. The new course material was first used in the summer of 1985. These blocks replaced 12-hour blocks of instruction in communicative skills that had been in place previously. It is not clear how much overlap there is between the old and new curricula, although the previous writing requirements for OBC and OAC were quite minimal. OBC required students to prepare a 500-word sample that took various forms depending on the school, and OAC required a 2500-word sample that also took various forms depending on the school.

The complete programs of instruction (POI) for OBC and OAC were not available for review, but hour-by-hour listings of the programs were provided. Judging by these listings, it appears that the course content is fairly similar to that included in the staff and faculty writing course. This is to be expected given that the primary purpose of the course for staff and faculty is to prepare instructors to teach the other courses offered at the Army schools. However, the OBC and OAC courses are only half the length of the staff course, and they were developed by different people. Moreover, individual schools may well be implementing the courses in different ways. Although the ACSO seeks uniform POIs across schools, instructors have objected to the amount of time required for what they see as basic skills instruction removed from the context of MOS-relevant training.

The POI for OBC includes:

1. Selecting the tools: Usage Book and Dictionary
2. Grammatical constructions (parts of speech, sentences, paragraphs)
3. Writing for clarity (exercises in correct usage)
4. Military formats (7 different ones covered)
5. Civilian formats (business and social letters)
6. Correctness (focus on basic grammar such as subject-verb agreement, noun-pronoun agreement; complete sentences; pronoun reference; dangling modifiers and participles)
7. Style (active vs. passive voice, vocabulary)
8. Editing your own writing (for substance, organization, style, correctness, unity, and precision)
- 9, 10. Writing exercises in military formats
- 11, 12. Writing exercises in civilian formats
- 13, 14. Editing exercises in military formats
- 15, 16. Editing exercises in civilian formats

In addition, four writing submissions to be prepared out of class are specified.

The POI for OAC includes:

1. Introductory review (tools, grammatical constructions)
2. Correctness (same 5 aspects as OBC, also includes punctuation)
3. Summaries (how, what, and when)
4. Military formats (9 covered)
5. Civilian formats (4 covered)
6. Style (same 2 as OBC, also includes use of first person)
7. Editing skills (your own writing, and writing of others)
8. Editing for clarity and correctness
- 9, 10. Strategies for organization (problem identification, mind mapping, grouping, outlining)

- 11, 12. Writing exercises: Mixed formats
- 13, 14. Editing exercises: Military formats
- 15, 16. Writing exercises: Military formats

In addition, six writing submissions to be prepared out of class are specified.

Similar 16-hour programs of instruction have been or will be developed for other courses, including ANCOC, the First Sergeant Course, the Sergeants Major Course, and the Command and General Staff Officers course. The goal of all the programs is to make soldiers better communicators by teaching "direct, concise, logical thinking, writing and speaking." In addition a 4-hour effective writing seminar for staff is offered at various installations and in fact is mandatory at some (e.g., Fort Monroe). (The CSO at Fort Belvoir offers the seminar here at Army Materiel Command once a quarter.) The TRADOC PAM on effective staff writing and the accompanying exercise booklet are intended to be used in these seminars.

#### Improving Communicative Skills at the Precommissioning Level

In 1986, a task force was created to explore the possibility of establishing a precommissioning literacy skills standard. The push for such a standard was based on the evidence of the poor writing skills shown by officers enrolled in OBC and OAC. The achievement test results reported by Hunter (1986) also demonstrate that a problem exists. Moreover, it has been found that cadets with low scores on a standardized writing test performed more poorly as a group on most precommissioning training measures examined. Of course, we cannot conclude that poor writing was a cause of poor performance. Nevertheless, additional research is clearly needed to examine precommissioning literacy skills in relation to career development and job performance.

A pilot program for improving communicative skills among ROTC cadets has been initiated by the ACSP. The goals of the pilot are to gather data on the extent of the literacy problem and data that will allow for the "best possible solution" to the problem. The current status of the program was described by Major Larry Pizzi, head of the ACSP, in a 16 July 1987 meeting at TRADOC. The pilot program, which is running from 1 March to 1 December 1987, involves about 20 ROTC schools. The program consists of an initial screen for reading, writing, and speaking skills followed by additional teaching for those whom the screen identifies as deficient. Plans call for the instruction to be followed by a re-evaluation of the deficient students. Training and testing of third year military science (MS III) students was

begun in the spring of 1987, and preliminary data were being analyzed this summer. Data collected included grades from whatever composition courses the students had taken, grades in communications or speech courses, if applicable, scores on the Nelson-Denny Reading Test, and scores on the Test of Standard Written English (TSWE). In addition, students were required to present a speech on a standardized topic, and the instructors were provided with guidelines for scoring performance. No writing samples were collected, although there is a plan to collect samples in the fall. One problem the ACSO has encountered in interpreting the data is that some ROTC cadets took the Nelson-Denny and the TSWE when they first began college, some three years previously, while other cadets took the tests as part of the pilot program. The only preliminary result reported to us is that students who had taken a course in public speaking or communication scored higher on the speech test than did those who had not.

A second effort to improve precommissioning literacy skills is also underway. A full-term (45 hours), college-level writing course has been developed as part of the ROTC curriculum. The course is currently being taught at three Historically Black Colleges (HBCs). The need for remediation is particularly pressing at these colleges, given that the failure rate of Blacks in the OBC and OAC diagnostic testing was 80% and the failure rate of Blacks on the ROTC achievement testing program was also quite high.

## CONCLUSIONS

### General Evaluation of the ACSP

The effectiveness of the AWP/ACSP programs of instruction has not been formally evaluated, and I am not aware of any plans for doing so. However, the curricula used in OAC, OBC, and ANCO are to be revised this year to reflect more adequately the broader goals of the ACSP relative to the AWP (i.e., to integrate listening, speaking, and reading skills into the program as well as writing skills). There is no plan to expand the length of the courses beyond 16 hours, even though new content is mandated. It is certainly questionable how much improvement in communicative skills can be effected within such a short period of time. The ACSO should certainly initiate an assessment of program effectiveness.

Given the evidence cited earlier that writing deficits exist among officers and NCOs, it is clear that remedial programs will need to be widely used. The ACSP has not yet developed standard remedial blocks of instruction, although a pilot test of a 12 to 15 hour program prepared by a civilian developer was to be given at Fort Benning sometime this year (Leiby, 1987). The remedial program focuses on writing, speaking, and reading; it also

includes lessons on studying, outlining, taking notes, and time management. Again, it is not clear how much can be accomplished within such a short course.

These criticisms notwithstanding, I think the ACSP has the potential to make an important contribution to the Army. It is encouraging that military leaders are concerned enough about communicative skills to attempt to initiate a far-reaching program. The new Army writing standard is generally sound and should have the desired effect of enhancing the readability of Army documents. As noted earlier, the writing course for faculty and staff appears to be an excellent one. Presumably, this will serve as a model for the writing component of the new broader curricula yet to be developed.

#### Relevance of the ACSP to ARI's Task of Improving Academic Competencies of NCOs

I was asked to prepare a report on the Army Writing Program in order to evaluate the program and make recommendations to the U. S. Army Research Institute (ARI) regarding its potential for improving academic competencies of soldiers, particularly noncommissioned officers (NCOs). However, because the AWP/ACSP has been in a state of flux since its inception (i.e., it has been tossed from one proponent to another), I have had difficulty obtaining accurate, up-to-date information. Some of the materials requested for my task have not arrived in time to be incorporated into this report.

My evaluation task was further complicated by the fact that the programs of instruction that are envisioned by the newly-defined ACSP are not yet developed. The materials that I saw are now considered out of date and it is not clear how much change there will be in the new programs. Although I was very impressed with the writing course for staff and faculty, I suspect that the abbreviated courses for soldiers are of lesser quality. Thus, it is unlikely that the various programs of instruction for NCOs will have much impact on the academic competencies of NCOs. Those soldiers whose writing skills are adequate will presumably learn the rules mandated by the new standard. However, those soldiers whose writing skills are not adequate will benefit little from the limited amount of instruction they will receive. The ACSO recognizes that remedial instruction will be needed for some soldiers, but the plan is for this remedial instruction to be taken concurrently with the regular instruction, an approach that is unlikely to succeed.

Overall, neither the AWP nor its successor, the ACSP, has had much impact as yet. Indeed, many people within the Army are unaware of its existence (Leiby, 1987). It is too soon to tell whether the goals of the program will be achieved. However, the program has little to offer at the present time in terms of ARI's objectives for improving the academic competencies of NCOs. ARI should follow through on its original task objectives: to

determine existing and future NCO skills requirements and evaluate NCOES instruction in academic competencies; to determine existing and future NCO academic competency requirements for training, job performance, and career progression; to evaluate NCOES instruction in academic skills. It may well be that the communicative skills instruction that the ACSO will incorporate into the Basic and Advanced Noncommissioned Officer Courses (BNCOC and ANCOC) can provide a starting point for building a more comprehensive program of instruction tailored to the actual MOS-related needs of NCOs. But in the meantime, these needs still must be determined.

## REFERENCES

- Army Regulation 600-70 (1985). The Army Writing Program. Washington, DC: Headquarters, Department of the Army.
- Army Regulation 340-15 (1986). Effective writing and correspondence--The new Army writing style. Washington, DC: Headquarters, Department of the Army.
- Baker, L. (1986). Towards enhancing written communication skills in the Army: Cognitive and metacognitive perspectives (Technical Report 755). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A197 396)
- Department of the Army Pamphlet 600-67 (1986). Effective writing for Army leaders. Washington, DC: Headquarters, Department of the Army.
- Hunter, F. T. (1986). ROTC achievement testing program: School years 1983-1985 (Research Report 1429). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A178 670)
- Leiby, B.A. (1987). The Army Writing Program: Can it succeed? Executive Research Project, #F-9. Fort McNair, Washington, DC: The Industrial College of the Armed Forces.
- McIntosh, W. A. (1986). Guide to effective military writing. Harrisburg, PA: Stackpole.
- TRADOC Pamphlet 350-5 (1986). Effective staff writing. The Army Writing Office, HQ TRADOC, Fort Monroe, VA.
- TRADOC Pamphlet 350-6 (1986). Effective staff writing: Exercise booklet. The Army Writing Office, HQ TRADOC, Ft. Monroe, VA.
- TRADOC Regulation 350-25 (1987). Communicative Skills Program. HQ TRADOC, Fort Monroe, VA.