A Study of the Attitudes of Teachers of Technical Subjects at South Dakota State College Toward Student Proficiency in Language Skills

Walter C. Daniel

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A STUDY OF THE ATTITUDES OF TEACHERS OF TECHNICAL SUBJECTS
AT SOUTH DAKOTA STATE COLLEGE TOWARD STUDENT
PROFICIENCY IN LANGUAGE SKILLS

BY

WALTER C. DANIEL

A thesis submitted
in partial fulfillment of the requirements for the
degree Master of Science, Department of
English, South Dakota State
College of Agriculture
and Mechanic Arts

June, 1959

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A STUDY OF THE ATTITUDES OF TEACHERS OF TECHNICAL SUBJECTS
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This thesis is approved as a creditable, independent investigation by a candidate for the degree, Master of Science, and acceptable as meeting the thesis requirements for this degree; but without implying that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Adviser

Head of the Major Department
ACKNOWLEDGEMENTS

The author wishes to express deep gratitude for the advice, criticism, and assistance given by the many people who helped to make this thesis possible.

Professor Maynard Fox, advisor for the study, offered the patient, sympathetic, and wise counsel which was needed throughout the many weeks of work which went into this thesis.

Associate Professor Carl L. Wilson, of the Speech department, encouraged the author to pursue this study during a class in Research Methods in Language Arts at South Dakota State College, and throughout the school year he was extremely helpful as the study progressed.

The Deans of the divisions of Agriculture, Engineering, Home Economics, Nursing, Pharmacy and the Head of the Chemistry department were especially helpful in securing the cooperation of the teachers in their area. And it was the teachers, of course, who offered the opinions which made up the substance of the thesis.
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CHAPTER I

INTRODUCTION

The Problem

It was the problem of this study to answer the question:
How effective is the program for the teaching of language skills at South Dakota State College in providing students with the level of proficiency which they need in the study of technical subjects?

Definition of Terms

A brief statement is given here of the meaning which is attached to key terms used throughout the thesis:

1. language skills: at the beginning limited to areas of writing, reading and oral communication.

2. technical subjects: courses in agriculture, chemistry, engineering, home economics, nursing and pharmacy.

3. level of proficiency: degree to which students satisfy teacher demands for correct language usage.

4. modification: changes in procedures and materials of instruction which have been deviations from the original plans of a course.

5. students: all persons studying technical courses, irrespective of their classifications.

6. teachers: all personnel of the college who are conducting courses or directing students in research projects; the term is used to avoid the awkward "teaching personnel" or "instructors and professors."

Limitation of the Problem

The study was limited to the divisions of Agriculture, Engineering, Home Economics, Nursing, Pharmacy and to the department of Chemistry of the Division of Science and Applied Arts. Courses in these curricula were considered "technical" among those taught at South Dakota State College. Proficiency levels were studied in the areas of reading and writing only.

Justification of the Problem

During the last decade many professional journals have carried articles which discussed the mastery of language skills by students of technical subjects. Some of the publications which are devoted to the teaching of language skills have published widely on the problem. Among this group are: College English, Journal of Communications, Journal of Developmental Reading, and the Quarterly Journal of Speech.

However, a greater emphasis on the need for satisfactory relation between facility in language itself and the subject matter of the technical disciplines has been made not by English and speech journals but by other technical and general publications. Among these

The journals listed above and such books as Practical Speaking for the Technical Man, Technical Report Writing, Effective Oral and Written Communication, and The Technical Institute have been written for the express purpose of handling problems, materials and procedures in helping students gain more effective communications skills.

At South Dakota State College a College Communications Committee was established as a result of faculty action in the fall of 1957 for the purpose of studying the problem of proficiency in English and speech. This plan was indicative of the concern at South Dakota State College over the low level of language skills found among many students.

Procedures

A pilot study was used to initiate findings for the problem. The raw data from teachers in technical courses was thought to be significant as a basis for building a schedule of discrete language skills. Such a method tended to exclude some items which teachers of English and speech might have considered important, but it was thought
justifiable as a means of providing a meaningful classification for respondents.

Twenty-five areas of the college were used: agricultural education, agricultural engineering, agronomy, animal husbandry, bacteriology, botany, chemistry, dairy husbandry, economics, entomology-zoology, horticulture, plant pathology, poultry husbandry, veterinary science, civil engineering, engineering shops, general engineering, industrial engineering, mathematics, home economics (division), nursing (division) and pharmacy (division). The divisions were handled as units rather than being broken down into separate departments.

Teachers in the above areas of the curriculum were asked to list specific deficiencies which they found prevalent among their students in reading, writing and oral communication. Additional comments which might be helpful to the study were asked for.

Approximately thirty-two percent of the teachers of technical subjects responded to the pilot study questionnaire (Table 1), and they tended to evaluate their students on the basis of writing and reading skills almost exclusively. The questionnaire was designed so as to elicit judgments from teachers in the broad areas of writing, reading and oral communication. There was no breakdown of discrete skills within each area.
### TABLE I. PARTICIPATION IN PILOT STUDY QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Department or Division</th>
<th>Questionnaires sent</th>
<th>Number returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agricultural Education</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2. Agricultural Engineering</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>3. Agronomy</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>4. Animal Husbandry</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>5. Bacteriology</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6. Botany</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>7. Dairy Husbandry</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>8. Economics</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>9. Entymology-Zoology</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>10. Horticulture</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>11. Plant Pathology</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>12. Poultry Husbandry</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>13. Veterinary Science</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>14. Civil Engineering</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>15. Electrical Engineering</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>16. Engineering Shops</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>17. General Engineering</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>18. Industrial Engineering</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>19. Mathematics</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>20. Mechanical Engineering</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>21. Physics</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>22. Home Economics</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>23. Nursing</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>24. Pharmacy</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>25. Chemistry</td>
<td>18</td>
<td>4</td>
</tr>
</tbody>
</table>

Totals: 248 | 79

The comments which teachers made on language skills were tabulated under the headings of Reading and Writing in order to show the frequency with which certain skills were listed. (Table 2.)
TABLE II. FREQUENCY OF AREAS OF DEFICIENCIES

<table>
<thead>
<tr>
<th>Areas of Language Skills</th>
<th>Frequency</th>
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<tbody>
<tr>
<td><strong>Reading</strong></td>
<td></td>
</tr>
<tr>
<td>1. Critical reading</td>
<td>10</td>
</tr>
<tr>
<td>2. Rate of reading</td>
<td>16</td>
</tr>
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<td>3. Comprehension</td>
<td>26</td>
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<td>4. Word meaning</td>
<td>8</td>
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<td>5. Word recognition</td>
<td>6</td>
</tr>
<tr>
<td>6. Retention</td>
<td>11</td>
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<tr>
<td>7. Skimming</td>
<td>3</td>
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<tr>
<td>8. Pronunciation</td>
<td>1</td>
</tr>
<tr>
<td><strong>Writing</strong></td>
<td></td>
</tr>
<tr>
<td>1. Grammar and Punctuation</td>
<td>27</td>
</tr>
<tr>
<td>2. Spelling</td>
<td>49</td>
</tr>
<tr>
<td>3. Logical organization</td>
<td>35</td>
</tr>
<tr>
<td>4. Limited vocabulary</td>
<td>9</td>
</tr>
<tr>
<td>5. Choice of words</td>
<td>8</td>
</tr>
<tr>
<td>6. Sentence structure</td>
<td>12</td>
</tr>
<tr>
<td>7. Clarity of style</td>
<td>26</td>
</tr>
<tr>
<td>8. Penmanship</td>
<td>16</td>
</tr>
<tr>
<td>9. Neatness</td>
<td>3</td>
</tr>
</tbody>
</table>

Very few respondents listed specific deficiencies in oral communication. When a comment was given, it was limited to such statements as, "Students need speech training," "Students do not have poise," and "Students rely too heavily on notes." Because of the nature of these responses and the small number made, it was felt that the
study would be more meaningful if it were restricted to the areas of reading and writing.

Several general statements and comments suggesting causes of student deficiencies in reading and writing were reported. Some of them are listed below:

Reading

1. "I find very few students read periodicals (scientific, technical, news and world affairs) during their college years, unless they are specifically assigned as classwork."
   - Electrical Engineering.

2. "Linguistic standards at South Dakota State College are depressed by accepting students without benefit of a qualifying examination which would turn away students who did not meet minimum standards. . . . While it seems a bitter pill for most English professors to swallow - the fact remains that English taught during and after the study of a foreign language is much more effective than English unsupplemented by foreign language study. . . . It is my impression, without data at hand, that more than half of the students who enter South Dakota State College could not have studied a foreign language in their hometown high school because the school did not offer same."
   - Plant Pathology.

3. "Most students do not read nearly enough."
   - Civil Engineering.

4. "... inability to study and attempt to understand anything but the simplest material. . . ."
   - Agricultural Engineering.

5. "... a tendency to ignore the little words and concentrate on the biggest nouns in the sentence."
   - Economics.

6. "... inability to be discriminating in what should be read carefully and what may be skimmed."
   - Home Economics.
7. "Arithmetic, along with reading . . . is being neglected in pre-college education."
   - Agronomy.

8. "They do not enjoy reading — it seems to be too much work."
   - Dairy Husbandry.

9. "Too many courses and too much time is spent in the English department on Milton, famous poetry and prose, not enough on drill of fundamentals. Take some of that out and give more on grammar, punctuation, spelling, organization of writing, letter writing, etc."
   - Dairy Husbandry.

Writing

1. "The student is too dependent on a multiple choice answer or a true-false question type of communication. Such students feel that a check-mark, a line, or a phrase is an adequate method of communication."
   - Economics.

2. "Emotional dependence leads to lack of original expression."
   - Botany.

3. "I believe these students have written too many T's and F's and check-marks."
   - Botany.

4. "The student seems more concerned with how long a term paper is to be than what is to be in it."
   - Home Economics.

5. "Actually, if the student could be impressed with the need for written communication, the problem would be solved; but until then English is merely a hurdle that is not an objective to an end."
   - Dairy Husbandry.

The specific deficiencies which were listed by respondents were arranged into a schedule which included the following items:
Writing Skills:

A. Mechanics
1. Correct usage
2. Correct spelling
3. Correct punctuation
4. Accurate use of words

B. Rhetoric
1. Logical organization
2. Logical paragraphing
3. Clarity
4. Coherence (Indicating relationship between ideas, etc.)
5. Economy (Avoiding excess words.)

Reading Skills:

A. Techniques
1. Rapid reading
2. Good comprehension
3. Good word recognition
4. Good critical ability
5. Good retention
6. Good knowledge of word meaning
7. Good pronunciation

B. Attitudes
1. Strong desire to read
2. Careful reading
3. Effective concentration while reading

The schedule listed above was, in effect, composed by the respondents to the pilot study, and it served as the basis for the approach to the problem being studied: How effective are the practical
courses in English for the needs of the students in the technical disciplines at South Dakota State College?

A questionnaire was constructed as a means of studying teachers' opinions, which were elicited through their responses to three questions:

1. How do you rate the level of proficiency in language skills of the typical student enrolled in classes which you now teach (or have taught recently) at South Dakota State College?

2. How do you rate the listed language skills as to their importance for a student who will do satisfactory work in classes which you teach?

3. To what extent have you modified assignments and teaching procedures in order to accommodate to levels of language skills which your students possess?

The first question was accompanied by an eleven-point scale which would register judgments from "Unsatisfactory" to "Desirable;" the second used a range of evaluation from "Negligible" to "Indispensable."

The question concerning modifications in teaching procedures and materials contained the following list of items: lengthened cur-
riculum, choice of easier textbooks (based on lower level of
diction), use of additional workbooks, changes in methods of teach-
ing, limiting coverage of material, detailed explanation of texts,
curtailment of written reports, limitation of collateral reading
assignments and use of make-up assignments. A space was provided for
respondents who wanted to write in modifications not listed. On the
schedule was placed a column which was to be marked "Used" if the
teacher had made use of any of the items of modification, and a
six-point scale was attached for indicating the degree of change.
(Appendix 2.)

Individual conferences were held with the deans of the Di-
vision of Agriculture, Division of Engineering, Division of Home
Economics, Division of Nursing, Division of Pharmacy and the De-
partment of Chemistry. The purpose of the conferences was to ac-
quaint the respective administrators with the study, to solicit
their cooperation in distributing the questionnaires, and to en-
courage teachers to execute and return them. All of the admini-
strators expressed concern over the language skills which they
had observed among their students. Each agreed to cooperate with the
study and each asked for a copy of the findings.

Expected Outcomes

Because of the initiation of a proficiency test in English
and speech at South Dakota State College and the fact that the majority of the juniors who took that test in Winter quarter, 1958-1959, failed to pass it, it was felt that teachers would judge their students to be somewhat deficient in language skills. Teachers were not expected to be concerned about all of the skills listed on the schedules. It was expected that some teachers would state that they had not had sufficient opportunity to judge their students on the skills being studied.

Modifications were expected to be limited largely to such procedures as use of additional workbooks and detailed explanation of texts. It was felt that only a small percentage of the teachers would report that they had actually curtailed written reports because students were not able to do them satisfactorily.

The most important outcome expected from the study was a clear indication of the respondents' judgment of the efficacy of the practical courses in English offered at South Dakota State College. Although the data to be obtained was a matter of personal opinion and referred to the "typical student," it was expected that the English department could, if it were at all interested, study the findings of the investigation as they were related to the freshman composition courses. It must be pointed out here, however, that the study was not initiated or suggested by the
Finally, it was expected that the several statistical tables for which the study would provide data would equip the English department at South Dakota State College with information which could not have been obtained from any other source than such an investigative study.
FOOTNOTES FOR CHAPTER I


(5) See Appendix I.

CHAPTER II

REVIEW OF THE LITERATURE

There were no studies available which explored the specific problem with which this thesis was concerned. It is considered important, though, that many articles in professional journals have been reports on the manner in which certain schools have tried to cope with the problem of providing adequate instruction and practice in language skills for their students of technical subjects.

David Mack, in "Inter-departmental Cooperation for Better English," reported that at Lehigh University a Communications Committee was drawn from the several technical departments and the English department, and committee members were asked: "What are you personally doing to improve the quality of English used by your students?"

Mr. Mack gave the plan of the Chemical Engineering department as an example, which listed the following procedures:

1. Essay-type examinations were used whenever possible; penalties were given for writing errors.

2. Mathematics-type examinations were presented in essay form rather than numbers whenever feasible.

3. Comparisons were made of written treatment of technical material by different authors.

4. All students were required to write absence excuses and similar correspondence as business letters.
5. Students were shown adequate means of presenting facts: tables, graphs, drawings, etc.

6. Model reports were prepared by the staff and made available to students.

7. Private conferences were utilized to discuss student reports.

8. Students were required to write "comprehensive reports" at the end of each semester; also they were given a group of student reports and told to write a report which would include and relate all of the information found in the set of papers.

Austin Wright, Chairman of the Department of English at Carnegie Institute of Technology, summarized in this manner the philosophy upon which the Carnegie inter-departmental plan between English and the technical subjects works:

Cooperation depends primarily upon the cooperation of administrative officers and department heads and teachers in engineering and science with the program of English, and the development of a program in English should make cooperation desirable and inventive.

He went on to state that at Carnegie Institute of Technology the English courses are not considered "practical courses" but that the teaching of English composition is done as a means of clarifying the student's thinking and strengthening his skills in communication. In the same article the president of the school was quoted as having said:
There is not a single better discipline in straight thinking than the insistence upon clear and logical thought structure in written analyses and expositions. A written statement is a faithful mirror of the state of one's thoughts; and a discipline which brings about a rearrangement of material and phraseology into a logical and unified form, implies also a corresponding readjustment of thoughts in one's mind.

Robert R. Rathbone observed that the teacher of technical writing has the problem of introducing realism into his courses, and that this responsibility is a special challenge inasmuch as such a teacher cannot fill his classroom with impressive hardware and machinery, nor can he perform dramatic experiments with physical objects. Instead, the writer, concluded, the English teacher who deals with technical students must try to create a realistic writer-reader situation with only words at his disposal.

The article continued:

If the teacher relies solely on the familiar English course in technical writing as his means of communication, his chance of creating realism is remote. Most engineering students resign themselves at an early age to a sort of "peaceful co-existence" with such courses "from the other side of the campus," and not infrequently with the English language itself.

Having thus set forth the problem, Mr. Rathbone abstracted in the following manner the procedure for teaching technical writing at Massachusetts Institute of Technology:

The M.I.T. cooperative plan consists of dovetailing technical reports with the components of a regular engineering subject - usually a laboratory course. Writing is taught as an integral part of this course, rather than as a separate English subject. The responsibilities of planning, teaching, correcting and grading reports, and holding editorial conferences, are shared jointly by the engineering instructors and the instructor in technical writing from the Department of Humanities. From about one-fourth to one-sixth of the course time is needed for this special instruction. The heavy consumers are the Electrical Engineering and Mechanical Engineering Departments, but several others have participated at one time or another. There is nothing compulsory about adopting the plan; Humanities supplies the service upon request.

The program for technical English which was being used experimentally at the University of Florida in 1955 was reported by Richard B. Vowles, who observed:

Despite a spate of technical English and report writing courses which happily indicate that the engineer is of all professional men most conscious of the need for accurate communication, alienation still exists between the engineer and his language.

Then he outlined the point of view which was the basis for the experiment in teaching English to engineers, in particular, at the University of Florida, and he listed the principles as: (1) language is part of the engineer’s know-how, (2) technical English ought to be taught by technical men, (3) it ought to be taught in the engineer’s bailiwick, and (4) it ought, as far as possible, to be integrated into
existing courses.

He listed in detail some of the activities in language skills which were being employed by three technical departments at the University of Florida.

Civil Engineering, he wrote, incorporated a series of four lectures on basic writing problems into a semester on engineering literature. Chemical Engineering periodically turned over sets of laboratory reports to the English staff for corrections in diction, syntax and structure before the papers were graded by the professors in charge of the course. Individual conferences were later held with the student during the laboratory hour with the objective of teaching the student to consider his language problems in the context of plant and laboratory practices.

The English department offered a kind of consultant service, according to the author, and students in the throes of a semester report were invited to bring their problems to the staff quarters in the Engineering Library. The author also stated that students were not asked to write the series of artificial letters, papers and reports that the traditional course in technical report writing heaps on them. Rather, the plan used was said to provide a functional relationship between writing and the study of engineering subjects.
S. Warren Reid delineated some of the problems of giving students of engineering a broad professional outlook on living. Some of his essential conclusions were: first, that education of engineering students in the humanities and social studies is the responsibility of all teachers of such students; second, that this responsibility goes far beyond the process of blocking out a certain number of hours for courses in those fields; and third, that the major objective in this area is to stimulate the student so that he will develop for himself throughout later life a knowledge and understanding of the broad aspects of human endeavor and human intercourse, outside science and engineering.

Writing specifically on the teaching of English to technical students, Mr. Reid felt that students need to be convinced that there is something more to living than science and technology; and that a student should meet oral and written communications and the humanities in such a manner that he develops enthusiasm for and personal interest in them.

Christian K. Arnold, in "What the Technical Teacher Can Do to Improve Training in Writing Skills," pointed out that employers want their technical employees to be able to write well; so much so that they list proficiency with language in every group of skills they draw
as desirable in the technical personnel they hire—often in first place and always high on the list. He cited the many studies which General Electric Company has conducted recently as proof for his contention.

Then he raised the question: "If engineers can learn to write, if the people who hire them want them to be able to write, and if experience teaches that the ability to write effectively is a significant factor in shaping a successful engineering career, why is it that most engineers do not learn how to express themselves accurately, forcefully, briefly, and interestingly?"

He answered his question in this manner:

I'm convinced there are two distinct and distinctly related reasons: (1) the engineering student, for the most part, does not feel the need to learn basic communications skills; and (2) neither do their teachers.

In his elaboration of his answers, Arnold wrote:

At the university or college the technical student finds he must take freshman English, usually taught not by a member of the engineering faculty but by a product of a liberal arts college—often, of all things, by a woman. Our freshman is apt to ask his advisor or one of his other teachers why he must take this course. His answer is likely to be an evasive, ambiguous one that, boiled down into freshman language means that the instructor doesn't know
as desirable in the technical personnel they hire - often in first place and always high on the list. He cited the many studies which General Electric Company has conducted recently as proof for his contention.

Then he raised the question: "If engineers can learn to write, if the people who hire them want them to be able to write, and if experience teaches that the ability to write effectively is a significant factor in shaping a successful engineering career, why is it that most engineers do not learn how to express themselves accurately, forcefully, concisely and interestingly?"

He answered his question in this manner:

I'm convinced there are two distinct and distinctly related reasons: (1) the engineering student, for the most part, does not feel the need to learn basic communications skills; and (2) neither do their teachers.

In his elaboration of his answers, Arnold wrote:

At the university or college the technical student finds he must take freshman English, usually taught not by a member of the engineering faculty but by a product of a liberal arts college - often, of all things, by a woman. Our freshman is apt to ask his advisor or one of his other teachers why he must take this course. His answer is likely to be an evasive, ambiguous one that, boiled down into freshman language means that the instructor doesn't know
Arnold felt that the first and most important remedy for the situation which he described is for the entire faculty of any school to give active, positive support to the importance of developing effective writing skills. Other steps were (1) teachers of technical subjects must establish certain minimum standards for the student’s written work and make it clear to the student that violation of those standards is just as serious as violation of the basic principles of mathematics; (2) teachers must give to students, to a far greater extent than is now common, the opportunity to submit written work of the type that will be required of him after graduation.

John A. Walter, Associate Professor of English at the University of Texas, in addressing the joint meeting of the Mechanics, Civil Engineering, Electrical Engineering, and Mechanical Engineering Divisions of the American Society for Engineering Education in June of 1956, stated some of his ideas on the teaching of communication skills to technical students in the following manner:

Judging from my twenty years of experience in teaching writing to students of engineering, I believe that a year of English composition is essential as basic training - as the foundation that makes continuity possible and meaningful. Some entering freshmen do not need so much training, to be sure, and provision should be made, perhaps through advanced standing examinations, to excuse them from the conventional course, but my experience
in state-supported institutions convinces me that such students are few.

The basic course should be followed by a half-year of work in report writing (or technical writing, as it is often called). At just what point in the student's program the latter course should be given is a matter of debate - a debate it would scarcely be appropriate for me to carry on here. I will say, however, that in my opinion such a course does the engineering student most good if it is given in his junior or senior year - after he has acquired engineering subject matter and can, therefore, write reports somewhat closer to being real engineering ones than those he would be able to do during his sophomore year.

James H. Pitman's article, "The Aesthetic Function of English Composition," was one of the few articles reviewed for this study which held that composition for the technical student should not be largely utilitarian. He felt that the main reason for the failure of most English courses for technical students was that objectives had been set too low. He continued:

For, by the nature of things, the English department should be the center of general education in the college. To lower ourselves to the status of hacks drilling in grammar, spelling and punctuation, with a smattering of the external forms of correspondence and technical reports thrown as a sop to the engineering faculty, is to debase our function. If we are worth our salt, we must teach the art of writing.

At South Dakota Dakota State College most of the students of technical subjects are required to take formal courses in freshman
composition, oral communication and possibly introduction to literature. The description of the freshman course - English 1-2-3 reads:

**Provides training in efficient, accurate reading; in clear, effective writing, and in vocabulary building. Includes instruction in conventions of standard English usage, grammar and punctuation.**

The English 4-5-6 sequence, which is scheduled for students who place sufficiently high in an English placement test, is described as follows: "Equivalent to 1-2-3, but with less emphasis on reading and more in writing."

The Engineering Division requires a survey of the Humanities and a course in writing for technical students, which is administered by the English department. The description of the course reads: "Writing for Technical Students, advanced course in writing. Required of Juniors in Division of Engineering and open to other students majoring in technical fields."

Some of the curricula of the Division of Agriculture also require three quarter hours of electives in English or speech.

Thus, basic courses in English and speech account for most of the language skills study which students at South Dakota State College undertake during their undergraduate curricula. The basic courses are, in effect, practical offerings which propose to provide adequate instruction in language skills sufficient for a student who follows
any of the curricula of the college. The question which arises is:
How effective are these courses, in content and procedure, for the
needs of students in the technical disciplines at South Dakota State
College?
FOOTNOTES FOR CHAPTER II


(3) Ibid., p. 372.


(8) Ibid., p. 93.

(9) Ibid., p. 94.


(13) Ibid.

(14) Ibid.
CHAPTER III

FINDINGS

This section of the thesis will report the results which the responses to the questionnaires showed and will make some interpretations of those results as answers to the question which was the problem of the study.

Participation in the Study

Table 3 shows the degree to which each division of the College responded to the questionnaire. A total of approximately thirty-six percent of the teaching staff of the technical subjects participated. Interestingly, the Division of Agriculture was sent the largest number of forms and the greatest percentage of response came from that division. Other areas ranked in the following order: Home Economics, Nursing, Science and Applied Arts (Chemistry only), Engineering and Pharmacy. All teachers in the technical subjects - as defined in the "Definition of Terms" of Chapter I - were provided with a questionnaire. Originally, the listing of the teaching staff in the college catalogue was used as the basis for sending forms to the various divisions. However, revisions were made in conference with divisional administrators. Hence, the number of questionnaires sent seemed to be a valid basis for calculating percentage of response.
TABLE III. PARTICIPATION IN THE STUDY

<table>
<thead>
<tr>
<th>Divisions</th>
<th>Percentage of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agriculture</td>
<td>44%</td>
</tr>
<tr>
<td>2. Engineering</td>
<td>12%</td>
</tr>
<tr>
<td>3. Home Economics</td>
<td>40%</td>
</tr>
<tr>
<td>4. Nursing</td>
<td>40%</td>
</tr>
<tr>
<td>5. Pharmacy</td>
<td>10%</td>
</tr>
<tr>
<td>6. Science and Applied Arts</td>
<td>33%</td>
</tr>
<tr>
<td>(Chemistry only)</td>
<td></td>
</tr>
</tbody>
</table>

Proficiency in Writing Skills

**Writing Mechanics**

The list of discrete skills on Table 4 contains items which were, in effect, dictated by respondents to the pilot study. As was explained in Chapter I, specific language deficiencies which respondents reported on the pilot study were arranged into a schedule which classified reading and writing skills under the terminology which is commonly used in the field of English. Since the teachers
had suggested the skills in which they were most interested, the
items which were placed on the rating schedules were thought to have a
high degree of meaning for teachers who judged them.

TABLE IV. MEAN OF LEVEL OF PROFICIENCY IN
EACH DISCRETE SKILL IN WRITING AS JUDGED BY RESPONDENTS

<table>
<thead>
<tr>
<th>Discrete Skills</th>
<th>Mean Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Writing Mechanics</strong></td>
<td></td>
</tr>
<tr>
<td>1. Correct usage</td>
<td>4.80</td>
</tr>
<tr>
<td>2. Correct spelling</td>
<td>4.57</td>
</tr>
<tr>
<td>3. Correct punctuation</td>
<td>4.34</td>
</tr>
<tr>
<td>4. Accurate use of words</td>
<td>5.03</td>
</tr>
<tr>
<td><strong>Rhetoric</strong></td>
<td></td>
</tr>
<tr>
<td>1. Logical organization</td>
<td>4.58</td>
</tr>
<tr>
<td>2. Logical paragraphing</td>
<td>4.60</td>
</tr>
<tr>
<td>3. Clarity</td>
<td>4.40</td>
</tr>
<tr>
<td>4. Coherence</td>
<td>4.52</td>
</tr>
<tr>
<td>5. Economy</td>
<td>4.84</td>
</tr>
<tr>
<td><strong>Average of the means in writing skills</strong></td>
<td>4.63</td>
</tr>
</tbody>
</table>
In the subdivision Writing Mechanics under the area of writing skills, respondents judged their students to possess a mean proficiency of 4.43. On the eleven-point scale which ranged from "Unsatisfactory" to "Desirable," this measure falls slightly above the unsatisfactory level.

The scale was so designed that the digits 0, 1, 2 and 3 would be interpreted as a judgment of unsatisfactory; 4, 5 and 6 would correspond roughly to a level of better than unsatisfactory but less than desirable; and 7, 8, 9 and 10 would be interpreted as a range of desirability.

Of the four skills included under writing mechanics, respondents thought their students ranked highest in Accurate use of words. Correct usage, Correct spelling, and Correct Punctuation followed in that order. All of these skills were judged to fall at a level slightly above unsatisfactory, provided the units 4, 5 and 6 were construed to indicate varying degrees of a satisfactory level but less than a level which teachers would consider desirable.

Rhetoric

Items listed under the subdivision Rhetoric were judged by the respondents to have a mean proficiency of 4.59. This figure also fell slightly within the unlabeled middle range between unsatisfactory and
desirable. However, it is obvious that the judgment was closer to an unsatisfactory level of proficiency.

Specific skills were rated by respondents in the following order: Economy, Logical paragraphing, Logical organization, Coherence, and Clarity. The tabulation showed that teachers thought their students were slightly more proficient in writing mechanics than in rhetoric.

Proficiency in Reading Skills

Techniques

The average mean of discrete skills under the category of Reading Techniques was 4.34 - another measure which was slightly above the unsatisfactory level. Rating of the individual techniques showed that teachers felt their students were more proficient in retention than in any of the other seven skills. Other items were rated in the following order: Good pronunciation, Good word recognition, Good knowledge of word meaning, Good comprehension, Good critical ability, and Rapid Reading. No one of the skills was judged to be in the desirable range of the scale, and no one of them placed as high as the mid-point. There is little question that the teachers thought their students were significantly deficient in reading techniques.
Another type of investigation - such as depth interviewing - might have revealed the reason why retention received the highest rank among reading techniques. This study could not determine whether the tabulation could be relied upon to imply that students tend to retain material which they have read, although they have not understood it or used a satisfactory degree of critical evaluation while reading.

**TABLE V. MEAN OF LEVEL OF PROFICIENCY IN EACH DISCRETE SKILL IN READING AS JUDGED BY RESPONDENTS**

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Techniques</strong></td>
<td></td>
</tr>
<tr>
<td>1. Rapid reading</td>
<td>3.95</td>
</tr>
<tr>
<td>2. Good comprehension</td>
<td>4.34</td>
</tr>
<tr>
<td>3. Good word recognition</td>
<td>4.43</td>
</tr>
<tr>
<td>4. Good critical ability</td>
<td>4.23</td>
</tr>
<tr>
<td>5. Good retention</td>
<td>4.59</td>
</tr>
<tr>
<td>6. Good knowledge of word meaning</td>
<td>4.39</td>
</tr>
<tr>
<td>7. Good pronunciation</td>
<td>4.46</td>
</tr>
</tbody>
</table>

Average of the means in reading techniques 4.34
Attitudes

The pilot study had shown that a large percentage of the respondents thought that certain attitudes toward reading were important in judging language proficiency. Accordingly, the three most commonly mentioned attitudes were included in the schedule. When the returns were tabulated it was found that teachers felt their students ranked low in all of the scheduled items. Table 6 shows that the average level of proficiency for this group of data was 3.83. Individually, the attitudes had been ranked in this order: Careful reading, Effective concentration while reading, and Strong desire to read.

TABLE VI. MEAN OF LEVEL OF PROFICIENCY IN READING ATTITUDES AS JUDGED BY RESPONDENTS

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudes</strong></td>
<td></td>
</tr>
<tr>
<td>1. Strong desire to read</td>
<td>3.56</td>
</tr>
<tr>
<td>2. Careful reading</td>
<td>4.03</td>
</tr>
<tr>
<td>3. Effective concentration while reading</td>
<td>3.90</td>
</tr>
<tr>
<td><strong>Average of the means in reading attitudes</strong></td>
<td>3.83</td>
</tr>
</tbody>
</table>
In summary, the tabulations on reading techniques showed that teachers thought their students ranked higher in reading techniques than in reading attitudes. Students were thought to be less than desirable in all of the attitudes rated in the area of reading. Reading techniques ranked slightly above the unsatisfactory of the scale, but the attitudes toward reading fell within the unsatisfactory level. Only one item on the attitudes schedule - Careful reading - was placed within the satisfactory range of the scale.

Importance of Writing Skills

The purpose of the second question of the polling instrument was to secure teachers' judgments as to the importance of the several skills in reading and writing for the student who would do satisfactory work in the various technical subjects.

Tabulation of this section of the questionnaire was expected to provide data for a comparison between what teachers thought the typical student should possess in language proficiency and what he actually seemed to possess.

A separate schedule was designed for the areas of reading and of writing, and the same discrete skills were listed as the ones which had been judged for student levels of proficiency.
TABLE VII. MEAN IMPORTANCE OF WRITING SKILLS AS JUDGED BY RESPONDENTS

<table>
<thead>
<tr>
<th>Discrete Skills</th>
<th>Mean Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Writing Mechanics</strong></td>
<td></td>
</tr>
<tr>
<td>1. Correct usage</td>
<td>7.06</td>
</tr>
<tr>
<td>2. Correct spelling</td>
<td>7.21</td>
</tr>
<tr>
<td>3. Correct punctuation</td>
<td>6.59</td>
</tr>
<tr>
<td>4. Accurate use of words</td>
<td>7.88</td>
</tr>
<tr>
<td><strong>Average of the means in writing mechanics</strong></td>
<td>7.19</td>
</tr>
<tr>
<td><strong>Rhetoric</strong></td>
<td></td>
</tr>
<tr>
<td>1. Logical organization</td>
<td>7.62</td>
</tr>
<tr>
<td>2. Logical paragraphing</td>
<td>6.50</td>
</tr>
<tr>
<td>3. Clarity</td>
<td>7.96</td>
</tr>
<tr>
<td>4. Coherence</td>
<td>7.88</td>
</tr>
<tr>
<td>5. Economy</td>
<td>7.26</td>
</tr>
<tr>
<td><strong>Average of the means in rhetoric</strong></td>
<td>7.44</td>
</tr>
</tbody>
</table>

According to the tabulations in Table 7, teachers felt that the area of rhetoric was slightly more important to students who would do successful work in technical courses than was the area of writing.
mechanics. Teachers also indicated - as shown by Tables 4 through 7 - that they expected a substantially higher degree of proficiency from the typical student than he possessed.

Importance of Reading Skills

Respondents had judged their students to have an index of 4.34 in reading techniques; however, they placed a much higher value on the importance of the same skills in the satisfactory performance of work in technical courses - a mean of 7.50.

**Table VIII. Mean of Degree of Importance of Reading Skills as Judged by Respondents**

<table>
<thead>
<tr>
<th>Discrete Skills</th>
<th>Mean Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rapid reading</td>
<td>5.95</td>
</tr>
<tr>
<td>2. Good comprehension</td>
<td>8.18</td>
</tr>
<tr>
<td>3. Good word recognition</td>
<td>7.57</td>
</tr>
<tr>
<td>4. Good critical ability</td>
<td>8.17</td>
</tr>
<tr>
<td>5. Good retention</td>
<td>8.00</td>
</tr>
<tr>
<td>6. Good knowledge of word meaning</td>
<td>8.07</td>
</tr>
<tr>
<td>7. Good pronunciation</td>
<td>6.56</td>
</tr>
<tr>
<td><strong>Average of the means in reading techniques</strong></td>
<td><strong>7.50</strong></td>
</tr>
</tbody>
</table>
High value was placed on Reading comprehension, Good critical ability, Good knowledge of word meaning, and Good retention - all of which were rated in the desirable portion of the rating scale.

Judgments expressed were interpreted to mean that the respondents considered each skill as an entity and did not consider one to be a necessary part of another. The schedule did not allow for a consideration of the manner in which one of the skills might have been related to another, but it was interesting to note that comprehension was judged to be more important than word recognition, knowledge of word meaning, and critical ability. If a different type of schedule had been used, teachers might have indicated that the latter list of skills plays a large part in comprehension.

Attitudes

The average of the means in the importance of good reading attitudes was 7.81. Careful reading ranked highest, with Effective concentration while reading, and Strong desire to read following in that order.

The figures (Table 9) indicated that teachers thought proper attitudes toward reading were slightly more important to their students than reading techniques. All of the specific items were judged within the desirable range of the rating scale.
TABLE IX. MEAN OF DEGREE OF IMPORTANCE OF READING ATTITUDES AS JUDGED BY RESPONDENTS

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>Mean Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strong desire to read</td>
<td>7.15</td>
</tr>
<tr>
<td>2. Careful reading</td>
<td>8.15</td>
</tr>
<tr>
<td>3. Effective concentration while reading</td>
<td>8.13</td>
</tr>
<tr>
<td>Average of the means in reading attitudes</td>
<td>7.18</td>
</tr>
</tbody>
</table>

Modifications in Teaching Procedures and Materials

Schedule III of the questionnaire was designed to discover the extent to which teachers of technical subjects at South Dakota State College had modified their assignments and teaching procedures in order to accommodate to the level of proficiency in reading and writing which they found among their students. (Appendix II.)

Modifications were reported to have been made because students were deficient in reading and writing. The items included on the schedule had been arbitrarily made by the researcher; however, space
was left for teachers to add types of changes which were not listed.

One hundred forty-eight incidents of modification were reported, and they ranged in degree from 1 through 5. Changes in teaching methods was the item which had been used the greatest number of times, and the degree to which it had been used ranged from 1 through 4. There were no respondents who indicated that they had used this modification to the highest degree of change. (Table 10.)

Detailed explanation of texts had been used second most frequently, and it occurred in all of the degree of modification, with the greatest frequency coming under digit 4 of the 0 to 5 range of degree. Curtailment of outside reading had been used widely, and the degree to which it had modified assignments and teaching procedures was registered in all five categories. Choice of easier textbooks, based on a lower level of diction, had been used by teachers in all of the degrees of modification, as well as curtailment of outside reading.

Slightly more than ten percent of the respondents reported that they had curtailed use of written reports as assignments, and a smaller number indicated that they had used additional workbooks and make-up assignments.
Teachers wrote the following items which had been used as modifications: additional written and oral work to encourage expression, essay examinations, demonstrations, increased outside reading, use of audio-visual aids, use of objective tests, and better preparation by the instructor.

Interestingly, some teachers had abandoned the use of written reports because they felt their students were not able to do them properly, while others had increased their use of them. Also some respondents reported that they had used essay examinations in order to give students more opportunities to make use of reading and writing skills, while others had resorted to objective tests because they felt that students could not write satisfactorily.

This study was not designed in such a way that it could show any other factors which had caused teachers to modify their teaching procedures and materials. The question was designed so as to secure data on the extent to which existing levels of proficiency in language skills among students had brought about modifications. That being the case, the data shown on Table 10 will have to be interpreted as an indication of the direct relationship which levels of proficiency in reading and writing bore to the manners and degrees of modifications which teachers had made.
TABLE XI. TABULATION OF FREQUENCY AND DEGREE OF MODIFICATIONS OF ASSIGNMENTS AND TEACHING PROCEDURES

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lengthened curriculum</td>
<td></td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>Choice of easier textbooks</td>
<td>18</td>
<td>4 7 2 4 1</td>
</tr>
<tr>
<td>Additional workbooks</td>
<td>11</td>
<td>1 3 5 2 0</td>
</tr>
<tr>
<td>Changes in teaching methods</td>
<td>22</td>
<td>3 7 9 2 0</td>
</tr>
<tr>
<td>Limited coverage of material</td>
<td>19</td>
<td>2 9 6 2 0</td>
</tr>
<tr>
<td>Detailed explanation of text</td>
<td>20</td>
<td>2 2 5 9 2</td>
</tr>
<tr>
<td>Curtailment of written reports</td>
<td>16</td>
<td>4 3 2 2 2</td>
</tr>
<tr>
<td>Curtailment of outside reading</td>
<td>19</td>
<td>7 6 5 1 1</td>
</tr>
<tr>
<td>Make-up assignments</td>
<td>8</td>
<td>1 3 0 2 2</td>
</tr>
<tr>
<td>Better preparation by instructor</td>
<td>1</td>
<td>0 1 0 0 0</td>
</tr>
<tr>
<td>Additional written and oral work to encourage expression</td>
<td>2</td>
<td>1 0 1 0 0</td>
</tr>
<tr>
<td>Essay examinations</td>
<td>3</td>
<td>1 0 0 2 0</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>1</td>
<td>0 1 0 0 0</td>
</tr>
<tr>
<td>Increased outside reading</td>
<td>4</td>
<td>1 0 1 1 1</td>
</tr>
<tr>
<td>Use of audio-visual aids</td>
<td>2</td>
<td>0 1 0 1 0</td>
</tr>
<tr>
<td>Use of objective tests</td>
<td>2</td>
<td>0 0 0 0 0 2</td>
</tr>
</tbody>
</table>
The discussion of the uses of modifications included in this chapter refers to those respondents who reported that they had felt compelled to make changes in teaching procedures and materials in order to accommodate to the level of skill in reading and writing which they found in their students. However, not all divisions of the curriculum had used modifications to the same degree. (Table 11.)

**TABLE XI, MODIFICATIONS BY DIVISIONS**

<table>
<thead>
<tr>
<th>Divisions</th>
<th>Percentage reporting use of some modifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Home Economics</td>
<td>6%</td>
</tr>
<tr>
<td>2. Pharmacy</td>
<td>0%</td>
</tr>
<tr>
<td>3. Science and Applied Arts</td>
<td>2%</td>
</tr>
<tr>
<td>(Chemistry only)</td>
<td></td>
</tr>
<tr>
<td>4. Engineering</td>
<td>5%</td>
</tr>
<tr>
<td>5. Nursing</td>
<td>8%</td>
</tr>
<tr>
<td>6. Agriculture</td>
<td>32%</td>
</tr>
</tbody>
</table>

Compilation of uses of modifications showed that sixty-five percent of the teachers of technical subjects had used some of the alterations shown on Table 10.
CHAPTER IV

CONCLUSIONS

This study was designed and executed in order to secure the response of teachers to the question: How effective is the program for teaching language skills at South Dakota State College in providing students with a level of proficiency which they need in the study of technical courses?

Three questions were used in the approach to the problem:
(1) How do you rate the level of proficiency in language skills of the typical student enrolled in classes which you now teach (or have taught recently) at South Dakota State College? (2) How do you rate the listed language skills as to their importance for a student who will do satisfactory work in classes which you teach? and (3) To what extent have you modified assignments and teaching procedures in order to accommodate to levels of language skills which your students possess?

Interpretation of the responses which teachers gave to the three questions leads to the following principal conclusions: (1) Teachers of technical subjects at South Dakota State College feel that their students are poorly prepared in the skills of reading and writing; (2) Teachers feel that students are slightly more proficient in
writing skills than in reading skills, but the level of ability in neither area is thought to be high enough for satisfactory work in technical subjects; (3) Teachers feel that a high degree of importance should be attached to proficiency in reading and writing skills, and that most of those items which appeared on the questionnaire used for this study were significantly desirable; (4) Teachers felt that discrete skills in reading which they had an opportunity to rate on the schedules were slightly more important to technical students than the writing skills which were under consideration; and (5) Teachers also felt that students are so far below the level of proficiency which is thought to be important for successful work in technical subjects that subject matter in the various divisions cannot be taught in the manner which teachers would consider ideal.

There were other conclusions which did not come directly from the tabulation of responses to the three questions asked of the teachers. The nature of teachers' comments suggested some basis for the following conclusions: (1) Teachers at South Dakota State College appear to feel that the English department is responsible for providing students with adequate skills in reading and writing which can be carried over into the effective study of technical
subjects; (2) Teachers are less concerned with prescribing the method by which the English department should provide students with language skills than the actual achievement of the necessary skills; (3) Respondents indicated that they have a right to expect their students to be proficient in reading and writing skills.

A major conclusion which this researcher drew from the study was that the English department at South Dakota State College would find some advantage in seeking to establish closer relationship with other areas of the college curriculum - especially with those included in this study - in order to provide a basis for better understanding of what each may expect of students in the area of language skills.

The portion of the review of the literature which dealt with the way in which other institutions have established inter-departmental schemes for teaching language skills to technical students should provide some plans which the English department at South Dakota State College can study.

The findings of this study raised several important questions which may be the basis for valuable subsequent investigation. Some such problems are: (1) Are there other factors besides deficiency in language skills which contribute significantly to modifications in teaching assignments and teaching procedures in technical subjects at
South Dakota State College? (2) Do teachers of technical subjects feel that an inter-departmental plan for teaching language skills at South Dakota State College would be advisable? (3) Which phases of the practical courses in English, as they are taught at present at South Dakota State College, seem to need revision? (4) How much of the teaching and maintenance of language skills does the English department expect other teachers to do, and to what extent has this position fashioned the content and methods used in teaching practical courses in English at South Dakota State College? (5) How much of the program for the Master of Science degree in Language Skills at South Dakota State College should be devoted to the investigation of problems in the teaching of language skills? (6) What are some methods and procedures by which the English department at South Dakota State College can test the effectiveness of its practical courses? (7) Would the findings of this particular study be essentially the same if a similar investigation were conducted in any other state A. and M. college? (8) How effective are the practical courses in English for students of technical subjects in colleges where a definite procedure of inter-departmental cooperation is used? (9) To what degree do teachers of English and teachers of technical subjects agree on the desirable objectives of practical courses in English? and (10) Are there administrative problems at
South Dakota State College which tend to hamper the effectiveness of the teaching of practical courses in English?
LITERATURE CITED

General Works


Articles on Content, Method and Procedure


Colle, Walter A., "Do We Need a Logic Course for Freshmen?", Improving College and University Teaching, vol. 7, 24-26.


Spear, Josephine, "Without Writing There is No Record", School Science and Mathematics, vol. 57, 16-18.


APPENDIX A

QUESTIONNAIRE FOR PILOT STUDY

English Department
South Dakota State College
Brookings, South Dakota
March 3, 1959

My thesis project is concerned with a study of deficiencies in language skills which the Faculty feel are prevalent among their students. If you are at all interested, please list briefly here the types of deficiencies which you find among students in the general areas of reading, writing and oral communication.

Area of Language Skills  Specific Deficiencies

1. Reading - 

2. Writing -

3. Oral communication -

a. 

b. 

c. 

d.
Please feel free to make any additional comments which may be helpful. Please return questionnaire to: Walter C. Daniel, Graduate Assistant English Department 308 Library

Respondent's Name ____________________________ College Department ____________________________
APPENDIX B

SCHEDULE FOR RATING STUDENT LANGUAGE PROFICIENCY

Question: How do you rate the level of proficiency in language skills of the typical student enrolled in classes which you now teach (or have taught recently) at South Dakota State College?

Directions: Indicate your judgment of each skill by placing a mark (x) at the appropriate point on the scale.

Writing skills:
A. Mechanics
1. Correct usage
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable
2. Correct spelling
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable
3. Correct punctuation
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable
4. Accurate use of words
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable

B. Rhetoric
1. Logical organization
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable
2. Logical paragraphing
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable
3. Clarity
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable
4. Coherence
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable
5. Economy
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory
   Desirable
Reading skills:
A. Techniques

1. Rapid reading
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable
2. Good comprehension
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable
3. Good word recognition
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable
4. Good critical ability
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable
5. Good knowledge of word meaning
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable
7. Good pronunciation
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable

B. Attitudes

1. Strong desire to read
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable
2. Careful reading
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable
3. Effective concentration while reading
   0 1 2 3 4 5 6 7 8 9 10.
   Unsatisfactory  Desirable
## Appendix C

### Schedule for Rating Importance of Language Skills

**Question:** How do you rate the listed language skills as to their importance for a student who will do satisfactory work in classes which you teach?

**Directions:** Indicate your judgment of each skill by placing a mark (X) at the appropriate point on the scale.

**Writing Skills:**

- **A. Mechanics**
  - 1. Correct usage
  - 2. Correct spelling
  - 3. Correct punctuation
  - 4. Accurate use of words

- **B. Rhetoric**
  - 1. Logical organization
  - 2. Logical paragraphing
  - 3. Clarity
  - 4. Coherence
  - 5. Economy


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Reading skills:

A. Techniques

1. Rapid reading
2. Good comprehension
3. Good word recognition
4. Good critical ability
5. Good retention
6. Good knowledge of word meaning
7. Good pronunciation

B. Attitudes

1. Strong desire to read
2. Careful reading
3. Effective concentration while reading
APPENDIX D

MODIFICATIONS OF ASSIGNMENTS AND TEACHING PROCEDURES

Question: To what extent have you modified assignments and teaching procedures in order to accommodate to levels of language skills which your students possess?

Directions: Indicate whether you have used one or more of the types of modifications listed here by placing a mark (X) beside the item. Please add any procedures not listed in the space marked "Others." Also assign a rank order to each modifications - 1, 2, 3, 4 or 5 - on the scale to indicate the degree to which you have used one or more particular modification.

List of Modifications

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<th>Item</th>
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<td>2. Choice of easier textbooks (based on lower level of diction)</td>
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<td>5. Limiting coverage of material</td>
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<td>9. Use of make-up assignments</td>
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<td>10. Others (list)</td>
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Additional comments: