The thirty-five papers in this volume were presented on the theme "Reading--Update: Ideals to Reality." The keynote address, delivered by Leland L. Medsker, was entitled "Postsecondary Education in the Decade Ahead." Titles of other papers include "Characteristics of Community College Students," "A Key to Unlock Aphasia," "The Realities of a Learning Skills Center in a College Without a Campus," "The Microcounseling Training Model: Interviewing Skills For the Reading Instructor," "Through Federal Funding land With Gun and Camera," "Active Listening," "Survey of Functions of Learning Programs in California's Two- and Four-Year Public Colleges and Universities," "The Minority Student in Teaching Communication Skills," "Using Experiences for Language Learning at the College Level," "Reading and Study Skills at the University of Kentucky Medical Center," "Getting Your Ideas into Print," "Dynamics of TNT (Teaching Notetaking Techniques)," "A Learning Center at Stanford?,” "Screening for Vision and Perception Disabilities," "Personalizing Reading Instruction in the Conventional Classroom," "Freshman Orientation: A Study Skills Approach," and "Implementing the Learning Resources Center: Who, Where, How, and With What?" (MKM)
PROCEEDINGS
OF THE
SEVENTH ANNUAL CONFERENCE
OF THE
WESTERN COLLEGE READING ASSOCIATION

VOLUME VII: READING — UPDATE: IDEALS TO REALITY

Editor
Gene Kerstiens
El Camino College

Editorial Advisory Committee
William B. Carnahan
El Camino College

Ramona Fusco
California State University, San Francisco

William W. Oaksford
UCLA Extension

Johanna Pomeroy
Phoenix College

Roy Sugimoto
California State University, Long Beach

cover design by pj davis & dianne nezgoda
PREFACE

The WCRA Proceedings are the result of the energies of a team: the Program Chairman, who screens and selects conference presentations; the authors, who present papers; the editors, who gather, edit, proofread, advertise, and distribute the Proceedings; and the printer, who arranges pages neatly between two covers.

The chief burden of this process necessarily falls upon the Editorial Advisory Committee, whose names and affiliations appear on the preceding page. Carefully scheduling their time, methodically meeting deadlines, and communicating with regularity, members relinquish their leisure and employ their skills to bring a professional instrument from manuscript to print, from "ideal to reality."

These Proceedings, reflecting papers delivered at the Seventh Annual Conference, Oakland, April 4-6, 1974, are, then, principally the product of these professionals, who have accepted the responsibility for and should receive a major share of any credit awarded to this publication.

GK
7/5/74

EIGHTH ANNUAL CONFERENCE:
ANAHEIM, March 20-22, 1975
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Characteristics of Community College Students</td>
<td>Avis Agin, Phoenix College</td>
</tr>
<tr>
<td>7</td>
<td>A Systematic Approach To The Establishment of a Reading Lab</td>
<td>Natalie Babock and Norma Bartin, California State University, Fullerton</td>
</tr>
<tr>
<td>13</td>
<td>A Key to Unlock Aphasia. A Multi-Level Approach</td>
<td>Lorraine M. Boothe, Portland State University and Portland Community College, and Eileen B. Slifman, Portland State University</td>
</tr>
<tr>
<td>17</td>
<td>The Realities of a Learning Skills Center In a College Without a Campus</td>
<td>Bobbie J. Bopp, Whatcom Community College</td>
</tr>
<tr>
<td>23</td>
<td>Cognitive Mapping and Individual Prescription</td>
<td>Paul Britz, Mt. Antonio College, and Gilbert Williams, San Bernardino Valley College</td>
</tr>
<tr>
<td>29</td>
<td>The Microcounseling Training Model: Interviewing Skills For The Reading Instructor</td>
<td>David Capuzzi, University of Wyoming</td>
</tr>
<tr>
<td>35</td>
<td>Ideals To Reality: Some Examples</td>
<td>David Capuzzi et al, University of Wyoming</td>
</tr>
<tr>
<td>41</td>
<td>Through Federal Funding Land With Gun and Camera</td>
<td>Rhoda Lintz Casey, Compton Community College</td>
</tr>
<tr>
<td>47</td>
<td>Active Listening</td>
<td>Gretchen Crafts, California State University, San Diego</td>
</tr>
<tr>
<td>51</td>
<td>Yours For The Asking Or An Individualized Approach To Reading Instruction</td>
<td>Jeanille Crannery, Utah Technical College at Provo</td>
</tr>
<tr>
<td>57</td>
<td>Test Anxiety Reduction Programs and Prognostications for College Reading Labs</td>
<td>Joan M. Curtis, University of Texas at Austin</td>
</tr>
<tr>
<td>63</td>
<td>Survey of Functions of Learning Programs in California’s Two- and Four-Year Public Colleges and Universities</td>
<td>Margaret Coda Devirian, California State University, Long Beach</td>
</tr>
<tr>
<td>71</td>
<td>The Minority Student In Teaching Communication Skill</td>
<td>Marsha Fabian, University of California, Berkeley, and Mary Hoover, Nairobi College</td>
</tr>
</tbody>
</table>
Developing An Outreach Model: From Practice To Theory, by Ann Faulkner, *University of Texas* at Austin

Using Experiences for Language Learning at The College Level, by Gene Fazio, *Maricopa Technical College*

CSULB Intern Training in Learning Assistance, by Nancy M. Fujitaki, *California State University, Long Beach*

Reading and Study Skills at the University of Kentucky Medical Center, by Phoebe Helm and Frances McDonie; *University of Kentucky Medical Center*

The Interview as a Tool in the College Reading Center, by Dorothy Klausner and Deborah Osen, *California State University, Fullerton*

Getting Your Ideas Into Print, by Lloyd Kline, *International Reading Association*

Writing and Consciousness: Alternative Education in a Student-Centered Environment, by Elva Kremenliev, *University of California at Los Angeles*

**Keynote Address:** Postsecondary Education in the Decade Ahead, by Leland L. Medsker, *University of California, Berkeley*

Visual-Perceptual Problems and College Learning Ability, by Loretta M. Newman, *Los Angeles Harbor College*

Guidelines for Building a Productive Writing Team, by Deborah K. Osen, *California State University, Fullerton*

The Practical Aspects of The Visual Action in Studying, by Bernard N. Robinson, *El Camino College*

Dynamics of TNT (Teaching Notetaking Techniques), by Carol Scarafiotti and Lucille Schoolland, *Maricopa Technical College*


Personalizing Reading Instruction in the Conventional Classroom, by Virginia Moore Shrauger, *Central Oregon Community College*

An Intersensory Transfer Approach To Teaching Sight Words, by Randall A. Silverston, *Southern Illinois University*

Freshman Orientation: A Study Skills Approach, by Guy D. Smith, *California State University, San Diego*

Crossing The Rubicon To Conquer Motivation, by Horst G. Taschow, *University of Saskatchewan, Regina Campus*

A Learning Center at Stanford?, by Carolyn Walker, Michael McHargue, Rita McClure, and Nancy Adams, *Stanford University*

The Reading Profession — A Status Report, by Margaret Bonds Wares, *Nashville State Technical Institute*
199  Visual Screening: A Procedure, by Robert T. Williams, Colorado State University

207  Teach Concepts, Not Words, by Leon E. Williamson, New Mexico State University

213  Screening for Vision and Perception Disabilities, by Mary Harper Wortham, Fullerton College
PROCEEDINGS
OF THE
SEVENTH ANNUAL CONFERENCE
OF THE
WESTERN
COLLEGE
READING
ASSOCIATION

THEME: Reading — Update: Ideals to Reality

HOST INSTITUTION: Diablo Valley College

WCRA OFFICERS: 1973-74

President
Jerry Rainwater
Eastern New Mexico University

President-Elect
Elizabeth Johnson
Diablo Valley College

Secretary
Mary Hess
Ricks College

Treasurer
E. Ann Holmes
University of Oklahoma

Past-President
Paul Hollingsworth
University of Nevada
The basic admission policy of many of the community colleges is starkly simple: Any high school graduate, or any person over 18 years of age who seems capable of profiting by the instruction offered, is eligible for admission.

One of the primary functions of the community college is to give substance to the ideal of equal opportunity for appropriate education for all citizens. In carrying out this responsibility, the community college educator is keenly aware that he does not know how to predict college success with anything approaching perfect accuracy; hence he attempts to provide a chance for any applicant who insists that he would like to attempt a given course of study.

- The community college philosophy sees the college as a creation and servant of mankind, responsible to the will of the populace who created it, ready to adapt quickly and efficiently to appropriate educational opportunities for the knowledge seeker.

The open door admission policy does not guarantee every student automatic success. Its purpose is to make sure that every person is granted the opportunity to succeed or fail by his own efforts. The responsibility for choice, for success, for failure; should rest with the student — not with a standardized test, not with the decisions of the admissions counselor.

In a world where nearly every part of our environment has been altered during the past decade, the college cannot regress and still continue to serve the community. Likewise, the reading programs must operate in this same atmosphere of change and be ready to assist the student as he sees the necessity — not by the rigid necessity of the "test".

The community college typically does not conduct indigenous studies. Even though research, basic or applied, is seen increasingly as one of its functions, it is still not a hallmark of the community college institution. Like most other institutions of higher education, community colleges typically
gather data about their students. Achievement measures are usually obtained. In addition, some schools gather demographic material, and occasionally, assessments of personality characteristics. In spite of many efforts to gather information, reports of research by community college personnel are seldom published. It is probable that much more information lies buried in local school administration files. There is a definite need to summarize existing studies and to report the findings.

If research is to have any effect on institutional functioning, it cannot be conducted by people who operate independently of the college staff and who simply send results back to individuals who make operational decisions. Investigations need to involve the practitioners on the scene because they are more likely to act on the findings if they have been actively involved in the research process.

One of the cries of today's youth who asks for "relevance" is actually a plea to let him assess himself in terms of what the educational schemes are all about without pressure from the system. It seems apparent that research, which considers the relevancy of today's colleges to be one of utmost importance, should in fact, be ready to open its doors to change its policies. This is the underlying cornerstone of the community college. It should be the foundation for the reading departments of the community colleges as well as the whole educational scheme of organization.

The increasing number of community colleges that are offering instruction of study skills gives credence to the assumption that this type of training is definitely needed. Unwillingness to offer such courses is said to have its origins in the belief that all high school graduates should come equipped with all study skills needed at the college level. They may have had all the necessary skills at the high school level, but they may need help in attaining the study skills required in disciplines at the college level, and the help can be provided in general study skills courses in connection with courses in the special disciplines or preferably in both.

It is a statistical fact that 39 percent of the students enrolled in a Reading class at a community college withdrew in one semester. The over-all percentage of all class withdrawals was 29 percent. This fact seems to symbolize a significant need for change in the admissions procedures in the reading departments. They are not doing what they profess to do — salvage students. If, in fact, the ACT or some other form of testing does persist as the community college "induction examination" it seems desirable to team it with other services, i.e. counseling, attitudinal surveys, further testing, questionnaires, review of high school records, and individual and group conferences, if it is to serve the student.

The growing practice of further counseling and testing is a significant sign — for it indicates a realization that standardized tests are very limited in their placement and diagnostic values. It also signifies a humanization of the vital placement procedure and a trend away from treating all those who score low on a standardized test as a homogeneous group.

In developing a volunteer program in the reading department, these items should be kept in mind:
1. Make a strong commitment to the desirability of and the need for this type of program.
2. Formulate objectives — some of these to be of general nature and others of a specific nature. Gear them to the students.
3. Develop sound placement procedures. Counselors and reading instructors must work together on this plan.
4. Experiment — innovate — evaluate — use formal and informal evaluation devices.
5. Individualize instruction in order to allow students to work at their own pace. This will also facilitate the development of an empathetic, prizing, and congruent relationship between the student and instructor.
6. Try to instill in the students the desire to improve and to point out that the effort, practice, and concentration must be theirs.

The community college is presently the most dynamic institution in the American educational system. It is now facing an extremely difficult task — that of educating as many of its remarkably diverse students as possible. Compounding this problem is the large proportion of these students in need of remedial education. The manner in which it deals with the remedial needs of its students will be a vital element in the progress of the community college.

Most of the leading writers believe that no matter how successful or unsuccessful programs for the disadvantaged are, community colleges must accommodate ever increasing numbers of low-achieving students. The community colleges are seeking new avenues for training this group of students. Monroe believes that some remedial courses will be continued, but instead of the former non-credit programs, which stress the remediation of skills, the trend is now to introduce general studies courses with full credit. He also believes that much of the future of programs designed for these students depends on the degree to which educational innovations are accepted by the staff and general public. But, he warns, that the community college faculty have a reputation for being conservative and slow to change their methods of teaching.

By 1980, more and more disadvantaged students will be enrolling in the community colleges, and also, the college will have to come to grips with the realities of life by also providing some programs which are meaningful and acceptable to the student. Another prediction is that most of the remedial work will not occur in the formal classroom but instead, students who desire help will be expected to acquire the skills through independent study assisted by tutors and work in laboratories or learning centers where audio-tutorial media are available. These laboratories should be for ALL students of varying success who seek aid, and in order for these laboratories to be meaningful and not conducted in a vacuum, they should be co-curricular offerings which are geared closely to the work the student is doing in his regular course work.

The future of the community college reading programs is complicated because no two pieces of raw material are alike and because people do not
lend themselves to change like inanimate objects. Hence, it is all the more important for the school to know what its students are like. The curriculum should fit the student.

The literature that is predominant today reveals many problems facing the community colleges if they are to capture the attention of the low-achiever, the disadvantaged, the unskilled, and the adult returning to education.

During the past decade, changes have entered into our educational plan, making the community college the fastest growing, the most innovative, and the most needed unit of education in the United States. Its growth has been astronomical. With this growth have come problems in programming, especially for the student entering at the lowest quartile according to entrance tests.

Remedial programs have not lived up to their expectations of ten years ago and most researchers agree that they will have to give way to a more general curriculum and one that will encompass the whole student body. The trend is toward learning centers, laboratories and study skills centers with a volunteer basis for entrance. The low-achiever will become greater in number in the future as the universities will become more selective and the community colleges continue to open wider the door to all who wish to enter. Adult enrollment will rise and the community college will become a community-wide, all-age, educational center.

The community college student will continue to come from the lower middle-class families and bring with him their habits, attitudes, and values. College goals will need to match student goals and abilities. As more and more students from the lower socio-economic classes and the lower half of high school classes enter the community college, the colleges will be under pressure to develop new curricula and teaching techniques.

Counseling is seen as a definite part of the scene especially in the remedial area. No longer can one make predictions with one test, but now it must be replaced by team effort — counselor, faculty member, reading instructor, psychologist, and administrator.

To summarize the findings of a Personal Background Questionnaire given to community college students, it was found that the student enrolled in reading classes is under 21, male, single, Caucasian, and enjoys good health with no physical problems. His mother and father have had a high school education; his mother is a housewife while his father is employed in a semi-skilled occupation. His family has an annual income between $10,000 and $14,999.

His favorite subject in elementary school was arithmetic and in this he also received his highest grades. In high school, his favorite subject was English and he received his highest grades in academic subjects. He chose a general curriculum in high school and graduated in a class of over 400 from a public school.

He enrolled at a community college because of its low-cost and he has selected a major area of study. Within the next ten years, he hopes to have
obtained a bachelor's degree. He works from 10 to 19 hours per week and does not engage in extra-curricular activities.

He indicates that he has fair study habits. He spends from 1 to 4 hours per day in outside reading and reads magazines as his preferred type of material. He has never been tutored in Reading nor attended a special or remedial reading class. Those who indicated that they had attended a special or remedial reading class, believed it was of help to them.

In summarizing, it is necessary to reiterate that the cry for relevant education is strong at this level of education. A relevant education means a practical, occupationally oriented curriculum. Above all, the students wish to be respected as mature individuals capable of making decisions on their own. There is nothing more demeaning to students than to have teachers who over-do the directive function and treat them like children. Even the remedial students feel grossly insulted if they are treated with condescensions or if teachers talk to them in over-simplified language. They are quick to judge a book as "high schoolish". Nothing does more to enhance the student's ego than to be treated as a mature, intelligent adult, regardless of his talents.

This story found in William Moore's book Against the Odds: The High-Risk Student in the Community College is perhaps the most symbolic of the characteristics of the community college student:

Maurice, a second semester freshman enrolled in a remedial reading program, explains: When you're in this program, you are the ass in the crowd. Teachers give you a kind of "well, I don't expect you to know" look when they ask a question. Some are hostile to you without a reason — and they call us stupid. Every time you pass a group of students you're being auditioned; they sort of get quiet until you pass. Sometimes you would rather hear them laugh at you. I have even borrowed other guys' books to carry around all day because I'm ashamed to let everybody see the books I use and let them know I don't learn too fast. Last year, when the men from the colleges came to my high school, my English teacher told me I shouldn't bother to go to talk to them. I knew it was because I didn't do too well in her composition class. But she always had us writing themes — and about the damnedest subjects. I just couldn't get a charge out of writing about "How the Chipmunk Got his Stripes."

The only thing I really know anything about is cars but my high school counselor kept saying I shouldn't want grease under my fingernails for the rest of my life. I don't see anything wrong with grease. The counselor in this college is different. He tells me if this is my thing to go ahead and do it. I guess I could take being in this program for slow students better, if others didn't treat you so different.

Thank you, Maurice.
A SYSTEMATIC APPROACH TO THE
ESTABLISHMENT OF A READING LAB

Natalie Babock
Norma Bartin
California State University,
Fullerton, California

Increased concerns in recent years for teacher accountability and for numerous testing programs mandated for schools by state and federal agencies have made school districts more cognizant of the needs of students to have adequate mastery of reading skills. Combined with rapidly multiplying numbers of published materials and more sophisticated curricular demands, these concerns prompt many school administrators and faculties to propose special classes to aid in developing students' reading ability to meet content area needs. More and more federal and local monies are being allocated to develop new reading programs, to extend elementary school basic programs, or to augment already existing special classes. Certified reading specialists are often the persons assigned the horrendous task of establishing a program to meet the growing demands of their schools or districts. Unless there is a well thought out procedure which takes into account such factors as population, goals and objectives, and needed instructional tools, the establishment of such a program within a meaningful learning laboratory is next to impossible.

The intent of this article, therefore, is to propose steps for a systematic, logical method of moving from a non-existent or limited reading program at the secondary or junior college level to a highly effective one which meets the needs of all persons involved.

STEP ONE

Since the core of any reading program is the students for whom it is
designed, the first step is to survey general reading ability within a given school in order to formulate the direction the proposed lab will take. Historically, programs developed to fit needs have been classified as the following:

**Enrichment** — a program of skills application for those students who have well developed reading abilities but who wish to move towards more sophisticated application of them;

**Developmental** — a program designed to provide sequential development of skills, habits, and attitudes to students who are learning to read and who require general reading improvement but who have no specific reading difficulties;

**Corrective** — a program of reading instruction for those students who have mild skills disabilities requiring minimal, short-term specialized instruction; and,

**Remedial** — a program of intensive reading instruction designed for those students whose reading disabilities are numerous and severe, requiring long-term specialized instruction.

Students within any one school will cluster for placement within one or more of those programs. Recognition of the grouping patterns within a school will help to focus upon which of these programs need to be implemented or augmented in order to meet student needs. To determine grouping patterns, consideration must be given to:

— surveying general needs which can be done by polling teacher opinion, administration and interpretation of standardized group tests, following recommendations from clinical work-ups on individual students completed by local agencies, i.e. counseling centers, private psychologists, etc.

— sampling procedures which might be done by surveying all students, a grade level or content area, or selecting at random a sample of the school population.

— consulting existing data as provided by school wide standardized testing.

— differentiating between common reading development needs and the needs of linguistically and/or experientially different learners.

— perceiving the lab as accommodating students who have total communication skills needs, or those with only reading problems.

Consideration of these points would determine global needs of the student body to be served, and the general survey will have been accomplished.

**STEP TWO**

The second step involves determining philosophy and basic educational
policy to be employed within the laboratory setting. Effectiveness of instruction will be visible only if there is a high correlation between underlying educational ideals and pragmatic limitations. It is essential to establish comprehensive guidelines for determining the general parameters within which other specific components of the program can be arranged. First, the philosophical attitudes of administrators and faculty should be examined by determining:

- policy governing the students to be served, i.e. the largest number according to above delineated group; those with severest disabilities who will probably require intensive, long-term instruction and, potentially, great expenditures of time, effort, highly qualified staff; or those students with greatest potential of rapid growth towards functional independence because they can be accommodated by short-term, small group instruction;
- whether or not students will come from certain content area classes;
- whether or not they will attend sessions on a part-time or regular basis;
- whether or not classes will be mandatory or voluntary;
- whether or not parents will be permitted to request admission of students to the lab;
- if the entire faculty has had an input into determining goals and objectives of the lab;
- if the administrative staff is willing to pledge support to the lab;
- if the total community has been involved, i.e. parent, local library staff, etc.;
- what considerations must be made for the demands of pressure groups; and
- if the goals of the program are both realistic and attainable.

Once these factors have been explored, the type of program that would be desirable can be seen. It is now necessary to balance these ideals against pragmatic limitations set by the particular situation involved. These limitations might include:

- insufficient resources, facilities, and personnel, to handle more than one of the programs deemed necessary of implementation,
- insufficient space allowed by physical plant for quiet study areas, small group work, instruction/teacher conferences, etc.,
- a staff that is insufficient in number and training to provide instruction in a one-to-one situation, small groups, or larger groups working in such enrichment skills areas as rate building, sophisticated critical reading, and more complex study skills,
- the need to hire additional qualified staff in order to meet the determined goals,
- the need to provide in-service training for para-professional and other staff members who may be appointed to assist in the lab, and
- the possibility of having sufficient resources to continue the program until primary goals have been met.

After a determination has been made about student population to be
served and the feasibility of doing so, it is necessary to outline procedures
to determine specific needs of each student enrolled in the lab program.

STEP THREE

No instructional plan is effective unless it is based upon a sound
diagnostic profile of individual strengths and limitations. Valuable time may
be wasted in presenting skills already mastered by the student while
neglecting to focus instruction on true weaknesses. It is a misconception to
assume that because students may be classified as enrichment/develop-
mental/corrective/remedial that members of a group are similar in skills
needs and may be lock-stepped into similar instructional programs. Two
individuals with the same basic skill weakness may not be deficient to the
same degree; therefore, they will require totally different methods,
materials, and learning experiences. For this reason, the results of
standardized group instruments are inadequate for determining specific
laboratory procedure and instructional plan. There is one significant
consideration to be made:

— The means by which individual needs will be determined, eg.
teacher/reading specialist/clinical referrals; standardized and/or informal
evaluations; group and/or individual surveys; or student self-checklist of
reading competencies.

This initial analysis of skills needs must then be followed by an
on-going evaluation of progress based on continual performance;
observable behavior, and development of positive attitudes. Change in the
program direction will occur as progress is made in accomplishing the
original objectives established for each student. Growth, however, will be
measurable only if there exists an adequate match between procedure and
materials used and clearly identified student objectives.

STEP FOUR

Perhaps the most difficult step is determining which commercial and/or
other materials will best aid the instructor and the student to meet specific
goals. A systematized inventory of materials and facilities already available
in the school would provide a logical approach to this matching. This is best
accomplished by charting information as follows:

(1) Down the left hand side of the chart, list all available materials
and equipment under headings such as:
SOFTWARE — books
programmed texts
kits/labs
games/puzzles
resources
HARDWARE — machines
EVALUATIVE INSTRUMENTS — group
individual
(2) Across the top of the chart, list all the subskills you deem significant for your school population under headings such as:
   
   WORD RECOGNITION — eg. sight words
   WOOD ATTACK
   VOCABULARY
   COMPREHENSION
   STUDY SKILLS
   RECREATIONAL
   MOTIVATIONAL

(3) Determine the particular skills which will be reinforced by use of each item listed vertically; and

(4) Place a checkmark next to each item under the determined skills.

If an examination of your chart reveals an adequate number of materials for instruction in word recognition and basic comprehension skills, but an inadequate number for such areas as critical reading, listening, and study skills, it might be necessary to utilize monies to supply these areas first.

It probably would be of assistance in making use of the chart to determine

— the materials already existing in the library, classrooms, and storerooms that could be transferred to the reading lab: i.e. tape recorders and tapes, filmstrip projectors, language masters, sets of high interest/low vocabulary books and other such materials
— the existing non-instructional items that could be adapted for instructional use: i.e. library books, newspapers, teacher-made materials
— the amount of overlapping with classroom programs of such items as Tactics in Reading (Scott-Foresman) and SRA kits
— the quantity of materials for skills application without too heavy reliance upon activity books, and
— the balance between hardware and software.

Once both needs of the student body to be served and quantity/quality of instructional aids available have been assessed, determination may be made that a school is already sufficiently equipped to initiate the lab program without expenditure of special monies.

STEP FIVE

If the checkmarks form definite clusters leaving large blank areas on the chart, it is readily apparent where proposed special funds may be utilized. However, there should be a high correlation between budget expenditures and needs and objectives. For example, if a student population has need of basic comprehension skills, the purchase of additional pacers for a lab will do little to correct this deficiency. Likewise, purchasing a large number of phonic workbooks for a population already able to apply basic word attack skills is obviously wasteful. In both instances, not only would student needs not be met, but such purchases would be a gross misallocation of funds.

To guide in the selection of materials judged essential to provide a
variety of learning experiences to meet specific needs, a check should be made for
- the number of items to determine if there are sufficient quantities to serve the needs of all students in the program
- an adequate variety of materials according to skill development needs and learning differences according to modality
- the number of recreational materials at all reading levels
- adequate space available to accommodate the hardware and software to be purchased (work area and storage)
- a low enough student-teacher ratio according to original categories of students selected
- staff preparedness to accomplish assigned tasks, i.e. content area teachers, if they are to be involved as part of the program, aides, and/or volunteers, and
- needed in-service training.

It is important to remember that many materials listed are consumable by nature and intent and must be replaced periodically. Likewise, publishing houses are constantly in the process of developing increasingly relevant and more attractive materials. Furthermore, as student needs are met, it will probably become obvious that more software and hardware will be needed in a specific skill area than was originally apparent. In order to keep the lab truly functional and current, staff charged with responsibility for the initial program would be well advised to hold back adequate monies to meet changing needs.

SUMMARY

Once these five major steps have been taken, it can readily be seen that the establishment of a reading laboratory is not something to be left to chance hoping that all aspects will be covered. Rather, when one considers that all too frequently disservice to society is perpetrated in the name of curriculum change and innovation, it should be obvious that real service can be provided only by persons who have given grave thought to (1) global needs of student bodies; (2) educational philosophies and policies; (3) needs of specific students; (4) items truly needed for instructional use, and (5) proper allocation of funds for further staff development as well as for materials.
What is aphasia? A dictionary definition states it is basically a "loss of the faculty of speech, or of connecting words and ideas, owing to morbid conditions of the brain, while the speech organs and general intelligence remain unaffected." (5:39) In other words, it is analogous to a silver mine. Just because there has been a cave-in somewhere in the mine does not mean the silver has disappeared. When you dig-out the cave-in, everything is relatively the same as it was before. The injury which caused the aphasia is the cave-in, the mother lode is the intelligence.

Of course, aphasia cannot really be this simplified. There is much more involved. Aphasia can be congenital, as in a cerebral stroke at birth, or trauma, resulting from an injury to the brain during the life of the individual. In either case, total or partial paralysis may result.

Aphasia can be divided into two broad categories: expressive and receptive. Expressive aphasia is difficulty with motor functions, such as speaking, walking, or writing (agraphia). Receptive aphasia is difficulty with auditory areas, such as hearing or reading (alexia).

In January 1973, John M., 29 years of age, was referred to the Reading Center at Portland State University from the University of Oregon Medical School. His doctors there had stated that John had been shot in the left side of the head in Viet Nam three years previously and that all spontaneous recovery that was going to happen had already occurred. He had been diagnosed as an expressive aphasic as well as receptive, with the expres-
sive component being more serious. Their prognosis was that he would probably never have employment higher than a janitorial position and would never learn to read and write again.

It was quickly ascertained that John did not recognize the alphabet in print, although he could recite it in perfect sequence. This is not unusual. Any automatic content — that is, something that has been memorized well (such as the alphabet, days of the week, nursery rhymes) — is speech which comes very easily to the aphasic.

Since John had partial paralysis of the right side, causing difficulty with walking, and because he had been right-handed, we began by having him use his left hand as much as possible. Teaching him the printed alphabet was completed in about seven days. We saw him daily, except Saturday and Sunday, for one hour. This was accomplished via positive reinforcement, repetition, application, and immediate feedback.

At this point, John was transferred to an ESL program of this author's devising and basically treated as a student learning the reading and writing of English for the first time. He was first taught single letter words (I, a), then two-letter words using these letters (it, is, am, at), and branched into three-letter words incorporating the two-letter words (hit, his, ham, hat; sit, sis, Sam, sat; and so forth). He was able now to do some basic abstracting by transferring this pattern to other two- and three-letter words containing different sets of letters. He had been in therapy five weeks.

John's main difficulties were in these areas: (1) dealing with the abstract, (2) grasping essential parts of the whole, (3) analyzing the whole into parts, (4) seeing common properties in different situations, (5) altering set patterns, (6) controlling his impulses, (7) controlling his attention, and (9) propositional speech (forming a complete thought).

Late in February 1973, an article in The National Observer titled "Functional Illiterates" changed the direction of therapy. This article discussed the idea that the ability to do textbook exercises did not automatically make the student able to read a help-wanted ad or fill out a job application form. We should be teaching functional abilities: basic skills connected with job survival, school survival, and general life survival.

Coupled with the ESL exercises, we began by introducing John to becoming self-sufficient by teaching him to buy a cup of coffee from a coffee machine, to work with money, make change (he was told in advance what the correct change would be), to practice on forms he would likely run into, such as securing a box at the post office, endorsing checks, using check deposit and withdrawal forms, etc. We also taught him how to know which bus was the one he wanted, how to make transfers from one bus to another, how to buy food from a local grocery store, how to pay his light and phone bills. The therapy sequence followed was reading and writing exercises on Mondays, Wednesdays, and Fridays, and a "survival course" on Tuesdays and Thursdays. The two reading therapists alternated so that John had contact with each in totally different situations.

In mid-March 1973, a short third grade cloze-technique comprehension
test was administered to John. It was not timed, but he completed it in thirty minutes with 95 percent comprehension.

It was our intention to continue therapy through the quarter break (a week's vacation between winter and spring quarters), but an emergency arose at John's parents' home, so he boarded a Greyhound bus and alone, negotiated for the round-trip ticket. In this week's time, we were afraid that the skills he had gained, particularly in the areas of reading and writing, would atrophy. We worried needlessly: his retention was nearly 100 percent.

At the beginning of spring quarter (late March 1973), we were able to enroll John in two physical education classes at Portland State University to help him improve his motor coordination: weight training and yoga. Both instructors were contacted to explain John's condition but were advised, to help John with his self-confidence, not to treat him preferentially. These classes each met twice a week.

At the same time, during our daily sessions with John, we started working with the books Remedial Reading Drills by Hegge, Kirk, and Kirk (3) and Handwriting with Write and See, book 6, produced under the direction of B. F. Skinner (4). Remedial Reading Drills was easily adaptable for exercises using a tape recorder so that John could practice these word pronunciations and word sequences at home. Handwriting with Write and See reinforced our "survival training" by forcing John to reduce the size of his handwriting to fit the dimensions of the "form." Using a special pen, if John "went outside of the lines," it did not write. The pen worked only inside the lines.

By early May 1973, it had become increasingly apparent that the modified physical therapy he had been receiving through his physical education classes was ameliorating his partial paralysis. His walking became better coordinated, the right hand was no longer difficult and painful to use, and, as a happy aside, his self-concept changed from extremely negative to quite positive. At this time, we were able to place John with a well-qualified psychologist at the University of Oregon Medical School to help him maintain this positive self-image.

In June 1973, another comprehension test was administered to determine at what level John was reading comfortably. He scored at grade five with 90 percent comprehension. His handwriting was at a grade six level as far as appearance and content are concerned.

Therapy was terminated in July 1973. In six months, John had progressed from being told over and over again that he must be resigned to never re-learning reading and writing to a fifth grade reading and vocabulary level with corresponding handwriting skills.

During November and December 1973, a follow-up study was conducted to determine what had become of John. He had been building upon the skills he had learned through us. He now had a driver's license and a delivery-type job which required driving a truck. He has also been named manager of the apartment building he lives in, responsible for collecting rents, keeping the premises neat, fixing minor problems with plumbing,
and handling various complaints. John has become quite able to take care of himself in today's world.

REFERENCES

THE REALITIES OF A LEARNING SKILLS CENTER IN A COLLEGE WITHOUT A CAMPUS

Bobbie J. Bopp
Whatcom Community College

Recently in a conversation between a couple of educators concerning the book *Jonathan Livingston Seagull*, one person quipped, "A seagull is nothing but an elegant bird wading around in a lot of garbage."

In applying that to education, it seems to me there are many elegant birds still wading around in garbage. Many federal and state programs have originated on soaring wings of idealism, only to become more or less earthbound in the garbage of mismanagement, tied-up funds, and political maneuvers.

At Whatcom Community College there is a special kind of state program, so far managing to stay free of most of the traditional garbage. Our college without a campus, in the newest district in Washington State, is "still relatively unencumbered by continuing programs and methods that might be more responsive or that should be modified or cancelled." (1) And there is every intention to keep it that way.

Not having a campus means that there is no specific location known as the campus, that the campus is the whole county. The administrative offices are in a county location, while two instructional centers are in two separate towns. Other instructional centers will be added later in other parts of the county. WCC has made a commitment to the taxpayers not to build or to buy buildings. Property is rented, borrowed, leased or renovated instead.

Another commitment that WCC has made to the taxpayer is that central to the college's instructional approach will be faculty: "open to uncommon modes of instruction and learning: independent study, individual study, programmed study, use of radio and television, challenge tests or performances . . . , etc." (2) Along with this, WCC's goal is to make the classroom the exception, rather than the rule.

What does this type of organization and philosophy mean to the
concept of a learning skills center (which, in spite of its pinfeathers, is already in danger of becoming bogged down in stereotyped definitions)? First of all, this means that the learning skills center must be thought of as a service, not a place on a campus. That service will be offered in more than one location in the county. This philosophy is in direct contrast to those centers which are established on campuses, and then at some point, branch out to offer satellite services elsewhere.

Almost immediately, there are several challenges which present themselves because of this uniqueness. WCC's operation does not fit into the traditional state system for funding. This causes delays and other complications in budgeting. Funding is perhaps the major challenge to WCC at this point, but adequate funding will allow learning skill services to be immediately available to any student in the county.

The traditional school experience of students and faculty may require them to do some adjusting to the idea of a learning skills center which is not a place, but a service. WCC hopes to give them new symbols for identity to replace the traditional symbols of buildings and a campus. Since part of the challenge to the faculty is how to have college identity while working in some isolated place, the learning skills center must provide a basic supporting action to the teaching program wherever classes are. Having one service program common to all facets of the curriculum will provide a method of communication which can be used to weld together diverse areas. Counseling easily available for students both in subject-matter areas and in personal areas can be the uniting factor for teacher and student as they make use of the Center.

Learning skills center budgeting for this service means finding a staff for each center and a way to duplicate materials and deliver services on an emergency basis. Record-keeping for learning skills center services in a decentralized situation becomes a complicated process, and the coordinator of the learning skills center must oversee operations at several locations instead of one. We know that without skillful coordination, there may be a splintering of quality in the name of flexibility. This is our challenge.

The advantages for a learning skills center in a scattered campus outweigh the disadvantages. The public supports the idea of a college which doesn't require an expensive outlay for buildings, and they appreciate the fact that services are brought close to them.

A duplication of services means the student has an opportunity to be exposed to different personalities and methods in teaching, and the necessity to hire extra paraprofessionals for the various centers adds diversity to the staff. Also, graduate credit given by a nearby state college or university for tutoring in the program (Western Washington State College provides tutors for WCC's Reading Program), or credit given by the college in which the tutoring is taking place, provides an opportunity for some practical experience in the exciting new field of adult education. It also solves some budget problems.

This variety of teaching provides "new blood" for the learning skills center system, and guarantees an on-going flexibility. This also guarantees
against the “empire building” that often happens in a one-location, one-staff operation. The very nature of this type of operation demands a constant search for new approaches, new material, and new creativity to meet local needs. It also avoids serving the needs of only a few near-by agencies, while ignoring those in outlying communities.

Holding classes in buildings other than school buildings often has a beneficial effect for those who feel “turned off” by school systems, symbolized by their buildings. WCC has held classes in churches, fire halls, armed forces buildings, YWCA facilities, and farm feed stores, as well as school buildings.

The teacher in a college without a campus may very well be caught up in the excitement of a really new educational enterprise, thereby making heroic efforts to overcome the inevitable problems of the system. In the learning skills center program he will often donate hours of his free time to learn about new ideas and materials. Working within this unique philosophy means that responsibility for knowing what is going on and what can be done for his students, and for seeing that the information is passed on to the student, falls directly on the teacher. There are some teachers who can accept the challenge, some who can’t.

Finally, the administrators in a college without a campus have, to be dedicated to its philosophy to a point beyond belief. They have to be dedicated to a long-range dream of retaining only what seems to be valid community needs in education, and to searching for and implementing what seems valid in innovative education. The learning skills center finds itself undergirded and supported in a way not possible in more, traditionally structured systems.

The learning skills center at WCC is unique in all the ways already mentioned. It is also unique in some more specific ways. WCC has a goal to make the classroom an exception, rather than the rule. As a result of our attempting to provide for non-traditional needs in the community, we find ourselves working hand-in-glove with such programs as the Interdisciplinary Studies Program (social studies, natural science, humanities, and communications totally integrated under the theme of environment — that environment being individual, social, and natural).

We are also involved with the New Careers Program, providing on job-training and a two-year college degree for positions, such as Center aides, within the system. The Lummi Indian Project provides special educational services to the Indians in cooperation with the government, and a new adult high school Diploma program offers credit for knowledge and experience, not necessarily time spent in classes. We also provide a staff improvement program for the secretarial pool, work with the educable retarded, examine what we can do to provide some basic skill services for the local jails, and are preparing a whole new package of non-traditional studies (overseas study, radio and TV courses, etc.). Thus, the classroom is giving way to such locations as a foreign country, on the job, observation posts, a student’s home, or an office.

In a search for new methods and research in adult education, our learn-
ing skills center finds itself involved in such projects as the HUMRRO (Human Resource Research Organization) project in inquiry-centered learning, which attempts to determine whether this type of learning can be generated, a high percentage of the time, by setting up carefully structured problem-solving situations.

Also, a research project involving our reading program is an attempt on the part of our tutors to identify the individual adult student's own method of problem solving and use it to teach reading. We have decided to let this project run for two terms before we come to any major conclusions. Our reading program is also attempting to develop a core of good adult reading materials.

Often we have to create our own instructional packets, because other materials aren't available. In doing so, and by trial and error, we have finally reached the conclusion that skills, except reading, are easily taught, comparatively, in instructional packets and programmed materials. Subject matter, such as history and literature, are not. Only the sharp, well adjusted student can grasp much of real importance in subject matter without some group discussion along the way. This presents some problems with individualized, self-paced, "any time" programs.

Our individualized self-paced, "any time" programs are unique in other ways. The learning skills centers themselves are not classrooms, but areas where individualized studies take place. Even in classes taken for college or high school credit, the student enters with a set of goals designed only for him. When those goals are completed to the satisfaction of the teacher, the credit is earned. It may have taken the student one term, two terms, or one-half term; attendance is not important in credit evaluation. This places the responsibility for making major decisions about his own life directly on the student; this is one of the major goals of our programs.

This concept of credit in the center may mean that more counseling than teaching is done with a given student, especially with the young high school student, because he may lack the maturity to easily accept this kind of responsibility. Most older students work well in the credit situation.

We like to think that not only is its learning skills center a service instead of a place, but also that it is a developmental service instead of a remedial service. In fact, we call ourselves the Developmental Center. This encourages students at all levels of learning, from all programs, and from all segments of the community to use our services without feeling a stigma attached to the experience.

So our college without a campus has many realities that differ from the traditional educational system. There are some challenges for the Developmental Center and its students. However, the many advantages in such a system, and the creativity which is an inevitable result, keep our elegant bird air-borne. The decentralized aspect becomes a many-splendored thing for those involved, whether student, teacher, counselor, or coordinator.
REFERENCES

1. "Trustees' Internal Mandates for Whatcom Community College" pg. 2
2. Ibid., pg. 4
Cognitive mapping suggests one possible way of determining an individual's preferred learning style. The map of cognitive style provides both learner and instructor with a graphic profile of ways the student obtains meaning from his world. Prescription of learning activities becomes pertinent and precise when the instructor is aware of how his student learns best.

Effective reading instruction, especially, depends upon diagnostic procedures which provide explicit information. However, reading diagnosis has heretofore concerned itself with determining the student's reading level, his pattern of skill, and relevant physical and psychological information. Cognitive Style Mapping adds a further dimension to this battery by indicating which types of learning assignments may be most productive when choosing student learning activities.

An individual cognitive style is determined by eliciting information from several areas: How does the student process qualitative and quantitative information through reading and listening? Moreover, does he prefer to work alone or is he influenced in decision making by family or associates? How does the student draw inferences? Cognitive Style Mapping reflects important differences in all of these areas. Some students reason like mathematicians; some like social scientists; and some like mechanics. Cognitive mapping tells you "who does what".

For convenience, information gathered on an individual is incorporated in a student profile which graphically represents areas of strength and areas of weakness. The instructor may use this profile to guide the learner through those activities which take advantage of the learner's strengths; further, mapping suggests precision areas where students may need to
improve. Such precision is essential to successful reading prescription or, for that matter, to successful learning activities of any sort.

THE EDUCATIONAL SCIENCES APPROACH TO LEARNING STYLES

The Educational Sciences, a research group initially under the leadership of Dr. Joseph Hill at Oakland Community College in Detroit, Michigan, developed a conceptual framework to describe cognitive style in more scientific terms. To do this, they found it necessary to devise a language which more precisely describes how students gain meaning from the world around them. Dr. Hill and his colleagues are developing a mosaic of tests and inventories for students, gathered from a variety of sources. When no suitable instrument is found to exist, the group creates one. As it now exists, the entire test battery requires three and one-half hours to administer. A "short" form has been developed by Dr. Hill, consisting of a Q-Sort of 226 items requiring a scale response of "rarely", "sometimes", "usually". This version takes less than an hour to complete. Where reading level is a problem, the items may be recorded on tape for ease of administration.

Results of these tests are processed through the computer system at Oakland Community College, producing a printout which profiles each testee's cognitive traits. This profile or Cognitive Map describes how the student characteristically goes about seeking meaning.

Results are given in the form of cartesian product of three sets of information: How students respond to qualitative and quantitative symbols; how students are affected by cultural determinants; and which modalities of inference they utilize.

Let us consider each of these concepts in turn, examining their vocabulary and examples of inventory items which might be used to assess them.

Set I

A. Symbols and their meanings. There are two types of symbols basic to the acquisition of knowledge and meaning: Theoretical symbols, meaning words and numbers, and Qualitative symbols, which embody code data.

The Mapping Inventory assesses four Theoretical Symbols:

T(AL) Theoretical Auditory Linguistic: The ability to acquire meaning through hearing spoken words.

Sample question: "After hearing a lecture, I find it easy to recall content."

TV(VL) Theoretical Visual Linguistic: The ability to derive meaning from words you see.

Sample question: "When someone reads instructions to me, I have a tendency to say 'let me see it.' "
T(VQ) Theoretical Visual Quantitative. The ability to acquire meaning in terms of numerical symbols, relationships, and measurements.

Sample question: “Problem examples in math tests provide sufficient understanding for me to learn new concepts without oral reinforcement.”

T(AQ) Theoretical Auditory Quantitative. The ability to find meaning in terms of numerical symbols, relationships that are spoken.

Sample question: “I find it easy to solve dictated arithmetic problems mentally.”

B. Qualitative Symbols are those symbols which represent to the student such things as feelings, commitments, and values. Meanings for qualitative symbols are derived from three sources:

1. sensory stimuli.
2. cultural codes.
3. programmatic effect.

Present research has identified 20 qualitative symbols, a few of which will be illustrated. Sensory stimuli provide the first five symbols of seeing, hearing, smelling, tasting, and touching. Information on the learner’s use of these modalities may be of great significance to an instructor dealing with adult illiterates, since they reveal in which significant ways these adults have assimilated meaning, and where they have failed to do so.

Q(A) Qualitative Auditory: The ability to perceive meaning through hearing.

Sample item: “I can recognize a song played without lyrics or distinguish the pitch of a musical note.”

Qualitative Codes that are programmatic in nature are:

Q(P) Qualitative Proprioceptive. The ability to synthesize a number of symbolic mediations in order to perform a complex task like playing an instrument.

Sample item: “Could I learn to be a good typist?”

The remaining ten qualitative symbols are associated with cultural codes.

Two examples:

Q(CET) Qualitative Code Ethic. Commitment to a set of values, a group of principles, obligations, and/or duties. This would reveal a type of student who takes an assignment and completes it out of duty.

Sample item: “All men should have a code of values.”
Q(CKH) Qualitative Code Kinesthetic. Ability to perform motor skills or effect muscular coordination according to a recommended or acceptable form.

Sample item: "I feel I have a good coordination in sports activities."

The remaining eight qualitative symbols are concerned with the learner's ability to note Kinesics-body language, enjoy art, react to dramatic approaches, and self image. Each of these twenty qualitative factors can offer significant insight into student prescriptive learning.

Set II
A. Cultural Determinants. The main cultural determinants of the meaning of symbols, are family associates and individuals. An assessment of these factors can identify more systematically which students are most comfortable working alone or in small groups.

I — Individuality. Frequently reflected by the individual's need to quote definitions or explain situations in his own words.

Sample item: "I prefer to work in the library on my own."

A — Associative. Explains or discusses activities with associates who are involved with him.

Sample item: "My friends are very helpful in assisting me make decisions."

F — Family uses analogous situations with family, as routes to solving of problems. This indicates the type of student who may need tutorial or closer instructor guidance.

Sample item: "My family's inputs help me make important decisions."

Set III
Modalities of Inference. These indicate how the student reasons to derive meaning.

M — Magnitude. A form of categorical reasoning that utilizes norms or categorical classifications as the basis for accepting or rejecting an advanced hypothesis. Persons who need to define things in order to understand them reflect this modality.

Sample item: "I work best when directions are given."

D — Difference. This pattern suggests a tendency to reason in terms of one to one contracts or comparisons of selected characteristics or measurements. Artists, writers, and creative individuals associate with this.
Sample item: "I like to take or shift to the opposite side in a debate or discussion."

R — Relationship ability to synthesize a number of dimensions or incidents into a unified meaning.

Sample item: "I like to see how all the parts fit together."

L — Appraisal. The modality of inference employed by an individual who employs all three of the modalities noted above.

K — Deductive. Deductive reasonings.

Sample item: "I enjoy geometry."

Several conferences have been conducted by Dr. Hill and his colleagues to encourage teachers to write their own Q sort items for their own populations. At the Adult Education Center in Albany, New York, Mt. San Antonio College in Walnut, California, and at San Bernardino Valley College various approaches to cognitive mapping have been utilized. Some of these approaches may be done informally including placing test items on cassettes or audio flash cards to reach the illiterate adult. The purpose is to give student and instructor more specific information about which classroom and lab assignments will be most productive. To illustrate how the computerized map developed at Oakland Community College can be helpful refer to the two examples below and on the following page:

<table>
<thead>
<tr>
<th>Personal Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualitative/Quantitative</strong></td>
</tr>
<tr>
<td>T (AL)</td>
</tr>
</tbody>
</table>

Examples:
- Peer tutor
- Teacher tutor

This student prefers to learn through auditory and visual stimuli. The qualitative codes reflect his characteristics which make working with others an interesting challenge to him. They are empathy, ethics, knowledge of his ability (synnoetics), and proxemics (ability to judge physical and social distance between himself and others). Also the learner prefers to work either independently or with associates.

The modality of inference indicates the needed characteristics for this mode of instruction, i.e. looking at relationships and following predetermined guidelines prior to making decisions.
This student prefers to learn through visual aids with some reinforcement of auditory stimuli. Qualitative codes which are supportive to the learner are majors in: visual stimuli, synnoetics, empathy and ethics. Also, the learner prefers to work independently (can work with others on occasion) and relies heavily on examining the relationship of bodies of information prior to making decisions.

A promising potential of cognitive mapping is that it offers a means through test item analysis to evaluate the nature of specific instructional tasks and their effect upon the learner. Further, it should be noted that cognitive analyzing may suggest student learning styles which might be augmented or broadened. The information generated is intended to offer students a rational approach to determining how they learn best. It does not include the opportunity to improve areas as desired.

For the instructor, cognitive mapping can provide a means of evaluating the types of resource material in the Learning Center. All types of reading, listening, and manipulative materials may be needed for community colleges and special reading clinics in particular. Cognitive mapping offers a cognitive framework for evaluating the resources available as well as the type of learning activity most appropriate for individual students.

REFERENCES

Instruction in basic interviewing skills is taking place in a variety of educational institutions with students preparing for a number of different professions. People interested in psychological and educational counseling, teaching, medicine, nursing, psychiatry, clinical psychology, the ministry and sub-professional helping roles are increasingly experiencing the need to systematically study their interview behavior. As noted by Ivey (4), despite the diversity of expertise represented in the professions mentioned above, all interviewers need to learn to listen, to ask questions, to attend to feelings, to interpret statements, etc.

The microcounseling training model is an attempt to develop a systematic approach to teaching interviewing skills. The purpose of this paper is to propose the model as an approach to increasing the ability of the reading instructor to be a facilitative interviewer when working with students.

THE MICROCOUNSELING TRAINING MODEL

The microcounseling training model is based on five essential propositions outlined by Ivey (4). The first principle is that it is possible to lessen the complexity of the counseling or interviewing process through focusing on single skills. The goal of the person experiencing the training is to master one skill at a time rather than to demonstrate competence in several skills simultaneously.

Second, the microcounseling training model provides important opportunities for self-observation and confrontation. Immediately after conducting an interview (taped by audio or video means), the trainee and his supervisor have the opportunity to play back the session. Thus, oppor-
tunity for instantaneous feedback serves as a learning experience to improve future interview performance.

Third, interviewers can learn from observing video models demonstrating the skills they are attempting to develop. Since specific interviewing skills are demonstrated on videotaped excerpts, the trainee can hear and see good technique in action.

Fourth, the microcounseling training method can be used to teach interviewing skills from a diverse and practical perspective. Basic skills of attending behavior, acceptance and paraphrasing as well as advanced Gestalt, Transactional Analysis or Behavior techniques can be taught.

Fifth, microcounseling training sessions are real interviewing sessions. Even though role-playing and simulation are sometimes used in connection with this model, the interviewer often finds himself assuming a real interviewing or counseling role. Often the volunteer student or client finds himself discussing actual concerns or problems.

While many variations are possible, most research and methodology in microcounseling has been conducted by putting the trainee through the following progressive steps outlined by Ivey (4:6) and based on the propositions mentioned above:

1. The trainee receives instructions to enter a room where he will interview a client. Depending on the situation, the topic may or may not be defined. Similar instructions are given to the volunteer client, with the exception that he is told he is about to be interviewed.

2. A five-minute diagnostic session (with the trainee interviewing the client) is then videotaped.

3. The client leaves the room and completes an evaluation form or may be interviewed by a supervisor. These data are then available for the supervisory session with the trainee.

4. The trainee reads a written manual describing the specific skill to be learned in this session. The supervisor talks with him about the session and about the manual.

5. Video models of an expert demonstrating the specific skill are shown. There may be a positive and a negative model of the skill.

6. The trainee is shown his initial interview and discusses this with his supervisor. He is asked to identify examples where he engaged in or failed to apply the specific skill in question.

7. The supervisor and trainee review the skill together and plan for the next counseling session.

8. The trainee re-interviews the same client for five minutes.

9. Feedback and evaluation on the final session are made available to the trainee.

Starting with the most basic of interviewing skills and progressing to the more complex, reading instructors could be helped to increase the level of facilitativeness they offer during individual conferences with students. Since more and more reading improvement programs, learning skills centers, etc., are designing skills development programs on an individual
basis for students, it is becoming increasingly important for reading instructors to conduct individual conferences effectively. What are the interviewing skills that can be taught within the microcounseling training model?

THE MICROCOUNSELING SKILLS

The twelve basic microcounseling skills delineated by Ivey (4) around which the reading instructor or other trainee would focus his initial training in interviewing are:

1. Attending Behavior
2. Open Invitation to Talk
3. Minimal Encourages to Talk
4. Reflection of Feeling
5. Paraphrasing
6. Summarization of Feeling
7. Summarization of Content
8. Learning Client's Attitudes Toward Tests: A Specialized Skill
9. Expression of Feeling
10. Sharing Behavior
11. Direct Mutual Communication
12. Interpretation.

As previously discussed, each skill taught and practiced within the microcounseling training model is described in a manual and demonstrated on video tape for the trainee. To illustrate, here is an excerpt from Ivey’s (4:149) Interviewing Skills Manual describing “attending behavior”:

Good attending behavior demonstrates to the client that you respect him as a person and that you are interested in what he has to say. By utilizing attending behavior to enhance the client’s self-respect and to establish a secure atmosphere, the interviewer facilitates free expression of whatever is on the client’s mind.

The following are the three primary types of activities which best characterize good attending behavior:

1. The interviewer should be physically relaxed and seated with natural posture. If the interviewer is comfortable, he is better able to listen to the person with whom he is talking. Also, if the interviewer is relaxed physically, his posture and movements will be natural, thus enhancing his own sense of well-being. This sense of comfortableness better enables the interviewer to attend to and communicate with the client.

2. The interviewer should initiate and maintain eye contact with the interviewee. However, eye contact can be overdone. A varied use of eye contact is most effective, as staring fixedly or with undue intensity usually makes the client uneasy. If you are going to listen to someone, look at him.

3. The final characteristic of good attending behavior is the interviewer’s use of comments which follow directly from what the in-
terviewee is saying. By directing one's comment and questions to the topics provided by the client, one not only helps him develop an area of discussion, but reinforces the client's free expression, resulting in more spontaneity and animation in the client's talking.

Since each interviewing skill is described as illustrated and demonstrated on video tape, it is easy for the reading instructor or other professional to compare tapes of his own interviewing to models. The microcounseling training model is conducive to self-evaluation and critiquing which encourages involvement and motivation to develop a facilitative interviewing style.

In addition to practicing the twelve skills that have been proposed in conjunction with the microcounseling training model, other skills can be developed utilizing the same training concept. As presented by Capuzzi, Klausner and Osen (1), goal setting, information giving, progress assessing, and reassurance are all aspects of interview behavior that the reading instructor might use in the process of working with a student in a reading center or learning skills program.

IMPLICATIONS FOR THE READING INSTRUCTOR

Research focusing on the microcounseling training model is providing data of interest to those wishing to improve interviewing skills. In general, beginning interviewers do not possess a stable repertoire of behaviors or techniques and their responses are often determined by the person they happen to be interviewing. As noted by Ivey (4), beginning interviewers spend too much time talking, interrupt the person they are talking to, ask closed-ended questions, make long, awkward speeches and lapse into uneasy, unplanned silences. Of potential interest to the reading instructor is that these interview behaviors can be improved as a result of training. In a study by Moreland, Phillips, Ivey and Lockhart (7), it was found that most of these errors can be eliminated with training utilizing the microcounseling concept. Similarly, Kelley (6), using a modified microcounseling format, found that two trained groups when compared to a control group had done the following (a) significantly reduced the number of and length of utterances, (b) lowered their percentage of talk time, and (c) reduced the number of interruptions, Hutchcraft (3), teaching interviewing skills, found that the microcounseling training model changed four variables: (a) frequency of counselor interruptions, (b) frequency of counselor zero response latency, (c) total number of counselor responses, and (d) total duration of counselor talk time.

The real test, however, of interviewing behavior is the impact it has on the people being interviewed. In studies by Ivey, Normington, Miller, and Haase (5), and Higgins, Ivey, and Uhlemann (2), in which clients have been asked to rate the interviewer, it has been found that interviewers have been rated more favorably after training via the microcounseling model than before. With the current emphasis on individual prescription of learning programs necessitating frequent one-to-one conferences between
instructor and student, instructor ability to interview well becomes increasingly important. The microcounseling training model and, for that matter, any other approach that will help instructors become more facilitative and better able to develop rapport with students should perhaps be utilized in teacher education and in-service programs. The reading instructor can become a "communications specialist" in every sense of the term.

REFERENCES


"Sounds like a good idea, but it would take too much time to develop;" "The
students would probably like that kind of an approach, but the
administration would never support such an expensive reading program;"
or, "These follow-up data from students who have been through our reading
program suggest a need for change, but other faculty would never go along"
are just a few examples of the "Why Don't WE . . . Yes, But" thoughts
experienced by almost all of us at one time or another. Fortunately,
professionals involved in community college and college reading programs
are becoming increasingly responsive to student needs and less easily
maneuvered into passive acceptance of the educational status quo. Reading
instructors and specialists in varied parts of the country are moving into roles as environmental engineers, consultants to students and instructors involved in learning difficulties, communication specialists and program developers. Time, effort and pressure are being expended to make learning relevant to a society which demands higher and higher levels of reading proficiency of its members to equip them to cope with rapidly changing economic, political and social demands. Ideals are being translated into reality. Here just a few examples of innovations taking place in Arizona, Colorado, Idaho, Utah and Wyoming.

ARIZONA: THE LANGUAGE EXPERIENCE APPROACH FOR ADULTS

At Maricopa Technical College, adult students have access to a special reading program emphasizing the language experience approach. This program is utilized extensively by adults in need of instruction in beginning reading and capitalizes on students' life experiences and oral language facility.

Basic to the program is instructor sensitivity to the student's self-concept. This sensitivity is communicated in several ways: the language experience approach is, in itself, conducive to communicating respect for the resources that adult beginning readers already have at their command. Note the following procedure:

1. Instructor and student discuss a subject of interest to the student.
2. A recording is made (either audio-taped or dictated to instructor or aide).
3. The copy is typed verbatim.
4. The student "reads" his material.
5. The instructor observes omissions, substitutions, and errors as well as any corrections in grammar or sentence structure.
6. Copy is retyped if student-made corrections are noted.
7. The instructor follows-up with teaching based on noted problem areas.
8. Material is accumulated as a source book for future reading.
9. The student is praised and encouraged at every step of his development.

As pointed out by Stauffer (1:259), the language experience approach "capitalizes superbly on the fact that these people do not lack the power to absorb ideas and impressions. To the contrary, it builds upon their ideas and impressions and the oral language facility they have acquired."

COLORADO: TEACHING MEDICAL TERMINOLOGY IN A LICENSED PRACTICAL NURSING (LPN) PROGRAM

From the paramedic to the medical specialist, precise use of medical terms is crucial to success in the medical profession. Yet, learning to understand and use these highly technical terms can be very embarrassing for the
novice — like learning to use a second language. Students feel, to say the least, self-conscious and threatened. This is evidenced by the reluctance on their part to use the medical terms when speaking. For instance, a trainee will more than likely refer to a gallbladder operation as “a removal of the gallbladder” before attempting a much easier and more precise term, cholecystectomy.

Otero Junior College teaches medical terminology as the student meets it in his other coursework. By using a Bell & Howell Language Master (an educational device usually associated with Phonics Development in the elementary grades), the LPN student learns how to master medical terminology in a fashion similar to the way language was first acquired, namely, through imitation and synthesis.

Aside from helping the student master the pronunciation of these words, the program also shows how to use structural analysis to arrive at their word meanings. Although this form of decoding has come into dispute because of the corrupting influence of language change, the stable characteristic of medical terminology (unchanged for centuries) makes structural analysis an effective approach to decoding medical terms.

The student listens to the term he doesn’t know how to pronounce. After listening to the correct pronunciation, he then attempts (by himself, without witnesses) to imitate the pronunciation pattern of the pre-recorded instructor. He checks his pronunciation by comparing his recording with the pre-recorded pronunciation.

On side two of each card, he learns the meaning of the term as well as its structural parts. Knowing the meaning of each structural component will also aid later in decoding new terms consisting of these roots and affixes. Now, the student can build “word families” of medical terms.

**SAMPLE CARD**

**SIDE ONE**

<table>
<thead>
<tr>
<th>panhysterosalpingo-oopherectomy</th>
</tr>
</thead>
</table>

**SIDE TWO**

<table>
<thead>
<tr>
<th>pan/hyster(o)/salpingo-oopher/ectomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>all uterus tubes ovaries excision</td>
</tr>
<tr>
<td>complete hysterectomy—Removal of all female reproduction organs</td>
</tr>
</tbody>
</table>
Basic to the success of any instructional program is to know the student: what he is, what he has, and what he needs. To know the student is to know something of his language, his experiential background, his interests and his concept of self. Diagnostic opportunities in a college reading program or center are limited only by the ingenuity and creativity of the instructional personnel of the center; they need not be expensive.

One diagnostic technique which can be very revealing about a student is the Informal Vocabulary Inventory being used in the Reading Center at Ricks College. This inventory is administered to the student by explaining that a survey is going to be taken of his everyday vocabulary; there is no pass or failure involved. After explaining the ten-minute time limit and a few ground rules, the instructor asks the student to list the alphabet down the left hand margin of an 8½” by 11” sheet of paper. The student then lists, alphabetically, as many words as possible during the ten minute time period. Observations such as the following can then be made:

- Is the student right or left handed?
- Does the student approach the task with some methodical organization?
- Does he spend much time searching or do words come to him readily?
- Is he struggling emotionally or does he seem to be at ease?
- Are his words monosyllabic or does he have an ample representation of polysyllabic and technical terms, etc.?

Another innovative and inexpensive diagnostic test is being used at North Idaho College in the Learning Skills-Center. The English as a Second Language Survey Test was developed to diagnose knowledge of phonetics, noun and verb usage and reading comprehension. The test has four parts, must be administered on an individual basis, and has proved useful as a general diagnostic tool providing insight into the problem areas to which instruction can be geared.

UTAH: MULTI-TRACK OPTIONS IN A LEARNING SKILLS PROGRAM

The Learning Skills Services at the University of Utah is a division of the Counseling and Psychological Services. Multi-track options are offered to any student who wishes to take advantage of the services available.

While appointments may be scheduled, most students simply “drop in” for help. This initial contact is used as a brief “intake interview” during which time the student completes an intake form and discusses his concerns with a counselor. The counselor helps to clarify the specific needs of the student, explains the program options that are available and helps to get the student moving towards his goal. Some of the options available are:

1. Independent work in the Learning Skills Lab with an individualized program of skill development.
2. Enrollment in a Learning Skills Seminar.
3. Referral to individual or group counseling program.
4. Referral to specific courses in reading, study skills, math, etc.
5. Referral to specific workshops in skill building.
6. Combinations of the above.

The majority of the students elect to work with an individualized program in the Learning Skills Lab. The Lab is open five days a week from 9:00 to 4:00 p.m. Students may come in at any time. All work is done in the Lab with materials such as the McGraw-Hill Basic Skills System, EDL Programs, or special materials specifically developed to focus upon certain skills. Diagnostic tests are used to determine the student's current level of proficiency for the assignment of materials.

While students are assigned to specific Counselor Aides (paraprofessionals), the relationship is not expected to be tutorial in nature, but rather one in which the counselor aid is viewed as a guide or resource person for the student. The paraprofessionals are trained not only in the use of the Learning Skills materials, but receive on-going training in basic counseling skills such as techniques of referrals, recognition of atypical behaviors, etc. They are also provided opportunities for professional growth through involvement in specific programs such as Test Anxiety Programs, Interpersonal Skills Workshops, and specific task-oriented developmental classes and workshops.

While the program is not offered as a panacea for all students suffering with academic difficulties, students' responses seem to indicate a high degree of satisfaction with the available options and the staff is constantly working on ways to improve services.

WYOMING: ACADEMIC SKILLS COUNSELING

Although the content material used in the study and reading skills program of the Counseling and Testing Division at the University of Wyoming is similar to that of most other college programs, Wyoming's program has some unique features. Programmed mini-courses, ranging in length from one to twelve hours, and consisting of cassette tapes, study guides and worksheets have been developed locally or purchased commercially. Programs are available for: developmental and speed reading, vocabulary building, spelling, listening, visual memory, test-taking, time and environment management, note-taking, basic composition, and self-exploration.

Recognizing that some students who request help with study and reading skills can also benefit from individual or group counseling in combination with development of academic skills, a variety of counseling options are available to students. In addition to individual counseling, group programs in self-assertive training, career exploration, encounter and self-awareness are conducted for those who elect participation. These individual and/or group counseling experiences often help a student become more aware of himself, more self-accepting, and better able to examine his own system of motivation. This awareness can have great
implications for success in study and reading skills, especially in view of the types of students who request help in the study and reading skills area.

Most students entering into the program seem to fall into one of four categories. For each category, the "next step" may be quite different. The first category is the student who "can and does." He comes to the program wanting to get better at what he is already good at. He needs little more than an introduction to the materials and he is off and flying, making rapid gains in whatever area he is working. Next is the student who "cannot but does." He is the hard-working, conscientious student for whom learning is somewhat difficult, due to either low specific aptitudes or to inadequate preparation. He needs support and encouragement, but he will usually show gains because he really wants to learn better ways to read and to study.

In the third category is the student who "cannot and does not." His system of motivation pushes him in the direction of failure. Often he believes that he cannot learn, a belief that has been reinforced by prior feedback from teachers and peers. He apathetically fails by not working at all, by not meeting the terms of his contract, and by ultimately dropping out of the program. His motivation seems to be to prove that he is right about himself. Unless intervention can be made quickly, he does not stay long. In the last category is the student who "can but does not." Often he appears to be working hard to fail, even though he has the ability to succeed. He may complain "I'm not interested in my courses," "I cannot keep my mind on what I am doing," or "I'm so tired all of the time." He may be the student who is in college to please his parents or peers, or the student who has declared a major in a field for which he does not have either interest or aptitude. Indeed, his real motivation may be to leave a place where he does not want to be at all. Often he is not aware of his real feelings, but comes into a study and reading skills program looking for easy answers.

Students from the first two categories find success in the program because they know where they are going and are determined to get there. Students from the last two categories are less likely to succeed and seem to benefit greatly from the combination of work in the study and reading skills area plus individual or group counseling.

REFERENCES

To those who have never applied for federal funding of academic projects, the procedure may appear to be so mysterious and complex that the tendency is to continue to ignore this possible source of help. The purposes of this paper are twofold — to outline the steps involved in making application for funding, and to present the chronology of a Title III project written by two “first-timers” in Federal Fundingland.

HOW TO WRITE A PROPOSAL

While guidelines for specific grants vary and should be followed, there are some procedures that are generally appropriate in proposal writing. First, seek out the person at your institution who is responsible for pursuing funding. If no such person exists, consult with your administration regarding the delegation of this responsibility so that communication is established with the government agencies involved with the announcing and awarding of grants.

When you have been apprised of funding possibilities for the coming year, contact the one that comes closest to meeting your needs. You may find that you will need to make applications to several different sources in order to acquire various components of your project. Acquaint yourself with the deadlines for submitting proposals, and be prepared for a time lag of as much as a year from submission date to start the project.

In writing the proposal narrative, certain information should be included:

1. Start with a description of your institution and population. Give pertinent geographical and economic factors, statistical data on ethnic makeup of your students, etc., stressing those aspects particularly applicable to the stated purposes of the grant. If you are writing only a part of an
institutional package proposal, the person in charge of the whole proposal will probably do this.

2. State the problem you seek to alleviate. Be specific. Define the characteristics and size of your audience. Do not propose to solve all of the ills of your institution or your students.

3. Outline your plan to attack the stated problem. Define the period of the project. List the behavioral objectives you have for your audience.

4. Catalogue what is needed to carry out your plan, describing the function of each item and the reason it is a necessary part of the plan. Be sure to consider
   a. Facility — is there a present site? If so, is it adequate for the proposed project? Is remodeling necessary? Will you have to shut down present operations during remodeling? Are there other possible locations?
   b. Staff — How many people are needed? What levels of proficiency must they have? Will training be necessary? Part time or full time?
   c. Equipment and supplies — is new furniture or blackout curtains needed? What machinery will act as teacher multipliers? Is hardware needed for implementation of new techniques? What diagnostic machinery or tests must be purchased? What kits or programmed materials are needed for individualization?
   d. Travel — What conferences need to be attended? What other facilities or institutions should be visited for acquisition of ideas?

5. Build evaluation procedures into your plan. State the methods you will utilize to measure how well you met your behavioral objectives.

6. Figure the budget needed to carry out your plans. Remember to include repair costs, inflation and state tax additions to present catalog prices of equipment. Staff expenses should take into consideration fringe benefit costs, salary schedule increments and cost of living raises. In addition, you should anticipate the possibility of having to hire new staff members at a more expensive slot on the salary schedule to replace current personnel. Your institution may have a flat percentage that must be added to your figures to cover increased operating expenses incurred by your new project as it affects work loads in personnel, accounting and purchasing offices.

   The budget will require your greatest efforts at crystal ball gazing. Funding agencies realize the difficulties involved in this item and will usually allow some changes in the allocation of monies in your budget.

DESCRIPTION OF PROJECT 16, COMPTON COLLEGE, 1973-74

Institution and Population
Compton Community College is an open enrollment two year community college located in the southeast Los Angeles area, serving the communities of Compton, Enterprise, Lynwood, Paramount and Willowbrook. Approximately 55% of our students live in Compton.

A student survey done in the Spring of 1973 at Compton College shows
that 25% of our students are from families with less than $5000 income, and another 21% fall between this figure and $7500. Unemployment percentages are high. 70% of our students are Black, 15% White, 6% Chicano, 5% Oriental and 4% other. About 12% of those students entering Compton College eventually obtain an A.A. degree. Compton College's foreign student population, mostly Iranians and Thais, is reportedly one of the largest of any community college in the country.

The average age of our day students is 23, and our evening students average 29 years. Because of family responsibilities, jobs, poor public transportation, lack of child care centers and a high incidence of poor health, absenteeism and dropout rates among our students are high.

The Problem
An analysis of placement test scores for the Spring, 1973 semester showed 35% of our native-born students scoring below 6.1 in reading. 2nd, 3rd and 4th grade reading levels are not uncommon. Foreign students are not included in these figures as they take a different test.

A well-equipped and staffed Reading Lab on campus was running at only half-capacity because the reading courses were not required and not transferable. Service was available to regular classes, walk-ins, ESL groups and Consortium students (a very capable group of students selected for a program of transition to enrollment at UCLA.) However, we were seeking more ways to match the availability of assistance in the Reading Lab with the needs of the bulk of our student population.

The sequence of English classes require students to move from 10A (dictionary skills and sentence writing), and 12 (paragraph and essay writing) to 1A. Placement was determined by an evaluation of a writing sample done the first week of school. The reading classes consisted of 9A and 9B, two semesters of survival skills (notetaking, handling textbooks, taking tests) and general reading skills.

Quite by chance, some students took 10A and 9A concurrently, and it was noticed that the students seemed to be making much better progress than those who were just taking one of the courses. After looking at our course outlines, we found that they correlated in many respects. We decided that if we formalized a composite course we might be providing a better opportunity for students in need of remediation to improve skills. We also hoped to lower the dropout rate. Thus we developed Project 16.

Following the steps outlined in the first section of this paper, we wrote and planned a program for 1973-74, utilizing the expertise of our institutional Instructional Technologist, Dean of Instruction, and Program Planner and Developer. We also consulted with our Purchasing, Maintenance and Personnel offices, as well as with outside sources including vendors, remodelers and college placement centers.

The Plan
Title III funding for 1973-74 was requested for the establishment of a program to provide individualized reading and writing training for students
with extremely low entry behavior. The project was designed to serve approximately 200 students. Entry into this class would be determined by a combination of scores on the Stanford Achievement Test (Advanced, Paragraph Meaning).

The curricula of remedial English and remedial reading classes were revised so that they correlated with and reinforced each other in a one semester, 7 hours weekly core program of 3 English lectures, 2 reading lectures, 1 reading lab and 1 tutoring session. It was proposed that at the successful completion of the course, students would be able to perform the following tasks:

Follow written and spoken directions; discuss (orally and in written form) proper procedures in studying; use the dictionary, card-catalog, and thesaurus; recognize main ideas and complete sentences; apply basic essentials of grammar necessary for accurate written expression; distinguish fact from opinion; draw conclusions; apply context clues to approximate word meanings; participate in discussions; select appropriate standards of usage for various situations; utilize textbook aids such as glossary, index, summary, appendix and type styles; take notes from auditory and visual sources; mark printed matter; and follow efficient procedures in test-taking.

These skills would be taught by instructors in a variety of classroom activities. The combined course would avoid redundancy of instruction and save student time in class. This time would be utilized in one hour weekly individualized tutoring sessions with Teaching Assistants possessing degrees or enrolled in graduate programs. A summer workshop would be held to train personnel in specific areas pertinent to the program.

Procedural Problems
One of our biggest problems first semester was that students were not able to be scheduled for their tutoring hours until after they arrived in class. Since many of them registered late, and others did not arrive in Project 16 classes until after they had been sorted out of other English classes, great numbers of students lost several weeks of tutoring. We solved this problem second semester by getting permission to place a table at the end of the registration line and assigning a student's tutoring hour on a grid as he went past us. At the same time, we solved a first semester geographical problem by giving the student informational materials.

Unfortunately, the English and Reading teachers were physically separated by being housed in different locations on campus. Not only did this make communication difficult, it was hard for some students to see the connection between the various parts of the course.

Evaluation
Written into our proposal was a list of possible evaluative procedures, of which we would pick at least three: pre- and post- standardized reading testing, pre- and post- writing samples, student grades, anecdotal records,
observation, and evaluations by students and T.A.'s and reduce dropout ratios.

One measure of the effectiveness of the program was student success in semester grades. There was usually little disagreement between the marks suggested by the English teacher and the reading teacher for a particular student. T.A.'s wrote summaries of the progress of each of their tutees, and this input was fed into the grading system and was often the deciding factor. Most of the students who stayed in the program did well enough to move up to the next level in English. A few moved directly into 1A classes.

However, despite all our supportive efforts, a number of students did not complete the program, and we do not feel that we cut the dropout rate appreciably.

Student evaluations indicated that they thought the class had helped them succeed in other classes or in their jobs by a margin of 4 to 1. The same percentage of students stated they would take another combination class like this one if it were offered at the English 12 level. By a ratio of 6 to 1, students said they would advise a friend to take the course.

Analysis of pre- and post- scores on the Stanford Achievement Test indicated average growth of 1.06 years during the first semester. Expected growth was .45 years, based on a 4½ month semester.

FUTURE PLANS

Plans for next year call for a slightly different setup. The project was too big, with 19 people involved, to be run smoothly by a part-time director.

In addition, we think that, for many remedial students, a 6 unit, 7 hour class is too much; therefore, in the future we plan to run the English classes and the reading classes concurrently, with the tutoring as part of reading.

Notwithstanding these changes, we feel that Project 16 has been a success.
ACTIVE LISTENING

Gretchen Crafts
California State University, San Diego

Research shows that an individual spends more of his lifetime in listening activities than in using any other communication skill. The average adult spends 45 percent of his time listening, 30 percent talking, 16 percent reading, and 9 percent writing. But of these skills, listening receives far less formal training than the others! Hence, we should not wonder that college students appear in our classrooms unable to "get anything out of a lecture."

Professor Vance Peavy of the University of Victoria has proposed five fallacies generally accepted as truths about why listening is given so little attention in schools:

Fallacy I: Listening is largely a matter of intelligence. Truth: While there may be some correlation between listening and intelligence, when language factors are controlled, the correlation is quite limited. Furthermore, quite commonly highly intelligent people are poor listeners.

Fallacy II: Listening is based on hearing acuity. Truth: Although this may be true to some extent, the fact is that only 3-6 percent of the total school population suffers hearing loss sufficient to impair learning; but low listening skills are found in about 95 percent of this same population.

Fallacy III: We practice listening every day, so we don't need formal training in listening. Truth: The fact is, we practice and reinforce faults in listening. How many times do you really listen when someone is talking to you? Or are you usually only half listening while you plan what you will say when he finishes? How many times have you only half listened to a student.
while thinking of all the things you could get done if he’d only leave your office? Most of us are preoccupied with other things when we pretend to be listening.

**Fallacy IV: By learning to read a person learns how to listen. Truth:** The best way to learn any skill is to practice that skill, not another skill — no matter how closely related the two skills may be. We don’t practice long distance swimming by practicing diving, so why would we think that we practice listening through reading practice?

**Fallacy V: Learning to read is more important than learning to listen. Truth:** The greatest fallacy of all, virtually all interpersonal living depends on listening — family, social, professional, religious, recreational relationships and activities are all based primarily on listening. Important decisions and beliefs (political, religious, and others) are based more on listening than on reading. Peer group psychology — at any age — is based on talking and listening. Most college learning is based on listening to and participating in lectures, discussions, conferences, seminars, and the like. In short, we are more influenced by what we listen to than by what we read or write.

**CONCLUSIONS**

Most classroom situations are not conducive to building good listening habits. When we as teachers ask a question we usually have a preconceived answer in mind and tend to tune out the student who gives another answer. Seats in rows are not conducive to good listening; a circle arrangement or small groups are effective because everyone in the class is then face to face. Since 98 percent of the information we receive is through the ears and eyes, active listening includes both listening and looking.

Listening is learned. Listening can be directly taught — and, because many college students have not learned how to listen, should be taught even at the college level. Every teacher should be a teacher of listening by 1) being a good listener and 2) direct instruction in listening skills. Despite evidence to the contrary, though, most of us teaching at the college level presuppose a mastery of this skill in our students and fail to include listening instruction in our curricula.

There are two basic purposes of listening: 1) to receive information and 2) to maintain emotional health. The first of these is fairly obvious to most people, but we rarely consider that being listened to is therapeutic; being listened to makes the individual feel like someone who counts. The exercise that I have used to demonstrate to students what it is like to be both a good listener and to be really listened to — and one which I usually use to open a unit on listening — is called “Active Listening” and proceeds as follows:
UNIT ON ACTIVE LISTENING

Behavioral Objective: Attending and giving feedback

Rules: Students work in dyads. This process has four phases:

1. Each dyad decides who is the "listener" and who is the "speaker." The "speaker" tells his partner about an early childhood experience. The "listener" is silent, and he avoids eye contact by every possible means. Trade roles after two minutes.
2. The "speaker" tells about another experience. This time the "listener" constantly interrupts with such statements as "Yes, I know how that is. You are so right, etc." Trade roles after two minutes.
3. The "speaker" tells about a recent frustrating experience. The "listener" constantly interrupts to interpret with such statements as "What you really mean is... etc." Trade roles after 2 minutes.
4. The "speaker" tells about another frustrating experience. The "listener" is silent, attentive, empathic, and maintains eye contact. After 2 minutes he gives the speaker positive feedback such as "I like what you say. I like the way you express yourself. I'm glad you are here. You are a great addition to this group, etc." for one additional minute. Trade roles.

After the four phases are completed, discuss feelings with the group as a whole. How did you feel during phase 1? Phase 2? Phase 3? Phase 4? Etc?

Variations: Feelings can be shared after each phase of the exercise. Topics can differ to suit particular groups or situations.

What do people usually do? What happens? Most people enjoy this exercise and come to recognize the difference between good and poor listening.

REFERENCES

2. "Listening and the Classroom Teacher," Vance Peavy (Presented at the Second Annual Far West Transmountain Regional Conference of the International Reading Association, October 26-27, 1973), University of Victoria.
INTRODUCTION

The Pre Technical Learning Lab at the Utah Technical College at Provo is committed to providing individualized instruction and tutoring to meet the varied needs of the students. Modestly beginning as a one-teacher operation serving three to ten students per hour a day in math, reading and English, it has metamorphosized into a multi-disciplinary, four-teacher lab which served over four hundred students last quarter. It is the purpose of this paper to describe the Lab reading program and to briefly outline its offerings.

FROM WHERE THEY ARE TO WHERE THEY AIN'T

Assessment of Student Needs

Students often come to the Lab seeking help, but not knowing why or exactly what they expect to find. A first contact is a conference with a Lab instructor. During this conference, planning between the student and the instructor involves setting up diagnostic testing in one or perhaps all major areas within the Lab. Each area usually has a hand in the administration of the student's assessment.

Students who request a reading assessment are usually administered a one-to-one oral reading inventory such as the revised Silvaroli Classroom Inventory Record. Further testing is usually administered using any of the following:

Cooperative English Test Form 2A [vocabulary and comprehension]
Discussion of Student Options

Results are shared with the student. A student may feel confident about his reading and not desire any further study in this area. Students who wish reading instruction are given details of possible programs and options which could help in gaining strengths in weak areas. Students may request auxiliary help in the form of a tutor.

In order to meet student needs, all Lab courses have variable credit and continuous enrollment throughout the quarter. A student may plan variable hourly attendance if desired.

A student-centered interest inventory aids in helping to identify areas of a student's reading interests and habits. This inventory aids in constructing activities that an individual or group of individuals might enjoy reading about.

Placing a student involves the establishment of instructional and independent reading levels in reading and comprehension. The student will receive teacher/teaching assistant supervision during instructional reading and comprehension activities. Independent activities can be accomplished by the student without direct teacher supervision. Basic classwork schema allows for individual study, one-to-one (tutoring) learning, pairing of students, group work, and sub grouping.

GROUPING

Grouping takes place by use of the following criteria:

Group 1 — Beginning reader, English as a Second Language Reader, or other readers with very few skills.

Group II — Developmental reading students and students referred for help in content area reading.

Group III — Highly skilled reading student.

Methods of matching reading materials with the student provides an opportunity for further individualization of student learning activities. Working with weaknesses, encouraging new learning, and introducing other instructional level areas are handled in a one-to-one situation and small groups. Supplementary reading is that reading activity chosen by the student such as a paperback novel, short story, play, or content area texts. Independent learning activities includes options in basic skill building materials which can be handled by the student with little teacher guidance.

As the chart on page 53 suggests, during a class hour, Group I will spend approximately forty minutes working directly in teacher contact.
Some learning activities might include exercises and drills in word attack skills, group and individual reading, vocabulary, controlled reader session, discussions, comprehension activities and short term writing projects.

**Hourly Schedule For Student Class Work**

<table>
<thead>
<tr>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Min.</td>
<td>work with teacher</td>
<td>independent work</td>
</tr>
<tr>
<td>20 Min.</td>
<td>independent work and supplementary activities</td>
<td>work with teacher</td>
</tr>
<tr>
<td>20 Min.</td>
<td>supplementary reading</td>
<td>work with teacher</td>
</tr>
</tbody>
</table>

Group II and Group III will likewise concentrate on similar reading activities according to the students' reading levels. Less direct teacher contact is provided for these groups.

Students may select to work in a content area during supplementary reading periods. Students may ask for instruction in textbook chapter reading, study reading, test taking, note taking, vocabulary study and time management. In addition, the reading lab has content area textbooks, alternate copies, large print texts, supplementary literature, some quizzes, and tests in many areas. Upon request any required textbook reading will be taped for a student.

**Learning Activities**

Assignments and learning tasks in all groups focus around the literacy skills of reading, writing, listening, speaking and thinking. As many of these skills as possible will be interwoven within an activity. For example, an assignment may ask the student to write a letter seeking information, to register a complaint, or promote good will. Students can share their letters with one another during a group exchange period. A follow-up activity would be to respond to their own letter in writing or exchange letters and reply to the classmate's letter with use of a telephone conversation with that classmate.

Student and master teacher conferences are scheduled at the begin-
ning and end of each quarter, as well as at the end of each learning activity. Such learning activities can be listed on the following sample of an assignment sheet:

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHER</td>
<td></td>
</tr>
</tbody>
</table>

**Specific Skills:**  **Materials:**  

**COMMENTS:**

Instructional, independent and supplementary reading activities are listed beneath the left column. Materials and resources are listed in detail beneath the right column. Assignment sheets are kept in the student's folder until the activities are completed or reconstructed. At the center of the sheet is a space for student comments. This is another means in which a student can give feedback to the master teacher and/or teaching assistant about how he feels towards his reading activities.

Finished activities or reconstruction of activities require a student and master teacher conference. At this time student input helps to evaluate his work and feelings about the completed tasks. After an informal reading inventory has been administered to the student, the student or a small group of students, master teacher and teaching assistant plan the next objectives, goals, and learning tasks to be undertaken. Student voice is vital in this phase of setting up learning activities.
Evaluating

Students are asked quarterly to evaluate the reading program activities, materials, resources, involved teaching assistant and master teacher by means of a written evaluation. Space is provided for personal comments. Therefore, the entire reading program process is under continuous evaluation and revision according to student needs and interests.

Last Spring quarter new growth took place in the reading program in the form of a credited speed reading course offered through the Humanities Department. This progress was due to an interest and subsequent request by trade instructors for such a course to aid their students in gaining reading proficiency skills. This course has bloomed with student interest and enrollment since that time. Planning is under way for future additions of credited companion courses in reading comprehension and vocabulary development and also in study skills.

Although all lab credits are not transferable to other collegiate institutions, lab grades are reported on the same record sheets as credited courses.

Students aid in establishing grades for themselves. A final conference between the student and master teacher aids in establishing a reading grade and also have proven to be an excellent time for planning upcoming quarter endeavors.

CONCLUSIONS

Two main overall objectives of the Pre Technical Reading Program are to help students identify strengths and difficulties in reading, and with the aid of a teacher, develop an individualized program. Specific activities to “get them from where they are to where they ain’t” include:

1. student and master teacher conference
2. diagnostic testing
3. identification of student difficulties
4. prescription of a program with aid of student input
5. regular student and master teacher and/or teaching assistant conferences to evaluate student successes and progress
6. one-to-one tutoring
7. small group and sub group activities
8. referral to counselors when desired by student or when planning to enter vocational programs
9. use of software, hardware and all other available resources to assist in the individualization of programs
10. flexibility and adaptability in program planning and scheduling
11. desire of teachers to meet the needs of students
12. continuous evaluation of reading programs activities, resources and teachers by students
13. growth of the reading program by the addition of a credited speed reading course and planning for future additions of credited courses.
panion courses in reading efficiency and vocabulary development, and study skills.

At present we are serving about 15 percent of the student body. We hope that with continued development of the Pre Technical Learning Lab we will serve at least 50 percent of the student body.
TEST ANXIETY REDUCTION:
PROGRAMS AND PROGNOSTICATIONS FOR
COLLEGE READING LABS

Joan M. Curtis
The University of Texas at Austin

INTRODUCTION

Treatment for test anxiety has been available in the Counseling Center at the University of Texas at Austin for several years. More recently, the Reading and Study Skills Laboratory (RASSL) has begun to offer desensitization groups for test anxiety. If thinking about ways to develop our program for the future, we have investigated several modifications to standard desensitization programs that address the needs of test anxious students.

THE PROGRAM TO DATE

Test anxiety treatment has been an organized program within the Counseling and Psychological Services Center since 1970. Generally, treatment has consisted of six to eight hours of systematic desensitization using a standardized hierarchy for general test anxiety with slight modifications for specific anxiety reactions to graduate entrance examinations or graduate oral exams. Clients are introduced to the concepts of inappropriate and constructive self-talk and may be referred to RASSL for further help in study behavior. In 1972, the behavior therapy staff met with the RASSL staff and taught us to screen clients for their desensitization program. In Spring 1973, recognizing that the majority of test anxious clients were appropriate referrals from RASSL, it was suggested that the Reading Lab experiment with offering groups. In Fall, 1973, the reading staff received specific training in the methods of the desensitization program, and we have spent this year offering a program identical to the
Counseling Center's in order to ascertain treatment comparability. An analysis of pre- and post-test data recently completed has confirmed that the treatment is comparable and effective at both institutions.

THOUGHT FOR THE FUTURE

At RASSL we are both excited and frustrated. Our frustration emerges in trying to offer services to 150 persons who have been screened for test anxiety treatment. The problems of juggling schedules to offer small groups at times convenient for both staff and students will have frustrated the attempts of many to receive treatment. We will be fortunate to treat a third of those who have asked for the service. Test anxiety desensitization is a small part of our total program but it is crucial.

Our excitement is in planning for next year. We suspect that as students become aware of this service at the Reading Lab the number of requests may double or triple. The reasons for this may be that it may seem "safer" to ask for help from a Reading Lab than from the Counseling Center; we screen routinely for test anxiety and identify students who could benefit from treatment, and we are responding to a demand for organized and systematic aids to help juniors and seniors prepare for graduate entrance exams.

The RASSL staff is now considering four questions:

1) What are the most effective and economical ways to treat test anxiety?
2) How can the majority of requests for this service be handled best?
3) How close to the time of the request can this service be made available?
4) How can continuous evaluation of treatment modes be incorporated into these programs?

REVIEW OF THE LITERATURE

Over the past fifteen years, the literature on test anxiety has burgeoned. From early work in desensitization by Wolpe (18) and Paul and Erickson (8) have come important adjuncts to the more traditional methods of dealing with the problem either by psychotherapeutic or study counseling. Allen (1) found that study counseling is more useful for students whose anxiety results from poor study habits, while desensitization appears to be more appropriate for conditioned emotional reactions to the examination situation. The majority of the literature testifies to the effectiveness of desensitization in alleviating anxiety over the testing situation, but more recently, additional components of test anxiety have been identified. These have implications for reading specialists and psychologists working with students and developing programs.

In 1967, Liebert and Morris (4) distinguished between worry and emotionality in test anxiety. Working with a ten-item modified version of Mandler and Sarason's (5) Test Anxiety Questionnaire, they identified
worry as "any cognitive expression of concern about one's own performance, while 'emotionality' referred to autonomic reactions which tend to occur while under examination stress." (4:228) Wine (14) noted, in her review of test anxiety literature that "training test anxious subjects to relax in the presence of progressively more stressful stimuli ... assumes that the emotional arousal components of test anxiety is its defining characteristic." (14:101) In contrast, her own program emphasizes the cognitive aspects, and she has developed an attentional training procedure designed to train the student to stop engaging in counter-productive self evaluations and to re-focus attention on the task to be completed. Meichenbaum's (7) cognitive modification program extends this concept. First, students undergo "insight therapy" wherein they become acquainted with their inappropriate "self talk" and are taught to generate helpful instructions and talk which will assist them to focus on and complete the task. An example of inappropriate self talk in the exam situation is "... that's two in a row I didn't know. I feel so tight. What if I can't get the next one! Then what!" Constructive self talk is "Now let's see, what does it say exactly ... don't interpret or add anything — just exactly what does it say?". (1:58) Next, a modified desensitization program is introduced in which students are presented with a series of test taking scenes where they are told to imagine themselves actively and appropriately coping with their anxiety by taking slow, deep breaths and thinking about constructive and helpful internal messages and instructions. Thus, with Wine and Meichenbaum, the worry component of test anxiety is more systematically attacked than it has been in traditional desensitization.

TREATMENT MODES

Groups: For our student population, several modes of treatment will be important. First, group treatment will be optional and offered periodically. Our experience indicates that some students select group treatment rather than self-regulated or automated programs. Donner (3) found no significant differences in treatment of a group where the therapist was present and a taped desensitization program, but a strong trend favored the therapist present group for improved GPA.

Automated Programs: There is evidence to support vicarious desensitization treatments (Donner (3), Mann (6), Suinn (13)). Reading labs with video or audio tape equipment can develop and present their own recorded programs.

Donner (3) developed a taped set of instructions for systematic desensitization which could be adapted for a cognitive modification program. He found he had to accommodate his program to the slowest member of any group and correspondingly increased his hierarchy from about fifteen to twenty-nine steps. Each was presented six times at either five, ten, or twenty second intervals. Wark (14) has described a simple and inexpensive way for using self-desensitization using two portable tape
recorders, thus obviating the necessity for elaborate and expensive playback equipment. (14:37)

Well-written material that students can work on at home or in a self-paced lab are still another option. Richardson (10) has developed a manual as part of a test anxiety reduction program for computer-assisted instruction. He writes:

Clients who receive one or another form of test anxiety treatment are usually treated in a manner based on some reasonably well-developed theory about test anxiety and its alleviation, but they are usually not provided with the full extent of available information about the behavioral and emotional dynamics of test anxiety and techniques for coping with it. Yet, in many cases, simply the provision of new and useful information about these matters may enable a student to modify his test-anxious behavior. Also, conveying this information in a permanent written form may be not only a more economical, but also a more effective way of making it available as a resource to the student... (9:14)

His manual contains three sections: The first section is informational, illustrative, and explains the author's rationale. It requires the reader to write down his reactions to tests. The second section contains strategies for coping with test anxiety including cognitive modification methods, relaxation and some study suggestions. In the last section, there are written exercises where the student develops and writes out his own personal plans for dealing with examination stress.

ASSESSMENT

Assessment of treatment effectiveness should be an ongoing part of program development: At RASSL, we plan to assess attrition rate and combinations of treatments as well as their effectiveness.

There are several instruments to measure test anxiety and reading labs may wish to review them. The Test Anxiety Scale (11) is a 37 item true-false questionnaire which Liebert and Morris (4) adapted to a ten item Worry, Emotionality Scale. The Suinn Test Anxiety Behavior Scale (STABS) (12) is a 50 item scale. The Achievement Anxiety Scale measures facilitating and debilitating anxiety scores. Both Wine and Meichenbaum have found that increased facilitating anxiety post scores on this test were more sensitive indicators of change than several other instruments.

Pre- and post-test measures, analogue testing situations, improved GPA, etc., can be used to evaluate the program effectiveness.

CONCLUSIONS

There are several ways to help test anxious students in the setting of a reading lab. Group treatment, study counseling, cognitive and modification, and student use of printed and automated programs which staff
members can develop or adapt are effective ways to meet the needs of test anxious students. Wittmaier (17) concluded that it is false to assume that test performance will automatically improve if anxiety is reduced because students with high debilitating anxiety are less likely to have efficient study habits and the more prone to delay work than low anxious people.

REFERENCES

SURVEY OF FUNCTIONS OF LEARNING PROGRAMS IN CALIFORNIA'S TWO- AND FOUR- YEAR PUBLIC COLLEGES AND UNIVERSITIES

Margaret Coda Devirian
California State University, Long Beach

INTRODUCTION

The Learning Center movement in California may be compared to an adolescent who "While searching to define himself, he remains unsure, unsettled and unstaid, but intent upon improving higher education by mixing convention with innovation." Learning Centers in California are developing in such a kaleidoscopic manner that there is little uniformity in their names or functions.

To determine exactly what degree of uniformity existed, all the California public institutions of higher education were surveyed regarding the program functions of their Learning Centers.

LITERATURE AND RESEARCH

The literature contains many surveys of reading programs in institutions of higher education. A. J. Lowe discusses the results of 49 such surveys done between 1929 - 1966 (4). After 1966, there were five surveys. Among these were two more by A. J. Lowe (5,6), one by John E. Martin (7), one by Jill D. Swieger (9), and one sponsored by the New York State Education Department (2).

Though there are over 50 surveys of reading programs, the search of

*This paper is a preliminary report. A detailed and comprehensive analysis of the data and institutional descriptive literature is being compiled for later publication.
the literature revealed no surveys of learning skill programs. Loretta Newman, however, surveyed learning center facilities (8). Kay M. Whetstone, United States International University, Colorado Alpine Campus, is presently working on the results of her 15-state survey of college-adult learning programs (11). Her survey, when published, will provide much needed and useful information.

PROCEDURE

A 25-item questionnaire with cover letter and self-addressed envelope was sent to the "Dean of Students" at the 103 California community colleges, the 19 California State University and College campuses, and the 9 University of California campuses. Of the 131 sent, 96 were returned — a 73% return rate. The first mailing went out January 7, 1974. Six weeks later, a second mailing was made to those campuses that had not responded.

The results were processed on the California State University and College Timesharing Date Center's Controlled Data Corporation 3170 Computer. The International Timesharing Corporation Questionnaire Package was used to process the data. Dr. Richard C. McLaughlin, Multi Media Coordinator and Associate Professor of Instructional Media at California State University, Long Beach, was the computer design consultant and programmer for this study.

RESULTS

This report does not list all of the survey data categorized. The analysis of data by type of institution and program designation is available, upon request, from the author.

The survey questions with their corresponding data are reported as follows:

Q. Is there a learning and study skills program on campus?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>77</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>80.2%</td>
<td>19.8%</td>
</tr>
</tbody>
</table>

Q. If there is no program, are there plans for one in the future?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>68.4%</td>
<td>31.6%</td>
</tr>
</tbody>
</table>

Q. During what year did program become operational?

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>To 1960</td>
<td>1</td>
</tr>
<tr>
<td>1960-65</td>
<td>3</td>
</tr>
<tr>
<td>1966-69</td>
<td>24</td>
</tr>
<tr>
<td>1970-72</td>
<td>26</td>
</tr>
<tr>
<td>1973 On</td>
<td>18</td>
</tr>
<tr>
<td>1.4%</td>
<td>4.2%</td>
</tr>
<tr>
<td>33.3%</td>
<td>36.1%</td>
</tr>
<tr>
<td>25.0%</td>
<td></td>
</tr>
</tbody>
</table>
Q. What department or service administers program?

Administered by
Counseling Center 17 16.3%
English Department 20 19.2%
Instructional Svcs 20 19.2%
Student Inters Svcs 27 26.0%
Other 20 19.2%

Q. Where is the program housed?

Building
Library 30 38.5%
Classroom 7 9.0%
Separate 13 16.7%
Other 28 35.9%

Q. What services are offered?

Services offered
Reading 63 14.7%
Study Skills 67 15.6%
Writing 60 14.0%
Mathematics 49 11.4%
Tutorial 63 14.7%
Personal Growth 34 7.9%
Academic Advice 33 7.7%
Voc Counseling 30 7.0%
Other Counseling 9 2.1%
Other Services 22 5.1%

Q. Who is eligible and using services?

General Public 17 5.5%
Students 74 23.9%
Faculty 32 10.3%
Administration 14 4.5%
Staff 22 7.1%
Veteran Students 70 22.6%
EOP Students 68 21.9%
Other 13 4.2%

Q. Is there a fee?

Yes 1 1.3%
No 75 98.7%

Q. How many full time personnel work in Center?

Full Time Personnel
1 24 34.3%
2 21 30.0%
3 9 12.9%
4 - 10 13 18.6%
11 + 3 4.3%
Q. How many part-time personnel work in Center?

<table>
<thead>
<tr>
<th>Part Time Personnel</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 5</td>
<td>37.7%</td>
</tr>
<tr>
<td>6 – 10</td>
<td>17.4%</td>
</tr>
<tr>
<td>11 – 20</td>
<td>17.4%</td>
</tr>
<tr>
<td>21 – 30</td>
<td>5.8%</td>
</tr>
<tr>
<td>31 +</td>
<td>21.7%</td>
</tr>
</tbody>
</table>

Q. How many hours is Center open per week?

<table>
<thead>
<tr>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To 34</td>
<td>10.7%</td>
</tr>
<tr>
<td>35 – 39</td>
<td>6.7%</td>
</tr>
<tr>
<td>40 – 44</td>
<td>28.0%</td>
</tr>
<tr>
<td>45 – 49</td>
<td>12.0%</td>
</tr>
<tr>
<td>50 – 54</td>
<td>8.0%</td>
</tr>
<tr>
<td>55 – 59</td>
<td>9.3%</td>
</tr>
<tr>
<td>60 – 64</td>
<td>10.7%</td>
</tr>
<tr>
<td>65 – 69</td>
<td>8.0%</td>
</tr>
<tr>
<td>70 +</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

Q. What is the average number of persons serviced monthly?

<table>
<thead>
<tr>
<th>Users / Month</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To 99</td>
<td>15.6%</td>
</tr>
<tr>
<td>100 – 199</td>
<td>28.1%</td>
</tr>
<tr>
<td>200 – 299</td>
<td>4.7%</td>
</tr>
<tr>
<td>300 – 399</td>
<td>7.3%</td>
</tr>
<tr>
<td>400 – 499</td>
<td>6.2%</td>
</tr>
<tr>
<td>500 – 999</td>
<td>14.1%</td>
</tr>
<tr>
<td>1000 +</td>
<td>23.4%</td>
</tr>
</tbody>
</table>

Q. Is program diagnostic?

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>73.3%</td>
</tr>
<tr>
<td>No</td>
<td>26.7%</td>
</tr>
</tbody>
</table>

Q. What diagnostic instrument is used?

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveys on Study Habits and Attitudes</td>
<td>11.8%</td>
</tr>
<tr>
<td>Survey of Reading/Study Efficiency</td>
<td>20.6%</td>
</tr>
<tr>
<td>Coop English Test</td>
<td>6.0%</td>
</tr>
<tr>
<td>Purdue English Test</td>
<td>3.9%</td>
</tr>
<tr>
<td>Diagnostic Reading Test (TRIF)</td>
<td>16.7%</td>
</tr>
<tr>
<td>Other</td>
<td>40.2%</td>
</tr>
</tbody>
</table>

Q. How do most learners use the service?

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>26.1%</td>
</tr>
<tr>
<td>Individual and Monitor</td>
<td>56.5%</td>
</tr>
<tr>
<td>Individual, Alone</td>
<td>13.0%</td>
</tr>
<tr>
<td>Other</td>
<td>4.3%</td>
</tr>
</tbody>
</table>
Q. How are most learners referred?

<table>
<thead>
<tr>
<th>Reference</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling Center</td>
<td>21.3%</td>
</tr>
<tr>
<td>Faculty</td>
<td>29.6%</td>
</tr>
<tr>
<td>Self</td>
<td>38.7%</td>
</tr>
<tr>
<td>Other</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

Q. Is course credit offered?

<table>
<thead>
<tr>
<th>Credit Offered</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>64.9%</td>
</tr>
<tr>
<td>No</td>
<td>35.1%</td>
</tr>
</tbody>
</table>

*Full bibliographical information on these test instruments can be found in the latest Tests in Print by Burps.*

Q. Ranking of major services according to purpose of center:

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>41</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Study Skills</td>
<td>22</td>
<td>13</td>
<td>23</td>
<td>11</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Writing (Eng)</td>
<td>21</td>
<td>15</td>
<td>23</td>
<td>12</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Mathematics</td>
<td>13</td>
<td>1</td>
<td>11</td>
<td>4</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Tutorial</td>
<td>31</td>
<td>11</td>
<td>16</td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Counseling</td>
<td>16</td>
<td>7</td>
<td>16</td>
<td>4</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>

Q. Ranking of major services according to use:

<table>
<thead>
<tr>
<th>Service</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>33</td>
<td>9</td>
<td>14</td>
<td>9</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Study Skills</td>
<td>17</td>
<td>16</td>
<td>25</td>
<td>17</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Writing (Eng)</td>
<td>17</td>
<td>14</td>
<td>25</td>
<td>13</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Mathematics</td>
<td>8</td>
<td>10</td>
<td>21</td>
<td>5</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Tutorial</td>
<td>28</td>
<td>12</td>
<td>26</td>
<td>10</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Counseling</td>
<td>10</td>
<td>9</td>
<td>23</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

**DISCUSSION**

The preponderance (80.2%) of learning skill programs in California institutions of higher education indicates an administrative recognition and acceptance of the need for such service. In addition, of 19 campuses stating that they had no programs, 13 indicated that they are planning one in the near future. This demonstrates an increasing interest and commitment to learning skill programs.

A perusal of the compiled data finds that a number of similarities exist in the learning skill program. The following generalizations are derived from the survey data:

- Most all (94.4%) became operational after 1965;
- Administration is fairly equally distributed among sectors;
- Over one-third of the programs are housed in the library;
- Those eligible and using services are primarily students;
- Group least eligible and using services is the administration;
- Only one campus charges for its services;
- Majority (64.3%) of programs have one or two full-time persons employed;
- Over 73% of programs are diagnostic;
- Diagnostic instrument designated most often was the Survey of Reading Study Efficiency by Frank L. Christ;
- Most of the learners in these programs utilize center on an individualized basis, monitored by a professional or para-professional within the center;
- Most programs offer some form of credit to some part of their users.

Certain similarities and differences do exist with respect to type of institution, i.e., community colleges, (CC); California State University and Colleges (CSUC); and University of California (UC). Thus, this survey disclosed that:
- Community colleges were the first to have a learning skill program; the UC's followed next, the CSUC's did not develop any until after 1965;
- UC programs are either administered by counseling and/or student personnel services;
- UC's and CC's ranking of purpose and use of center deviates little from overall ranking;
- CSUC's ranking differs markedly;
- 80% of UC's have between 4 and 10 full-time employees;
- UC's give no course credit;

Other factors affect programs. Some factors, such as size, locality, and budget are related to the nature of the individual campus. Other factors relate to administrative and staffing background and experience. In particular, as Gene Kerstiens has pointed out, "... the philosophy of a learning center mirrors almost without distortion the philosophy and personality of the director," (3:224) This survey did not explore the latter factors.

REFERENCES

1. Devirian, Margaret C.; Enright, Gwynn; and Smith, Guy D. "Turning the Corner for the Learning Center in California Colleges." Paper read at the Claremont Reading Conference, Claremont, California, February, 1974.


7. Martin, John E. "Improvement of Reading Programs (College Level) Summary of Data Collected," an unpublished paper, John E. Martin, Director of Reading Center, Fresno State College, 1970.


In order to broaden the concept of cognitive strategies we are coining the term "cultural-cognitive style." The rationale for broadening this term is that those psychologists and psycholinguists who deal with cognitive strategies often provide educators with fodder for racist pedagogical decisions. Much of the philosophy of the late 1960's focused on labeling the low income, bidialectal or bilingual student as dyslexic, culturally disadvantaged, slow in cognitive tempo, field sensitive, or "concrete" rather than "abstract" oriented. This labeling provided excuses for poor teaching and has resulted in mass failure in reading programs for minority students.

An example of the disastrous results of incorrectly translating psychological and educational theory can be seen in the treatment of students labeled as dyslexic. Valuable research has been done on this problem; a variety of sophisticated diagnostic instruments have been devised. Yet, very little methodological research has been done to solve the problem. A former student, for example, who hadn't completed our program, came up and proudly informed us that he had been diagnosed as dyslexic by another junior college. When asked what solution had been offered by the diagnostician, there was a blank expression on his face. We had to convince him to return and finish the structured program we have provided him.

The first cultural/cognitive style we will discuss is the audience participatory style-characteristic of Black, Chicano, and Native American students. For example, in Black culture, the audience participatory style is seen in the Black church. The minister's preaching style, as well as the choir's singing style, is audience participatory. The minister preaches
rhythmically, leaving spaces every few lines for fillers such as "Amen." This call response technique is used as well by the choir. Philips (3) has discussed the Native American's participatory style as well.

Keeping in mind the audience participatory style of our students, and after much experimentation, we discovered that allowing the class to split into groups worked best. Members of a group become concerned with the progress of their friends. In our reading labs there have always been a variety of group activities: games, paraphrasing, chants, and proof reading. Some activities are done with the whole class, some within a group, and some are done by two members of the group in a peer coteaching set-up. Our students are not isolated in carrels for long periods of time. At Nairobi College the students were polled to see which part of the reading lab they felt was most enjoyable and/or beneficial. The students preferred the paraphrasing in groups, which is a comprehension builder, and they enjoyed the instructor's presentation of the spelling pattern rules. They felt the tapes were very useful for individual drill, especially if they had been absent.

Many of our students have gaps in their knowledge of the short vowels as well as other spelling patterns. The problem is finding the most effective drill techniques. We have discovered that along with dictation exercises, and pairs of students drilling each other with flashcards, games take advantage of the audience participatory style of our students. Since movement is an important teaching device, an example of a drill which incorporates movement and mnemonic clues is found in the following short vowel drill. Teach the short vowels with hand clues. "Imagine you are hungry and see a red, juicy apple. Just as you are about to take a bit, a worm crawls out — a-a-a-a!" The hand signal that goes with this clue, devised by Watson (5), is an arm outstretched as though holding a disgusting apple. Students of course enjoy developing their own mnemonic devices for the spelling patterns.

The second cultural-cognitive style we have isolated is the bilingual/bidialectal students' systematic learning style. Students with another language variety in their speech repertoire seem to need a systematic approach — a semi-foreign language teaching method. Chall (1) found that low income, bidialectal students initially needed a decoding approach. They may need this system because they have another language variety in their background. Perhaps the presence of another language variety prevents their learning the spelling patterns on their own. The students must either intuit the patterns by themselves or be taught them. Since it is often the case that the speaker of Black English does not differentiate between /i/ and /e/, the difference between these two sounds should be pointed out for reading and spelling purposes. Students should not be told to change their speech, however. Whereas the students must discriminate the difference in meaning between "pen" and "pin" when reading, they need not make this discrimination in their speech.

Our approach proceeds step by step in an organized fashion, teaching the spelling patterns, vocabulary, comprehension, and study skills. We
teach the five simple patterns or rules so that the older student can quickly attack polysyllabic words on his own. We include, of course, the rest of the major spelling patterns, but a student is on his way to word attack with the following five rules or patterns from Fabian and Hoover (2)

1. **Simple Vowel Hint — Short Words.** In a short word, if one vowel is followed by one or two consonants, the vowel represents a simple vowel sound. Example: bell.

2. **Simple Vowel Hint — Long Words.** In a long word, if a vowel is followed by two or more consonants, the vowel will represent a simple vowel sound. Examples: dismiss, kidnapping.

3. **Schwa-Diphthong Vowel Hint.** If a vowel is followed by one consonant in a multisyllabic word, that vowel is a schwa /a/ most of the time, so try a schwa sound first. If that pronunciation does not produce a word, try a diphthong or long vowel sound. Examples: adult, music.

4. **Silent E Vowel Hint.** At the end of the syllable or a word, when a vowel is followed by a consonant and an e, the e is silent and the first vowel is a diphthong. Examples: cape, hate.

5. **Double Vowel Hint.** Double vowels sometimes represent the letter name of the first vowel. Examples: aid, eat.

Decoding is of course only an initial step, which must be followed by vocabulary, comprehension, and study skills. When teaching vocabulary and study skills we stress the importance of our students developing systematic work habits. Many of the techniques used by students of a foreign language are particularly effective for the bilingual/bidialectal student. Anyone who has studied a foreign language knows that an excellent study technique is to carry around flashcards and drill oneself constantly. Our students are encouraged to carry their sound, syllabication, and vocabulary flashcards with them, drilling at every convenient moment — while waiting for the bus or while standing in line at the grocery store. Flashcards are used in group and self drills and in a variety of games. One highly systematic way to begin vocabulary work is to teach prefixes, suffixes, and roots — as opposed to rote memorization of words. Word histories are another way of pointing out to the student that our language is systematic and not at all as arbitrary as it looks at first glance.

Each day’s lesson is highly structured. There is a shift of activities every ten to twenty minutes unless the class is finishing a project. After discussing various study skills, the skills are used for a concrete purpose. We have incorporated the teaching of study skills into the broader skill of writing a term paper. Once again the class structure is small groups working together — narrowing down the topic; using the library; outlining; taking notes; writing the rough draft; and proof reading for spelling, grammar, wording, logic, and flow. The instructor floats around serving as a resource, and questions may be discussed individually or with a group. This project has served us well. It encompasses most of the problems of study skills and composition. For example, when the student is at the point
of taking notes he/she really appreciates hints about prereading, skimming, and scanning, and note taking. It is easier to teach these skills when the student can practice them within the framework of a concrete task. Often we allow students to work on papers for other classes in this fashion. They get our suggestions as to procedure and thus begin to see how study skills apply in their immediate lives. Keeping in mind the oral tradition of most minority students, when their papers are done there is a presentation prepared for the class. Sometimes these presentations have been in the form of a group presentation, and sometimes they have been speeches. Before giving a speech the student turns in an outline of what he/she is going to say.

We have discussed the cultural-cognitive styles of minority students and the teaching strategies which can be developed to teach the bilingual/bidialectal student. While a systematic approach, making use of audience participation techniques, is effective for most students, it is absolutely essential for the bilingual/bidialectal student.

REFERENCES

DEVELOPING AN OUTREACH MODEL:
FROM PRACTICE TO THEORY

Ann Faulkner
The University of Texas at Austin

For many years the Reading and Study Skills Laboratory (RASSL) has offered free, voluntary, non-credit instruction in college-level reading and study skills. RASSL is a part of the Counseling-Psychological Services Center and the U.T. Division of Student Affairs. While maintaining and diversifying these services offered in our classrooms and labs to U.T. students, faculty and staff, the RASSL staff has been vigorously pursuing a wide range of outreach services. Having coordinated these outreach endeavors during this academic year, I'm eager to share some of our experiences in a way that might be relevant to the development of outreach programming on other campuses. It is my conviction that the employment of various outreach activities can yield great benefits not only in staying-power to budget-troubled reading programs but in the larger efforts of our institutions to respond to the changing needs of society.

THE BACKGROUND

A brief sketch of our context for outreach may be helpful. The University of Texas has a large campus, populated with 40,000 students who by virtue of admissions criteria tend to have better than average academic skills. These students are taught by 3400 faculty members, more than half of whom are graduate student teaching assistants.

Philosophically, the RASSL staff has always been committed to the idea that learning skills instruction is not a luxury but an essential component in intellectual development. Over the years it became clear that while our programs outside the academic mainstream were a valuable, sought-after service to students, an additional service lay in providing information about learning in other places convenient for our consumers —
students, faculty and staff. Two other important considerations were the need to maximize use of available professional time, and the subtleties of administrative politics. For more complete coverage of these factors, see Heard's paper in the WCRA Proceedings, 1973. (4)

Out of this background we began, about two years ago, to develop the outreach services of RASSL. Our staff formulated a list of projects and suggestions for implementation. Some of the ideas that looked impractical two years ago are today an established part of our outreach services. Some of the things which were initially successful are no longer part of the overall program; it is constantly changing, and, hopefully, growing.

THREE TYPES OF OUTREACH

Three types of activities are carried out under the general title of outreach: Basic Outreach, Co-sponsored Instruction and Consultation.

Basic Outreach is a central aspect of our efforts to inform members of the University community about the scope and nature of RASSL services. Publicity is always a problem, especially on a campus the size of ours. During the past year, we have talked to faculty members in departmental meetings, to students in classes, to several graduate students' associations, and to different groups within the Division of Student Affairs. In these presentations we include information about our In-House services of Classes, Short Courses, Self-Help, and further details about RASSL Outreach Services.

Co-sponsored Instruction has two purposes. First, it is a vehicle for delivering reading or study skills information at the co-sponsor's convenience as to place, time and topic. Second, Co-sponsored Instruction is often an effective "teaser" to more involvement in RASSL programs. Requests from faculty members for Co-sponsored Instruction within their classrooms have included talking to English classes about how to read essays and take lecture notes, working with students in a number of different foreign language classes to develop study habits useful for that particular language, and helping government students deal with a vast list of required readings. Graduate students in Business Administration are a particularly enterprising group on our campus, and they have repeatedly co-sponsored a four-week course in rate flexibility which uses their own textbooks for practice material.

Consultation is the third type of Outreach Service. The staff is prepared to work with interested faculty or staff on issues involving students' learning. In the past this has ranged from a phone conversation with a professor about ways to assist a student having special difficulties with a math course to more extensive training with groups of faculty interested in diagnostic and developmental reading techniques for history students. Our staff has also been called upon to act as consultants to a number of groups developing minority recruitment and retention plans.

Though the three types of Outreach Services have been discussed as if they were discrete entities, there is considerable overlap among the
categories. What begins as a phone call requesting Basic Outreach may easily become a plan for Co-sponsored Instruction. Consultation often leads to some types of direct intervention. Thus, delivery of outreach activities requires emotional plasticity and professional flexibility which serve to keep the job deeply exciting, if occasionally nerve-wracking!

DEFINITIONS OF ORGANIZATION DEVELOPMENT

In the first book of a series by Addison-Wesley Publishers on organization development, Bennis defines the term this way:

Organization development is a response to change, a complex educational strategy intended to change the beliefs, attitudes, values, and structure of organizations so that they can better adapt to new technologies, markets, and challenges, and the dizzying rate of change itself. (2:2)

A translation of Bennis’ terminology into more familiar language might read like this: Organization development, applied to higher education, is a way of responding to change, or the need for it. It is a complex educational strategy intended to change the beliefs, attitudes, values and structure of educational institutions so that they can better adapt to new methods, students populations, challenges, and the urgently needed — but not always dizzying enough — rate of educational change itself.

Another definition, this one provided by Beckhard in his book from the series, may be even more helpful to convey — operationally — what is meant by the term.

Organization development is an effort (1) planned, (2) organization-wide, and (3) managed from the top, to (4) increase organization effectiveness and health through (5) planned interventions in the organization’s ‘processes,’ using behavioral science knowledge. (1:9)

Again I want to suggest a translation, reading for organization a variety of educational synonyms: institution, department, and some term which would convey that the classroom is an organization comprised of students and the teacher.

Let me quickly suggest that RASSL’s outreach endeavors have not at this time targeted either western higher education, or even the whole educational institution of The University of Texas. But I do find that OD provides a model for the process our staff used in developing its program of outreach, and I think it is specifically relevant to individual outreach services. Beckhard suggests that in the broadest sense, OD efforts include these steps:

- Diagnosis
- Strategy Planning
- Education
- Consultation and Training
- Evaluation (1:5)

In retrospect, I can see each of those steps having been used by the
RASSL staff. We were moved by a variety of philosophical and institutional factors to diagnose the need for outreach. Strategy planning has been carried on a variety of ways, but I certainly recommend brainstorming as a valuable part of the step. The results of this planning have been some education, through the Basic Outreach presentations and Co-sponsored Instruction, and some consultation and training functions. Evaluation takes place continually as we assess what has been done and how better to do it.

CONCLUSION

In sum, the Outreach Services of the Reading and Study Skills Lab are proving themselves to be exciting and attractive to both the RASSL staff and to members of our university community. They help broaden the base of our impact and thus increase our sources of support. It is rewarding to have found theoretical justification for our actions in the concepts of organization development and to be able to use increasing understanding of that process to plan for the future. The OD model also resolved a question about the "exportability" of our experiences from the U.T. context. I believe it provides a generally applicable model which can still be sensitive to the subtleties of varying institutional settings. I hope others will find the OD model for outreach programming a viable response of college reading labs to some of their predicaments. As Bennis puts it, "Organization development is necessary whenever social institutions compete for survival under conditions of chronic change." (2:18)

REFERENCES

4. Heard, Patricia. "Take it to 'Em' — or — Outreach Programming for College Reading Study Centers." Proceedings of the Sixth Annual Conference of the Western College Reading Association, 6 (1973), 67-72.
Experiences give a person the tools to understand information. When an electrician reads an article on electrical wiring, he draws on his experiences to understand the article. For a layman, without this familiarity and this background, reading the same article would result in rote memorizing without knowing a bit more. In education, then, teachers need to utilize life experiences in order to give students a background for understanding new information, and to arrange for opportunities to use them in class.

To be effective, "arranged experiences" need to begin with life experiences familiar to the students. Let's look at applying this method to learning objectives for reading and writing. First, the teacher sets the objective of teaching students how to write the following types of paragraphs: giving directions, defining a term, comparing, classifying, operational analysis, casual analysis, and reporting. Next, the teacher has the students write about something familiar to them — an "arranged experience" to give life a chance to show.

It is very important not to tell students to write a certain type of paragraph. Merely suggest topics that will obviously dictate the type of paragraph to be written. Tell someone how to get to the school library from the school admissions office (giving directions). Would the person make it? Explain to someone the meaning of fear (defining a term). Would it be fearful? Write about the differences between the school's escalators and stairways (comparing). Could a mental image be developed? Tell someone about the many different ways of getting to school (classifying). Would each way be understood? Tell someone how traffic lights control the movements of cars (operational analysis). Would it be understood? Tell someone why the school team lost (casual analysis). Were the reasons supported? Tell someone what happened at your home yesterday (reporting). Were the important persons, places, and things included?
Once a student completes his writing experience about one of these familiar topics such as the differences between an escalator and a stairway, he will have a better background for understanding the teacher's explanation of how to write a comparison paragraph, if that is what is desired.

The teacher then shows how a particular paragraph can be written by having students learn from their own writing experiences, their background. As the teacher talks about comparisons, the students look for comparisons in their own writing. When the teacher points out that connectives such as "in contrast with" develop a comparison, students look to see how they used connectives to develop comparisons in their writing. As a result, students use their background by bringing their unique writing experiences to this explanation to draw a personalized understanding from it — "two-way learning." (In education, relating one's own experiences and background to information is recognized as a two-way process of bringing meaning, one's experience, to the information to draw more meaning from it).

WRITING TEACHES READING

Through their writing experiences, it is a logical step for students to develop their reading. Students recognize types of writing and main ideas in textbooks by first recognizing them in their own writing. In addition, students recognize the purpose of rhetorical devices when reading by using transitions, thought patterns, and topic sentences and so on to develop ideas in their writing. Thus, students first learn about different types and organizations of paragraphs from their own writing experiences. When the reading teacher talks about main ideas anticipating comparisons by recognizing transitions such as "in contrast with," recognizing thought patterns to determine and to organize important details, students can use their background from their unique writing experiences to understand the information and to draw more meaning from it.

One student of mine said that once he knew what type of writing (comparing, defining, etc.), he was reading, he could better determine the main idea and the important details.

TWO WAY TEACHING

The prism diagram on page 81 explains graphically the process of arranging opportunities to use experiences for teaching. The arrow to the left is the teacher's message (new information) represented by a beam of light. The prism represents the students' arranged experiences, while the circles behind the prism represent the students. Notice that the beam of light does not travel "one-way" without changing. If it did, the one light would reach very few students. In "two-way" teaching, a prism representing the arranged experiences of the students is brought to the light. As a result, the one light entering the prism becomes refracted into many lights reaching
many students. In learning, students draw on their arranged experiences to bring meaning and understanding to new information. The same message (information) from the teacher then becomes different for each student because of the unique experiences they bring to it. Through their experiences, the one light becomes many lights reaching into many places.

Experiences give students a background for understanding new information.
CSULB INTERN TRAINING IN LEARNING ASSISTANCE

Nancy M. Fujitake

California State University, Long Beach

Frank L. Christ (2), in his article, "Preparing Practitioners, Counselors, and Directors of College Learning Assistance Centers: An Intensive Graduate Workshop," mentions the paucity of available literature on training programs for college reading/study skills personnel in proportion to the amount of other published college reading/study skills materials. He cites two articles, Fry (1964) and Carter and McGinnis (1970) in the Yearbooks of the National Reading Conference; three articles, Wolfe (1966), Cooper (1969), and Colvin (1969) in the Yearbooks of the College Reading Association; an article by Kinne (1962) in the North Central Reading Association publications; four articles, Maxwell (1970), Joffe (1970), Ahrendt (1971) and Beldin (1971) in the Proceedings published by the Western College Reading Association; and two other sources, Price and Wolfe (1968) and Kaznierski (1971), all of which deal with training programs. These articles and a perusal of recent available literature reflect a focus primarily on the training of reading instructors, and hence, support a strong feeling that there are in existence very few training programs for college reading/study skills specialists per se, and no programs for personnel who function in what Christ (4) describes as a systems approach to learning assistance.

The Intern Training Program in the Learning Assistance Center at California State University, Long Beach, however, represents a systematic training program for college reading/study skills specialists who function as learning assistance facilitators.

BACKGROUND/RATIONALE OF TRAINING PROGRAM

CSULB's Learning Assistance Support System — LASS (an Outreach Pro-
gram of Counseling Services) under the coordination of Frank Christ began its intern training in learning assistance in the fall of 1973. The internship experience was designed to acquaint participants with a dimension of counseling that attempts to mobilize all existing resources available to help the learner learn more in less time with greater ease and confidence. The internship consists primarily of participants processing information on the rationale, operations, and procedures of a Learning Assistance Support System and experiencing personal learning skills development through diagnostic and prescriptive exercises and materials.

The program serves both M.S. in Counseling graduate students who are interning in the CSULB Counseling Center and California State University and College personnel who want exposure to a learner-centered Outreach Counseling Services Program. Counseling Center interns spend eight hours weekly for six weeks in the program; while participants from the 19 colleges and universities in the CSUC system experience a special and intensive forty-hour-five day training program.

Since October, 1973, eight M.S. in Counseling interns and a total of eight individuals from the CSUC System (2 from CSU, Chico; 2 from CSU, Fresno; 2 from CSC, San Bernardino; 1 from CSU, San Diego; 1 from CSC, Sonoma) have participated in the training program.

DESCRIPTION OF TRAINING PROGRAM

The training program is competency based. (c.f. "Competency Tasks Descriptions" at conclusion of this article.) First, interns take the Learning Assistance Center 12-minute orientation tour and read several articles that detail the rationale upon which the LASS is based. Interns are asked to keep a log of their reactions and questions as they complete each competency task. During the training, they interface regularly with LASS training personnel. During these regularly scheduled conferences, questions are answered and a general exchange of ideas takes place.

One of the next tasks is the Imaging Potential Memo in which interns imagine that it is the last day of their LASS intern training. From this memo, one is able to get some notion of what specific expectations each intern has of the training program. The training can then be adapted if necessary to insure that individual needs are met.

Following the Imaging Potential Memo, interns get involved in additional information processing tasks such as reading the projects proposals for 1972-73 and 1973-74; reading the Survey of Reading/Study Efficiency (SR/SE) Counselor Manual (1); reading a paper reflecting the LASS concern for cost-effectiveness and accountability (5); and reading evaluations of the Learning Assistance Center (LAC) by outside professionals (6) (8).

Interns then experience taking the SR/SE (3) and sampling several modules which comprise their individualized programs established during the SR/SE intake interview with a counselor. This personal experience with the SR/SE, in addition to viewing a videotape of an actual SR/SE
intake interview, will enable interns to assist counselors with intake interviews and eventually handle their own SR/SE intakes with proficiency.

Other competency tasks require interns to become acquainted with various academic aids and catalogs available at the Learning Assistance Center; to understand the relationship of these aids to the LASS tutorial program; to participate in a county fair which is designed to orient potential users to LASS programs and equipment by doing; to familiarize themselves in a "hands-on" fashion with all the hardware and software in the LAC; to take an audio tour of the University library; to assume responsibilities of a LAC aide, which include such tasks as becoming familiar with opening and closing procedures, the LASS referral system, and attendance at two or more weekly staff meetings.

Interns also take field trips to local community colleges and CSUC campuses to become more acquainted with other learning assistance facilities: El Camino Junior College and Rio Hondo Junior College were the target locations for most field trips.

Upon completion of these competency tasks, interns will have established enough background to have meaningful conferences with those Learning Assistance facilitators outside the LAC, i.e., Director of Learning Resources, Director of Student Development Programs, and the Dean of Counseling and Testing.

For the final competency tasks, interns complete a report/critique on their internship experience. They are asked to use the following four items as an outline for their report:

1. What has the LASS intern experience done for me?
2. How am I different as a result of this experience?
3. Have my attitudes toward learners been affected by this experience? How? Why?
4. What has prevented this experience from becoming more effective for me? How could the training be improved?

From the reports/critiques of the interns, the LASS Staff has been able to receive some valuable feedback concerning the efficacy of the training. Most interns in the programs have felt that their training experiences in the LAC have been meaningful and worthwhile.

CONCLUSION

From the responses of individuals in the program, the staff concluded that the CSULB training in learning assistance has been well received. There were minor improvements, as suggested in the intern evaluations, which will be made; but, in general, the training program has provided the experiences for one to become a competent college reading/study skills specialist or learning assistance facilitator. In fact, success with the CSULB training in learning assistance has provided the LASS staff with incentive to propose expansion of such training programs beyond the California State University and College System. Already the Center has received requests
to offer the training to out-of-state institutions. Since the CSULB Learning Assistance Support System sees itself in the role that Voegel (7) describes as an “innovation diffusion center,” the probability exists that in 1974-75 the intern training program for Learning Assistance Center facilitators will expand to meet these regional and national needs.

CALIFORNIA STATE UNIVERSITY, LONG BEACH
LEARNING ASSISTANCE SUPPORT SYSTEM
COMPETENCY TASKS DESCRIPTION

1. INTERN LOG: For each of the training task that you do, keep an informal diary. Record your reactions and your questions. Don't forget to record data and get confirming signature for each task.

2. LAC 12-MINUTE ORIENTATION TOUR: An introduction to the Center that demonstrates the potential of technology to offer information in a dramatic and experiential mode. Consider how you could use this wireless headphone-induction loop for other counseling activities.

3. READINGS: FACT SHEET, SYSTEMS ARTICLE. CSULB ARTICLE: As you are reading, jot down any reactions to the material. Write out any questions you may have for later discussion in your weekly conferences. If you want to explore the references alluded to in the articles, note this for possible use as an open task.

4. IMAGING POTENTIAL MEMO # 1: Using the memo form in your training folder, imagine that it is the last day of your LASS intern training. It is all over. You have completed all 40 competency tasks. This memo is to be addressed to the Dean of the Counseling Center. Complete the memo. Be as specific as you can.

5. READING: PROJECT PROPOSAL 1972-73: As you read the proposal, jot down questions and reactions to its contents. Don't forget to read the four quarterly reports, including the appendices for each one.

6. READING: PROJECT PROPOSAL 1973-74: Again keep a record of your reactions and questions for use in a subsequent conference. Note the shift in emphasis for this second year of the LASS. Compare budgets. Look at the LASS operational projects' board in the supervisor's office and review the strategies and activities that are posted under each objective. If you would like to read the documents accompanying any objective, ask the supervisor for its file.

7. READING SR/SE COUNSELOR MANUAL: This is probably your introduction to a college level study skills survey. Read carefully the section entitled "Diagnosis and Application" (pp.4-7). Note the amount of reference material that is available for in-depth study. Some of them are available either from the LAC or the University Library. Keep in mind as you study the manual that you will be taking the survey as one of your competency tasks.

8. SR/SE WITH INTAKE INTERVIEW: Ask the aide for the survey
materials. After you have completed the survey (this includes making your profile and writing your response to it), have the aide make an appointment for you to meet a LAC counselor for the intake interview.

9. **SR/SE VIDEOTAPE**: A videotape of a SR/SE intake interview was made for your viewing. It will help you to become more familiar with what might take place when counselor and learner interface.

10. **ASSISTING WITH SR/SE INTAKE INTERVIEW**: It's your turn now to look at the counselor side of the SR/SE. Please remember that the SR/SE is only given when the learner is ready for it. Also, that the counselor must read the student's folder before he does the intake interview. Note that the program that results from the Survey and the interview is designed by the learner and counselor together.

11. **INDIVIDUALIZED SR/SE ACTIVITIES**: Try to sample at least two or three modules for each of the five SR/SE areas. When your training is over, remember that the LAC is still here if you want to continue to develop your personal learning skills.

12. **LIBRARY WALKING TOUR**: This is an audio tour of the University Library. You will need to sign out a shoulder-bag cassette player and tour cassette for this task. The tour takes 30-45 minutes and directs you to all five floors of the library.

13. **OPENING AND CLOSING PROCEDURES**: Make the rounds with an Aide or the Supervisor to see how a Center is opened and closed each day. These procedures are particularly necessary for Center security.

14. **OVERVIEW ACADEMIC AIDS**: These are located principally on shelves of the bookcase near the Language Master carrels. Our present collection of Academic Aids represents only a beginning. However, there are more shelved in the wooden cabinet near the files and in the cassette and filmstrip drawers. You will also find content study-reading kits as well as computation and math kits on the room divider near the entrance to the LAC Supervisor's Office.

15. **OVERVIEW OF CATALOGS**: Knowing what is available in Learning Assistance equipment and materials is vital to maintain currency and to promote growth of the LAC. The catalogs are kept in the Supervisor's office for reference by both LAC staff and faculty. Spend at least an hour browsing through a representative sample of them.

16. **READING: DATA COLLECTION PAPER**: This article can be found in the Visitors Reference Book. It was authored by Margaret Deviran, the LAC Supervisor. It reflects our concern for cost-effectiveness and accountability.

17. **READINGS: MAXWELL AND WARK EVALUATIONS**: Both of these consultant reports can be found in the Visitors Reference Book. As a result of each report, the LAC has modified its operational behavior. Each year the LAC plans to be evaluated by outside professionals. This year, a team of consultants from ETS will meet with LAC Staff to evaluate our evaluation procedures.

18. **LAC EQUIPMENT CHECK**: Technology is very much a part of Learning Assistance. In this task, you will familiarize yourself in a
“hands-on” way with equipment that is commonly found in a Learning Assistance Center. If you have any questions about the equipment, see an aide or the Supervisor.

19. MATERIALS CHECK: Software in the LAC is also very important. In this task, you will become acquainted with the various programs and materials available to the learner.

20. COUNTY-FAIR PARTICIPATION: Sometime during your training period, there probably will be a county-fair for a student or faculty group. This activity was designed by LAC staff to orient potential users to LAC programs and equipment by doing rather than by talking.

21. REFERRAL FORM SYSTEM: This system was designed to allow complete follow-up on all referrals made from the LAC. Have an aide or supervisor explain the procedure for this referral form.

22. TUTORIAL ASSISTANCE PROGRAM: Lisa Messersmith is the coordinator of tutorial assistance. Please see her in regard to what procedures are necessary for a person to become a paid or volunteer tutor. Note that all tutoring for veterans is coordinated by Lisa.

23. WORKING AS A LAC AIDE: Aides are a very instrumental part of LAC. They are usually the first contact a learner has with the center. Spend between 4 and 8 hours actually performing the aide’s duties.

24-25. STAFF MEETING #1: Every Monday, all LAC Staff meets during lunch. An agenda sheet is posted near the staff message center for anyone to suggest items for the meeting. During the meeting hours, the LAC is closed. Don’t forget to bring your lunch.

26-31. WEEKLY CONFERENCES: You are scheduled for a weekly conference with the LASS Coordinator. This is your opportunity to get answers to any questions that may have occurred to you during the week. Bring your folder to the conferences.

27. FIELD TRIPS: Visiting learning assistance centers on other campuses is always a worthwhile experience and often presents new and possibly different outlooks to the learning assistance concept. Field trips will be arranged regularly to community colleges and other CSUC campuses in this area.

33-34. Your choice of tasks. See LAC Staff for ideas, if you have no preferences.

35. CONFERENCE WITH DEAN WEISBROD: During this 30-minute conference, you will have an opportunity to find out where the Learning Assistance Support System fits into Counselor Services as an Outreach Program.

36. CONFERENCE WITH LIBRARY STAFF MEMBER: During this conference, you will be briefed by a member of the library staff to learn about its relationship with the LAC.

37. CONFERENCE WITH DIRECTOR OF STUDENT DEVELOPMENT PROGRAMS: This conference is designed to give you an opportunity to discuss Learning Problems of Minority Students and to
see the working relationship that Student Development Programs has with the LASS.

38. CONFERENCE WITH DIRECTOR OF LEARNING RESOURCES: The LAC is part of the total learning resources available on our campus. However, it is specifically designed for the independent learner. Other components of learning resources are more concerned with faculty or with classroom supported instructions.

39. CONFERENCE WITH LAC SUPERVISOR: The LAC Supervisor is in charge of the Center's operations, including its aides, tutors, advisors, and counselors.

40. INTERN REPORT AND CRITIQUE: Using the following four questions as an outline, write a report on your internship experience with the Learning Assistance Support System. A copy of your report will be shared with LAC staff.

   Q 1. What has the LASS Intern experience done for me?
   Q 2. How am I different as a result of this experience?
   Q 3. Have my attitudes toward learners been affected by this experience? How? Why?
   Q 4. What has prevented this experience from becoming more effective for myself? How could the training be improved?

REFERENCES


Beginning with the academic year 1972-1973, the University of Kentucky Medical Center implemented a coordinated approach to the recruitment and retention of qualified students from minority and low-income groups to health professions. A section for Special Student Programs was established within the Medical Center Student Services Division for the coordination and administration of recruitment, admission, and enrollment of minority and low-income groups, and for the development and administration of special programs (reading, tutoring, and counseling) to assist the retention of students in these groups. The Colleges of Allied Health, Dentistry, Medicine, Nursing, and Pharmacy supported the effort through Special Projects Grants from the Office of Health, Education and Welfare.

The reading study skills, and tutorial staff consisted of a coordinator, five graduate assistants, a number of tutors (employed on an hourly basis) and a secretary.

Because of the many differences in the five colleges, the level of students' preparation, chronological age and maturity, there were different approaches to program implementation in each college. (11)

One might question the utility of such a program in a medical center; however, after working with a number of the students in all five colleges, the author concluded that many of the students' study habits and skills did not vary greatly from those which characterize our community college's students. Vast differences did exist in motivation, achievement need, and amount of the time spent studying. The students entering health professions seemed to experience more anxiety but surprisingly did not evidence a more positive self-concept than students in general studies. This plus a host of other studies such as that by Stevenson (10) and Astin (1) indicate that educators and directors are failing to help students improve their
self-concepts. The problem of a negative self-concept is of a significant magnitude if one notes the fact that students (and perhaps all humans) will seldom attempt anything unless they first believe they can do it (3). This is evidenced by the droves of students who dropout of Chemistry and Physics courses after the first class period.

To counteract this problem, a strong counseling program is needed. The students should be led through experiences such as *The Development of the Human Potential,* (7) which is a program designed to enhance the participant's positive view of himself. In addition to this, a flexible tutorial program must be implemented. This program must be accessible at the very beginning of classes and flexible enough to meet the needs of all the students. It is hardly a service to offer a tutoring session on Monday evenings at seven if the student cannot meet then or perhaps he discovers on Wednesday that he needs help for the examination coming up on Friday. The medical center program offered individual and group tutoring in any course requested.

Graduate assistants in the various fields of study were employed as tutors. These tutors did a splendid job as indicated by the fact that no student who was tutored for more than five hours during the fall semester of 1973 received a failing grade in that course.

Given a warm, compassionate staff who possess that delicate insight which enables one to know when to "love" a student and when to "kick him in the seat of the pants" plus the components of accessibility and flexibility, which is what Gene Kerstiens referred to as "Academic Curb Service" in the November 1973 WCRA Newsletter, (4) one could hardly fail to have a viable tutoring program.

One phase of the work, which was not anticipated at the conception of the program, has been the involvement of the Coordinator in directing programs requested by the instructors of two of the colleges to provide training in the construction of test items, and other seminars designed to improve their instruction. Graduate students as well as faculty have participated in these seminars.

The involvement of the faculty and the policy of providing an opportunity for all types of students in their respective colleges to improve themselves has contributed to the positive image of the program.

After this over-all view of the retention program in the medical center, let us take a closer look at the specific study skills program as it was implemented in the College of Medicine.

**STUDY TECHNIQUES IN THE COLLEGE OF MEDICINE**

The problem of assimilating large masses of information is more acute in professional schools because the content given is greater, the repetition is less, and the student has less time to read and re-read.

In 1970, the University of Kentucky College of Medicine employed and trained the writer to work with their students using the Hanau Study.
Techniques. (2) There are three basic components in these techniques: recording (notetaking), classifying, and correlating material. Other study skills such as Robinson’s SQ3R deal with these same components. (9) However, one of the differences is that Hanau Study Techniques seem to be independent of the source; in that they enable the student to deal effectively with information regardless of whether the source or media for this information is lecture, laboratory, textbook or examination. In addition to dealing with information he receives, these same techniques apply in his learning to deal with information he needs to share, such as writing themes, giving talks, or responding on examinations.

The central theme of this approach is based on the relief that “All information, whether written or spoken is made up of only two elements: Statement and PIE.” (2)

At this point you probably haven’t accepted this idea — at least you should not have accepted it because you have not been given any PIE for it. PIE is an acronym for proof, information and example. PIE is used to guide, direct, or control the mind of the reader or listener. (2)

For an example of how authors of textbooks, speakers, you and I use PIE to support our statements, look at the following example: Let us see if you will believe my statement: “OSCAR IS A VERY GOOD SON.” If you look into your mind, you will see that everything is pretty clear except that your mind is wavering over the meaning of “good.” Now look at a piece of PIE for the statement about Oscar: “Whenever he robs a bank, he gives half the take to his mother.” Did your mind snap into focus on a particular meaning of the word “good?” Your mind probably moved from the wavering to focus. Now still talking about the same Oscar look at another statement: “OSCAR IS A VERY GOOD HUSBAND.” If you look into your mind you’ll see that your mind is again wavering in an arc over the word “good” but not in as wide an arc this time. The PIE for “OSCAR IS A VERY GOOD HUSBAND,” is “he never strikes his wife, until he has first removed his brass knuckles.” Again the mind snaps into focus on a meaning of the word “good,” the author’s meaning of “good.” Her meaning of good may seem a peculiar meaning to you; but an idea about Oscar, the kind of guy he is is beginning to form in your head because of the PIE you have been “fed” about him. Now examine a third statement: “OSCAR IS A VERY GOOD FRIEND.” At this point some of you don’t need any PIE About the kind of “good friend” Oscar will be. You wouldn’t trust him around the corner. (2)

The purpose and the effect of using PIE is to control the mind, to direct it, to guide it until it believes what you have said in your statement. That’s how it’s done by advertisers, authors of textbooks, teachers, and politicians, and you and me. (2)

In textbooks, you might find the system presented in this manner: A statement is made: “The volume of a given mass of any gas at constant temperature varies inversely with the pressure.” Then follows numerous pages of experiments and equations, relationships, or reasons, which can all be called PIE. Or in History this statement is made: “When a state
accustomed to living in freedom under its own laws is acquired, there are three ways of keeping it.” (5) Then follows pages of PIE citing the three ways of “keeping” a state.

The procedure for teaching these techniques at the University of Kentucky Medical Center is: the student reads the theory underlying the study techniques, and then has a work session with his study techniques instructor.

Using the notes which the student has taken in any one of his academic courses, the study techniques instructor begins transposing the notes into statement-PIE form. A system of identification is used to separate the pieces of PIE from the related statement. Before the student leaves, he is encouraged to take over the transposing with the instructor merely assisting him with problem areas. The student is encouraged to add in anything of importance that he might recall from the lecture. He is not permitted to paraphrase or reorder the material. This is to provide as nearly as possible a simulation of the lecture situation. The student is asked to practice approximately 30 minutes daily rewriting his notes into statement-PIE form just as he has done during the work session. Work sessions are continued on notetaking until the student can get a set of notes from a lecture in statement-PIE form that contain the bulk of the information imparted. Most all students accomplish this in about two weeks if they have practiced thirty minutes daily.

At this time the student moves into the second technique which trains him to hear and recognize the professor’s classifications of the lecture material. The words which enable the student to classify or categorize material are used to relate the statement-PIE units to one another. The jargon for these words are “go-between” words or (G-B’S). The G-B’s are not necessarily just one word but can be a phrase or a whole sentence. This technique is also taught during a work session and a questioning strategy is used to train the student in this skill.

The theory behind the G-B’s is related to the Gestalt theory of learning. The student must become aware of the professor’s organization of information. Many times this structure is implied and is often difficult for the student to recognize. It is only when the student can relate the fragments of statement-PIE to one another in an organized manner that understanding can occur. This organization is also a key factor in improving memory. (8)

The last of the basic techniques is taught once the student can classify material, i.e., he can verbalize what a piece of material is telling him about the subject being studied. At this point he is ready to tie the units together. When this has been done, he is able to see the “big picture” or how the unit pieces all fit together. The work session on this technique proceeds as follows: the major topic for a particular lecture is listed, then the G-B’s are listed in statement-PIE form under it. Next, the student must be able to make sentences using this information to tie the pieces of PIE to the major topic. When he can do this, he understands how each piece of information relates to the other material. The student now has pulled his lecture or
topic together in such a way that he has created a list of potential examination questions. By using the Over All Organization (OAO) to test himself, he can identify the areas he has learned as well as those which need further study. Deciding what one knows and does not know is an important step in acquiring good study techniques. Many students spend an overwhelming amount of time studying that which they already know. The OAO is also a means of providing rehearsal which will serve to set the information in the student's mind and aid his retention.

Some of the other techniques in this system deal with memorization, visual patterning of sketches and charts, correlation of supplementary course materials, identification of different patterns of organization, theme writing and techniques for taking examinations.

About one third of each first year class at the medical school participates in the study techniques program and 95 percent of the students report that they find it to be helpful.

In conclusion I repeat these study techniques are somewhat like other methods found in various reading-improvement programs across the country; however, they do seem to offer a more structured pattern for study and students have found them to be useful regardless of the source or media by which the information is presented.

REFERENCES

THE INTERVIEW AS A TOOL IN THE COLLEGE READING CENTER

Dorothy Klausner and Deborah Oseñ
California State University, Fullerton

Three types of interview commonly used by the college reading teacher are: Entrance Interview, following pre-testing; Informal Conference during the program; and Exit Interview when the student completes the course. Each has specific purposes related to the objectives of the program. Each has important implications as a tool to assist the instructor in guiding students to improve their reading skills.

Too often, however, such interviews are conducted without real interaction, and with minimal carryover to the student's program of reading improvement. Lack of training and experience in techniques of interviewing, and limited knowledge of the ways such interviews can be used as a tool are primarily responsible. Few courses in the teaching of reading offer interviewing skills or practice as part of the curriculum; and even fewer acquaint the reading teacher with uses of the interview as a tool.

Microcounseling skills and practice with the microcounseling training model can help the college reading instructor become familiar with techniques of interviewing. An examination of the purposes and relationship to the total reading program of each of the three selected types of interview discussed in this paper will suggest implications of the interview as a tool in the college reading center.

Entrance Interview following pre-testing

Four purposes of this initial interview with the student are:
1. to inform the student of his strengths and limitations as defined on the entrance assessment devices.
2. to work with the student to develop mutually satisfactory goals in reading and study skills, and means of achieving those goals.
3. to convince the student of the need for self-motivation and voluntary practice.

4. to build a viable team relationship between instructor and student.

Each of these purposes relate to the objectives of reading instruction. In informing the student of his strengths and limitations, it is essential that the student be shown first that reading involves a combination of many different skills, some of which he already possesses. He needs to know that he has some strengths, and that these are not only recognized by the instructor but will be used in alleviating his limitations. He must be helped to recognize that there are others who have the same limitations, and that he is not alone. As a young adult, he should be encouraged to consider the strengths that lie in his life experience and background which offer many more opportunities to synthesize new information than he had as a younger reader. He should be helped to relate his limitations as a reader and as a learner to his present situation — his other college classes, his home, his plans for the future, and his motivation. That his strengths and limitations are only roughly defined by the initial testing instruments (even when they include attitudinal as well as reading assessments) should be conveyed to the student. More importantly, he should be made aware that his change and growth will be most clearly evident to him through what he sees happening to his facility with words and reading outside of the reading center.

Development of mutually satisfactory goals includes looking at the student's own priorities and feelings of need, as well as at the instructor's understanding of reading processes and knowledge of sequence of skills. For example, word study may need to be focused on the specific words the student must know right now for other classes he is taking, rather than beginning with the basic sight words this student does not know, or an organized phonetic approach. Inclusion of the student's interests and priorities in planning an individualized program for reading improvement has repeatedly been demonstrated to produce better results at this level than locking the student into a pre-designed program based on knowledge of "proper" sequence (Axford). When goals have been mutually developed, then the student needs to know what can be done in this reading center to help him achieve them. Awareness that the contract, the reading machines, the practice exercises, or whatever is available in this reading center have successfully helped other students with reading problems, and that if these don't work for him, still more techniques and material are available — with substantially increase the student's confidence in his probable improvement.

Convincing the student of the need for self-motivation and voluntary practice is essential. Many students come with the conviction that some sort of magic wand will be waved, and three or four hours a week in the reading lab will make them super-readers. Like any skill, reading improves more and faster when the students will practice skills learned in the reading center for a short time every day. At the same time, students begin to develop the kind of self-responsibility for learning and time-scheduling
which is integral to success in college. Getting this message over to students takes more than explanation — in the language of public relations, it takes a hard sell.

Building a viable team relationship with the student involves conveying the two basic tenets of reading instruction: “I like you and am interested in you as a person”; and “I can help you.” It also involves listening to the student, hearing what is behind his words and attitudes, and reading his non-verbal communications. Most of all, it requires development of a “we” feeling, where instructor and student are actively working as partners as the improvement of reading.

Informal Conferences during the program

Among the purposes for these conferences, which should occur at least weekly during the program, are the following four:

1. to assess progress and understanding of what the student is doing in this course, and why
2. to give recognition and praise for progress, attitudinal changes, attendance and perseverance, or personal factors
3. to provide an open environment for discussion of personal problems which affect reading and learning
4. to make referrals as appropriate

In assessing progress and understanding, the instructor will want to make sure that the student not only is “doing it right” but that he knows why he is doing each activity and how it relates to his reading improvement. Some of the activities required by the reading instructor may seem not only boring to the student but totally unrelated to his reading needs, unless he understands their purpose. Learning theory as taught us that man learns best when he can see the reasons for what he is doing and can recognize its relationship to his goal, and reading research has given us ample data in proof of this theory. (IRA, Verner, and Davison).

Giving recognition and praise for progress and attitudinal change relates to improvement of self-image and self-confidence, and to the rapport essential for a team relationship. Most reading teachers recognize this. But not all are aware that some kind of praise and recognition is an essential component of every informal conference. Where none is possible for progress or attitudinal change, the instructor can and must identify another factor about which something pleasant can be said — the student’s handwriting or neatness, choice of topic, appearance, friendly smile, use of “his words” in speech or writing, outside activities, etc. Whatever it is, the recognition needs to be sincere and indicative of a real interest in the student as a person.

Providing an open environment for discussion of personal problems is one of the most difficult tasks for many reading instructors. Time is always a factor, since most instructors meet informally with several students during each class. However, the reading instructor must develop awareness of the moment when a personal problem is so engrossing a student that his reading and learning are severely affected. The student
whc has just lost his job or his girl, has serious illness in the family, is in trouble with the law, or is contemplating suicide cannot keep his mind on SQ3R or the cloze procedure. A few minutes of supportive listening, or if necessary, the scheduling of time for a lengthier interview may make it possible for the student to get on with his reading practice. In true crisis situations it may be best to spend all the allotted time at one interview helping the student clarify his own thinking about a serious problem, or to get immediate professional help.

Making referrals as appropriate may follow on discussion of personal problems. Awareness of available help for students from counselors, medical facilities, crisis centers, and financial aid organizations needs to be part of every reading instructor’s background. Some other kinds of referrals which often emanate from reading centers include tutorial organization in specific content fields, sources of help for learning disabilities such as speech, English as a Second Language, grammar and spelling when not remediated in the reading center, and sight or hearing aids.

Exit Interview

Four purposes of the final interview with the student are:
1. to assess progress with the student, and reasons for same
2. to get feedback about the student’s experience in the program
3. to develop a long-range plan for continued improvement and practice as needed
4. to follow-up on discussions of personal problems and plans for handling

Final assessment of progress should help the student look at where he was when he started, where he is now, and how he got there. It should encompass attitudinal changes as well as improvement of reading skills. Frequency of attendance, perseverance, and work habits should be considered. The student’s own priorities, as set at the beginning of the course, should be examined. His feelings about change and growth evidenced to him in his reading and use of words outside the reading center should be weighted at least equally with progress shown by results of the post-test. The student should be helped to recognize the relationship between what has gone on in the reading program and what he sees as his growth.

Feedback about the student’s experience in the reading program is an important component of the exit interview for two reasons. First, the student’s perception of his experience may have affected his progress adversely or positively, and he should be made aware of this. Second, how the student feels about activities, materials, learning opportunities, and people with whom he has worked will give the instructor data for assessing and revising the program. Frequently a questionnaire is the sole method used to obtain student feedback. Such a method can be infinitely more valuable when used as a framework for discussion in the Exit Interview.

Developing a long-range plan for continued improvement, like initial
development of goals, should be a mutual process. The student's priorities and feelings of need should be considered, as well as the instructor's perception of the student's reading skills. But no student should leave the exit interview without an understanding of the need for continued practice if he is to retain the skills he has learned, and some suggestions for ways of continuing to improve his reading.

<table>
<thead>
<tr>
<th>No.</th>
<th>Goal Setting</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acceptance</td>
<td>Yes, uh-huh, (a nod)</td>
</tr>
<tr>
<td>2</td>
<td>Advising</td>
<td>I think you should...</td>
</tr>
<tr>
<td>3</td>
<td>Approval</td>
<td>Good. That seems to be wise...</td>
</tr>
<tr>
<td>4</td>
<td>Assurance</td>
<td>You probably did better than you think...</td>
</tr>
<tr>
<td>5</td>
<td>Building a team relationship</td>
<td>How can we best work together?</td>
</tr>
<tr>
<td>6</td>
<td>Clarification-semantic</td>
<td>By &quot;getting it all together&quot;, you mean...</td>
</tr>
<tr>
<td>7</td>
<td>Deliberate misinterpretation</td>
<td>You mean you are just lazy!</td>
</tr>
<tr>
<td>8</td>
<td>Evaluation</td>
<td>Where do we stand now? Which reading skills shall we start with?</td>
</tr>
<tr>
<td>9</td>
<td>Goal setting</td>
<td>How will you continue to improve your...</td>
</tr>
<tr>
<td>10</td>
<td>Incomplete thought</td>
<td>You feel that if you do, you might---</td>
</tr>
<tr>
<td>11</td>
<td>Information giving</td>
<td>Your test shows these strengths &amp; limitations...</td>
</tr>
<tr>
<td>12</td>
<td>Motivating self- responsibility</td>
<td>These are the ways we can work here...</td>
</tr>
<tr>
<td>13</td>
<td>Priority determining</td>
<td>The reason we are doing this activity is...</td>
</tr>
<tr>
<td>14</td>
<td>Probing</td>
<td>Your progress will be faster if...</td>
</tr>
<tr>
<td>15</td>
<td>Progress assessing</td>
<td>Which goals are most important to you? are easier to achieve?</td>
</tr>
<tr>
<td>16</td>
<td>Projection-Interpersonal</td>
<td>Why did you do that?</td>
</tr>
<tr>
<td>17</td>
<td>Reassurance</td>
<td>What factors are holding back your progress?</td>
</tr>
<tr>
<td>18</td>
<td>Recognition and praise</td>
<td>Even though you haven't shown much progress this month, many students find...</td>
</tr>
<tr>
<td>19</td>
<td>Silence</td>
<td>You look happy today. I like your...</td>
</tr>
<tr>
<td>20</td>
<td>Urging</td>
<td>Look how you've improved in this...</td>
</tr>
</tbody>
</table>

Follow-up discussion of personal problems will probably not be necessary in any depth for most students. For those students, however, who have recognized and discussed concerns which affected their reading and learning, or who have been referred to helping agencies or persons, a mutual review of what has happened and how the student plans to continue to handle the problem is recommended. Not only helpful to the student, this
provides valuable information to the reading instructor about the way in which referral agencies and individuals have been dealing with his students. The data also provides information for opening communication lines and for improving or expanding referral services to students. A student who has had much interaction with the instructor about personal problems may feel bereft at the prospect of losing the listening ear and supportive conferences he has enjoyed with his reading instructor, and need help in moving away from the team relationship.

Rating Scale
The attached Rating Scale lists twenty selected techniques which may be used in interviews. Not all of these would be used in any one interview, obviously. But each of them will probably be used at some time in one or more of the three types of interviews. The sample wording given after each technique is only an example: there are of course many other ways of wording each.

The purpose of the Rating Scale is to give reading instructors an alphabetized list of selected techniques which they can then use to assess themselves. Taping a sampling of actual interviews, and then assessing his skills on the replay will give the instructor some insight into how well and how many techniques he is using, as well as indications of areas he is avoiding.

Conclusion
Developing rapport, improving student self-image, helping students establish goals, set priorities, develop responsibility for learning, and keeping the student aware of his progress — these are all instructors' goals in most college reading programs. Interview tools provided in this paper offer the college reading instructor a variety of ways for achieving those goals.

REFERENCES

At the risk of oversimplifying and sounding flip, let me assure you that getting into print is a matter of writing something that someone else wants to read, and writing it so clearly that it can be read easily and effectively. With patience, sufficient postage, and a comprehensive index of journals, magazines, newsletters, and the like, publication will almost surely follow.

Obviously, that advice is simple to verbalize, but most demanding and difficult to accept and follow. If you cannot master all the elements of the requirement, cut from the rear: So you can’t write too effectively, write clearly. So your writing isn’t clear and easy, maybe you’ll luck into an editorial staff that will rewrite for you. (Swallow the ego; the path to publication is littered with wounded egos.)

But you cannot cut the first half of that advice if you want to get published. You must write something that someone else wants to read — indeed needs to read.

In assessing the remarks that follow, keep in mind that there are variations from publisher to publisher, editor to editor. There are very crucial differences, for instance, between commercial and non-commercial publications, as far as authors and editors are concerned, and I assume that you can recognize for yourself at least some of the most obvious differences. Manuscript in hand, or idea for one in your head, your “sales” approach to a commercial textbook publisher should not be the same as your approach to professional journals, for instance. I can speak here with complete accuracy only from my own editorial office. On the other hand, practices and policies within my present office are not atypical, overall, and where there is great deviation, I will try to remember to point out that fact.

Neither is what I say here to be interpreted as comprehensive and absolute. Getting your ideas into print is a topic that literally has produced volumes. I hope simply to touch on a few matters that will be helpful to you.
Editor's Point of View

Some aspiring authors think that getting published is mainly a matter of knowing an editor. Generally speaking, little could be further from the truth. While no editor has been known to sell his grandmother in the process of carrying out his editorial responsibilities, it is probably only because circumstances have never arisen in which an editor has found it necessary to do so. Given editorial responsibility and familial relationship to choose from, grandma would go.

Rather than knowing the editor, I would urge you first to know your purpose in writing. Second, know your intended audience. Third, know appropriate publications. and, those three requirements come in close order. What do you want to accomplish with the manuscript? Who are the people you want to reach, what do they know how can you best communicate with them? Which publication is most likely to help you reach them?

Contrary to a lurking, unspoken suspicion, an editor does not exist to keep you out of print. In fact, just the opposite is true. The editor is the point of contact between author and audience, and in that capacity his first and foremost responsibility is to the readers of the publication he edits. What best serves them, best suits him. That is an important point for the potential author to remember. His own interests as author are entirely secondary to the interests of the audience, and the interests of the audience are the only interest of the editor. George Shick makes this point quite strongly in an article in the Journal of Reading, "Author and Editor: Catechism and Strategies," October 1972.

Now, there is such a thing as "personality editing," and to some extent every editor shapes a publication and thus to some extent influences both definition of audience and what is to be expected of potential contributors to that publication. The Saturday Review of the forties, fifties and sixties was so much Norman Cousins that the magazine became something else altogether when he pulled out two or three years ago. In fact, it folded, although factors in the demise went beyond his "editorial personality." Playboy is another obvious example of a publication that is apparently tied inextricably to its creator's personality and editorial outlook — or at least that is what the Playboy image-managers would have us believe.

But, such "personality editing" is the exception. The editor as personality fades in a publication as blandly commercial as Family Circle or Better Homes and Gardens, and in educational journals, the editor's personality is usually all but literally non-existent. Some professional journals are edited essentially by committee. I might add that in educational journals, already basically intolerant of undue personal editorial bias, toleration of an editor's personal biases quite likely goes down still further as his pay goes up. That is, the editor who is being paid off only or mostly in prestige, service and influence can be expected to exercise his personal biases more than the editor who is a fully paid hired hand. You can't eat prestige, service and influence, and the volunteer editor needs some source of satisfaction to sustain him. If he can refrain from
getting it through the exercise, conscious or unconscious, of his personal preferences, hang on to him as an editor, for you have some kind of saint enshrined there. The moment a group pays him a living wage, the less likely any toleration of his very human tendency to let the publication reflect unduly his own personal biases.

How, then, does each of these three different editor-types determine or interpret his audience? The personality editor has the easiest task. He says, "This is what I'm interested in, and whatever audience my publication draws will necessarily — by definition and free choice — be interested in the same things." The commercial editor will determine his audience largely by advertising revenue and the rules of the marketplace. The educational editor will serve that audience that has already been defined by the membership and the goals of his sponsoring organization. He is their hired hand.

By the way, there is probably a bit of each type operative within every editor. The distinctions drawn here are for illustration of a point. It is rare to find an editor who fits solely and completely into only one of those types.

Let me turn from those general — and again oversimplified — distinctions to some of the more specific criteria and procedures that I myself hold and follow as an editor. I suspect many other journal editors in education follow similar practices.

There is a belief among writers that the chances are great that a manuscript will rarely be read by the editor to whom you have sent it and who is eventually responsible for deciding on acceptance, rejection or modification of every manuscript that arrives in his office. There is a belief that most manuscripts are picked over and sorted out by underpaid hirelings or "pretty young things" before those manuscripts are routed to the editor.

Perhaps there is some validity to the belief, especially if it is directed toward huge commercial magazines or professional journals staffed by overworked volunteers who try to squeeze in editing between running graduate seminars and the rest of their heavy faculty commitments. However, in educational publishing, even that harassed and poorly supported volunteer is likely to read every manuscript that comes along. Speaking for myself, not only do I read every manuscript that comes our way; I guarantee that about 90 to 95 percent of those manuscripts will also be read by at least two advisors from the professional field — peers or colleagues of the contributor solicited from my office. If the manuscript is then accepted and published, it will almost always, in our operation, have been read or worked on by at least six people at our end of the line before it goes to the printer.

In all this, some of us probably outdo our editorial colleagues from other journals, but those of us who do so are also probably fortunate in being more fully staffed than the others. That is, we are given more resources to work with than others are given in their offices.

The criteria by which manuscripts are evaluated are usually not difficult to discover. We ourselves publish an author's guide, and it is not unusual for a publication to do so, often within the front matter of the
journal itself. Check the information in a journal's masthead, or somewhere in the vicinity of its table of contents, or wherever that fine print is that you normally ignore. General criteria almost always echo the audience being served — or that is the intent of the criteria, at any rate. Within the house, we refine those criteria to cover such matters as style, clarity, editorial convention, and the like, and we ask our reviewers to consider such finer concerns.

Our incoming manuscripts, by the way, are reviewed anonymously by our editorial advisors, although I am not sure that is true of most publications. Only my staff and I know who has written a manuscript that is out to the advisory board for review. Similarly, manuscript authors are not normally told which of the advisors have reviewed their particular manuscripts. We maintain this anonymity so that every manuscript can be judged as much as possible on its own merits — not on the name or reputation (or lack of them) of its author.

Some people wonder if we, or other journals, follow any quota systems, either in deciding on contents or authors. Some publications do, some do not. We do not, really, although we do seek representation across the broad range of interests, approaches and levels within the field of reading. As editor, I like to be sure that all professional persuasions have their turns at the rostrum, and in that desire I simply reflect the official policy and the major intent of the organization for which I work. However, rarely has a top quality manuscript been rejected only because another manuscript has been accepted that is similar to it. If both are top quality, we will probably try to allow a time lapse between the appearance of one and the other. I repeat rarely. Some topics turn out to be extremely popular and we cannot — should not — fill an issue with six or seven repetitions of the same message, no matter how good the manuscripts. The past year brought me a rash of manuscripts about word lists, for instance. I do not think our readers would welcome two or three word list articles every month, nor would a dosage of two or three per month fairly reflect needs and drives within the profession.

We also do not set quotas among authors — by level of assignment or background or degree or geographical location or whether or not they are well-known. Again, wide representation is our goal, but we simply do not hear from certain corners often enough, so both supply and demand play their separate roles in determining what finally appears in print. Most of what I hear from classroom teachers and community college people, to name two examples, unfortunately does not come in the form of manuscripts — which we need — but in complaints that we don't publish enough articles from classroom teachers or articles for community college personnel. And, adult reading is an area that apparently exists in name and need only, judging by the almost zero number of manuscripts we receive in that area.

There are economic limitations, by the way, on what can be published, and they loom large for some editors. There are only so many pages available per volume. Again, my office has been more fortunate than some
— with great flexibility in number of pages (or budget percentages) allocated to the journals. Furthermore, our flow of incoming manuscripts and our acceptance-rejection rates have remained rather steady. So far, every manuscript unanimously recommended for publication has been published.

**Writer's Point of View**

Let me turn, now, from the editor’s point of view and try to see things from the potential author’s point of view. So you think you have written something that someone else will want to read. You even have an idea of who that someone is; you’ve identified an audience, in other words. Next step: Where to send the manuscript?

Certainly it is useful to have a particular publication in mind when you write. Indeed, various publications, as we have implied, hold various expectations and requirements in format, needs and audience. However, if you are really interested in publishing, you will consult any of the several reference lists available to you. Most new writers are amazed to learn how many different outlets are available to them. See *Literary Marketplace*, *Ulrich’s Guide to Periodicals*, *Writer’s Market*, *The Writer*, *Ayers’ Standard Rate and Data*, or one of the indexes to educational publishing. We ourselves publish three journals, almost every group like the Western College Reading Association has at least one publication, and there are at least thirty or forty state journals and newsletters in reading. They vary in quality, but almost all of them deserve more recognition than they receive.

However, one caution! Do not — do not — send a manuscript to more than one publication at a time. There is nothing so infuriating to an editorial staff — every staff is overworked — as to learn that a manuscript on which they have spent hours of time has already been accepted for another publication. Not only does the practice waste our staff time; it jeopardizes our copyright attempts to protect contributors themselves from misuse of the materials they publish through our journals.

Should you send a cover letter with your manuscript? Usually, it doesn’t do any harm, but it probably doesn’t do much good. If a cover letter is needed to explain some circumstance that is not obvious in the manuscript, okay, use a cover letter. Otherwise, you might as well save the stationery. A manuscript either stands on its own or it doesn’t. The journal readers will not see any cover letter if the article is eventually published. Why inflict one on the editor, who is supposed to be at least as smart as most of the journal readers?

What about all those “Mickey Mouse” requirements — typed copy, double spaced, three copies, return envelope, etc.? Do follow them closely. There are reasons for them. We ask for three copies of a manuscript, for instance, so we can keep one in the office for safety and consideration while the other two are circulating among advisers. We don’t want dittoed copies because they are usually difficult to read and all but impossible to reproduce well on the photocopier if we need extra copies in processing the manuscript. I distrust mimeographed copies because I suspect the author either
has not cared enough to shape a manuscript toward my publication, or has run off enough copies to send them simultaneously to everyone in the world.

Some authors are still copyrighting their materials before they send them to an editor. Perhaps unless you are dealing with a shyster outfit (shysterism is usually obvious to all but the hopelessly naive), the practice of copyrighting your own material before sending it to an editor is a waste of your time and money. Of the editors you are likely to deal with, those whose publications are commonly recognized as legitimate in the field, none has ever stolen a manuscript, or even an idea from a writer. We would be cutting our own throats to do so. When I see a manuscript with a copyright notice on it, I immediately wonder if it has been published — and thus copyrighted — in some other journals, so the practice has somewhat of a reverse effect on me, though not a damning one.

Should you write a letter of query to the editor before you send in the manuscript? A query letter might help, but probably will not help very much if you are talking simply about an article manuscript. If the editor receives a huge number of ideas and manuscripts, yes, a query can save him and you time and effort. However, speaking from my own office, we almost routinely answer query letters with a statement that all manuscripts are welcome, that each is judged on its own merits, and the topics — which is about all that a query letter suggests — is not the sole criterion by which manuscripts are evaluated. With a small staff and a heavy workload, we unfortunately are not now geared to work directly with an author in developing a topic. Some editorial offices are geared to do so, but I don’t know of any in educational publishing.

Will my being a member of an organization help or hinder my chances at publication in that organization’s journals? Usually, membership neither helps nor hinders your chances at publication; it is essentially irrelevant to those chances. It might be nice but it is completely unnecessary to tell me, for instance, that you have been a member of the International Reading Association (my employer) for twenty years and have read our journals slavishly those many years. For the how-many-eth time, a manuscript stands on its own merits, and paying your dues to the sponsoring organization is definitely not one of those merits — at least in the offices I know anything about. The only time I have checked a membership list is to find someone’s address or to send out a randomized questionnaire. In fact, a computer did the randomizing job for us, and I did not even see the list.

Why the long wait for an editorial decision? It takes time for a manuscript to be reviewed. We pride ourselves on efficiency, but you are extremely fortunate to hear even from us within two weeks. Two months is closer to the norm, and it is not unusual for consideration of a manuscript to stretch into three to six months. If a manuscript is accepted for publication, it is not uncommon for a year to have passed from your sending the manuscript to its appearance in print. Production alone takes us about three months, and from scheduling through press run, we are often working directly on four different monthly issues simultaneously. With two
journals to produce, that means we can be working at one time on eight different issues in various stages of production. *Time* magazine can come out with a new report two or three days after the event, newspapers within an hour, TV and radio simultaneously, but all of that is made possible through the use of several hundred times as many staff members as are available to most education editors.

As a contributor, rather than try to beat the lag problem by dual submission of your manuscript, try George Schick's method ('ibid.'): Keep one manuscript in some editor's office, while a second one is being typed for mailing from your office, and a third is in outline or rough draft.

**Final Word — for Now**

One final word — a statistic that many budding writers request: What are my chances for publication?

For many reasons, some of them probably bordering on mysticism, we who are editors tend not to build speeches or articles around responses to that question, and I really don't know how many accurate rates of acceptance and rejection are computed from office to office nor what they are if they are computed. Somehow, "25 percent acceptance" is often mumbled or dropped as an aside or offered in a very subordinate clause when the topic comes up over cocktails or beer. I do know rather precisely that during the volume year that will end with the May 1974 issues, most of one hundred sixty articles in *The Reading Teacher* and the *Journal of Reading* have resulted from unsolicited manuscripts. Your chances of publication in RT this year would have been one in five. Your chances for publication in JR would have been one in three. If I were an unpublished, aspiring author, no need to guess which of the two I would have aimed for this year — provided I had something to say that someone in the audience for that journal wanted or needed to read.
WRITING AND CONSCIOUSNESS:
Alternative Education in a Student-Centered Environment

Elva Kremenliev

University of California at Los Angeles

Writing, even secondhand, tired, borrowed writing, never writes itself; in the arrangement of ideas, the choice of subject, the marshalling of supporting evidence and arguments, the inherent world-view of the writer lies frozen on the page for the experienced cryptographer to decode. Students writing assigned papers sense and fear this unwitting yet unavoidable self-revelation. They spend time creating elaborate disguises and defenses, time which can be better spent in discovery. In the Writing Center at UCLA we have been working since 1967 to redirect student energies into more productive completion of writing assignments. We improvise as we go, creating an atmosphere of trust and collaboration which functions both as adjunct and alternative to the more traditional course work which generates the original task of writing research papers, critical book reviews, theses or dissertations.

Giving no grades or units of credit, we can define and articulate rigorous scholarly criteria without concomitant degradation of personal worth. To achieve balance between professional standards of expression and personal integrity we find that one-to-one conferences work best in the areas of scholarly research, critical reading and writing. In creative writing, by contrast, small weekly groups of 8-10 students with two leaders, supplemented by individual work at crucial stages in the writing process, provide a multi-level exchange which is stimulating and rewarding.

Population Served
Our population ranges from entering freshmen to advanced graduate students and is ethnically mixed, including some foreign students who have passed through the English as a Second Language program. The largest number of students, (at least 75 percent), are upper division and graduate
students majoring in literature, the humanities and the arts, the social sciences and such professional programs as Public Health, Business Administration, Education and Law. All these students share a desire to improve their writing and exhibit a serious commitment to developing expressive skills while gaining mastery of principles of thinking and organization fundamental to clear statement. Since they receive no academic credit for work in the Writing Center, their persistence in individual programs depends on the strength of their personal motivation. Students in the writing groups express somewhat different interests and more variable levels of motivation. Thinking of themselves as writers, they welcome the group as a safe place to try experiments before live audiences and to talk about the times when they can write as well as about the times when they cannot. Their commitment to the group is dynamic but sporadic, fluctuating in inverse proportion to demands of regular course work. But as they discover themselves and the shapes of their experience they also discover the pleasures of interaction and the tones of their own authentic voices. Incidentally, they have taught us more about the stages of the writing process and about the relation between writing and consciousness than we could have learned in individual programs alone.

EXPERIENTIAL LEARNING

First Steps

Both active and dysfunctional writers reinforce our convictions as to the right place to start: with the student, his mind, its ways of working or not working, his imagination, his play instincts and preferences, his feelings about his failures and his successes, his idea of what good writing is, the books or magazines he reads for fun, the movies or TV programs that reach him, how he spends his unscheduled time, what questions trouble him and around what issues such questions cluster. We do not of course elicit this information all at once; it emerges gradually as we work together. If our first view of the real person behind the writing comes from a finished paper, we try to demystify the special kind of analysis that students particularly fear. We point out hedged bets, avoidance of responsibility in passive voice and other indirect constructions. We talk about the situational ethics basic to proper use of quoted and cited materials; we consider the probable consequences of giving professors what they want; we identify false notes of polysyllabic vocabulary and indulgence in jargon. We laugh a little and cry a little with the student, seeking in his writing, as we do in the printed texts we analyze together, some evidence of the human voice behind the printed words. We seldom pounce, preferring to sidle up to rough spots to get the student to see and tell us what went sour. This is valuable practice in heightening the writer's awareness of the writing process and it is also valid educational strategy. Gradually the student learns to set his work aside for a time and then come back to evaluate what he has written with some degree of objectivity.
Crisis Intervention

We do deal with students in the grip of panic or despair over papers. But over the years we have learned not to take over, to rewrite or to edit. On the other hand, the student must somehow meet the deadline, so we listen to what the student says about his troubles; we analyze the assignment; we read the rough draft. We ask questions about what the student has been doing and how he now feels about the paper. We also answer questions, except the tricky one about what kind of grade we think the paper deserves. We point out glaring mechanical errors and suggest remedies, often rephrasing aloud what the student has written to make sure we both know what he meant.

Ultimately our goal is to support and encourage the student through the immediate crisis toward a new grasp of the educational possibilities in the writing process. We make a point of explaining (in non-accusing tones) that next time, if he begins earlier and consults us in the formative stages, he can use the extra time to read, think, form a tenable thesis and tie loose ends together in an atmosphere of inquiry and discovery. Many of our crisis clients return to work at a more reasonable pace. Others, of course, get or fail to get what they sought in one or two breathless conferences and go out with a modest increase in self-confidence and understanding or continue to fall into the same traps again and again.

Individual Program

Since most of our students come to us by referral from other students, from other branches of Student Services or from faculty members, we function in an unpredictable milieu where the next student through the door is as likely to ask if we know anything about primitive cosmological myths (one of us does) as about systems theory (we don’t, but a colleague or two in other divisions of the Learning Skills Center do). My favorite recent question came from a student who dropped in to sound out his interpretation of a poem. In mid-sentence he stopped to ask whether I knew anything about poetry. His question was especially poignant because the poem was Theodore Roethke’s “The Waking” which ends: “I wake to sleep, and take my waking slow. I learn by going where I have to go.” (4) These familiar lines express the improvisatory nature of much of our work in the Writing Center.

Part of our protean quality is born of necessity; obviously we cannot be experts in every field about which students write. We turn this limitation into an advantage, handling questions of conceptualization, organization, emphasis, evidence, proof, style and manner. By scheduling conferences during the initial stages of writing, we can follow the writing process with live commentary and live responses before ideas have hardened into any rigid mold.

The Hypothetical Mode

In those fields where we do have valid claim to authority and might choose a didactic, tutorial approach, we find it most effective to work instead in an
atmosphere of mutual inquiry and effort. When, for instance, a student has an assignment dealing with a novel I haven’t read, I first go over the text with the student, orienting myself in setting, style, devices, asking questions and responding to the student’s analysis and interpretations by reference to specific passages. Then, when I read the work and an early draft of the critical paper, I do it with a sense of what the student knows or thinks in relation to the assigned critical task. Often we work with unfamiliar short texts (short stories, poems, essays, scenes from plays) side by side with the student, conscious that our ways of grading and examining texts may serve as a stimulus to the student’s nascent critical capacities. But we don’t show off if we can help it; we gropè, try out ideas and change angles. We make a point of consulting standard critical resources and direct the student to those which seem most promising. Such guidance presupposes that the counselor must have learned to use the tools of the trade and be willing to share both his method and his questions.

This pattern of collaborative learning follows Jerome Bruner’s “hypothetical mode” in preference to the “expository mode” in which the teacher and the student are in a more cooperative position with respect to what in linguistics would be called “speaker’s decisions.” The student is not a bench-bound listener, but is taking part in the formulation and at times may play the principal role in it. He will be aware of alternatives and may even have an “as if” attitude toward these, and he may evaluate information as it comes. One cannot describe the process in either mode with great precision of detail, but I think it is largely the hypothetical mode which characterizes the teaching that encourages discovery. (1)

Creative Writing Groups
The hypothetical or improvisatory mode has led us to experiment freely in our writing groups. We have adopted Gestalt devices which emphasize the “Here and Now” and the experiential base of verbal expression. (3) We have used the personal journal which my colleague Donald Brannan and I first tried in freshman composition classes on the Irvine campus of the University of California. (4) In practice we have changed the original pattern described by Rohman and Wlecke, defining the journal as strictly private territory where the writer tries out the shapes of his experience for his eyes only. He may and does use the journal as a quarry from which he selects material for later writing but he does not hand it in for inspection.

We have played parlor games and tried nursery school arts like clay modeling and finger painting. We have used video-tape with some success. Recently, we tried to get students to read aloud or improvise scenes for tape recording so they could hear themselves. But students balked so we turned the project upside-down and brought in recordings of poets reading their own poetry and talking about the joys and pitfalls of reading their own work aloud. This started an animated discussion of the poetry and of the experiences behind the lines.

Besides bringing to the surface buried links between experience, consciousness, writing, speaking, listening and reading, these groups
provide impetus for would-be writers. Moreover, the groups have also taught us to work better with students embroiled in the writing chores endemic to academic life. Constantly, the groups remind us of the importance of reading for the student writer and of the differences between reading to pass exams and reading for personal and intellectual growth. For us and for students, these connections between life, reading and writing cannot be stressed too often. As the non-reading writer and the non-writing reader are painful realities, so is the non-feeling, non-thinking writer. The Socratic doctrine that "The unexamined life is not worth living" expands into deeper and wider meaning when juxtaposed with the modern retort that "The unlived life is not worth examining."

REFERENCES

Only a presumptuous person would project the state of any facet of our society during the next ten years. As everyone knows, we are in a period during which drastic changes occur within a given year or even during a few months. Since postsecondary education is an integral part of the total society, it is affected by other factors and thus we must assume that in the period ahead it will reflect the social, political, and economic trends of times. Of course, we also hope that it will have some influence on society itself.

Despite uncertainties ahead, there are a few facts and trends which can assist us in predicting certain situations in the nation's colleges and universities which have implications for those who work in these institutions. I should like to discuss three likely developments in the period ahead. These are: 1) the no-growth state of college enrollments, 2) the changing characteristics of college students, and 3) the increasing emphasis on more precise educational objectives and competency attainment.

**STATIC ENROLLMENTS**

During the last two years it has become apparent that college enrollments are headed for what is called a "steady state." Even the Carnegie Commission has had to revise downward its earlier projection that college enrollments would continue to grow during the 1970's but only at half the rate of the 60's. Some facts tell the story. In the 1972 first time enrollment in four-year colleges and universities declined one and one-half percent and in contrast to prior spectacular enrollments in community colleges, first enrollment in them increased less than 2 percent. In 1973 first-time enrollments increased somewhat in the public institutions but declined in the private sector. The public two-year colleges had an increase of over 5 percent...
in first-time students but this is still lower than for earlier years. It must be noted that these are national data and that there is considerable variation among types of institutions. For example, the loss in enrollment is greatest in private colleges and in four-year colleges (including those that offer Master's degrees); whereas, the two-year colleges and the prestige universities are still growing at a diminished rate.

One cause for the earlier-than-expected leveling off in enrollments is the fact that fewer high school graduates are entering college directly after high school. Of the high school graduates in 1972 only 49 percent—the lowest proportion in 5 years—went on to college. This decrease was particularly noticeable among young men for whom the percentage drop was from 63 to 53 percent for the five-year period. There are undoubtedly many reasons for these trends. One is that in recent years there has been considerable discussion about the desirability of young people taking time out between high school and college or for them to attend periodically rather than continuously until they earn whatever degree they are seeking.

Somewhat further ahead the enrollment decline will be certain because of the declining birth rate which is now at its lowest point in history. Based on live births in the last several years, the Census Bureau estimates a sharp drop in the number of college-age youth after period 1982.

Many colleges are now learning to live with the steady-state with various consequences, not the least of which is competition for students. Perhaps for our purpose today it is sufficient to remind ourselves that the excitement of growth such as occurred in the 1960's is over and that our preoccupation with it must now be directed to other concerns.

It must be noted with emphasis, however, that these comments about enrollment apply primarily to what might be considered the attendance of conventional college students. More will be said presently about new types of clientele that may be in the offing.

CHANGING CHARACTERISTICS OF STUDENTS

A second factor with which we all have to reckon is the changing nature of the college population. I recognize that some of this change is already well known by many of you in public community colleges but it may help to think about the total picture. It has several parts. For one thing, we have moved rapidly in recent years toward breaking down many of the barriers to college attendance. A few years ago we were placing great stress on academic aptitude and achievement tests as a means of determining eligibility. Today, social, personal, and economic factors are considered more important. Equality of opportunity is a new ideal. The phrase "the new students" denotes students from lower socioeconomic and ability groups hitherto unserved. Thus, the diversity of students in most colleges is becoming greater and is destined to continue, lest this seem inconsistent with the fact that enrollment is stabilizing, one has to conclude that the new students are subject to the same forces which lead to sporadic attendance.
for the more advantaged. Thus, there is a tendency for total enrollment to decline.

There is yet another part of the student picture that will affect all of you and your work. Today there is much discussion about the "new learning society." In general this term refers to a rapidly spreading tendency for adults to continue their formal education. It is related to the phenomenon of the rapid increase in part-time students which has been evident for some time. In 1973 by far the largest percentage increases over 1972 enrollments were in the part-time category. This was true for all types of institutions, both public and private, and for men and women. The increase in part-time students was higher in the two-year colleges. To be sure, not all part-time students are older than those of conventional college age, but they tend to be.

Thus is it that those who serve in higher education in the future will most likely be called upon to work with part-time students, many of whom will be older and often recurrent in their enrollment patterns. They may be highly motivated, but they will be subject to all the disruptions that interfere with their communication with staff and fellow students.

While we are on the subject of the new learning society, we must mention some of the new modes of serving such a society. For the last three years higher education has been flooded with the language of non-traditional education. The term is not a good one, and it presumably denotes many things. Among them is the concept of the external degree which means that students, usually adults, can qualify for a degree through off-campus study. The term is also closely related to the concept of the "open university" or the extended college or university. All the terms include new developments in delivery systems such as the student contract idea, the use of electronic media, and correspondence study, to name only a few. Practically every state in the union and many institutions either have embarked on some form of extending their program or have under study a plan to institute one. While many questions of public policy arise in connection with the extended opportunity concept, it is surely a distinct movement in higher education today. Associated with it is a host of other developments such as the practice of awarding credit for life experience, the widespread use of external examinations such as the College Level Examinations, awarding advanced credit, and even new models for reducing the time required for a baccalaureate to three years.

As I see the picture unfolding, I believe that there will be a blending of the nontraditional movement with continuing education and that together they will effect a concerted drive to serve the part-time degree credit student.

EMPHASIS ON EDUCATIONAL OBJECTIVES
AND COMPETENCY ATTAINMENT

You may wonder why I project the third development in postsecondary education, namely, a trend toward a re-emphasis on educational objectives
and competency attainment. Perhaps before any explanation of rationale, I should explain my perception of the prediction. In a way, it is simple: instead of planning a program, either in general terms or for particular students, attention is given to the anticipated outcomes for students, especially in terms of the competencies they should develop. To the greatest extent possible, the objectives are measurable. The idea is not new. It is rooted in Bloom's taxonomy of educational objectives. It dates back to the basic statement on the objectives of general education which appeared sometime in the early 1940's. It is related to accountability which denotes many things including fiscal responsibility.

Why do I believe there will be increasing attention to measurable competencies? Primarily because of many straws in the wind. Let me enumerate a few.

1) In recent years educators, including those advocating the systems approach as well as those developing management information systems have been seeking to identify the outputs of education. They have not succeeded very well. It has been easy to talk about inputs such as student characteristics but trying to determine how to measure the success of a program has been frustrating. But the search is still on.

2) Another of today's fads is the concept of management by objectives. While this is really a managerial technique, its very terminology hints of an increasing emphasis on objectives per se.

3) The notion of the performance based curriculum is up for discussion at nearly every professional meeting. For example, at the 20th national conference on higher education sponsored by the American Association for Higher Education in Chicago in mid-March, no fewer than five group discussions were centered on this topic.

4) The nontraditional movement is leading to a widespread practice of awarding credit for prior life experience, evaluated primarily on the extent to which the entering student can document his competencies in the appropriate areas.

5) Finally, many of the new programs or new institutions being established today are prescribing competency areas for degree requirements. For example, at the new Minnesota Metropolitan State College in St. Paul, the college defines "competence" as the ability to exhibit the level of performance requisite to the successful attainment of a particular goal. It requires demonstration of competence before graduation in the following five areas: basic learning skills, personal growth and development (meaning a personal and social awareness), civic competencies, leisure time competencies, and vocational competencies. Each of these is spelled out in more specific terms.

Perhaps these are enough indices of what I believe will be a new emphasis. Personally, I regard the possibility as a good thing for if we can agree on the right competencies and develop ways of measuring their attainment, we will at least be more honest and specific than we have by our generalized education jargon in the past.

Do not hold me totally accountable for making these three predictions
about postsecondary education in the decade ahead. No one person has a
crystal ball and, as I said earlier, each segment of society is dependent upon
all others. There are other matters we could consider, for example, the
financial one. Everyone here is aware of rising costs in our colleges and
universities and of recommendations by prestigious groups that tuition be
raised. If this is done, and if student financial aid is not sufficient to offset
the costs to lower and even middle income students, many will not be able
to attend college. Obviously, this would affect both the enrollment picture
and the diversity of students.

But assuming that our institutions of higher education will be growing
more slowly, or perhaps not at all; that there will be a dramatic shift to new
ways of serving adults and recurrent students (the new learning society);
and that there will be more attention to what people get out of education,
what then are the implications for those of you who are concerned directly
or indirectly with the teaching of reading?

First, you will not be caught in the rat-race of growth and expansion so
presumably you can turn your attention to doing the job for which you were
employed. We hope that as a result of decreasing enrollment there will not
be relatively fewer of you, for your skill in developing one of the most
important student skills must be available, especially in view of the advent
of "new students" who will need your help.

Second, you will be working with an increasing percentage of part-time
older students. I cannot speak to the point of what types of competencies
are needed for this task, but you and your group can ponder on this.

Fortunately, the skill you seek to develop in students is measurable, so
you should not have difficulty in setting objectives for yourselves or your
students. However, I would hope that your expertise as counselors or
teachers would be useful to your colleagues and your institutions as they
determine more specifically what it is that they want to happen to students.

The years immediately ahead should be interesting because of the
changes which postsecondary education will undergo. A static enrollment of
conventional students should not mean homogeneity of students. It
certainly should not lead to apathy on the part of teachers, counselors, and
administrators. On the contrary, now is the golden opportunity to
individualize education for people at this level — and that is your business.
VISUAL-PERCEPTUAL PROBLEMS AND COLLEGE LEARNING ABILITY

Loretta M. Newman
Los Angeles Harbor College

We used to think that if a child had average intelligence and health, it was up to him to learn when exposed to usual teaching methods. We now know there are some physical reasons why some youngsters cannot learn adequately in school. The problem we are concerned with today is developmental or functional vision, those elements that can relate to ability to read and learn. In one school psychologist's practice 80 percent of the students referred to him for scholastic difficulty exhibited visual problems. In a Texas study, over 90 percent exhibited a visual problem by the eighth grade.

Unfortunately, the elementary school sight examination most often given is still the Snellen letter test which checks only visual acuity. Sight itself is not the process that mediates learning, but VISION is. Acuity is not necessarily a factor in reading. In fact, studies of children entering first grade have found that 60 percent-80 percent have visual deficiencies which prevent them from performing close work successfully. Sometimes the eye cells necessary to do reading and other close work do not develop until age eight or nine.

Hence, it is easy to understand, why many children develop a negative reaction to early education; the tasks are visually impossible for them to comprehend. Consequently, many children, even some potentially brilliant intellects, operate at mediocre levels and continue to limp along throughout their school careers. As a result, many college students are not working up to their intellectual potential. The community college offers probably the last chance for rescue.

There is a challenge for college educators to learn more about vision, its relationship to learning, and how to help those with visual problems. Educators make students aware that they have visual problems that interfere
with their learning ability. Students also need to know that their visual problems are correctable.

Developmental training procedures for functional visual problems have been established by optometrists and psychologists. Some of us have seen functional visual training totally change students' lives. A professional eye refraction and follow-up can often be the difference between success and failure in school. Those of us who work in the college learning skills field have a responsibility to make students aware of possible visual problems. We must alert them to the need. Relatively few students can foot the bill for the functional vision training that should accompany the glasses. It is lengthy and costly, but done better by the professional. Given this situation, we try to fill the void.

The fact that efficient seeing and visual perception is learned has important implications for us. Visual function that requires great effort creates stress that cuts down learning. The student needs to be able to focus easily and quickly, use his eyes as a team, perceive quickly and accurately, and track moving targets in any sphere of sight. He has to be able to sustain focus at reading distance for a considerable length of time. He has to be able to use his eyes and hands together. When he cannot, he often turns away from reading class assignments, does not turn in homework, seems lazy and indifferent, uses every excuse to cut class, and may become a fail-out.

All of this leads us to the conclusion that some degree of interest in visual skills is important for college students who show reading disability. After all, reading is a prime visual task. One of our goals should be to help the poor learner achieve the greatest degree of effective vision.

PRACTICAL APPROACHES

Some of us observe our students for faulty visual clues. A free list called the "Educator's checklist" can be obtained from any functional vision optometrist. Some of the clues include appearance of eyes, and behavioral signs — such as seeing double, squinting, omitting words, turning head, tilting head, mistakes in similar words, reversing letters, blinking excessively, head to close to book, avoiding near-focus tasks, covering one eye, rubbing eyes often, quick fatigue, etc.

Another approach concerns neurological development. We can do extensive "movement education" with youngsters from age 4 to 14. Unfortunately, we have not as yet found any successful way to implement this kind of training with young adults on a group basis. Optometrists are very successful on a one-to-one basis.

Third, exploring the area of vision training is practical and very rewarding. Up to now, except in a few places, vision training has been thought to be possible only when done in the professional's office, usually by a specially trained visual technician. This is ideal, providing that the technician understands modern visual training concepts and methods. From reports and personal observations, it seems that very few ophthalmologists
have even heard of it since it is not a disease and the research was not done by medical men. Training of the visual perception system to make learning easier is not necessarily medical. The optometric researcher working with experimental psychologists (Renshaw) specializing in visual perception explored and developed this area of knowledge over thirty years ago. Educators and optometrists now need to work together to put these trainable, perceptual, educative skills into practice to help the student we see.

Unfortunately, only about one-third of today’s practicing optometrists really have a thorough understanding of the advanced concepts in visual training worked out by their own research colleagues, but the number is steadily increasing. Even fewer educators have any understanding of this area. It is indeed strange that we teach so many things to children, but we do not teach them how to see. Yet, what sensory system is more used for education than “vision”? Again, remember that research evidence estimates 80-90 percent of our students probably have visual perceptual problems of some kind that can cause or intensify reading problems; therefore, learning. Research is beginning to show that most students who do not profit much from our usual reading class workbook approach have very defined visual problems.

VISUAL SCREENING

A necessary first step is screening students for visual deficiencies in functional vision — not sight. That is strictly for the professionals. We use two instruments to screen eyes: the Keystone telebinocular and the Reading Eye Camera. Due to lack of funds, we have been unable to screen all of our students in reading classes, but we have trained some of our student tutors to do telebinocular short survey tests. We perform studies on students in our advanced study skills classes on the Reading Eye Camera, and use the results as a fast diagnostic tool for planning lab activities.

During the telebinocular test, we watch particularly for near-point fusion or binocularity, the ability to use both eyes together with ease and clearness: Some students cannot line up both eyes on one plane without tilting their heads horizontally or vertically. Some cannot fuse stimuli into one image, and the image remains blurred or may be fused only with great effort to produce strain and fatigue. One serious result is that some people, unconsciously, solve the fusion problem by seeing with only one eye and thus suppressing vision. This is definitely not a solution and it could eventually lead to blindness in that eye if not detected. While depth perception is tested, we are not yet able to do anything about it in the classroom due to lack of space. Finally, usable vision is checked one eye at a time, then together. Failure to perform the last test leads to a conference with the student and referral to a functional vision optometrist. The results of a real visual screening might well shock most of you into further investigation of this area.

Next, with the help of the professional, there are some simple eye
practice exercises that individuals could do daily to train eye muscles to coordinate and function more efficiently. We would be wise to add to our educational consultation staff an O.D., trained in modern vision training procedures. Additionally, Federal funds should be channelled to provide glasses for students who need “training” lenses or regular glasses. “Training glasses” have materially reduced reading problems for many. And glasses prescribed are worn only during a training session or reading activity. (As teachers, we cannot legally put lenses on people). We cannot or should not attempt to do a complete vision training program in college, but we might be able to do enough to enable the student to become aware of what vision training is and what it could do for him. Here, the O.D. can be most helpful.

Such a procedure brings about both improved comfort in reading and efficiency in seeing. Many times it reduces or gets rid of myopia, double vision, faulty depth perception, eye strain, blur, rigidity in seeing, reduced seeing span, monococular vision, and other dysfunctions in the visual process. It is no cure-all, but it can be helpful for many people.

CLASSROOM TRAINING

In the classroom, we can train by using tachistoscopic devices such as the Keystone Tachistoscope, Visualizer, eye-trainer and tachistoflasher. In this area, there has been great controversy and much faulty research. For the welfare of our students, training needs to be looked at again. We need to pay attention to optometric and psychological research which has largely been ignored by many up to now.

Tachistoscopic training can be done as a part of any reading class. This is noticeably effective in widening span, reducing fixations per line, lessening regressions and arhythmic reading, deepening concentration, increasing perceptual accuracy, and laying a solid foundation for more rapid and more accurate reading. If handled properly, nearly all students could benefit from the training, but those with more serious visual problems benefit more if the two types of training, vision training and tachistoscopic training are combined.

The above are visual and mental skills which are trainable. In such training, the student is experiencing a high order of attention and concentration. Through appropriate choice of stimuli on slides or filmstrips, students can develop visual skills which can influence reading, spelling, mathematics, typing, shorthand, and other subjects. At the same time he is learning and reinforcing good habits of attention, concentration, and accurate perceptual skills. The tachistoscopic method works hand-in-hand with the newer multilevel materials which are now abundant. Such training could supplement the usual reading skills thought to be essential in a reading class. The controlled reader also has training possibilities for directionality, motility, and quick focusing.

Obviously, all of us need to operate mentally at the highest possible level if we are to solve today’s problems and keep up with the present
knowledge explosion. Our students need this added sharpening and upgrading in perceptual accuracy and skill. The competent college reader must be able to organize content quickly, spot main ideas, catch significant supporting facts, and ruthlessly by-pass material not important to his immediate reading task. He must do this at the highest speed at which he can still efficiently read with confidence. Visual training can help in this developmental goal. An adequate visual screening program is a necessary first step.
GUIDELINES FOR BUILDING A PRODUCTIVE WRITING TEAM

Deborah K. Osen
California State University, Fullerton

The college reading instructor who wants to write a professional book or student textbook often finds himself a member of a writing team. A glance through his own professional library quickly reveals that many major books in the field have been written by teams of writers.

Authors have noted several advantages to team writing. The time involved in writing can be substantially reduced if a productive team tackles the task. Expertise drawn from the varied backgrounds and teaching experiences of the team members can add valuable dimensions to the scope of the book being written. Authors have found that they tend to function more effectively when they work under deadlines set by the group, rather than solely under self-imposed deadlines.

Team writing with all its advantages does, however, add another dimension to the task of writing a book. The authors on such a team need to develop a series of skills related to working as a team. This personal interaction dimension in writing is at least as important to the success of the project as the background, experience and writing skills of individual members of the team.

My own experiences as a member of several writing teams, and my awareness of related experiences of my colleagues, have led me to develop a series of guidelines which may be helpful to others contemplating team writing.

BUILDING A WRITING TEAM

1. Find a compatible, committed group.

It is of primary importance that members of the writing team have a mutual respect for each other. Members of successful writing teams often state
that the major value of working on such a team is the opportunity they have to learn from each other.

The team also needs to have a strong commitment of a common set of goals the project book is attempting to achieve. The stronger the initial commitment is, the more likely the project will be completed, despite other unexpected and unpredictable demands of the individual writer’s time.

A common commitment to “strike while the iron is hot” will help individual members to meet deadlines set by the group and by editors. The resulting feeling of urgency about meeting these deadlines can help individual authors on the team keep their writing tasks among their top professional priorities.

2. Locate a saleable group.
Writing teams find more success in interesting publishers in their book if their team includes at least one member who has previously established a “name” for himself in the field. Not only does this help assure that at least one member of the team knows how to see a writing project to conclusion; it also increases the possible sales of the book as potential buyers recognize this individual’s name on the title page.

It is also helpful if at least one member of the team is from a different geographical area. Although this may make it more difficult for the team to meet as a group, it can increase sales in other parts of the country, and limits criticism about the book being geared to too narrow an audience.

3. Assure the production potential of the group.
Members of the team must not only willing to do their part of the task, but they must also be dependable. Previous experiences with individuals who are potential members of the writing team are probably the most reliable data for predicting the likelihood of their performance on a writing team.

It is also important to know at the outset whether each member of the group can provide typed copy for other members of the team to react to. Even rough drafts of typed copy expedite the reading and reacting tasks of other team members.

BEGINNING TO WORK TOGETHER

1. Agree on a person to coordinate the project.
This person serves several functions. He can:

1) remind team members of time and places of meetings and deadlines;
2) serve as the group’s liaison with the publisher and editor;
3) do the final editing of the book to assure consistency of style, content, length of chapters.

Because of the additional demands on the coordinator’s time, writing teams often agree that he will receive a higher percentage of the royalties than other team members do. It is therefore essential that he be someone
each member of the team agrees can and will handle effectively each of his functions.

2. **Use problem-solving procedures to develop the book.**

Successful writing teams report that they allowed plenty of time at the beginning of their work together to develop a clear statement of needs which this book is designed to meet. This needs assessment provides the rationale for the book and the publisher. They have carefully

1) defined the audience for whom the book is designed as well as the unique learning characteristics of this audience.
2) assessed the market to be certain that this book meets a need not sufficiently covered by other books or materials in the field.
3) looked at current materials to identify effective methods of presentation and format which they might incorporate in their book (and teacher's manual, if there is to be one).
4) brainstormed ideas which might be included in the book, from which an organizational pattern for the book can emerge. It is helpful to conduct this state of the writing process in a classroom with plenty of chalkboard space on which the ideas can be listed during the brainstorming, making them visible to all the members of the team simultaneously.
5) written the proposal for the book, including the outline and several sample chapters. The coordinator can then submit it to several publishers for consideration.

When the writers are ready to complete the book, they need to

1) establish their timeline for working together, and set working deadlines.
2) determine the division of labor. Sometimes each author independently writes several complete chapters. Other teams brainstorm ideas chapter by chapter and each team member then is responsible for writing certain chapters. In some teams the coordinator does not write any chapters, but may write introductory materials, practice materials, teacher's manual, index and table of contents in addition to his other tasks.
3) agree on a manuscript style sheet they will use and get a copy for each member. If members of the team use it right from the beginning, they will find they have simplified both the reading and editing of the material at each step in the process.

Professional style sheets of the American Psychological Association or the Modern Language Association are useful guides for writing professional textbooks, if the publisher does not provide one. An excellent, concise general guide is Margaret Nicholson's *A Practical Style Guide for Author's and Editors*. (4)

4) decide on how the final copy will be typed. If someone must be hired to do this task, then group members need to agree on how much they will be willing to pay to have it done. A typist generally needs to be
alerted well in advance if she is going to be able to take on a task of this size at the precise time it is needed.

DEALING WITH PROBLEMS

1. Problem members.
Sometimes a member of a writing team becomes a problem to the rest of the team. Whether he ignores deadlines, does not respond to communications from the coordinator, or becomes increasingly negative toward the project, he impedes the progress of the rest of the team. Cartright and Zander (1) have summarized research on how groups deal with a deviant member:

We should expect that the greater the cohesiveness of a group is, the stronger will be the pressures on the role-occupant to act as he is expected to do. (1:147)

They have also noted that if this deviant member persists in his unacceptable behavior, that all communication directed toward him markedly declines, which can then result in his being excluded from the group. (1)

If a group member early in the project exhibits behavior which seriously interferes with the productivity of the group, the group members need to face the problem directly. It may be in the best interests of the project to remove this person from the team at that point. If seriously deviant behavior occurs when the project is nearing completion, others on the team may simply need to assume the tasks previously assigned to this person.

2. New member.
It takes time to orient a member added to a writing team after it has begun functioning. It generally is the responsibility of the coordinator to see that the new member understands the dimensions and content of the project and how the group is functioning.

It is interesting to note that a new member of a group tends to conform to the group's present standard, but can also exert a small influence on that standard. (1)

3. Group functioning.
If the group itself is having trouble functioning effectively, it might be helpful for the team to look at the roles they are playing in the group. The difficulty in their functioning may be due to conflicting leadership roles being played within the group. Olhmsted (3) from research on the functioning of small groups concluded that there generally is not a single leader in a small group. Rather, a variety of leadership roles emerge: task specialist, social-emotional specialist, idea generator, and style setter. The interaction of these roles greatly affects the productivity of the team as suggested by Slater. (5)

It is often observed that the same individual may play several of these leadership roles while functioning on a team, especially if the team is small. In fact, the more flexibility demonstrated by team members in playing
these roles, the greater the chance for success of the team since this results in a highly empathic group.

Coordinators of writing teams might find Chapter 8 of Olmsted's *The Small Group* (3) useful in helping him and his team members realize the roles they are playing in the writing team.

4. Editor.
Sometimes the editor can be a real threat to the effective functioning of a team, especially if he changes the rules midway through the project. Valuable suggestions for dealing with a problem editor appear in Green's article in the current issue of *Writer's Digest*. (2) Early reading of the article could help teams avoid many later problems.

CONCLUSIONS

Writing on a team is an exciting professional experience. Guidelines presented in this paper suggest ways to turn this experience into a productive, successful and lucrative venture.

REFERENCES

Sight is our most dominant sense. If it is not the dominant sense or the leader of the other senses, a reading problem is often the result. We live primarily in a visual world.

*How Vision Occurs*

The receptors of the eye are in the retina and are called rods and cones. The cones are for day vision, color and fine detail. The rods are for night vision and gross side objects and movement. The cones predominate centrally and the rods peripherally. The retina covers the interior back surface of the back part of the eyeball.

The rods and cones turn light energy (as from print of a book) into nerve excitation. These nerve impulses are carried to the highest part of the brain, the cerebral cortex, by the two optic nerves. These visual sensations are received by areas called 17 and 18 in the occipital lobes of the cortex which is at the back end of the head.

Perception of vision occurs when the visual cerebral sensations are integrated with the sensations of the other cerebral sensory receptors of the body.

This integration occurs by way of association nerve fibers in the brain and brain-stem. The receptor senses that are most important for this integration are visual, hearing, tactile and proprioceptive. The speech center of the brain and feed-back sensations from motor activity also become involved. This total involvement of all the senses, with vision dominating, might be called the conceptualization of perception.

*The Optometrist and the Educator*

Professionally, many areas of common interest motivate both the educator and the Optometrist. Within recent years a new ground of common concern
has emerged. This is the area of the Psycho-physiological aspects of vision as they affect learning and reading. (2)

The traditional optometrist, accustomed to the milieu of a professional office, has had to orient himself to the wider area of helping students to read more clearly, efficiently, comfortably, and with better understanding.

In addition to concentrating on typical vision problems, the optometrist has broadened his field of service to include the problems of the retarded child, the poor achiever, and the slow reader.

Eye Anatomy Terms

Ciliary muscle. The ciliary muscle is also known as the muscle of accommodation. The ciliary muscle, by its own natural tonus, has a pulling effect on the ligaments holding the lens. When the eyes are turned inward (converged) by the external muscles of the eyeball (as in reading print in a book), the ciliary muscle automatically pushes forward and releases the tautness of the suspensory ligaments from the lens. The lens then, by its own elasticity, becomes wider in its fluid-like center. This results in a lens with greater magnifying power. The lens thus bends the light from the print of a book to a sharpened point on the fovea of the retina at the back of the eye. This act is called accommodation.

Optic disc and nerve. The optic nerve connects the light receptor, or retina, with the brain. It consists of many nerve fibers bound together by three sheaths which are continuous with sheaths of the brain. The optic disc is the area where the optic nerves exit from the eye. This area leaves an oval blind spot in the field of vision in each eye which is filled-in by the opposite eye.

Macula and fovea. The macula is at the back of the eye near the center point of the retina. It is the size of a dime. The macula is for our general vision such as driving, looking at a classroom or viewing television. This is where the cone cells predominate. The fovea centralis is the center of the macula and is rod free. It is as small as the end of an eraser of a standard pencil. This is the only place in the eye where clear fine vision can occur such as is required to see the print of a book.

The small area around the macula is called the perimacular area. The target that each eye is looking at must be placed within the perimacular area of each eye before binocular vision and fusion of the two visual fields can occur while a student reads. If this does not happen, an individual will see double or suppress one image. This can result in one eye not seeing the target clearly.

If this occurs in an eye of a young child, while the vision cells are developing, the bluriness can result in uncorrectable subnormal vision. This is called Amblyopia. Intermittent suppression can be a cause for confusion while reading and could result in poor school achievement.

External eye muscles. There are three pairs of outer eye muscles for each eye. These control the movements of the eyes. They help each eye to line up correctly so that the object being looked at is on a straight line from object to fovea centralis at the back of the eye.
Physiology of Vision While Studying

The following is an account of the physiological phenomenon that occurs when a student studies. An amount equivalent to about fifteen units of nerve energy is needed to make the outer or external eye muscles converge the eyeballs inward and see the word singly. Two and one-half units of nerve energy are needed to make the internal ciliary muscles of each eye focus the lens so that the lens accommodates on a word at 16 inches and the student sees the word clearly. These two functions must occur together and reflexly as one mechanism. This is the visual act that occurs while studying. The optometrist measures this binocular accommodative-convergence ratio clinically. If the convergence is found deficient then the student is using too much energy to keep the word from becoming double while studying. This kind of visual dysfunction is called convergence fatigue. The student will feel headachy or experience a "pulling" sensation between the eyes, and he tires easily. He will lose his place easily while reading. If the words run together or they are hard to focus while studying, then the student will have to use more than the normal amount of nerve energy to keep the letters clear. This dysfunction is called accommodative deficiency or fatigue. He will "not feel like reading" because a visual and mental fatigue occurs that increases the longer he tries to look at the book. He reports that he can only read a short time comfortably. He naturally becomes bored. He cannot concentrate or keep his attention on his study assignment. He avoids desk work and often makes a nuisance of himself in class.

Juvenile delinquency can be a result of lack of optometric care. A high correlation has been found for teen-age delinquents who are poor readers and who also have uncorrected accommodative near-point problems. This accommodative insufficiency while studying can be corrected by spectacles and-or eye exercise. The lenses that keep this accommodative fatigue from occurring in its early stages, and possibly prevent fatigue from occurring, are called achievement or study lenses. They are like exercise glasses. They are often needed for the student who is in the lower 1/2 of his class. Every student who is attending a community college learning center is a potential candidate for study glasses. For such a student a vision survey is inadequate. He should be given a complete optometric near point clinical exam routinely before he starts his work at a learning center.

The Under-Achiever

A complete clinical optometric work-up should be provided for every underachiever. This is not a suggestion, but a "must," because the student cannot tell another person that his eyes are the cause of his school troubles. The student cannot diagnose his own visual problems because he has nothing with which to compare his visual anomaly. The poor achiever concludes that this is the way he is and nothing can be done about it. Moreover, there is no vision survey at school that can efficiently detect an accommodative or convergence near point fatigue problem. Testing eyes on Snellen's chart twenty feet away will not discover this near point problem. Clinical equipment in the office allows for special distance and near point
tests. These tests, through a visual analysis with visual-motor perceptual tests, offer a syndrome which is needed to discover and correct a near point or vision reading anomaly problem.

It is both appropriate and mandatory that a student-oriented type of clinical optometric vision examination be given routinely to every under-achiever once a year.

**Observable Clues to Classroom Vision Problems: A checklist [1]**

The most obvious signs for an accommodative act deficiency is the student's avoidance of as much desk activity and studying as he can manage.

1. **APPEARANCE OF EYES:**
   - One eye turns in or out at any time
   - Reddened eyes or lids
   - Frequent styes on lids
   - Encrusted eyelids

2. **COMPLAINTS WHEN USING EYES AT DESK:**
   - Headaches in forehead or temples
   - Burning or itching after reading or desk work
   - Nausea or dizziness
   - Print blurs after reading a short time

3. **BEHAVIORAL SIGNS OF VISUAL PROBLEMS** (Classified under headings of observable visual performance)

   A. **Eye Movement Abilities** [Ocular Motility]:
      - Head turns as reads across page
      - Repeatedly omits words
      - Rereads or skips lines unknowingly
      - Loses place often during reading
      - Displays short attention span in reading or copying
      - Oriented drawings poorly on page

   B. **Eye Teaming Abilities:**
      - Complains of seeing double (diplopia)
      - Misaligns digits in number columns
      - Tilts head extremely while working at desk
      - Omits letters, numbers or phrases
      - Squints, closes or covers one eye

   C. **Eye-Hand Coordination Abilities:**
      - Must feel of things to assist in any interpretation required
      - Writes crookedly, poorly spaced; Cannot stay on ruled lines
      - Repeatedly confuses left-right directions
      - Uses his hand or fingers to keep his place on the page
D. Visual Form Perception [Visual Comparison, Visual Imagery, Visualization]:
Fails to recognize same word in next sentence  
Reverses letters and/or words in writing and copying  
Confuses likeness and minor differences  
Mistakes words with same or similar beginnings  
Fails to visualize what is read either silently or orally  
Whispers to self for reinforcement while reading silently

E. Refractive Status [Nearsightedness, Farsightedness, Focus Problems]:
Comprehension reduces as reading continued: Loses interest too quickly  
Holds book too closely; face too close to desk surface  
Makes errors in copying from chalkboard to paper  
Fatigues easily: blinks to make chalkboard clear up after desk-task and/or reading; not elsewhere  
Avoids all possible near-centered tasks  
Complains of discomfort in tasks that demand visual interpretation  
Squints to see blackboard, or requests to move closer  
Rubs eyes during or after short periods of visual activity

It is important that the educator be knowledgeable in this field of vision and learning. He must be especially aware as to the Observable Visual Clues given above. The educator is our first line of defense against a student becoming an under-achiever. But what about the college student who is still under-achieving? The educator must not only concern himself with the under-achieving student's scholastic remedial work, but also with seeing that this kind of student, when discovered, is referred for optometric remedial care. This might be his first step to being really able to achieve.

REFERENCES

DYNAMICS OF TNT [TEACHING NOTETAKING TECHNIQUES]

Carol Scarafiotti and Lucile Schooland
Miracopa Technical College

INTRODUCTION

This paper deals with a specific Learning Center program which was designed to upgrade the notetaking skills of the students within the wide spectrum of abilities and the many areas of study at Maricopa Technical Community College. It will explain the impetus behind its development and the evolvement to its present content and form.

Maricopa Tech has a unique student population which can be classified into three groups: students who are returning to school after many years of detachment from the academic scene, students who have never been exposed to good study techniques, and students who have serious learning or background deficiencies. The need for a notetaking study program was evident to us in the Learning Center as we recalled the number of each students who in the previous year had bombarded the Learning Center seeking help with particular subject matter. Their problem represented a lack of systematic, efficient notetaking techniques.

Thus, in an attempt to help our students cope with the demands of college courses, in the fall of 1973 we initiated non-credit, "quickie" classes on notetaking which we held in the Learning Center. We also took our "quickie" notetaking classes to regular classrooms upon request of instructors.

Our procedure for these classes was to first give a sample lecture — one of general interest; ours consisted of a short introduction to a literature unit on folklore. We required that students take notes and then we compared their notes for completeness, clarity, and conciseness to model notes on an overhead transparency. This usually demonstrated to most students their need to learn better notetaking techniques and also set the
stage for the second portion of our program, which consisted of suggestions on how to be more skillful in recording information from live lectures.

Later we analyzed the class notes more fully. In general we found that in nursing or allied health classes approximately 80 percent of the notes were quite adequate in recording accurately and clearly the main ideas and supporting information. No additional reworking had been done to indicate if they could be more useful in review than in the original state. In advanced automotive classes approximately 60 percent of the students' notes were adequate. On the other hand, in developmental classes such as basic communications and modern reading the percentage fell between 20 percent and 35 percent. Regardless of the class percentages, we saw that good as well as poor students could improve their notes.

After we had gathered enough statistical information to substantiate the need and the necessary direction of our program, we reversed the order of the presentation's content — introducing first suggestions on how to take better notes and then presenting a practice lecture. Another major change came when we were developing a handout to accompany the live presentation. That is, after analyzing the content of our notetaking suggestions, we shifted the emphasis from format to four distinct aspects of notetaking: listening, writing, formats and reviewing.

When we were satisfied with the basic content we made plans for developing it into a self-instructional medium, which would standardize the content and economize on time. It was evident that we could not cover enough classes during the first week of each semester with our quickie oral presentations. Also, we needed a self-instructional presentation that we could use in the Learning Center because presenting complete information orally to each student who came to the Learning Center was too time consuming.

Our final step was the development of our notetaking program into a slide-tape production which will eventually be made into a synchronized filmstrip-tape to be used with the Bell & Howell Film-O-Sound. Several live lectures are now recorded on video-cassettes so that after the student finishes the slide production he can practice his notetaking skills in a simulated classroom experience. Each video-cassette is accompanied with model notes to which the student's notes can be compared for completeness, clarity, and usefulness in review.

NOTETAKING

Listening suggestions
1. Read textbook assignment prior to attending lecture; be familiar with the vocabulary.
2. Develop concentration by:
   a. Maintaining eye contact with the instructor
   b. Forcing yourself to listen even if you don't agree with the speaker.
3. Listen carefully for main ideas and supporting points and examples. Main ideas are often prefaced by words such as: “for example,” “to
illustrate,” “a demonstration of this point is,” “There are three cases...,” “There are five major classifications,” “The process is as follows...,” “The first step is...,” “All authorities now agree...” “There are few specialists who would deny,” “There are similarities and differences here both worthy of note.”

4. Listen for repetition of terms and words which indicate importance.
5. Listen for changes in voice of speaker which often indicate important points.

Writing suggestions
1. Keep notes in three ring-binder type notebook.
2. Write only on one side of notebook paper.
3. Write in pen instead of pencil.
4. Date and label notes according to lecture subject.
5. Write anything written on the blackboard or on overhead transparency in notes.
6. Write only main ideas and supporting points, ignoring unimportant words such as “a,” “an,” “the.”
7. Use shorthand for writing notes: + = & % /#
8. Write notes in your own words unless a specific formal definition is demanded by the instructor.

Notetaking formats
1. Index all notes by writing key terms (names, dates, etc.) in left hand column.

| Index Cues | Cortext - outer covering of the brain made of:
|            | A. Dendrites
|            | B. Cell bodies of Neurons
| Cerebrum   | Cerebrum - major portion of brain connected to spinal cord
|            | A. Composed of 2 hemispheres

2. Use outline format for taking notes from the organized lecture.
   a. Main ideas are prefaced with Roman numerals.
   b. Supporting ideas or examples are indented and prefaced with capitalized letters, etc.
   c. Outline is structured from general to specific.
Notetaking format

3. Use double column format for taking notes from the disorganized or discussion lectures.
   a. Divide paper into two columns
   b. Write main ideas on the left side and supporting ideas and examples on the right side.
   c. Number main ideas with Roman numerals and supporting with capital letters.
   d. Revise notes.

4. Use double column format for lecture which parallels the book.
   a. Write book notes in left hand column.
   b. Write lecture notes in right hand column.

Notetaking format

5. Write notes in book when lecturer is explicating literature.

Suggestions for Studying Lecture Notes

1. Review notes immediately after lecture.
a. Make necessary corrections
b. Note uncertain items and get them answered as soon as possible.

2. Use index method for daily review, noting items which will demand further study.

---

References:

IMPLEMENTING THE LEARNING RESOURCES CENTER
Who, Where, How, and with What?

Sarah G. See
Westinghouse Learning Press

The President of the United States arrived at his box in the theatre in good season, and, forgetting that guests were to join the party, he put his tall stovepipe hat on the seat beside him. A corpulent dowager, wife of a cabinet member arrived and immediately plumped herself down beside him. Surveying the wreckage of his expensive hat, Mr. President said dryly, "Madame, I could have told you it wouldn't fit before you tried it on."

This same difficulty with fit occurs when the subject of learning resource center is approached. We need to get some approximation of fit before we try one on.

DEFINITIONS

The Facility
The major difficulty lies in the many definitions of the term, the many concepts in different peoples' heads, and the different names people use for the same thing. As far as names go, I have heard people make fine distinctions between learning resources center and learning resource center (I use the two interchangeably); others refer to their learning center, resource center, learning lab, reading center, audio-tutorial center, and on and on. In concept the idea can be as broad as the learning resources center at Benedict College in Columbia, SC, where the library and media center are combined in one building with satellite centers in the language lab, the education department, and the biology department. It can be as narrow a concept as the one room I used for a writing laboratory at Norfolk State College, with no special furnishings at all. It can be a grand new building, planned and designed around the idea of innovative learning as at Oklahoma Christian; maybe it is the old quonset hut that the reading
department at Solano Community College inherited when some other departments moved into grand new-buildings.

The Audience and Purpose
We find a similar variation in defining or characterizing the audience served. There are schools that designate the learning resource center only for students who require remediation in basic math and communication skills. Other institutions make the learning center available to students having any kind of learning difficulty. Some learning centers deal with a single subject, — for example, the audio-tutorial biology lab at Columbia Community College. A facility may provide some components all subjects for student use, tapes, films, study guides, learning packages, and tests. Writing labs, reading clinics and individualized classrooms are also types of learning center.

A Broad Definition
My definition of learning resource center is extremely broad — a place where learning materials and students are brought together under some kind of human mediation. The instructional interaction is primarily, though not exclusively, between students and materials. While interaction between the student and the human mediator is, for the most part, on a one-to-one or small group basis, large learning resource centers may include facilities for large group viewing of films and television. Somewhere within this definition you can find your own learning resource center or at least a basis for clearly defining the concept that you have in mind.

STARTING A LEARNING CENTER
The best way to start a learning center is to assess the needs of your population and discuss the results with people who have already had prior practical experience. The checklists that follow include information pertaining to varied learning centers (some may be common to all; some may be unique.) It would be impossible to go over every element in these checklists in detail, but I would like to touch on a few illustrative points.

Physical Resources
Consider first the checklist on physical resources. It is important to have a realistic idea of the space where you plan to work. Try to keep your situation as flexible as possible. Furnishings and equipment should also be kept flexible. There are colleges that have an enormous number of fixed, steel carrels, some with built-in equipment that is becoming obsolete. Educational planners and architects sometimes are working toward a date that is so far in the future that it is impossible to predict the technological delivery systems that will be available when a building is completed. Recently, there has been an epidemic of "carrel-fever," a belief in magic to be found in a carrel or "corral"; likewise there is a counter-movement that rejects the sterile isolation of carrels.
What kind of equipment is on hand? What kind is hidden away in the departmental supply closet? What can be obtained on long-term loan from the audio-visual department, and can students provide their own tape players? At Colorado State College in Pueblo, biology was offered both in conventional and audio-tutorial form. To take the latter, a student had to purchase a $29.95 tape player if he did not already own one. About half the students opted for audio-tutorial.

Remember that the more complex equipment, the more problems associated with it, and the more difficult it will be to prepare material for it. Synchronized tape-slide machines are convenient for the student, but sometimes expensive cassettes or cartridges are required. One system that provides multiple responses is great when it works, but takes about a semester to shake out the problems. For most lessons using sound, student control of stopping, starting and review is important. For music, certain kinds of lectures, and readings or plays a dial access system is fine. But for self-pacing the element of student control is essential.

Make a note about duplication of copyright materials. Publishers are beginning to establish licensing policies and a scale of fees, so write or call regarding any program that you want to duplicate, rather than be in violation of the law.

Staff
The staff of your learning resource center is important whether it is just one person or includes many instructors or assistants. If you lack adequate staff, there may be sources you have not tapped. Education majors may assist as part of a methods course. Peer tutoring or other forms of tutoring are used successfully in some schools, but there can be pitfalls, especially if training is not provided. The best assistant I ever found for a writing lab was a former Latin teacher. She was able to isolate specific problems so that students worked on only one or two areas at a time. Having worked with her, I now have a better idea of guidelines to provide for training assistants.

Students
The most important participant, of course, are the students who use the resource center. These days it is impossible to identify a typical student. It seems to be more significant to determine the range of characteristics. The idea of bringing instruction to the student has received new impetus through the gas shortage. Use of storefronts, apartment party rooms, and factories may draw a whole new population to community college instruction.

Functions
What do you plan to do in your center? You may be surprised at some of the items on the functions checklist. Administration of tests as a service to the faculty occurs in some learning resource centers. At Montgomery Community College in Tacoma Park, Maryland, however, any faculty
member may deposit tests to be administered by the learning resource center. Counseling is another aspect of the learning resource center.

Career counseling may be a function of a learning resource center and has been successfully applied at Moorpark Community College. The key to determining the functions is the analysis of the needs and the resources at your institution.

**Materials**

When selecting or preparing materials for use in the learning resource center, you must be aware of points from all the checklists. Your audience characteristics — age, background, interests, and needs, are significant factors, and once again I stress the range rather than the mean. If diagnosis is a key to the functions you perform, then some kind of instrument must be found to diagnose what you are looking for. Be certain that you are making the fullest use of available materials. For example, raw sub-scores on standardized tests already being administered to your students may be far more valuable than a converted overall grade level. Local norms vary so much that national norms of standardized test are not very meaningful. Since the purpose of diagnosis is to know what to prescribe, you must analyze materials to determine specific objectives that can be found within the whole. Look for modular material prepared to use in a variety of sequences. Look for material that has frequent opportunities for successful performance and review for the weak student; look also for credit by protesting for the capable student.

In choosing media consider your students and their needs as well as your resources. A well-constructed printed course may sometimes be a better starting point than an elaborate multimedia presentation. One medium does not always transfer directly to another. Reading the script of a tape is not always a satisfactory substitute for the tape. The original was prepared for a special sensory channel, using certain conventions and modes. Never select a medium for the reason Hillary climbed Everest — “Because it is there.”

**Special Considerations**

The checklist of special considerations relates on such an individual basis that I will not try to cover any of its elements, but any of them may be crucial as you plan.

**Evaluation and Revision**

Your own evaluation of the learning resource center may be the basis for its continuation and expansion, or possibly for its termination. To obtain funding, staff, and facilities you must be able to demonstrate in concrete and measurable terms that you do serve students in a manner that meets their needs. Even more important, your continuing program must take into consideration changing needs and new approaches in the continuing process of revision.
SUMMARY

As you examine the components of the learning resources concept, you will find yourself in a better position to define your own concept and your adaptation, existing or planned. The variety of elements listed may lead you to broaden your original idea. On the other hand, this same wealth of detail may lead you to narrow your scope — have realistic limitations, and you will have to curtail your initial plans because of constraints of plant, budget, and staff. It is my hope that the ideas that have been shared here may help you to become aware of potential problems and to find new solutions to some that you have already met.

Learning Resources Checklist
Evaluation and Revision
C. Westinghouse Learning Press
1974

See ED 103. 830 for this material
PERSONALIZING READING INSTRUCTION
IN THE CONVENTIONAL CLASSROOM

Virginia Moore Shrauger
Central Oregon Community College

Educational practice seems to cycle (in reading, some say "circle") but one goal in education remains constant: the achievement of individualized educational programming.

In the near past, individualizing in reading was associated with the concept of one-to-one teaching leading in turn to increased emphasis on diagnosis and prescription in the teaching-learning transaction. Now, a disquieting note is creeping into the rhetoric of the field, and questions are being asked which, in part, challenge conventional wisdom. Are students being taught to think? Are they becoming self-directed learners? How different in the learner's eye is prescriptive teaching in the lab from the traditional classroom course outline approach? And, what now is the place of the traditional classroom in reading improvement programs?

The purpose of this paper is to describe one response to those questions, the generation, implementation, and results of a personalized reading program, one operating in a conventional college classroom and intended to create opportunities for students to learn how to learn, to direct their own learning, and — not incidentally — to improve their reading and vocabulary skills.

PROGRAM GENERATION

Reading, as "sociology," "biology," or "industrial arts," is a content area. There are concepts and skills to be taught in reading as in other subjects, and as in those other subjects, content and method differ. To design a substantially modified course format in reading for the conventional classroom, it is helpful to maintain the distinction between content and method.
The usual practice in program development focuses first on content specifics, and second on mode of acquisition, with the specifics of content being of prime importance. In developing the Personalized Learning format, a decision was made to reverse the usual procedure and focus first on the mode of acquisition and second on the content specifics. It was also decided that, if students were to have an opportunity to actively participate in decision-making, prescriptive teaching (but not diagnosis) was to be avoided.

The intent of Personalized Learning was to enfranchise the student, to permit him to determine his own needs, set his own objectives, and work through material in his own way. Learners were to be exposed to a wide variety of alternative choices of content and approach, with little prejudice on the part of the program developer either as to the content each student would select or the way in which each student would approach that content.

Reality suggested, however, that any course format could not totally disregard content and instructor expertise, and further, students could not be expected to create in a vacuum. A way, then, had to be devised to guide the student in prudently selecting both content and approach, and in best using his own problem-solving abilities to learn.

For learners to operate effectively, four essential elements were identified:

1. Diagnostic information on the skill development of each student.
2. An annotated index of available learning opportunities and resources.
3. A plan for assisting students with the unusual responsibility of formulating a needs and goal oriented developmental reading program.
4. A set of procedures designed to assist the student in learning to manage his own learning.

PROGRAM IMPLEMENTATION

Students enroll in Personalized Reading as for other courses offered in the college. They report for class at the appointed time and receive three hours of credit under an A,B,C, Optional D, grading system. During the first three class sessions, students meet as a group for orientation, testing, and program planning. The chief tools in initiating Personalized Reading are:

1. *Memo to My College Reading Students.* A memorandum from the instructor given to each student explaining the course requirements, grading criteria, and class format.
3. *Student Instruction Sheet.* A printed form, available commercially, which includes a profile space in which test results may be graphed in percentiles. (McGraw-Hill, 1970)
5. *Vista Contract.* An instructor-prepared form used by learners to
delineate goal(s), skill areas identified as needing improvement, materials initially selected for use, and program changes as needed.

6. **Term Report.** An instructor-prepared form used by learners to summarize and evaluate the results of all activities engaged in during the term.

7. **Portfolio.** A Manila folder in which each learner maintains his activity records, and by which students and instructor exchange written notes.

The Portfolio is distributed to each student during the first class meeting, and initially, it contains the Memo from the Instructor, the Student Instruction Sheet, Survival Kit, Vista Contract, and Term Report. Students are urged to become acquainted with the Survival Kit, and prior to the third class session to read the Memo carefully and drop by for a conference if they like. After perfunctory acknowledgement that testing is the least desirable known way to launch a course of study, the first two class sessions are given over to pretesting.

As the third class meeting opens, students find their individual test results graphed on the Student Instruction Sheet included in the Portfolios. To point the way for students in program planning, a checklist is marked to indicate which skill areas appear in most urgent need of attention, and which materials the instructor considers each might profit from using. A note written to each student on the inside front cover of the Portfolio includes additional suggestions for both materials and activities.

Information on how to read and interpret test results is next given to the class as a group. The focus is positive. Among other things, students are acquainted with the effect of rate on certain sections of the test, the import of disparity to be noted in sub-skill scores, and the proposition that reading skills are learned skills which can be improved. It is suggested that each learner zero-in on improving those skill areas which to him seem low, and which he sees as being essential to his success in college.

Learners are then asked to begin completing the Vista Contract by writing a goal for the course, identifying skill areas to be improved, and noting materials selected for use. Goal writing, which can be puzzling to college students, is related to the reason each enrolled, and although identification of skill areas for improvement may stem from test results, students are assured opportunities for learning need not be that narrowly defined. All college survival skills are considered to be fair game.

As learners are ruminating over goal(s) and skill areas, the instructor demonstrates how learning materials are located in the classroom. Once again, students are invited to drop by for a personal conference, especially for assistance in developing and evaluating a self-selected and self-directed learning program.

Finally, students are stimulated to begin exploring the learning resources in the classroom and to begin selecting instructional materials. In this access mode approach to learning, it is thought best to omit clarification in the beginning to two specifics — how to read and interpret test results and how to locate specific learning materials.
The initial limits on clarification allow the students to make decisions about content and establish the parameters of methods. Students want tools, they want resources, and they want the freedom to learn what they need to learn. When they find these are options, they negotiate with the teacher for the tools and the resources and get under way.

Beginning with the fourth class session, each learner picks up his Portfolio upon entering the classroom and begins in a self-directed manner to accomplish those tasks he has selected for himself, and which he knows he needs to do. For assistance in day-to-day activities, each student is encouraged to contact the instructor, and in our experience, he does so freely. For long range planning, each student is obligated to arrange a personal conference at regular intervals with the instructor to assess his program and to put aside any stumbling blocks he has encountered.

Student-instructor conference are in integral part of Personalized Learning. Although students are expected to initiate such conferences; either in or out of class time, in practice it has been found that a few students are reluctant to do so. Such students want to be invited. It is not only appropriate, but essential, that the instructor take the initiative at the onset in issuing invitations to the timid, most of whom can be expected to overcome their initial fears.

In Personalized Learning, students maintain all records of their activities giving them an opportunity to evaluate their progress on a daily basis. Various recording forms are made readily available, both for the sake of order and direction and to ease the bookkeeping.

At the close of the term, each learner is asked to evaluate the total of his learning activities, and to prepare a written summary on the Term Report form, the one that has been a part of his Portfolio from the first class meeting. The learner may then submit the report to the instructor in conference, or by means of the Portfolio, at his option.

The Portfolio is an important component of Personalized Learning. Not only is it a constant, non-punitive guide for each student's class activity, but it is also the means for the instructor to evaluate and shepherd student progress. Portfolios are reviewed regularly by the instructor, and the results of those reviews, along with bits of positive encouragement, are recorded on the inside front cover for student reference. Such reviews, although valuable, do not and should not take the place of obligatory personal conferences.

The culminating course activity in administration of alternate forms of the standardized reading and vocabulary tests given at the beginning of the course. Posttesting serves well as the final examination expected in a conventional classroom, and when results of the posttesting are compared with results of the pretesting, means are at hand for statistical analyses.

Learning resources
A variety of learning materials, most commercially produced but some instructor produced, are made available for classroom use. Tapes, programmed texts, practice exercises, mechanical aids, boxed programs,
and the like are on the shelves. The emphasis is on improving reading and vocabulary skills, but student options do include improving other skills needed for success in college and the learning resource collection reflects those options. Wherever possible, students are offered a choice of learning modality, and some few students have been found to exhibit marked modal preference.

Personalized Learning creates opportunities for cooperation with other college departments. The resources available include materials either developed by other departments or developed in cooperation with them. Specialized technical vocabulary programs, study techniques related to specific course textbooks, and aids for preparation for examinations are but a few of the natural outgrowths of such cooperation.

PROGRAM RESULTS

A commitment by a college to a developmental or ameliorative program is extensive, and when such a program is implemented, the expectation is that it will be effective. Accountability in this format, as for others, requires some measurement of results. Objective analysis is possible to a reasonable degree; subjective analysis is limited for want of a scientific measuring procedure in the affective domain. So it is that data records for Personalized Learning have been gathered in the usual way through use of T-tests of significance for the differences in pre-and posttest scores, grade point averages, but always with an ear kept open for student comments.

During Fall Term, 1973, data analysis of pretest and posttest results for reading comprehension, skimming and scanning skills, reading rate, and vocabulary, measured in percentiles for learners enrolled in the four classes formed, indicated significant student improvement in the measured areas beyond the .01 level of confidence. These findings are similar to those for which there is recorded data over a two and one-half year period, with one exception. During one of the terms for which data is available, the mean gain for reading rate was found to be significant at the .05 level of confidence for two class groups.

Also during Fall Term, 1973, thirty-six incoming freshmen applying for admissions to the college identified themselves as high-risk students, and were enrolled in one or another of the four reading classes formed. Of the thirty-six, no one withdrew either from the reading class or from the colleges. The average grade point earned by the group was 2.90 on a four point scale, with no one separate grade below 2.0.

Student evaluation of Personalized Learning has been favorable, and enrollment, which is voluntary, has remained high. Subjective evaluations by both students and instructor tend to indicate students do learn how to learn, do develop maturity in decision-making, do improve in reading and vocabulary skills, and enjoy themselves in the process.
DISCUSSION

A teacher who believes in and adopts Personalized Learning and access mode approaches to teaching must be both courageous and patient, especially in accepting the high numbers of alternative solutions devised by students. A teacher's expertise might well become strained by those choices, and his patience weakened as learners take awhile to get over their decidophobia.

On the positive side, Personalized Learning seems to provide the opportunity to enhance maturity of students in decision-making, provide them with an awareness of multiple solutions to a single problem, encourage intuitive and creative approaches to skill improvement, and enhance motivation. It also tends to confirm that there is value in the presumption of the interrelationship of all learning, for reading improvement does occur. Lastly, Personalized Learning offers an opportunity to meet the needs of individual learners without loss of peer-group interaction.

On the negative side, Personalized Learning is less efficient in covering material. It lacks a guarantee that a particular skill will be acquired by each learner, and as a course format, it is less manageable than conventional classroom approaches.

There are whole suits of new issues that relate to success in Personalized Learning for which there are no certain answers, one being the lack of an acceptable measuring procedure of student change in the affective domain. It is to be acknowledged that our commitment to Personalized Learning represents a bias about the future for it is our strong conviction that human competence should include a stronger reliance on self, and that all learning for the future is best based upon the principle of self-management.

Our conclusion then is consistent with our commitment. If students experience access mode approaches, specifically in reading courses, they have a higher probability of developing maturity in decision making and gain in positive attitudes toward self-directed learning. They also explore a wider and more useful base of content, are more likely to survive and succeed in college, as well as improve reading and vocabulary skills.
AN INTERSENSORY TRANSFER APPROACH TO TEACHING SIGHT WORDS

Randall A. Silverston

Southern Illinois University

Word recognition ability is an important consideration in any remedial reading program. The building of a repertoire of written words recognized on sight is an important prerequisite for complex reading skills. Without such a sight vocabulary, the reader is forced to decode every written word that he encounters. This "word-by-word" reading is time-consuming, sometimes inaccurate, and prohibitive in terms of efficient comprehension of what has been read.

A remedial procedure which effectively and consistently increases a student's sight vocabulary would be an important contribution to the instruction of reading. It is the author's view that coordination of certain sense-modalities, when it is present in the learning of a new written word, increases the probability that this word will be retained over a period of time. This coordination is seen as involving specific intersensory transfers (intersensory transfer refers to the ability to translate information from one sensory mode to another).

This paper shall analyze current word recognition instructional methods in terms of their intersensory transfer components. A perceptual model of word recognition, based on perceptual memory research, will then be presented. The model shall be utilized as a basic to derive a new instructional technique for remediation of word recognition difficulties.

CURRENT INSTRUCTIONAL METHODS

According to Bond and Tinker (3), four basic approaches are used to teach beginning or remedial word recognition skills. These include spelling methods, phonic or phonetic alphabet methods, whole word methods, and
context methods. The purpose of this section is to define each method and to analyze the sense modes utilized in each approach.

**Basic spelling methods** require the student to correctly spell a word presented auditorally to him. When a word is incorrectly written down, the student practices writing the word several times and is then tested again.

The "spelling bee" is another type of spelling approach. It requires the student to give verbally the correct letters for a word presented auditorally. Once again practice or overlearning is the procedure followed when words are incorrectly spelled.

Both spelling methods require intersensory transfer from the auditory mode to other modes. The basic method involves auditory to kinesthetic (writing) to visual transfers. The spelling bee includes auditory to kinesthetic (verbalization) to auditory transfers. In both cases a decoding of the auditory presentation is required before transfer takes place.

**Phonics and phonetic alphabet instruction** emphasize visual-auditory transfer. They attempt to provide students with basic word decoding skills based on symbol-sound associations. Phonics instruction associates letters in the alphabet with their respective sounds while phonetic alphabet instruction associates phonetic alphabet letters with specific sounds. Students are generally required to imitate the sounds given by the instructor when a letter is presented to them. Overlearning by drill is then required. Both methods involve visual to kinesthetic (verbalization) to auditory transfers. Through this type of procedure, word attack or word analysis skills are expected to develop (i.e. decoding skills). A word is initially viewed as the sum of its parts. The student is required to transfer repeatedly from the visual to the kinesthetic (verbalization) to the auditory modes as a consequence of this instruction.

The whole word approach to teaching word recognition involves word configuration memorization. Written words are presented to the student and he is given the auditory representation of that word. The student usually repeats the word verbally. This procedure is followed for a list of words, with the student repeating the words until he can read the words on sight. The perceptual process is the same as the phonics-phonetic alphabet approaches (visual to kinesthetic to auditory transfer) although synthesis of the whole word configuration is emphasized rather than word part analysis (i.e. rote learning instead of strategy learning).

All of the previous instructional viewpoints have concerned themselves with words in isolation. The context approach takes the stand that word recognition must occur within a meaningful framework. In other words, word meaning and relationships between words is stressed in this approach. Structural units such as sentences, paragraphs, stories, etc., are the forms of instructional presentation. Proponents of this method claim that the most important aspect in the teaching of word recognition is the concept that written words are representations of spoken language.

There are two basic presentations in the context approach. In general, the student is either presented with a selection and asked to underline words that he sees but does not know so that they can be presented to him
in the context of the selection, or he is asked to verbally create a context for specific words and is then presented with the graphic and corresponding verbal representation of that context. These contexts act as links between spoken and written language. This juxtaposition of speaking and writing is the basis for the whole approach.

More modes are utilized in the context approach than in the other methods. The first method involves visual to kinesthetic (underlining) to auditory to visual transfers. The second method uses kinesthetic (verbalization) to auditory to visual to auditory transfers.

On the surface, all the methods presented appear to be valid in terms of their intent. As instructional strategies, either separately or in combination with each other (the general contemporary view), they should logically increase word recognition skills.

A MODEL OF WORD RECOGNITION

The major focus of this paper concerns whether or not a particular pattern of intersensory transfers is necessary for proficient word recognition skills to be evident. In a study with high school remedial readers, Silvertbn (9) determined that a technique which utilized certain systematic intersensory transfers was superior to carefully controlled versions of context, spelling, and phonics techniques in the teaching of fifty basic sight vocabulary words. The rationale for this intersensory transfer technique is discussed below.

Word recognition for oral reading involves the observable elements of presentation of graphic symbols which is followed by an appropriate verbal response. At this observable level, what is required is a visual to kinesthetic (verbal response) transfer. This is a bit too simplistic. The manner in which visual input of symbols becomes associated with sounds and verbal responses is not clear.

Various cognitive learning theorists, including Atkinson and Shiffrin (1), Neisser (6), and Norman (7), view the memory process as being composed of three elements. These elements are visual information storage (VIS), short-term memory (STM), and long term memory (LTM). The life of VIS is about one second according to research performed by Averback and Sperling (2) and Sperling (11). Waugh and Norman (13) determined that information stored in STM survives about fifteen seconds if it is not recoded or practiced. LTM information storage lasts for an extended period of time.

Conrad (5), Sperling (10), and Steinheiser (12) provide some evidence to suggest that, for verbal individuals, VIS is recoded auditorally for STM storage. The presence of vocal or subvocal repetition then determines the storage of the information in LTM by preventing decay and interference according to research by Brown (4) and Waugh and Norman (13). There seems to be reasonable constructs due to the fact that, for verbal individuals, language (auditory information) probably acts as the coordinator of all sensory information. Language is associated with visual imagery, tactile sensations, and kinesthetic operations and, thus, is the most efficient
encoding device. A word can be retrieved from LTM, for instance, with a great deal of sensory information associated with it.

Piaget (8) makes the point that language is the product of sensory experiences. Consequently, language acquisition can be viewed as the auditory encoding of all sensory experience. A child receives auditory cues from his parents with reference to concrete experiences and learns to associate these sounds with his experiences. In addition, he rehearses the kinesthetic production of these sounds so that the information is stored in LTM (see Figure 1).

![Perception and Acquisition of Language](image)

Reading words involves the recoding or transfer of visual stimuli (symbols) into the auditory form of language. In order for this to occur the individual must essentially add a new dimension to his language acquisition format—a type of visual to auditory transfer has to take place. The symbols have to become meshed or associated with language acquisition (see Figure 2).

![Perception and Visual Word Recognition Acquisition](image)

Another skill often overlooked on the subject of word recognition is the ability to correctly graphically spell words. From the viewpoint of this model, spelling and writing words is the linking of kinesthetic responses to the word reading process. These kinesthetic responses naturally result in visual input which feed into the reading and language perceptual systems.
Learning to correctly write words is a copying or visual to kinesthetic transfer procedure which yields a visual product which can then be read or verbalized. (see Figure 3).

An instructional procedure which establishes the perceptual relationships posited in this model should be extremely effective in increasing word recognition skills. Such a procedure is discussed below.

AN INSTRUCTIONAL TECHNIQUE

The student should be guided through the language acquisition process discussed above while systematically adding the reading and writing components in terms of the words chosen to be taught. Basically, the student is shown a word and is given its auditory representation (visual to auditory transfer). He verbalizes the word (kinesthetic to auditory transfer) and then listens to a recording of his verbalization while looking at the word (auditory to visual transfer). Finally, he writes the word down and reads his writing (kinesthetic to visual to kinesthetic to auditory transfer).

This sequence can best be accomplished through use of an audio-flashcard system. The flashcards should have a two channel capacity so that a prepared recording can be made and the student can make his recording on the same card. The words to be taught should be printed on each card. The following procedure should then be followed: 1. Student looks at word flashcard and plays prepared recording for that word. 2. Student records on tape the correct response for that word while looking at word. 3. Student plays back his recording while looking at word. 4. Student writes word. 5. Student reads word he has written to instructor.

CONCLUSIONS

A new instructional technique for the remediation of word recognition difficulties has been introduced. This technique was derived from a model of word recognition. The model was based upon a perceptual (intersensory transfer) view of the word recognition process.

It is hoped that the technique discussed in this paper will prove useful to practitioners in the field of reading. It is also hoped that further research in reading will be initiated from this intersensory transfer vantage point.
REFERENCES


FRESHMEN ORIENTATION: A STUDY SKILLS APPROACH

Guy D. Smith
California State University, San Diego

INTRODUCTION

Providing academic assistance for all students has been the primary objective of the Study Skills Center at San Diego State University since moving under student personnel services early in 1972. It is obvious that this type of academic assistance benefits a student most if he obtains it early in his college career, preferably upon his entrance to the university. There is more than a mere whispering of futility in teaching a senior how to be an effective student.

With this in mind, our Study Skills Center, in conjunction with several other offices on campus, set about designing an orientation program which would consist of something more than platitudes from the president and a hello dance on Friday. Our concept of orientation was not merely to provide another perfunctory handshake to incoming freshmen but to provide a valuable experience which would increase a student's academic readiness and ease his transition to a new environment. We proposed to do this in two ways. First, by equipping students with the basic reading and study skills necessary for college survival, we aimed to provide the techniques which would be immediately applicable. The second objective was to provide a philosophical and interpersonal orientation that would encompass far more than a summer reading program.

Summer reading programs are not new; they have proven successful in the past. (4) This program was not a reading program nor strictly an orientation but a synthesis of the two, still holding the same objective: to lay the framework of a successful college career.

Several assumptions were made about what type of student would be willing to spend two weeks in August enrolled in a two-unit orientation course. Our assumptions proved to be fairly accurate. The 66 students who
finally enrolled proved to be highly motivated and above average academically. We knew they would not need, nor would they tolerate, two weeks of SQ3R. 31 percent were undeclared majors, about average for an entering freshmen class, but there was a high proportion of business and science students. All of them were serious about college.

THE PLAN

Any orientation program is designed first of all to disseminate information. Answering the interminable questions of freshmen concerning registration and/or requirements, resources consumed our efforts for the first several days. Indeed the fears a student has concerning the registration process alone are so intense as to preclude any other activities. To deal with this, a mock registration was conducted and several hours were spent explaining the college catalogue.

Once these traditional objectives of orientation were accomplished, we were able to turn to our more weighty goals of preparing students for the coming four years. For an hour and a half of the three-hour period, groups met in the reading and study skills lab. Since nearly all these students were above average academically, the developmental aspects of learning skills were emphasized: task organization, deductive and inductive thinking, notetaking and listening skills, and, of course, reading skills. Axiomatic in our approach was that one does not have to be sick to get better; there is no end to becoming a better student, to becoming a better learner.

It was emphasized during the two weeks, that a reading and study skills class was not an end in itself or a panacea to one's academic woes. Yet a student could make significant progress in his own studentship. They recognized that they had never been taught how to study and welcomed the opportunity to learn.

The Brown-Holtzman Survey of Study, Habits and Attitudes was administered, primarily as a diagnostic instrument. Other materials were gleaned from a variety of sources textbooks, catalogues, newspapers and study aids. The opportunity to examine and practice the techniques and devices of being a college student before one was thrown into the midst of battle did much to insure their academic success. More importantly they were also given a place in which to come for academic assistance.

But acquiring reading and study skills cannot be done in isolation. In notetaking skills we teach a student that when a lecturer gets bogged down in details to step back and get the larger picture. Instead of trying to follow these details, we tell a student to ask what do these details mean? Why is he giving these examples? In teaching a student how to read, we tell him to get the overall idea, the main concepts being presented.

Does not this same concept apply to the entire academic process? Students get bogged down in the details of classes as well as schedules and requirements. Voeks has stated that

In attempting to solve any problem, the wisest starting point is a careful answer to these questions: What precisely am I trying to
do? Where do I want to get? Your efficiency in reaching a desired goal is increased when you answer first 'What am I trying to do?' and only then ask 'How can I do it?' (6:3)

Concomitant to providing an answer of "how" to get an education, that is through study skills, our orientation program attempted to provide some answers to the broader philosophical question "what" is an education and "why" get one at all?

This is not to imply that such questions can be given definitive answers. But they can be discussed. And that is the point. If a student is taught how to study for his Western Civilization class, he should simultaneously be exposed to the rationale of why he must take it. The rationale for these liberal arts and breadth requirements cannot be taught, and with some people cannot be discussed. But the rationale exists, and so do the requirements. Viewing a class as inane and ridiculous leads to the same effect as not being equipped with the proper academic skills.

These apparently philosophical questions are crucial and real for the college freshman and they are as important a part of becoming an effective student as learning how to take good notes. An effective college career includes more than knowing the methods and applying them. It means having an idea of purpose. To effect real change in a person's study skills and habits, his attitudes and motivations must also be considered — not in isolation but in context of the entire process of becoming an educated person.

Providing a forum for discussion of these philosophical and personal discussions was done by dividing students into groups of 8-10. These small groups met for an hour and a half each day and were staffed by faculty and graduate students. In addition to offering a chance to discuss some of the constructs of higher education, these groups provided students with the opportunity to interact with one another and to accomplish a feeling of belonging to mitigate the impersonality of the system they were about to enter. Many students felt that just getting to know other members of these groups was the most valuable aspect of the entire orientation. Even a cursory examination of the literature relating to higher education reveals a majority of the experiences to be oriented toward facts and information, subject matter content and understandings of things rather than toward people and understandings of self. In other words, there has been an emphasis on the cognitive domain at the expense of the affective domain. (5:6)

This is not to suggest that freshmen can be divided into two domains, but rather furthers my point that study skills cannot be isolated in order to be effective but must be integrated with the emotional, psychological, and philosophical aspects of the student.

CONCLUSION

Like so many other things, reading and study skills programs are awarded
functions by default. If the objective of any orientation program is to prepare a student for his college career, it seems that study skills should at least be a corollary to that. Or perhaps more audacious, orientation should be a corollary to study skills.

Orientation seems to be the ideal place for students to sharpen their academic skills, and summer is the ideal time. In the fall when classes are about to begin, students are deluged with various forces pulling on them—they are excited about a new environment, new classes, new friends. They are not afforded the time to sit and think about what it is they are doing or even the best way to go about doing it.

A student's strategy for survival must include study skills, but cannot be confined to them. More than fifty years ago, Dr. William Rainey Harper, then president of the University of Chicago, gave the following address to members of an incoming freshman class. This was his entire speech:

Young gentlemen, you have come here in the hope of furthering your education. If you are to do this, it would be well that you have some idea of what an educated man is. If you have this, you will know what to aim at here, what this institution exists to assist you to become. An educated man is a man who by the time he is twenty-five has a clear theory, formed in the light of human experience down through the ages of what constitutes a satisfying life, a significant life. If a man reaches these ages without having arrived at such a theory, such a philosophy, then no matter how many facts he has learned or how many processes he has mastered, that man is an ignoramus and a fool, unhappy and probably dangerous.

I am not advocating that platitudes from the president are essentially valuable, but Harper has said much more eloquently what our orientation program was only able to mutter. It is the obligation of higher education to provide not only processes and techniques but a theory and philosophy consonant with the academic experience.

REFERENCES

WHAT IS GOING ON?

The literature of teaching reading tends to agree that in learning-to-read and in reading-to-learn, the concept of motivation is paramount. Most teachers try hard and harder to motivate their charges. When asked why motivation is needed, answers vary from being certain that motivation is simply the prerequisite for learning to being not so certain that motivation should awaken and spark interest. When asked how to motivate, answers run the gamut from showing pictures to operating audio-visual machines to ready-made commercially prepared programs and kits. When asked who is to do the motivating, answers range from smiles of unspoken interpretations to sarcastic verbalizations of "who else but the teacher?" When asked who is to be motivated the answer is unanimous: the adult student.

Instructors of ABE (Adult Basic Education) classes have said that they are in a state of desperation because they find it almost impossible to motivate the adult students. The instructors have tried many approaches and none made the adult students read, study or memorize.

It is therefore the intent of this presentation to: (1) recollect a selected and brief account of motivation as found in the current literature, (2) steer away in a bold move from the traditional descriptions of "how to motivate whom" to a new proposal of inward motivation that begins and rests within the adult learner, (3) pursue the challenge of inward motivation on the level of the adult learner in reading and (4) spell out what adult students and their instructors do to motivate themselves.

It is also the hope of this presentation to stimulate stronger drives whose cues open up and direct more research to eventually cut the Gordian knot in the understanding of motivation which the writer does not pretend to have done.
AND LITERATURE SAYS.

Leaving behind "the corrupt situation in the field of motivation" (1) a descriptive statement declares that motivation refers "to the energizing of behavior, and especially to the sources of energy in a particular set of response that keep them temporarily dominant over others and account for continuity and direction in behavior" (5). Motivation then is "an expression referring to a wide variety of conditions which alter stimulus-response relationships" (1). Motivation together with perception and learning "are the gravitational centres of contemporary psychology and regardless of how often we are forced to detour, psychological roads have a way of leading back to these three problems" (4). If, however, we would understand motivation and "if we had perfect control of motivation learning would just about take care of itself, that is, the role of motivation is so central that it is far more important than conditions of practice, special teaching aids" (6) and whatever may be applied as secondary motivators.

The Greek philosophers explained motivation as man's attempt to reach goals and solve problems by logic. The hedonist postulated that pleasure should be sought and pain avoided. The pleasure-pain continuum was first (1898) reflected in Thorndike's "Law of Effect" as "satisfiers and annoyers," with the latter dropped (1932) because punishment, it was learned, did not motivate learning. Darwin's theory of evolution (8) elicited the instinct theories in which "the central theme is the psychology of motivation or purpose" (2).

Closely related to theories of instinct are those of drive. The strong stimulus of drive sets the individual into action. Cues of variant intensity elicit responses that are strengthened by reinforcement or reward (3). Whenever a stimulus reaches sufficient intensity it may become a drive which, within the dynamics of personality, is accompanied by feelings or emotions.

The relationship between level of arousal and learning has been demonstrated in the Yerkes-Dodson Law (7:381): Motivation on simple tasks is higher than motivation on complex tasks. With an increase of difficulty in the tasks, the optimum level of motivation declines.

While the need for achievement may be latent in an individual, "achievement motivation is aroused by any task that challenges the individual" (7:385). Challenge in achievement motivation, however, is not manifested by completing a particular task to gain money, status or to please someone; instead, achievement motivation is marked by excellence and by doing the task well because it is worthwhile to do so. "How he performs makes him a success or failure in his own eyes — if he is motivated by achievement need" (7:386).

THE QUESTION RIDDLE

Will adequate motivation arouse, satisfy or block the adult learner's potential to achieve? In this question lies one of the most evasive challenges
to be faced by instructors. Are the instructors really motivated to teach? What is their inner state of wants, desires and drives, their inward motivation, in teaching adult students to read? Do the instructors' inward motivation inspire and guide the adult students self-development (9)? What is the relationship of the instructor-produced motivation (extrinsic) to the adult student background experiences (intrinsic)? Do motivational entreaties as often prescribed in the instructor's guides meet reality expectations of the adult learners? What are the roles of instructors in developing intrinsic motivation?

The second challenge is directed to the adult students as learners: How much and what kind of motivation do they bring to the classroom and the task? What makes adult students grow? Does the same quantity and the same quality of motivation apply to all adult learners at the same time? What needs to be motivated in adult learners? How much and what kind of motivation bring adult learners first to the task and then to execute it? Do they want to learn this particular academic subject? Is a different motivation needed for each subject under study? How meaningful is this learning to them? Do they need more cognitive or more affective motivation? Do they need more praise, reward, encouragement or punishment? Do adult learners need to be enticed by extrinsic motivation? How do adult learners develop intrinsic motivation? What are the roles of the instructors who motivate and those of the adult students to be motivated?

The Question Riddle neither exhausts nor delineates the concept of motivation or what motivation may or may not be. The questions raised shall merely impress the complex unity of motivation. Adult students are not starved rats or well-fed monkeys but real people, who in the process of learning-to-read and reading-to-learn remain real people, act as real people and want to be treated as real people. It is therefore suggested that it is within not without where motivation lies, operates, enhances and produces learning and thinking through reading.

SO LET'S MOTIVATE

I play a waltz melody on the mouth organ. I pipe a folk song on the flute. I speak in German, French and Spanish.

Now, certainly, you are motivated; that is, you have the strong drive to learn to play the mouth organ and the flute, as well as to learn to speak in German, French and Spanish! Each motivational device was a first-hand, direct and strong stimulus presented to you. You would actually like to convert this strong desire by giving it the appropriate direction. You would like to rush out to locate the institution where you could learn to play the mouth organ and the flute and where you can learn to speak German, French, and Spanish.

Has this motivation reached you personally, inwardly so that it penetrates to strike a realistic tone inside you? Is it realistic for you to learn to play a mouth organ or flute or both? In a wider sense, is it realistic for you and inwardly in agreement with you to make music by learning to play...
an instrument and to learn languages in order to speak them? Were these five kinds of motivations realistic for and to you? Of course not! At best, they have entertained and amused you or, the opposite, bored and annoyed you.

Could it also be that this kind of motivation so generously offered in many of the Adult Basic Education classes yields same or similar results? When adult students are confronted with school subjects whose contents rest mainly between the two covers of basal readers, workbooks, reading programs and other schoolish reading-learning materials, what strong drives to learn to read are awakened inside the learners? “Old Stuff” which brings to mind painful frustration and ridicule! “Kid’s Stuff” which at best signals instructional insult by school and teacher who cannot do better! Motivation may be talked about but is unreal. Adult students seldom come to the Adult Basic Education classes with the desire to become academicians! Most of them have failed in school in their academic efforts in the first place, then quit school and dropped out. Now they are older, temporarily jobless, and therefore want to prepare for new employment and are motivated to do so, but instead they find themselves back again to be trained and to become academicians! In all fairness to them this is indeed unreal.

In the literature that has been reviewed and cited in this study, there is no mention or suggestion of what motivation is and how to apply it to adult reading and learning. This deprives instructors of applicable guidance and possible assuredness of how to motivate adult students in order to learn. At times adult students are reluctant learners, even anti-intellectuals who may defy actively or passively academic approaches to learn to read more effectively.

**TABLE 1: MOTIVATION FLOW CHART OF INWARD MOVER FOR ADULT STUDENTS IMPROVING READING**

<table>
<thead>
<tr>
<th>Involvement by</th>
<th>Adult Students</th>
<th>Instructors</th>
<th>How To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Goals to be</td>
<td>Reality assessment</td>
<td>Stock taking</td>
<td>Exploring facilities</td>
</tr>
<tr>
<td>2. Background experiences</td>
<td>Stock taking</td>
<td>Who am I?</td>
<td></td>
</tr>
<tr>
<td>3. Assets-Liabilities</td>
<td>Task prescription</td>
<td>Criteria reference of ‘can and cannot’</td>
<td></td>
</tr>
<tr>
<td>4. Reading-Learning strategies</td>
<td>Mastery</td>
<td>Independent work</td>
<td></td>
</tr>
<tr>
<td>5. Need achievement</td>
<td>Transfer</td>
<td>From basic to critical reading skills</td>
<td></td>
</tr>
<tr>
<td>6. Competencies</td>
<td>Strengths and weaknesses</td>
<td>Continue as planned or rework</td>
<td></td>
</tr>
<tr>
<td>7. Guiding evaluation</td>
<td>Continuity and continuity</td>
<td>From task to goal reality</td>
<td></td>
</tr>
<tr>
<td>8. Fulfillment</td>
<td>Verification</td>
<td>Inward Mover</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: DESCRIPTION TO MOTIVATION FLOW CHART OF INWARD MOVER FOR ADULT STUDENTS IMPROVING READING

<table>
<thead>
<tr>
<th>Adult Students Do:</th>
<th>Instructors Do:</th>
<th>How Done:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spell out their goals, what they think they should be or what they want to achieve.</td>
<td>Listen attentively and actively, and begin to assess verbalized goal reality versus aspirations.</td>
<td>Instructors listen to adult students facilities in using speech, forming sentences, pronouncing words, expressing themselves clearly and directly, in asking questions and giving answers and in exploring the &quot;is&quot; reality of the &quot;might-be&quot; possibilities of goal and need achievement.</td>
</tr>
<tr>
<td>2. Spell out what they bring to the realization of goals, what they already know and what they are able to contribute before new learning begins.</td>
<td>Continue reality assessment in order to aid in taking stock and clarify assets and liabilities.</td>
<td>Background experiences explored: who he is, what he wants to become and how he wants to achieve it.</td>
</tr>
<tr>
<td>3. Know their assets and liabilities in comparison to what they want to achieve and prepare new learning strategies.</td>
<td>Assist in prescribing learning strategies, in allocating proper reading-learning materials and in 'carving out' real work according to tentative performance abilities.</td>
<td>Together they write out detailed assets and liabilities in regard to his wants. Assets: what he can do; strength - Liabilities: what he cannot do; weakness - and what he needs to learn; newness - essential to his spelled out goals.</td>
</tr>
<tr>
<td>4. Work on planned strategies essential to becoming competent in the basic reading skills leading toward reality goals.</td>
<td>Guide through diagnostic teaching to fulfillment of immediate and extended task achievements and hold students responsible to master what they want to learn.</td>
<td>Ability to work independently through setting purposes, asking questions and applying study and learning techniques to demonstrate mastery in the basic reading skills of word recognition and comprehension.</td>
</tr>
<tr>
<td>5. Demonstrate competency in both silent and oral reading by working independently on materials applicable to their real need achievements.</td>
<td>Probe individual achievements by asking detailed competent performances of overlearned tasks and ability to transfer them to related tasks.</td>
<td>Adult student uses basic reading skills to apply and integrate them together with the higher level, reading skills in subject areas and employ both in critical reading to cross the barriers from learning to thinking.</td>
</tr>
</tbody>
</table>
continuation of Table 2.

6. Evaluate each completed reading skill competency in light of own usages in reading-to-study and reading for enjoyment.

Together they evaluate mastery of performances, make realize strength and weaknesses and help decide on course of action to be taken by adult students.

7. Know that evaluation is ongoing and changes with demonstrated performance competency.

Describe developmental task requirements at each success-failure performance and make reading-learning contiguous and continuous.

8. Experience throughout BAE training that mover of progress in reading-learning lies within themselves, they achieve by acting upon, doing the work and through willingness to perform can accomplish what they want to become within their reality assessment.

Help verify at all stages in training what they have achieved related to what they need to achieve to reach fulfillment of their goals.

Discussions on materials read silently and orally show them how they have acted upon achievement tasks; on satisfaction, plan next task, on dissatisfaction, decide to rework to accelerate and upgrade performances.

Active, constructive and independent work mastery leads from task to task to goal reality; readiness for successive task is always embedded in and grows out from attained mastery of previous tasks.

Mutual sharing of work in progress sustained by criterion reference performances to show them at any time during their BAE training where they stand on the road to achieve what they have decided to do with themselves, what they have accomplished, wanted to accomplish, what makes them a success in their own eyes, in those of others and in regard to the reality of the employment economy market.
SUGGESTIONS TO MOTIVATE

While adult students and their instructors recognize that motivation begins from within, both learners and teachers must be able to spell out their inward motivational drives in observational criterion references.

BE RESOLVED

As can be gleaned from studying the Motivation Flow Chart (Table 1), it becomes apparent that, instead of motivation outside the learner, motivation lies embedded within the individual and unfold inwardly, directing his energy so that he wants to achieve. Proficiencies in reading as well as in learning and thinking are not accomplished because instructors, school curricula and norm reference tests attempt to compel adult students to read, learn and think. Failures among them to do so are only too numerous and very obvious. However, to stop further deterioration of current ABE classes, it is suggested that instructors and administrators entrusted with those classes make earnest and sincere efforts to look at motivation as an individual's inner mover to learn to read and to improve his reading within the individual's psychological field of reality.

REFERENCES

A LEARNING CENTER AT STANFORD?

Carolyn Walker, Michael McHargue, Rita McClure and Nancy Adams
Stanford University

Stanford University students are generally thought to be a capable and intelligent group. Therefore, when one mentions the Learning Assistance Center (LAC) at Stanford, people are surprised. "Do Stanford students really need assistance in learning?" asked Stanford faculty and staff, community members, other educators. In fact, the only people who do not ask this question are the Stanford students themselves. Their questions seem to run more toward, "Why have we had to wait so long for a learning center at Stanford?"

To understand the LAC and our work here, one must know our students. They are, indeed, very bright, very verbal, very inquisitive. Usually that is enjoyable; sometimes it's frustrating; occasionally it's awesome. Here are some statistics:

1. The mean high school GPA of this year's freshman class is 3.8.
2. It could have been 4.0 — there were more straight A applications than there were places in the class of 1600.
3. It takes a score of 700 on the CEEB's or the AP in Literature to exempt a freshman from our writing requirement.
4. Our Admissions Office, when rating students, has a category called "Academic Ones." To receive that rating, a student must have:
   a. scores over 700 on both the verbal and quantitative sections of the SAT,
   b. no more than two B's in high school, and
   c. outstanding letters of recommendation.
Over 10 percent of our freshmen are "Academic Ones." There are more statistics — the number of Fulbright, Rhodes, and Wilson scholars, for example — but the main point is clear. The students we work with are incredibly bright.
This does not mean that Stanford students do not need the services we provide in tutoring, study skills, and reading. They do. They sometimes need tutoring because competition is intense and because, although there is no "educationally disadvantaged," "high risk," or "special admit" quota at Stanford, almost everyone is educationally disadvantaged in something. Our students need work in study skills because many high school students are not systematically taught the appropriate techniques. Besides, many of our students are so sharp that they seldom had to study until they arrived at Stanford and started to compete with all the other super stars. And what about extra-curricular activities and social life? How can a student fit all this into a 24-hour day?

To serve the needs of Stanford students, the LAC offers two courses for academic credit: 1) LAC 1, Effective Learning Skills, and 2) LAC 10, Effective Reading Skills. The LAC also serves as a reference bureau for students seeking tutorial help. We match a student with tutors we feel can help him. In addition, the LAC is an academic counseling-guidance-study center for students. Our learning lab is open all day and in the evening five days a week.

Because the two courses the LAC offers are the nucleus around which our major activities revolve, we would now like to describe each one and indicate the direction in which we hope to move in our reading course in the future.

**LAC 1**

LAC 1, Effective Learning Skills, is a unique course. It is unique in the world of study skills courses, for it is geared to serve an extremely intelligent, articulate population, whose talents have already been proven. It is unique because it is set up to reach a large number of people (100+ each quarter) with as much personal contact with each student as possible. Consequently, its content ranges from the traditional SQ3R method of reading to deep muscle relaxation and behavioral self-management.

The students in LAC 1 provide a special challenge to a study skills program. The class population ranges from students who have already been accepted to Harvard Business School and-or Stanford Law School, to students who are on academic probation. The age span ranges from scared freshmen to worldly graduate students. The students demand a rationale for what they are told. They demand research to back up the techniques they are learning. And they want to learn how to tackle Ph.D dissertations and Masters’ orals as well as how to get along with their roommates.

The result of these demands is a course with a special, highly individualized format. For most students the major technical and theoretical input of LAC 1 comes from the required readings, lectures, and tapes. This input is supplemented by student conferences with lab personnel on a one-to-one basis, and by small group discussions in the classroom. The student is then asked to tailor the general techniques suggested in the course to meet the needs of his own personal study goals. The approach is
basically a behavioral one. Students are asked to apply self-management techniques, and to use self-observation, goal setting, shaping, and self-reward as tools toward this end.

Our lectures cover a broad range of topics: the traditional study skills areas of notetaking and listening, study-reading, test preparation and test taking, time and study management, memory and concentration, library research, effective writing, and reading improvement; and also the less traditional areas of decision-making, personal problem solving (or self-management), cognitive restructuring, and deep muscle relaxation.

The course, being new, is still growing and developing in response to the unique demands placed upon it. While there is much room for improvement, we believe that in its present form LAC 1 is effective in making theoretical and technical information applicable to a large number of students, each with his own idiosyncratic life style and needs.

LAC 10, Effective Reading Skills, forms the core of our reading program at the LAC. The class is divided into two parts. The first hour of each semiweekly class meeting is devoted to rate improvement and the second hour to critical and analytical reading.

The rate improvement section of the course has a three pronged focus:

1. **Improved Study-Reading Techniques.** We teach the basic SQ3R method — and various refinements of this method — for use in attacking difficult, complicated academic materials. We believe these techniques and concentration, comprehension, and retention. They are not specifically aimed at increasing speed, although this is generally a by-product of the process.

2. **Much Faster Reading of Average Difficulty Reading Material.** On this type of material, the student should double his current reading rate and should simultaneously experience a gain in comprehension. The majority of in-class time — spent on drills — is aimed toward this goal.

3. **Development of a High Speed Reading Capability.** This is not reading as we generally think of it but rather the development of proficiency in skimming and scanning techniques. Skimming is very high speed reading. When you skim you do not read every word but read in a type of "outline" form, picking up the main ideas and some details through development of an ability to see the skeletal outline or organization of reading matter. Scanning is even faster "reading" and is actually a high speed search for specific information, not really "reading" in the normal sense of the word. Skimming and scanning are done at speeds of several thousands of words per minute. Both techniques are especially useful to students doing research work but can also be useful in preparing daily assignments.

In addition to the two hours of class time per week, the rate section of
LAC 10 has an optional meeting on Fridays for extra practice. Also, students are required to sign in at our lab twice a week for drill practice and are asked to practice 20 to 30 minutes at home each night. Classroom time is spent in diagnostic testing, introduction of new techniques, drill practice, group discussion, and some lecturing. (The instructor speaks, for example, about factors such as passivity, sub-vocalizing, repression, and fear of losing comprehension, which generally retard reading rate.) The majority of class time, however, is spent on group drills. We are not machine oriented, although the optional Friday session is devoted to pacer practice and we do have reading accelerators available in the lab.

In the critical and analytical section of LAC 10, the focus is on vocabulary and language development and on the critical and analytical reading of college level materials. The students study word analogies, word elements (prefixes, roots, suffixes), and how to determine word meaning from the context. There are daily 5-minute vocabulary quizzes. The rest of class time is spent primarily on close, textual analysis of reading selections. We discuss the following topics:

1. *How well written is the selection?* Are there dying metaphors or meaningless umbrella words? Is the diction pretentious? Are there circumlocutions, euphemisms, clichés?

2. *Connotation and denotation.* What are connotative words and what difference does their presence or absence make in an essay?

3. *Organizational pattern.* Students study the four major forms of discourse (narrative, descriptive, argumentative, and expository); patterns of exposition (illustration-example, comparison-contrast, cause and effect, etc.); and matters of style (such as sentence length, paragraph length, sentence arrangement, sentence rhythm, balance, parallelism, climax) because a reader can be swayed by devices of rhetoric and form as well as by reason and emotion.

4. *Following the thread of an argument.*

5. *Distinguishing fact from opinion.* Students are encouraged to question everything. Language can be used to manipulate and mislead, as well as to inform or persuade.


7. *Inference.* Students read selections and practice making valid inferences from the clues found in content, diction, and form.

8. The author's tone (belligerent, joyful, sentimental, sarcastic?); intent (People write for a reason, a purpose. The question to ask is, why did the
The general format of the reading course needs to be changed. As long as the instructors have taught it they have felt they have been teaching two courses. The students, too, have echoed these feelings. In the course evaluations written at the end of each quarter, students have affirmed the value of the course topics but have complained of not having adequate time to develop them.

The Center is contemplating expanding the reading program into two separate courses: one in rate improvement and one in critical and analytical reading. Each course would be for three units of credit and would meet three times a week. The rate improvement course would focus on the problems of the reading ten college textbooks. It would emphasize reading for facts as well as developing the student’s rate. The critical and analytical course would focus on problems of reading the original sources in classical philosophy, literature, political theory etc. on which textbooks are based.

The rate improvement course, then, would expand its presentation of the Survey, Read, Review strategy. The instructors would spend several weeks on surveying techniques and would give explanations and drills on recognizing topic sentences and topic nouns and on determining broad study questions in addition to the skimming and scanning techniques now taught. Several weeks would be spent on reading in phrases, reading to answer study questions, and reading to distinguish main ideas. Finally, with the course expanded in this way, the instructors would be able to elaborate their explanations of reviewing to include more on annotating, diagramming, outlining and summarizing.

The critical and analytical course would expand to allow more discussion of the topics now presented. Other topics, of course, will evolve. At present, three alternatives are being considered. The first, and the most likely to materialize, is the development of the critical and analytical course around topics determined by the concerns of classic argument, sentence style, the denotation and connotation of words. Courses might also be built around an instructor’s choice of a theme for discussion. Themes such as “Alienation,” “the Environment,” or “Women and Society” would serve as a focal point for the instructor’s choice of a short novel, poetry, and several non-fiction works. A third possibility lies in the generation of a course that examines the work of two or three major figures of the 19th and 20th centuries, such as Marx, Darwin, Freud, Sartre.

WCRA’S CONTRIBUTION

The Stanford LAC would not be as effective as it is, and might not exist at all, were it not for the WCRA and its members. This organization provided
much of the impetus for the proposal of such a center at Stanford and it offered the important ideas, crucial materials, and encouragement necessary to see the project through. It continues to provide the professional base for the LAC’s development. The unselfish sharing of concepts, systems, and materials makes the WCRA unique among professional organizations and Stanford students have benefited greatly from this generosity.

Perhaps the staff at Stanford’s LAC can partially repay WCRA and its members by furthering the notion that the developmental skills taught in college learning centers are important, legitimate, academically sound techniques and that they are not, by definition, remedial. We will be glad to communicate with administrators and teaching colleagues at member schools if this will aid your attempts to obtain academic credit for your courses or otherwise help you gain recognition for your services.
A survey by Lowe (1968) concludes that college reading and study skills services have been in existence since the closing years of the nineteenth century. (3) Ahrendt (1971) suggests that only in recent years has a demand for these programs increased measurably. (1) Maxwell (1970) has pointed out the increased demand for reading professionals on the college level, weakness in training for these people and the high turnover rate of college reading specialists. (4)

Colvin (1971) has discussed the lack of status and acceptance of reading programs on the college level. He suggested that the organization, administration, testing, diagnosis, methods of instruction, selection and use of materials, and the evaluation of these programs all flow from the philosophical outlook of the college administration and attitudes of the college faculty. (2)

In preliminary tabulation of this study, 20% of the reading specialists responded in agreement to the statement: "If the reading specialists position as it now stands were to cease to exist, it would not affect our college greatly." 10% of the deans who responded also agreed.

It was the purpose of this study to investigate the reading professional in the post-high school institution that offers technical curricula. His status and his role were researched both by ascertaining his own opinions and also those of his dean of instruction.

One hundred two-year colleges were randomly selected from Ferguson's Guide to Two Year College Programs for Technicians and Specialists. To the deans of instruction and the reading specialists of these hundred colleges, identical opinionnaires were sent. Attached to the reading specialists' opinionnaire was an information sheet asking for specific information on their position in the college.
The replies, 46 from reading specialists and 48 from deans of instruction, were compiled by item to show how the reading specialists felt about the eleven specific items and how the deans saw their reading professionals. These results will be reported in simple percentages by item with RMS tables for composite deans and reading specialists to illustrate agreement or disagreement. An accompanying RMS table will be included for each question showing what differences, if any, exist between the composite population and the subpopulation which was composed of the 60 opinionnaires to which both deans and reading specialists from the 30 colleges responded.

The status-related questionnaire were compiled to show where the reading specialists were with regard to salary, staff, office space and other status-related items.

FIGURE I

QUESTIONNAIRE FOR READING SPECIALISTS

Questionnaire

1. What is your official title?
2. Please circle the highest degree you hold?
   a) associate b) bachelor's c) master's d) ed specialist e) doctorate
3. Do you have a private office? Yes? or no?
4. How much secretarial assistance do you have?
   a) full time secretary b) half or quarter time secretary c) use of superior's secretary d) student worker secretary e) no secretarial assistance
5. How many hours comprise your work week at school?
   a) 20 b) 40 c) 50 d) more than 50
6. Please indicate your current annual salary:
   a) 7,000-9,000 b) 9,000-12,000 c) 12,500-15,000 d) above 15,000
7. How many persons comprise your total reading department staff?
   a) 1 b) 2-4 c) 4-6 d) more than 6

The questionnaires for the reading professional were constructed to give a composite picture of the teacher in the field. From this we learned that the majority of reading teachers who responded to the questionnaire held a master's degree, with the remainder holding either a bachelor's or an education specialist and five of the 46 responding holding the doctorate. Twenty-nine of the 46 had private offices.

Secretarial assistance, which is so essential to the innovative teaching of reading, was not provided in many instances. Of the 46 respondents, 15 had student secretaries, 11 had no secretarial assistance, 5 had full time secretaries, 5 had half or quarter time secretaries, and 9 had occasional use of the secretarial staff of their superior.
Of the respondents, 27 worked twenty hours a week and nine worked 50 hours or more at school each week.

Salary was reported to be $9,000 to $12,000 for 18 respondents, while 15 reported their salary to be above $15,000 per year.

Personnel in the reading programs was limited. 18 respondents said that only one person worked in the reading program, 19 reported a staff of 2 to 4 and the remainder of the departments represented were comprised of 4 or more.

Of the reading specialists whose deans also responded to the questionaire, there is a slight difference in responses. Those schools where the deans and the reading specialists responded, salaries of reading specialists were slightly higher, and proportionally more reading specialists worked 50 hours a week or more. This is by no means significant statistically, but it does indicate that when deans and reading specialists respond, there is an evidence of harder work by reading people and greater confidence in them from their deans.

Five items on the opinionnaire were designed to ascertain the role of Reading Professional as reported by deans and the Reading Professional themselves. In response to the statement “The reading specialists’ role in our school is primarily that of remediationist for students with substandard skills,” 16% of the reading people strongly agreed; 17% of the deans strongly agreed. 53% of the reading people agreed, as did 43% of the deans; 23% of the reading people disagreed, 11% of the deans also disagreed; and 11% of the deans strongly disagreed with the statement, as did 7% of the reading people. (See Table I)

More than half of the reading people saw their job in this narrow light. Surely the deans have more confidence in their reading specialists’ ability than the reading specialists had in themselves.

Table 1

The reading specialist's role in our school is primarily that of remediationist for students with substandard skills.

<table>
<thead>
<tr>
<th></th>
<th>Reading Specialist</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>16%</td>
<td>Strongly Agree</td>
<td>17%</td>
<td>16.5%</td>
<td>16.8%</td>
</tr>
<tr>
<td>53%</td>
<td>Agree</td>
<td>43%</td>
<td>48.2%</td>
<td>48%</td>
</tr>
<tr>
<td>23%</td>
<td>Disagree</td>
<td>28%</td>
<td>25.6%</td>
<td>27%</td>
</tr>
<tr>
<td>7%</td>
<td>Strongly Disagree</td>
<td>11%</td>
<td>13.7%</td>
<td>6%</td>
</tr>
</tbody>
</table>

One of the most painful things to realize and accept is that one's job exists because there is a law or tradition that dictates that a remediationist be on payroll. In response to the statement, “One of the purposes we have a reading specialist in our college is to satisfy state requirements that we have one.” The deans who responded to the question were emphatic. 76%
strongly disagreed and 24% disagreed. On the other hand, the reading professionals were not so sure. 60% strongly disagreed, 28% disagreed, but 8% agreed and 5% strongly so. (See Table 2) If this is an expected index of dissatisfaction, it is not anything to worry about — however if it is a status quo that 13% of our profession feels un-needed — we should reevaluate our profession.

Table 2

One of the purposes we have a reading specialist in our college is to satisfy the state requirements that we have one.

<table>
<thead>
<tr>
<th>Reading Specialist</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>5% Strongly Agree</td>
<td>0/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8% Agree</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28% Disagree</td>
<td>24%</td>
<td>26%</td>
<td>21.5%</td>
</tr>
<tr>
<td>60% Strongly Disagree</td>
<td>76%</td>
<td>68.4%</td>
<td>58%</td>
</tr>
</tbody>
</table>

At the WCRA Conference in Reno, one of the officers was, overheard saying, "Look around for the people who appear as if they need to be needed — they are the reading professionals." Two statements were made on the opinionnaire to scale the importance of the reading professional in so far as serving the other professionals in the institutions and the college at large. In response to the question, "Part of the reading specialist's job should be helping other faculty members to know how to teach reading in course content," 46% of the deans agreed; 33% strongly agreed. 40% of the reading professionals strongly agreed, 42% agreed. Neither group strongly disagreed, but 21% of the deans and 18% of the reading professionals disagreed. (See Table 3)

Table 3

Part of the reading specialist job should be helping other faculty members to know how to teach reading in the course content.

<table>
<thead>
<tr>
<th>Reading Specialist</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>29% Strongly Agree</td>
<td>13%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>66% Agree</td>
<td>55%</td>
<td>60.7%</td>
<td>51%</td>
</tr>
<tr>
<td>5% Disagree</td>
<td>33%</td>
<td>23%</td>
<td>23.7%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Consider this in comparison with the responses to this item: "The reading specialist is used as a curriculum consultant by running readability
formulae on textbooks considered for adoption. 30% of the deans and 43% of the reading specialists agreed while 11% of the deans and 12% of the reading professionals strongly agreed. 48% of the deans disagreed with the statement while only 26% of the reading people indicated a similar response. (See Table 4) This indicates two things. First the reading professional stands ready to be of assistance to his colleagues, but may not be encouraged to do so. Secondly, this question is one reflecting status quo, because the former one said should, but this one was worded is. This may indicate that deans recognize the need for reading specialist professional services for colleagues, but have not seen evidence of such services being rendered.

Table 4

The reading specialist is used as a curriculum consultant by running readability formulae on textbooks considered for adoption.

<table>
<thead>
<tr>
<th>Reading Specialist</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>12% Strongly Agree</td>
<td>11%</td>
<td>11.5%</td>
<td>13.3%</td>
</tr>
<tr>
<td>43% Agree</td>
<td>30%</td>
<td>37%</td>
<td>28%</td>
</tr>
<tr>
<td>26% Disagree</td>
<td>48%</td>
<td>38.6%</td>
<td>38.8%</td>
</tr>
<tr>
<td>19% Strongly Disagree</td>
<td>11%</td>
<td>15.5%</td>
<td>13%</td>
</tr>
</tbody>
</table>

The last function of the reading professional explored was that of ombudsman. Because of the close personal contact the reading teacher has with students, many times he is placed in the position of go-between for students and faculty. Tutorial services, counseling services, and many other personal services are secured for various students by the reading professional. In response to the statement, “The main function of our reading specialist is that of ombudsman,” 23% of the reading specialists agreed as compared with only 9% of the deans. This suggests only that the deans are not aware of how much time a reading person spends trying to assist students in matters not strictly instructional. This is no reflection upon anyone; rather it is to suggest that a reading teacher does not just teach reading.

Table 5

The main function of our reading specialist is that of ombudsman.

<table>
<thead>
<tr>
<th>Reading Specialist</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>37% Strongly Agree</td>
<td>44%</td>
<td>40%</td>
<td>41.5%</td>
</tr>
<tr>
<td>44% Agree</td>
<td>38%</td>
<td>41%</td>
<td>34%</td>
</tr>
<tr>
<td>12% Disagree</td>
<td>14%</td>
<td>45%</td>
<td>27%</td>
</tr>
<tr>
<td>34% Strongly Disagree</td>
<td>37%</td>
<td>35%</td>
<td>34%</td>
</tr>
</tbody>
</table>
The Existence of a Reading Program

Three items on the opinionnaire were designed to discover attitudes about the existence of reading laboratories and reading instruction on a college level.

In response to the statement, "Assuming that we had neither facility, and we had unencumbered funds to either build tennis courts or equip a reading laboratory, we would open a reading laboratory," 44% of the deans strongly agree as did 37% of the reading specialists. 44% of the reading specialists and 38% of the deans agreed. 19% of the reading specialists disagreed, with 7% disagreeing strongly; and 18% of the deans disagreeing, 4% strongly so. (See Table 6)

<table>
<thead>
<tr>
<th>Reading Specialist</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>37% Strongly Agree</td>
<td>44%</td>
<td>40%</td>
<td>41.5%</td>
</tr>
<tr>
<td>44% Agree</td>
<td>38%</td>
<td>41%</td>
<td>34%</td>
</tr>
<tr>
<td>12% Disagree</td>
<td>14%</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>7% Strongly Disagree</td>
<td>4%</td>
<td>5.7%</td>
<td>7%</td>
</tr>
</tbody>
</table>

To the statement, "It is not the function of the post-high school institution to teach reading," there was a variation in the strength of responses, even though they moved in the same direction. 78% of the reading specialists strongly disagreed. Only 56% of the deans strongly disagreed, but 38% disagreed. 19% of the reading specialists disagreed; 2% agreed and 2% strongly agreed. Four percent of the deans agreed.

<table>
<thead>
<tr>
<th>Reading Specialists</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% Strongly Agree</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>2% Agree</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>19% Disagree</td>
<td>38%</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>78% Strongly Disagree</td>
<td>56%</td>
<td>67.8%</td>
<td>65%</td>
</tr>
</tbody>
</table>

That reading shouldn't be taught on the college level, two percent strongly agreed that it should not.
The last question dealing with the existence of reading programs in colleges dealt with study skills. The statement was, "Study skills should be taught to all students in our college." 40% of the reading people strongly agreed; 42% agreed and only 18% disagreed. 21% of the deans disagreed, 46% agreed and 33% strongly agreed. (See Table 8) This indicates that the lack of study skills has shown itself to both deans and specialists. There should be some more research in this area to capsule the kinds of study programs needed, since there has been little research on study skills for technical school subjects.

Table 8

<table>
<thead>
<tr>
<th>Study skills should be taught to all students in our college.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Specialist</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

The position of the reading specialist in two-year technical colleges appears to be secure at the moment. To the statement, "So far as raises, increments and travel are concerned, I believe that the reading specialist should be on the same status level as other members of the faculty," there was overwhelming agreement by reading specialists and deans. (See Table 9)

Table 9

<table>
<thead>
<tr>
<th>So far as raises, increments and travel are concerned, I believe that the reading specialist should be on the same status level as other members of the faculty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Specialist</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

One of the reading specialists responded to this question with this statement: "Because of the rapid rate of change in our field, I believe that the reading specialist should have more travel allowances than other faculty members." This is an interesting observation.
To the query, "I believe that if the reading specialist position, as it now stands, were to cease to exist, it would not affect our college greatly," 36% of the deans strongly disagreed, 48% disagreed and 16% agreed. 38% of the reading people strongly disagreed, 40% disagreed, but 20% of the reading specialists agreed — if their job were to disappear it would not matter. (See Table 10) This is a frightening thought. The reason? That cannot be determined from this sampling. However, more work needs to be done to ascertain why. If human behavior is any indication, when one feels his job is superfluous, he changes professions.

Table 10

<p>| I believe that if the reading specialist position, as it now stands, were to cease to exist it would not affect our college greatly. |</p>
<table>
<thead>
<tr>
<th>Reading Specialist</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>7% Strongly Agree</td>
<td>2%</td>
<td>5%</td>
<td>0</td>
</tr>
<tr>
<td>14% Agree</td>
<td>14%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>40% Disagree</td>
<td>48%</td>
<td>44%</td>
<td>36.6%</td>
</tr>
<tr>
<td>38% Strongly Disagree</td>
<td>36%</td>
<td>37%</td>
<td>40%</td>
</tr>
</tbody>
</table>

To the statement, "The reading specialist is a highly qualified individual who offers supportive services related to reading to faculty and students," all reading specialists agreed and only 6% of the deans disagreed. (See Table 11)

Table 11

<p>| The reading specialist is a highly qualified individual who offers supportive services related to reading to faculty and students. |</p>
<table>
<thead>
<tr>
<th>Reading Specialist</th>
<th>Deans</th>
<th>RMS1</th>
<th>RMS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>61% Strongly Agree</td>
<td>56%</td>
<td>58.5%</td>
<td>61.2%</td>
</tr>
<tr>
<td>39% Agree</td>
<td>39%</td>
<td>39%</td>
<td>34.5%</td>
</tr>
<tr>
<td>0 Disagree</td>
<td>6%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0 Strongly Disagree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Zimmerman believes that college administrators are largely indifferent to college reading programs. (5) The results of this study do not find this to be the case. What is evident, however, is that there are some disagreements about role and status that need to be resolved. More communication needs to take place between deans and their reading professions. Each has a different viewpoint, but those viewpoints are valid and should be
understood. College Reading can become a meaningful part of the curriculum, or it can cease to exist.

Further research needs to be done to ascertain student need in comparison with services available. Training for the reading specialists should become so specialized that the reading and remediation would stand on its own, rather than being ignominiously attached to whatever department or division happened by.

More importantly, new and innovative approaches to remediation must be developed. We must be developed. We must become a product-oriented profession — we must show results in tangible reading gains and higher GPA. The challenge is here.

REFERENCES


Educators are aware of the intimate relationship between accurate, healthy vision and academic success. However, our awareness is not often carried into practice. Many of us continue to use a far point vision chart even though we know we are not measuring "reading vision." Others of us have no visual screening procedure at all. Kerstiens (7:78) found none of the over eighty institutions he visited that were designed to effect' adult learning to have "an adequate visual screening survey consistently employed on all students seeking help or otherwise being referred to a learning specialist for help."

We felt very smug when we heard Kerstiens' indictment. We were using the Keystone Visual Survey (8) with our students. Then we discovered "The Orinda Vision Study" (9) which indicates that telebinocular screening is only about 50% accurate and over-refers about 35%. It seemed evident that we needed to explore a new procedure.

In reviewing the literature on vision testing, we found many procedures, only a few of which are reported here (1,2,5,6,9,10). We have assumed Bing's (4) definition of vision. She suggests "vision — as it operates for learning — is a very complex process having a physical (acuity), a physiological (integrative), and a psychological (perceptual) phase." Although we realize that these phases cannot be considered discrete, they have provided a basis for the development of our procedure.

The phases, the abilities to be evaluated, and the screening devices used are summarized in Table I. Specific procedures and examiner's record follow.

I. Standard Snellen Chart [See Table 2, page 202]  
Purpose: To determine the far point visual acuity  
Procedure: Have the subject stand 20 feet from the well lighted chart.
Have the subject occlude the left eye and read the lowest line he can. Then occlude the right eye and read the lowest line. Then have him read the lowest line he can with both eyes. (Three different charts would be best. Then one could be used for right eye, one for left eye and one for both eyes.) Note: Pre-school and primary-grade subjects may use the Pointing E Chart.

Response: Record responses on Examiner's Record

Referral: Subjects below 10 years with less than 20/40 vision should be referred. Above the age of 10 years, a subject with 20/30 vision or worse should be referred.

COLORADO STATE UNIVERSITY
READING SERVICES
VISUAL SCREENING PROCEDURE

II. Reduced Snellen Chart [See Table 2, page 202]
Purpose: To determine the near point visual acuity

Procedures: Have the subject hold the card at 16 inches. Be sure to have good light. Have the subject occlude the left eye and read the lowest line he can. Then occlude the right eye and read the lowest line. With both eyes, have him read the lowest line he can. [Three charts would be best. See note above.]

Response: Record responses on Examiner's Record

Table 1

<table>
<thead>
<tr>
<th>Phase</th>
<th>Visual Ability to be Evaluated</th>
<th>Screening Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Acuity</td>
<td>Far point visual acuity</td>
<td>Standard Snellen Chart</td>
</tr>
<tr>
<td></td>
<td>Near point visual acuity</td>
<td>Reduced Snellen Chart</td>
</tr>
<tr>
<td>Visual Integration</td>
<td>Binocular vision, fusion</td>
<td>Worth 4 Dot Test</td>
</tr>
<tr>
<td></td>
<td>Ocular Motility</td>
<td>Pursuit Tests</td>
</tr>
<tr>
<td></td>
<td>Muscle balance</td>
<td>Saccadic Movements Tests</td>
</tr>
<tr>
<td></td>
<td>Depth perception</td>
<td>Convergence Test</td>
</tr>
<tr>
<td></td>
<td>Visual perception</td>
<td>Cover Test</td>
</tr>
<tr>
<td></td>
<td>Visual memory</td>
<td>Vertical Posture Test</td>
</tr>
<tr>
<td></td>
<td>Eye-hand coordination</td>
<td>Titmus Stero Tests</td>
</tr>
<tr>
<td></td>
<td>Detroit Test of Learning</td>
<td>Aptitude (3) Subtest 12</td>
</tr>
<tr>
<td></td>
<td>&quot;Memory for Designs&quot;</td>
<td></td>
</tr>
</tbody>
</table>
Referral: Many subjects up to the age of 10 years may not have developed fine near point visual acuity. Subjects below 10 years with less than 20/40 vision should be referred. If the subject has a reading problem and visual symptoms, he might be referred at the 20/30 level if age 7 years or above. Above the age of 10 years, a subject with 20/30 vision or worse should be referred.

III. Worth 4 Dot Test [See Table 3, page 204]

Purpose: To determine if a subject has binocular vision. It will also determine if a subject is suppressing the vision in one eye.

Procedure: Place the red-green glasses on the subject with the green lens over the right eye. Hold the flash light about 16 inches away and ask him how many circles he sees.

Response:
1. If the subject reports 4 circles, he possesses binocular vision.
2. If the subject reports 3 green circles, he is suppressing the vision of the left eye.
3. If the subject reports 2 red circles, he is suppressing the vision of the right eye.
4. If the subject reports 5 circles, which include 2 red and 3 green circles, he is having double vision.

Referrals: Refer — 2, 3, and 4 responses.

IV. Ocular Motility Tests [See Table 3, page 204]

Ocular Pursuit

Purpose: To determine the ability to follow a moving target in all directions of visual gaze.

Procedure: Have the subject follow a moving penlight 16 inches from him through his field of vision on a horizontal meridian, a vertical meridian and two diagonal meridians. Instruct the subject to move his head as little as possible.

Response: The subject should be able to visually follow the light without loss of motion, concentration, re-fixation, or excessive head movements.

Referral: Refer subjects who cannot follow the light or whose tracking is jerky.

Saccadic Movements

Purpose: To determine the ability to shift one's gaze rapidly and efficiently from one point to another.

Procedure: Hold two penlights about 16 inches from the subject and just within his horizontal field of vision. Have the subject look from one light to the other and back again several times (left-right at near). Hold one penlight about 16 inches from the subject and have him fixate on an object about 20 feet away, then to the penlight and back again several times (near-far). Hold one penlight about 10 inches and another penlight about 20 inches from the subject. Have him fixate first on one light then the other several times (near-near). Have the subject select two objects about 20 feet away and about five feet apart. Have him fixate from one to the other and back again several times (far-far).
Response: The subject should be able to shift his fixation from one point to another rapidly and efficiently.

Referral: Refer subjects who cannot shift their gaze rapidly and efficiently or who have excessive head movements.

Near Point of Convergence

Purpose: To determine how near a person has binocular vision.

Procedure: Have the subject observe the penlight and start moving the penlight towards him. Ask the subject to tell you when he first sees two lights. Measure that distance. This is called the 'break'. Then start moving the penlight towards you until he sees one light. Measure that distance. This is called the 'Recovery'.

Observe the light reflex in the pupil. It will be centered in both pupils. About the time the subject sees two, the light reflex will not be centered because the eye will diverge out. It will not be centered until the subject sees one and recovers.

Table 2

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Visual Screening Procedure

EXAMINEE RECORD

Visual Screening
Referral: If the subject breaks at a distance of 10 inches or greater, he should be referred. If the subject recovers at a distance of 12 inches or greater, he should be referred.

V. Cover Test/Vertical Posture Test [See Table 3, page 204]

Purpose: To test for muscle balance.

Phoria. The direction of one eye in relation to the other eye, manifested in the absence of an adequate fusion stimulus.

Exophoria: The turning out of the two eyes relative to each other in the absence of an adequate fusion stimulus (when the eye is covered, muscles of the eye draw the eye out; when the eye is uncovered, it moves in to fixate on the stimulus).

Hyperphoria: The turning upward of the two eyes relative to each other in the absence of an adequate fusion stimulus.

Hypophoria: The turning downward of the two eyes relative to each other in the absence of an adequate fusion stimulus.

Strabismus of Tropia: The condition in which binocular fixation is not present under normal seeing conditions.

Exotropia: Strabismus in which the eye turns out.

Esotropia: Strabismus in which the eye turns in.

Procedure: A. Hold a fixation penlight at about 16 inches. Occlude one eye and then the other and repeat this several times. Observe the movement of the eye after you remove the occluder. B. Have the subject fixate on an object or light 20 feet away. Occlude one eye and then the other and repeat this several times. Observe any movement of the eye after you remove the occluder. Note: If the eye moves from out to in, we have an exophoria. If the eye moves from in to out, we have an esophoria. C. Use Test 2 "Vertical Posture" from Keyston Visual Survey Tests to determine the presence of hyperphoria or hypophoria.

Determination of a Phoria: If you remove the cover and the eye that was previously covered fixates on the light and the other eye remains fixated, we have a phoria. This is true for both near and far. Note: If the eye moves from out to in, we have an exophoria. If the eye moves from in to out, we have an esophoria.

Determination of a Tropia: If you remove the cover and the eye that was covered does not fixate on the light, we have a tropia. This is true for both near and far. Note: If the eye that was covered fixates on the light and the other eye that was fixated moves in or out, the subject has a tropia. If the eye moves out, we have an exotropia. If the eye moves in, the subject has an esotropia.

Referral Criterion: 1. Any tropia should be referred; 2. An extremely high exophoria or esophoria should be referred; 3. An esophoria of moderate magnitude should be referred if the patient complains of eye fatigue when reading. Esphoria does cause fatigue; 4. Any response outside the expected response area on the "Vertical Posture" test should be referred.

VI. Titmus Stereo Tests [See Table 4, page 205]

Purpose: To test for stereoscopic depth perception.
Definition of Stereopsis: Stereopsis is the binocular visual perception of three dimensional space.

Table 3

Test III.
Worth 4 Dot Test
4 circles __ 2 red circles __
3 green circles ___ 5 circles ___

Test IV.
Ocular Motility Tests
A. Ocular Pursuit
   Follows light (well, poorly)
   Horizontal ______
   Vertical ______
   Diagonal ______
B. Saccadic Movements
   Left-right ______
   Near-far ______
   Near-near ______
   Far-far ______
C. Near Point of Convergence
   Break=______  Recovery=______

Test V.
Cover Test/Vertical Posture
   Tropia ______ Exophoria ______
   Esophoria ______
   Hyperphoria or Hypophoria ______

Procedure: Have the subject put on the polaroid glasses. 1. Stereo Fly. If the subject is quite young and has trouble following instruction, ask the child to pinch the fly's wings. If the child has stereopsis, he will pinch the wings above the plane of the picture. 2. Animals: This test is also for young children. Ask the subject if one of the animals is closer to him in Row A. Continue to Row B and C. 3. Circles. This test will determine fine depth perception. Begin at the 1st square and ask, "Which circle is closer to you?" Continue until the subject gives up or misses two in a row.

Interpretation of the Responses: If a subject does not have binocular
vision, he will not have stereoscopic depth perception. An example would be a subject with esotropia (one eye turns in) or exotropia (one eye turns out). Subjects with uncorrected low visual acuity at near may have trouble with this test. If the subject does poorly, check the near point visual acuity and see if it is due to this or a muscle problem as described above.

VII. Visual Perception [See Table 4, below]

Purpose: To determine visual perception, visual memory, and eye-hand coordination.


Table 4

Test VI.

Titmus Stere Tests

A. Fly (for younger children)
   Pinched wings ______
   Touched book ______

B. Animals
   1. (cat) ______
   2. (rabbit) ______
   3. (monkey) ______

C. Circles
   1. (B) ______ 6. (L) ______
   2. (L) ______ 7. (R) ______
   3. (B) ______ 8. (L) ______
   4. (T) ______ 9. (R) ______
   5. (T) ______

Test VII.

Visual Perception

Raw Score ______

CA ______

MA ______

Referral: Refer any subjects age 5-10 having a score one or more years below chronological age. Refer any subject over 10 years having a score two or more years below chronological age.

We have presented a visual screening procedure which we feel
examines the aspects of vision needed for school learning (see Table 1). Our procedure is not offered as a proven, statistically sound instrument, but rather derives from our interpretation of the literature, our discussions with ophthalmologists and optometrists, and our work with elementary, secondary, college, and adult students.

Furthermore, we feel that this procedure can be used by paraprofessionals with a minimal amount of training and that it is relatively inexpensive. The materials can be purchased from optical supply houses for less than $70.00. Detroit Test of Learning Aptitude material is available from the publisher. Penlights are available from local stores.

We need empirical proof of the value of this procedure and have proposals and research designs underway. Your feedback on the use of the procedure would be appreciated.

REFERENCES

TEACH CONCEPTS, NOT WORDS

Leon E. Williamson
New Mexico State University

Since concepts are the mental divisions man makes among the concrete and abstract phenomena of his environment so he may generate, maneuver, and control their relationships in a manner to satisfy his physical, emotional, and social, and aesthetic needs, concepts should be the vortex of intelligence and not vocabulary items as evident in most intelligence, aptitude, and achievement tests. For illustrative purposes, consider items 111 to 120 for form B of the Peabody Picture Vocabulary Test. They are crucial in achieving a score which would place a person with a chronological age of seventeen years six months to eighteen years five months in the average range of intelligence quotients. To the right of each item are other vocabulary items which may be used to express the same concept in other language settings or environments. Settings for language usage are easily identified if one thinks in terms of learned, formal, and informal environments, for example:

<table>
<thead>
<tr>
<th>Vocabulary Item</th>
<th>Learned</th>
<th>Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>111. constrain</td>
<td>fetter</td>
<td>restrain</td>
<td>keep under wraps</td>
</tr>
<tr>
<td></td>
<td>manacle</td>
<td>control</td>
<td>hold up</td>
</tr>
<tr>
<td></td>
<td>gyve</td>
<td>curb</td>
<td>sit on</td>
</tr>
<tr>
<td></td>
<td>incarcerate</td>
<td>suppress</td>
<td>sit upon</td>
</tr>
<tr>
<td></td>
<td>immure</td>
<td>hamper</td>
<td>sit down on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>confine</td>
<td>crack down on</td>
</tr>
<tr>
<td></td>
<td></td>
<td>quarantine</td>
<td>put the lid on</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>bottle up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>squash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>squelch</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>hog-tie</td>
</tr>
</tbody>
</table>
To assume a person does not have any of the concepts represented above because he does not respond correctly to one or all of these verbal stimuli is nonsense. Vocabulary tests reveal how American education is too pedantic to assess the degree to which students have acquired conceptual clarity for any concept. Too often students are taught as if they lack a concept when all they really lack is a vocabulary item for the standard or learned language environment. Thus, “learning” language is used to block students’ use of concepts they may apply very effectively in their home. In reality, formal education helps people to acquire vocabulary to express concepts in formal and learned settings. Unfortunately, vocabulary items used to express the same concepts in informal settings are taboo in education. Yet students and instructors spend most of their talking time in informal language settings. Nothing reveals man’s variation in expressing his finite number of concepts more than does Roget’s Thesaurus.

Since concepts, and not selected vocabulary items, should be the vortex of intelligence, teaching strategies should direct the development of the ability to express concepts appropriately for any language setting. The following nine conceptual relationships form a hierarchical seriatim which may be followed in directing the development of conceptual clarity for any concept (Williamson, 1970).

1. Concurrence: recognizing members of the concept (mammal: man, pig, goat, whale, horse, etc.)
2. Distinctness: recognizing what is not a member of the concept (mammals: duck, snake, lizard, bee, etc.)
3. Appurtenance: being aware of unique characteristics which result in placing members in the concept (mammal: hair, live birth, milk glands)
4. Dimensional: knowing the range in sizes for members of the concept (mammal: from small field mouse to the whale)
5. Self-activity: understanding an act or activity peculiar to members of the concept (mammal: nursing)
6. Equivalence: recognizing two or more members of the same concept based upon scientific but subtle similarities (mammal: man, whale)
7. Reaction: recognizing an effect one concept has upon another (mammal: eats plants; provides food for some parasites)
8. Association: recognizing a cause-effect between one concept and another (mammal: producing carbon dioxide for plants; plants producing oxygen for mammals)
9. Functional dependence: recognizing what members of one concept depend upon for continued existence (mammal: sun, water, plants, male and female)

Using the above conceptual relations in conjunction with vocabulary appropriate for the learned, formal, and informal language environments, it is easy to demonstrate with the concept constrain how a person may be able to express a concept using one set of vocabulary items but not with another set. The demonstration will be made by giving a word or symbol for each of the nine relations that will evoke the correct response if the person can express the concept in that language setting. Three foils or distractors are given with each correct choice. The answer is underlined. The order for the language settings is: (1) informal, (2) formal, and (3) learned.

For the concept = to constrain

**Concurrence:** Recognizing members of the concept.

<table>
<thead>
<tr>
<th>Informal</th>
<th>b. squelching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>b. refuse</td>
</tr>
<tr>
<td>Learned</td>
<td>b. peremptory</td>
</tr>
<tr>
<td></td>
<td>d. aquiesce</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Informal</th>
<th>a. set-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>a. choice</td>
</tr>
<tr>
<td>Learned</td>
<td>a. manacle</td>
</tr>
<tr>
<td></td>
<td>c. clementness</td>
</tr>
</tbody>
</table>

**Distinctness:** Recognizing what is not a member of the concept.

<table>
<thead>
<tr>
<th>Informal</th>
<th>a. crack down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>a. restrain</td>
</tr>
<tr>
<td>Learned</td>
<td>a. incontinence</td>
</tr>
<tr>
<td></td>
<td>d. extinguish</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Informal</th>
<th>b. sit on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>b. curb</td>
</tr>
<tr>
<td>Learned</td>
<td>b. gyve</td>
</tr>
<tr>
<td></td>
<td>d. extinguishe</td>
</tr>
</tbody>
</table>

**Appurtenance:** Recognizing characteristics unique to members of the concept.

<table>
<thead>
<tr>
<th>Informal</th>
<th>a. happy person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>a. police officer</td>
</tr>
<tr>
<td>Learned</td>
<td>a. stack of books</td>
</tr>
<tr>
<td></td>
<td>b. reading a book</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Informal</th>
<th>b. scared person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>b. priest</td>
</tr>
<tr>
<td>Learned</td>
<td>b. reading a book</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Informal</th>
<th>c. unhappy person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>c. laborer</td>
</tr>
<tr>
<td>Learned</td>
<td>c. writing a book</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Informal</th>
<th>d. sick person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal</td>
<td>d. sales clerk</td>
</tr>
<tr>
<td>Learned</td>
<td>d. burning a book</td>
</tr>
</tbody>
</table>
**Dimensional:** Recognizing the range in size or degree of intensity of the concept.

- **Informal:**
  - a. 
  - b. 
- **Formal:**
  - c. 
  - d. [correct answer]
- **Learned:**
  - c. 

**Self-activity:** Recognizing an act or activity peculiar to members of the concept.

- **Informal:**
  - a. *can't move*
  - b. *can't read*
  - c. *can't sleep*
  - d. *can't sing*
- **Formal:**
  - a. *bind*
  - b. *associate*
  - c. *help*
  - d. *demand*
- **Learned:**
  - a. *leniency*
  - b. *compulsion*
  - c. *plenary*
  - d. *monopolist*

**Equivalence:** Recognizing two or more members of the same concept based upon scientific but subtle similarities.

- **Informal:**
  - a. empty jar and blank page
  - b. empty bathtub and empty room
  - c. *empty pocket and empty purse*
  - d. empty box and empty bed
- **Formal:**
  - a. beautiful girl and homely girl
  - b. *man in jail and a hermit*
  - c. woman sleeping and woman singing
  - d. baby walking and baby crawling
- **Learned:**
  - a. *man praying and man reading*
  - b. a man singing and a man reading
  - c. a man laughing and a man eating
  - d. a man dancing and a man carving

**Reaction:** Recognizing an effect one member of a concept has upon a member of another concept.

- **Informal:**
  - a. a boy tying up a package
  - b. *a boy tying up a dog*
  - c. a boy tying his shoe
  - d. a boy tying strings together
- **Formal:**
  - a. doctor examining a man
  - b. gardner watering flowers
  - c. *fireman putting out a fire*
  - d. barber cutting a man's hair
Learned:  
   a. beaver building a dam across a stream  
   b. bird pecking meat from a crocodile’s teeth  
   c. kangaroo with a baby kangaroo in her pouch  
   d. dog under a tree with a bird in it

**Association:** Recognizing a cause-effect relationship between two concepts.

**Informal:**
   a. black cat completing crossing a street behind a car just involved in a wreck  
   b. fat lady eating a chicken while looking through a door too small for her  
   c. man praying while lightning strikes another  
   d. grocery store and a hungry child

**Formal:**
   a. a dairy and a half beef hanging  
   b. a garden and a swarm of insects  
   c. a withered plant on a desert  
   d. two men shooting each other with hungry children standing behind them

**Learned:**
   a. public speaking and a man in jail  
   b. angry boss dismissing workers and picket signs in front of his business  
   c. a teacher and a student holding a report card with four f’s on it  
   d. an unhappy student walking away from a school and a happy truck driver

**Functional dependence:** Recognizing what members of a concept needs to exist.

**Informal:**
   a. don’ts  
   c. homes  

**Formal:**
   a. lawyers  
   c. rules

**Learned:**
   a. nonpartisan  
   c. federalism

Teaching strategies and evaluate instruments which focus on prestige vocabulary and not concepts are obscurants which have no place in a profession proclaiming the ethics educators do. Yet, obscurants abound in most educational institutions. They set the boundaries and the goals to which professors and teachers commit themselves to lead their students. Unfortunately, too many educators have become slaves to words rather than their masters. Bernstein’s (1961) theory of “restricted” and “elaborated” language codes is widely accepted with an assumption that the “restricted”
code (a different dialect than that accepted as the standard in a speech community) fails to develop and refine the intellect. There is not one shred of evidence that any particular language or a dialect within a language is more effective in developing and refining an intellect. The syntax of thought is universal; the syntax of language is specific to a speech community. Let's conclude with a description given by Vygotsky (1962: 150).

Thought, unlike speech, does not consist of separate units. When I wish to communicate the thought that today I saw a bare-foot boy in a blue shirt running down the street, I do not see every item separately: the boy, the shirt, its blue color, his running, the absence of shoes. I conceive of all this in one thought, but I put it into separate words. A speaker often takes several minutes to disclose one thought. In his mind the whole thought is present at once, but in speech it has to be developed successively.

REFERENCES

SCREENING FOR VISION AND PERCEPTION DISABILITIES

Mary Harper Wortham
Fullerton College

Administering a 10-part diagnostic battery to more than 400 students in the reading skills courses at Fullerton College in the fall of 1973 was undertaken for three purposes:

(1) to relate the instructional program more closely to student needs;
(2) to explore the extent of visual and perceptual problems and their relation to reading retardation at the college level;
(3) to provide data to help determine what the limits of the community college's commitments are, or should be, to students who are educationally handicapped in ways not served by conventional methods of language instruction.

Only those components of the total battery which are related to vision and perception will be treated here. Inasmuch as the terms visual and perceptual are used with assorted meanings in the professional literature of various disciplines, some definitions are in order. Visual refers to functions of the eye, with motor and sensory components. Visual adequacy is a term for unimpaired reception of the image in the occipital area of the brain (area #17, according to Brodman's method of classification). Thus, if the eye does not effectively deliver the image the problem is one of vision. However, the eye may function well, but the recognition or awareness or significance of the image may be lacking or distorted, and we call this dysfunction perceptual.

Diagnostically, it may be difficult to determine whether a problem is visual or perceptual. Since the vision occurs first in the time sequence, it seems logical to establish visual adequacy before suspecting a perceptual problem.

Preliminary to venturing into vision screening, the Fullerton College Reading Center arranged with the Southern California College of Optometry to screen students in the basic reading course. A team of 24
student doctors and professors administered a modified clinic technique to 86 students. Of this group, 55% failed one or more tests. The optometrists reported that the primary problem was in the area of binocularity, mainly in lateral phoria and fusion.

In-service Training
Preparatory to faculty screening in the fall of 1973, eight staff members of the Reading Center attended a summer course (1 quarter) at the Southern California College of Optometry (SCCO) for instruction in vision related to reading and the use of the telebinocular and other diagnostic procedures. Certifications of completion of the work in visual screening were issued. There was firm support from the Fullerton College administration. The Board of Trustees of the district paid tuition fees for the Fullerton staff and also for reading instructors at Cypress College and a faculty member from adult education.

Screening Procedures
In the first two weeks of the fall semester, more than 400 students in the basic reading course were given the Keystone telebinocular visual survey. The Reading Center owned one instrument and borrowed two others. Any student who failed the screening was retested, usually by a different instructor, before referral was considered. Students who fared poorly on the screening and who had glasses “five years ago” were urged to be reexamined by their optometrist. Students who were confident of excellent vision because they were 20/20 on the test for driver’s license were given some explanation of why their visual performance at near point might be less than adequate. These students were also urged to go to an eye doctor with the SCCO Clinic as an alternate.

Appointments were made with 76 students at the SCCO Clinic, with an arrangement of partial waiver of fees in view of research being conducted. Despite a reminder system, only half of the students turned up for their eye appointments. Other students visited their own doctors, but the exact number was not verifiable. At a conservative estimate, the visual screening resulted in 50 visits for full eye examinations or about 12 1/2% of the students. One common complaint about the use of the Keystone telebinocular in the hands of teachers is that it over-refers. The Fullerton staff was told informally by SCCO administrators that the staff had not over-referred. Part of a student research project of the SCCO was to compare the efficiency between screenings performed by the teachers vs the optometry students. To quote from the conclusions.

The results of this portion of our study indicate that, with regard to Keystone Visual Skills screening, teachers who have been properly instructed are able to administer the test with equal, or possibly greater efficiency than optometry students. (Domroy, II:8)

Formed Used
Both a long form of the Keystone Visual Survey Test which employs 15
cards for 15 tests, and the short form which used 3 cards for 7 tests, were used in initial screening. The short form can be administered in three or four minutes; the long form generally takes 10 or 12 minutes, and often longer because of conversation with the student. The failure rate was 47% on the long form, and only 30% on the short form. Any response outside the expected range on a subtest resulted in a fail in the screening.

Since the long and short forms of the screening survey differ in both

---

**Distribution of Failures on the Subtests of the Keystone Visual Survey: Students in the Reading Skills Courses, Fall, 1973.**

*N = 175*

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Number of Students</th>
<th>Percentage Failing of Total 175</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Passing</td>
<td>Failing</td>
</tr>
<tr>
<td><strong>AT FAR POINT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Simultaneous vision</td>
<td>174</td>
<td>1</td>
</tr>
<tr>
<td>2. Vertical posture</td>
<td>170</td>
<td>5</td>
</tr>
<tr>
<td>3. Lateral posture</td>
<td>168</td>
<td>7</td>
</tr>
<tr>
<td>4. Fusion</td>
<td>164</td>
<td>11</td>
</tr>
<tr>
<td>4½. Usable vision—both eyes</td>
<td>170</td>
<td>5</td>
</tr>
<tr>
<td>5. Usable vision—right eye</td>
<td>167</td>
<td>8</td>
</tr>
<tr>
<td>6. Usable vision—left eye</td>
<td>166</td>
<td>9</td>
</tr>
<tr>
<td>7. Stereopsis</td>
<td>162</td>
<td>13</td>
</tr>
<tr>
<td>8. Color Perception</td>
<td>167</td>
<td>8</td>
</tr>
<tr>
<td>9. Color Perception</td>
<td>165</td>
<td>10</td>
</tr>
<tr>
<td><strong>AT NEAR POINT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Lateral posture</td>
<td>155</td>
<td>20</td>
</tr>
<tr>
<td>11. Fusion</td>
<td>115</td>
<td>60</td>
</tr>
<tr>
<td>12. Usable vision—both eyes</td>
<td>172</td>
<td>3</td>
</tr>
<tr>
<td>13. Usable vision—right eye</td>
<td>170</td>
<td>5</td>
</tr>
<tr>
<td>14. Usable vision—left eye</td>
<td>165</td>
<td>10</td>
</tr>
</tbody>
</table>

* All tests were passed by 93 students, or 53%
length and style of test item, they are not strictly comparable. The accompanying Table on the distribution of failures on the subtests includes only 175 cases in which the long forms were used.

It is apparent that the failures fall heavily in the near-point category, and that the test most frequently failed was for fusion (34%). Students were not referred if the fusion test was the only test failed and if they reported no symptoms of eye problems. Nor were students referred for deficiencies in color-perception.

Failure to get and hold fusion on the test is commonly indicative of a problem of convergence: holding a clear focus is a strain that may result in the quick onset of fatigue. The number of students reporting symptoms of eyestrain may be directly related to the high rate of fusion failures.

The Questionnaire
A questionnaire was filled out by students in the first few days of class, without reference to the telebinocular screening. One group of questions asked for an identification of any of the seven following problems associated with reading: (1) fatigue, (2) headaches; (3) irritated eyes, (4) blurring print; (5) losing place, (6) skipping words, (7) reversing letters. Only 10% of all students replied negatively to all seven questions. Almost half of all students checked three or more of the seven times, and 15% checked five or more as problems.

Can such a positive response to the laundry-list of complaints be attributed entirely to boredom or lack of comprehension or skills? At the very least, one can say with some assurance that the act of sustained reading is not associated with an easy, pleasant experience.

Conclusions:
In addition to visual handicaps, there is evidence of psychoneurological differences in a portion of the students which may account for learning disorders. On the basis of the data thus far, the staff ventures a tentative estimate that one-fifth to one-quarter of the reading course students may have underlying problems in vision or perception.

REFERENCES