DOCUMENT RESUME

ED 366 370 JC 940 083

AUTHOR Yevoli, Carole
TITLE Corrective Strategies in Reading for At-Risk Community College Students.
PUB DATE 93
NOTE 57p.; M.S. Requirements, Long Island University.
PUB TYPE Dissertations/Theses - Masters Theses (042)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Classroom Techniques; Community Colleges; Computer Assisted Instruction; *Corrective Reading; Educational History; Program Descriptions; Program Effectiveness; Program Evaluation; Reading Assignments; Reading Comprehension; Reading Difficulties; *Reading Instruction; *Reading Programs; Reading Tests; Remedial Reading; *Teaching Methods; Two Year Colleges

ABSTRACT

Focusing on corrective strategies for improving reading skills of at-risk community college students, this document reviews the history of such strategies, highlights current efforts, and assesses future needs. The first section traces the history of remedial reading programs at community colleges, beginning with small individualized sections introduced after World War II, and reviews guiding principles for corrective reading developed in 1965 by Savin Cohen, techniques proposed in 1975 by Kenneth M. Ahrendt, and information on a 1983 computer-based course at Cuyahoga Community College (Ohio). The second section reviews the current state of corrective reading efforts, highlighting programs at Nassau Community College (New York), Rock Valley Community College (Illinois), Moraine Valley Community College (Illinois), Evergreen Community College (California), and the University of Toledo Community and Technical College (Ohio). This section also reviews a study conducted at Austin Community College (Texas) which found no significant differences between the performance of computer-assisted and text-based remedial reading students but improved scores for increased practice time. The final section presents recommendations for improving remedial reading programs based on evaluations of existing programs, including requiring all curricular students to complete an assessment program, providing program assistants for students experiencing difficulties, teaching sociology or psychology with remedial reading, and utilizing computers in instruction. References and annotated bibliographies are included with each section. (ECC)

CORRECTIVE STRATEGIES IN READING FOR AT-RISK COMMUNITY COLLEGE STUDENTS

With appreciation to the librarians at Long Island University, C.W. Post Campus, for their professional assistance, and to Dr. George Guiliani for his guidance.

Carole Yevoli

Fall 1993

The first chapter of this paper will discuss the history of corrective strategies in reading for at-risk community college students covering the time span from the 1940's up until the 1980's. It will discuss what some of the program's goals were, how they were implemented, and suggestions for creating new programs.

The second chapter of this paper will deal with the current state of the art of the most recent models of corrective strategies in reading for at-risk community college students.

The last chapter of this paper will deal with needs assessment and new directions. It will mention how and if the needs of the students are being met. It will describe any problems there are with corrective strategies in reading for at-risk community college students. This section will also state if there has been enough research in the area pertaining to the topic. Lastly, the paper will mention where corrective strategies in reading for at-risk community college students seem to be going in the future.

Carole Yevoli Fall 1993

Chapter 1 - Historical Overview

The community colleges thrived on the educative tasks that the universities could not or would not undertake. They provided freshmen and sophomore courses for students who were not qualified for entry to the more selective institutions by virtue of their poor prior academic preparation, or who could not afford the higher tuition charges and the expense of living away from home. The idea that the ultimate benefit to the state would far exceed the cost, promulgated by the President's Commission on Higher Education (1947), led to magnified support for the institutions that promised to provide occupational preparation, offer instruction in citizenship and basic skills, and allow young people a place to develop during a period of prolonged adolescence (Encyclopedia of Higher Education, 1992).

During the first 20 years after the Second World War, the community colleges added two functions to their pre-baccalaureate, occupational, and post-high school terminal programs: community services, providing cultural and educational programs that typically did not lead toward the baccalaureate or specific jobs; and remedial studies, those courses and activities designed to compensate for the students' defects in prior learning (Encyclopedia of Higher Education, 1992). As a result, community colleges all around the country implemented remedial

reading courses for at-risk students, "...students who fail to meet the established criteria for entrance into a college-level course or program of choice" (Encyclopedia of Higher Education, 1992).

Examples of various programs offered and/or recommended as corrective strategies in reading for at-risk community college students are as follows:-

At the Jacksonville Junior College, reading was unmastered by at least half of the students after twelve years of education, and the root of many student shortcomings during the 1940's. Such (obvious to the teacher) devices as underlining key words, spaced reading, reading in large thought units, efforts to speed up (with more devices) were set forth by the usual teaching techniques of statement, restatement, and illustration (Junior College Journal, 1949).

During the 1950's, students at the Agricultural and Mechanical College of Texas, whose reading rate or reading comprehension scores fell into the lowest quartile of the college norms, were contacted to determine whether they were interested in enrolling in the Reading Improvement Program. The reading course was so organized that each section met in groups of thirty to thirty-five for two fifty-minute periods each week. Those periods were devoted to training designed to increase skill in the various factors involved in reading. Special exercises from a work book were

employed to develop competency in diverse types of reading activity. Tachistoscopic training and special reading films were also employed during those periods. In addition to the periods of group work, each student devoted fifty minutes each week to training with a reading accelerator. The laboratory work was individualized so that each student progressed at his own particular rate (Junior College Journal, 1952).

In 1965, Savin Cohen, associate professor of communication arts and skills at New York City Community College of Applied Arts and Sciences, Brooklyn, New York, developed a reading program that he recommended for all at-risk community college students. Some highlights of the guiding principles that he set forth are as follows:-

1. The student must always be approached as a complete personality. The instructor must consider a student's level and the best method for correcting each particular problem. A program must begin and end with the student. It begins by knowing him. Personality, intelligence, aptitude tests, reading tests, and achievement should be part of the process.

2. A reading program which provides only encouragement of reading is inadequate. Reading experiments must continually be integrated with the students other significant experiences. Sometimes vital experiences unrelated to reading are springboards for a reading program. College students in their late teens and early twenties sometimes have religious conflicts,

disappointments in love, or anxieties about a choice of career. Under the careful scrutiny of an instructor, they may be directed to readings which help resolve, in part, some of the problems.

3. The reading program is effective to the extent that it involves the efforts of all members of the organization. It is sometimes noted that students who major in drafting will submit an untidy sketch in a technical report submitted to a liberal arts instructor, a carelessness which they would scarcely commit in a report to their drafting instructors. Because nearly all courses offer reading, and because all reading differs in technique -- reading directions, scientific texts, sociological data, and literature -- each instructor must be made to feel responsible for the reading effectiveness of the student in his field.

4. A single course in reading or a single laboratory for retarded readers will not adequately serve the purpose of continuous development. The skills required for speeded reading, vocabulary development, associational thinking, and the drawing of inferences are not the province of one course or of one semester; they are the responsibility of all the courses throughout a student's academic life, in short, the entire curriculum. The experience of reading must always be related to the experiences and concepts created by and presented to the individual -- social, psychological, and vocational -- and the learnings must continually be integrated.

5. The cooperation of the library may be solicited in allocating space and preparing posters and pleasant background materials in a special reading section of the library.

6. Informal and formal tests can be given frequently to test for the obvious: reading speed, comprehension, vocabulary. A reading laboratory for slow and retarded readers is essential. The laboratory should be permanently equipped with appropriate reading materials for conducting the program at all levels and interests. Groups may be small enough to permit individual help during the sessions.

7. Everyone likes to see a "return" for work performed; work in reading is no exception. All students should be in a position to observe and measure their progress, in records which they can keep for themselves, in specific areas of reading -- speed, vocabulary development, comprehension, etc. Continual practice drills in all subjects are essential.

8. The reading program should not be imposed upon students against their wishes. For retarded students especially, the indications of stigma should be avoided, and desirable and achievable goals pointed out to them.

9. Not all reading skills are the same. Associational reading differs from skimming. The reading of textbooks, charts, and tables differs from the reading of novels. Associated with

skills in reading for speed and remembering and vocabulary must go an awareness of the various techniques in drawing inferences, and testing conclusions on the basis of differing disciplines which the various fields impose: the sciences and mathematics, the social sciences, and the humanities. In these areas, the responsibilities of the reading instructor are critical, for he is in the most strategic position both to enlighten and discipline his students' learnings and his colleagues' instruction techniques.

10. Proper materials and equipment are important in this program. Helpful items are tachistoscopes, speed-pressure devices, motion-picture projectors, slide projectors, turntables. A suitable room containing graded materials and textbooks is essential. The ophthalmograph is helpful in indicating the movement of the eyes; but the use of hand mirrors in helping students recognize the nature of their eye spans, regressions, and eye movements can be just as effective (Cohen, S, 1965).

Kenneth M. Ahrendt (1975) made the following proposals for remediating at-risk community college students. However, he cautioned that no two remedial cases are alike; what may work with one student can be a complete failure with another. Remedial programs must be individualized to fit the program with the student, not to fit the student with a particular program:-

Techniques

1. Teach only the skills that are necessary.
2. Provide books, magazines, and other reading materials that are of interest to the student.
3. Begin with short assignments made in cooperation with the student.
4. Combine reading with activities that the student enjoys.
5. Create an atmosphere of success. Spend only the time necessary on technical skills of reading. Do not burden the student with isolated drills or unessential skills.
6. Have frequent conferences with the student. Move him through a variety of skill exercises and materials.
7. Relate what the student is doing on his content work so he can see success in the area which is most important to him (Ahrendt, 1975).

Dennis Gabriel (1983) used the mainframe computer in teaching a basic reading and writing class at Cuyahoga Community College during the 1980's. Some data reported about this program are as follows:-

1. They are in the process of developing a number of cloze tests so that a student may sit down at a mainframe terminal, and once each week work out a cloze exercise. Because the cloze exercises will be geared to the students' reading levels, the test results

should be helpful in evaluating the students' progress.

2. They are also working out a spelling program for the mainframe which will test a person's knowledge of 300 common words. The computer will present a word spelled four ways, and the student will select the correct spelling; the computer will also keep track of the words the student does not spell correctly.

3. Another diagnostic tool they are developing is a writing test geared to the grammar handbook used in class. The test will involve 50 multiple choice items to pinpoint areas where the students have problems. The computer will report these areas to the student and keep records for the school.

4. The last diagnostic tool is the FOG index. The computer tests students' writing samples to help them improve the general readability of their papers.

5. The mainframe can also be used to motivate students. Electronic mail or email is a very powerful tool, and each student in some classes is given an electronic mailbox. Email is sent to students to tell them if the instructor is happy with their work or worried about their lack of progress, notes on books and magazine articles the instructor thinks they might enjoy, and a summary of each day's class.

6. The mainframe can also provide drill. Spelling, punctuation, and grammar exercises can be sent to students via email.

7. Networking is another powerful tool. Students work out short essays and then -- via email -- send them to the other class members. In this way, students have an opportunity to see how their skills compare to other students' skills.

8. The class is sent a list of 25 new vocabulary words each week. (Gabriel, 1983).

Students are required to read a newsmagazine and write a brief (50 words or less) summary of one article and send it to their instructor via email. Kept in the mainframe are handouts on how to take a test, study for a test, time management, formats for reports, and so on. From time to time, students have questions on why people have comprehension problems, what is needed to know about phonics, etc. An electronic encyclopedia has been set up to answer these questions (Gabriel, 1983).

The mainframe evaluates students' progress. Each week, students send an email report about what they have learned the previous five days in class. This gives the instructor a chance to correct misinformation; it also forces the student to look at the class to see if it is helping him (Gabriel, 1983).

Summary

Teaching reading to at-risk community college students has been an on-going challenge for decades. Scholars continue to search for new methods and techniques in the hopes of affording students the opportunity to experience success. However, because there are no specified programs mandated by the states, there is no one way that remediation is administered.

Annotated Bibliography

Ahrendt, Kenneth M. (1975). Community College Reading Programs. Newark, Delaware: International Reading Association.

This book discusses the community college and the unique student body it serves. It discusses the literature that is available and suggested training programs for community college reading teachers. Diagnosis and testing is outlined, as well as available instruments. Guidelines are offered which cover what is known about learning theory, teaching methods, and student needs.

Cohen, Savin (1966). A Recommended Reading Improvement Program for a Community College. Journal of Reading, Vol. 9, 1965-1966.

This article discusses ten guiding principles that should be incorporated in a community college's reading program. It then goes on to discuss the appropriate methods of teaching reading to at-risk students.

Gabriel, Dennis (1983, December). The Mainframe Computer in a Basic Reading and Writing Class. Paper presented at the annual meeting of the Ohio Instructional Computing Conference, Parma.

This article discusses the chief advantage of the use of a computer in a basic reading and writing class. Uses of the computer which have been developed for this purpose are discussed as well as ititial problems associated with the use of a mainframe computer for a basic reading program.

Kingston, Albert J. Jr. (1952). Student Reaction to a College Reading Improvement Program. Junior College Journal, 23, 98-101.

This article describes the purpose and function of the remedial reading program at the Agricultural and Mechanical College of Texas. It discusses the reaction of students to the program as well.

BIBLIOGRAPHY

Ahrendt, Kenneth M. (1975). Community College Reading Programs. Newark, Delaware: International Reading Association.

Clark, Burton R. and Neave, Guy R. (Eds.) (1992). The Encyclopedia of Higher Education, (Vol. 2). New York: Pergamon.

Cohen, Savin (1965). A Recommended Reading Improvement Program for a Community College. Journal of Reading (Vol.9), 163-169.

Gabriel, Dennis (1983). The Mainframe Computer in a Basic Reading and Writing Class. ED 239 710.

Hawse, D. H. (1949). Pity the Poor Freshman! Junior College Journal, 14, 391.

Kingston, Albert, J. Jr. (1952). Student Reaction to a College Reading Improvement Program. Junior College Journal, 23, 98-101.

Chaper 2- Current State of the Art

As Martin observed (1971), with the influx of large numbers of students deficient in reading, remedial reading services would be in great demand in community colleges. He predicted that the trend would be likely to continue as community colleges developed more liberal admissions policies and that programs would be needed for the disadvantaged. When comparing the most current data available to date, whereby 2,863,780 students enrolled in community colleges in 1972 as compared with 5,5055,453 in 1987 (Clark, 1992), it is clear that Martin's predictions were extremely accurate. The purpose of this chapter is to examine the current state of the art on corrective strategies in reading for at-risk community college students -- a population that is ever increasing.

At Nassau Community College, State University of New York, the Basic Education Program currently in place emphasizes learning strategies and metacognition. The strategies that are used are highly structured -- mnemonic devices, planning, and organizing strategies. In reading, there are several prereading activities such as mapmaking and organizing before reading. In addition, the students in the Basic Education Program are required to attend weekly counseling sessions as well as computer-assisted labs for reading, writing, and math. Counseling generally revolves around issues of independence for learning disabled students. A major function of counseling is to

help these students understand their learning disabilities. They have to learn to be able to reveal and explain them to their professors. They are helped to learn to deal with their very negative feelings towards themselves. Students are referred for services on the basis of freshman placement tests in reading, writing, and mathematics. All students who are accepted into the college must take these tests. On the basis of their performance, some students are required to take a basic education remedial program (Becker, 1990).

Students from ages eighteen to eighty choose to attend community colleges for a multitude of reasons. These students often have the proper motivation, but they frequently face failure because they lack the requisite basic skills to succeed. At Rock Valley College, Rockford, Illinois, the decision was made to stop the revolving door. Beginning with the fall semester of 1986, Rock Valley College implemented an assessment program to turn that revolving door into a guarantee that its students have a chance to succeed by prescribing mandated placement in developmental reading and writing courses (Castleberry, 1990).

The guarantee for a chance to succeed hinges on the stipulation that students are excluded from college level courses until they successfully complete the necessary reading courses. Every new student enrolling in a credit course is tested in reading, English, and math. Students are allowed to take the

assessment tests only one time, so the placement process is set in motion at the end of a one hour and thirty minute test session. The cornerstone of the placement program is based on the results of the reading tests (Castleberry, 1990).

Reading 099 is for students with DRP (Degrees of Reading Power), test scores between 94% and 75%, and reading levels between grades 8 and 10. These students are allowed to enroll concurrently in courses on the Reading Limited Course List. This list is composed of performance music courses, studio art courses, physical education activity courses, mathematics courses, student orientation courses, a small number of technical and computer courses which require limited reading, and developmental English 098. For those courses which have textbooks or required handbooks, readability formulas have been applied to determine that the reading level and amount of required reading are within the ability range of these students (Castleberry, 1990).

The success rate of the students placed in the reading courses has been dramatic. Of the number of students who complete the courses, 76% passed Reading 099 with a grade of C or better. Post-test results on the Nelson-Denny Reading Test, Form F, show an average gain of two years in one semester. Students average a post-test gain of nine points on the Degrees of Reading Power, Form PB-2. Rock Valley College faculty, administration,

and students are pleased with the results of the assessment program. Students entering Rock Valley College know their basic skills will be assessed and they will be placed in courses designed to help them succeed. The door is open but has stopped revolving (Castleberry, 1990).

At the Moraine Valley Community College, Palos Hills, IL., there are three levels of reading classes that are offered. RDG-040 covers basic reading skills, vocabulary and comprehension on a funcional level; students who test into this course read below the 7th grade level. RDG-070 is the second level reading course, emphasizing vocabulary, comprehension and rate skills, and is designed for students who read at the 7th to 8th grade level. The third reading course is RDG-090, which emphasizes critical reading skills and is intended for students who read at the 9th through the 11th grade level. Half of the students (50 percent) were recent high school graduates, (that is,they entered Moraine Valley directly from high school), and half were not. The average age was 21; the median age was less (19). The oldest student was 61 and the youngest was 17. Overall, 72.3 percent of the students completed their reading class with a grade of C or better. Ten percent received a D, or F in their reading class, and 17.7 percent received a grade of N, W, or I. The grade distributions were similar for RDG-070 and RDG-090 students (Reis, 1992). These developmental courses are designed,

theoretically, to remediate student deficiencies so that the students can then successfully complete college-level coursework (Reis, 1992).

In the spring of 1992, at the Evergreen Community College, San Jose, CA., a program was initiated to assist underprepared students entering reading, writing, and math courses below the level of transfer English and math courses. The program entitled Gateway U (GU), includes the following components: weekly surveys of students during the first 4 weeks of class to determine if students understood their assignments, and if they wanted to see a tutor, talk with the instructor, or study with other students; a program assistant who immediately contacted students having difficulty; block scheduling of reading, writing, and math classes; student study groups; and assistance for students on visits to student services offices. A total of 259 students participated in GU. Elements of the program are as follows:-

Students are surveyed every week for the first four weeks asking questions like: Do you understand your assignments?; Do you want a tutor?; Would you like to study with other students? A program assistant is provided to immediately contact students having difficulty. Other program features include: Blocking reading, writing, and math classes to facilitate support among

students in the program; doing success and retention research to monitor the impact of the intervention strategies; giving the program a name and an identity to foster identification with, and pride in, the program. Support offered includes: listening, taking the student to the instructor; providing spot tutoring; explaining assignments; finding the student a tutor; forming study/support groups; taking the student to a counselor; personally taking the student to needed student services; conferring with instructors about students having difficulty (Kangas, 1992).

Three comparison sections were chosen for each of the nine Gateway U sections. They were typically sections taught by the same instructor the same semester or the same instructor in a previous semester. Three major findings resulted:

259 Gateway U students had: a 64% success rate, 796 non-Gateway U students had a 45% success rate; a 72% retention rate, non-Gateway U students had a 53% retention rate. In 81% of the comparisons with non-Gateway sections, Gateway U sections had a higher success rate. In 85% of the comparisons with non-Gateway sections, Gateway U sections had a higher retention rate (Kangas, 1992).

As a result of these findings, the Gateway U model has great promise for increasing the success and retention of underprepared

and ethnically diverse students. Plans are to continue adding elements to the program and to continue monitoring the results with research. Future program elements include the addition of an in-depth assessment component for students in the lowest levels of the reading, writing, and math. A team of professionals is envisioned including a social worker, a job development specialist, a career counselor, the instructor, and a learning disability specialist. An individual education and career plan developed by this team of professionals is the planned outcome (Kangas, 1992).

Following the introduction of a one-credit practice lab, and computer-assisted practice into a developmental reading course at the Riverside Campus of Austin Community College (Texas), a study was conducted comparing the effectiveness of practicing reading skills using computer software with practice using text-based materials (Burke, 1992).

After incorporating an additional one credit practice lab and computer-assisted practice into the community college developmental reading classes, students seemed to be making greater gains on the exit test (the Nelson Denny Reading Test). That observation prompted a study. If computer-assisted practice is more effecive with developmental community college students, then more materials should be dedicated to software

programs (Burke, 1992). Questioning whether their assumptions about computer-assisted and text-based practice would prove to be true, the following research was conducted:-

Method

Design:

Quasi-experimental and observational. Anecdotal records were developed.

Subjects:

Students enrolled in developmental reading skills classes at Austin Community College, Riverside Campus, Austin, Texas.

Dependent variable:

Reading ability as measured by the Nelson Denny Reading Test, Forms E and F.

Independent variables:

Three different instructional conditions:

(1) computer-assisted practice lab: two four unit Reading Skills I and II classes, Fall, 1991, 25 students.

(2) text-based practice lab: two four unit Reading Skills I and II classes, Fall, 1991, 26 students.

(3) mixed instruction, no practice lab; all Reading Skills I and II, classes, Spring, 1989, 52 students. This was the last semester of classes taught before implementation of the practice lab.

Procedures:

In the Fall semester, 1991, two experienced instructors each taught two classes using direct group instruction, one class with a computer-assisted practice lab and one with a text-based practice lab. Both software and text practice materials were correlated to the concepts presented in the classroom. Peer-to-peer communication characterized the activities of both practice labs, through E-mail in the computer-based practice lab and small groups in the text-based practice lab. At the end of the semester, gain scores on the Nelson Denny Reading Test for the two groups were compared. Gain scores on the Nelson Denny Reading Test for the practice lab classes were then compared to the traditional classes without practice labs. The Reading Skills I and II classes taught in Spring, 1989 were selected for the comparison because they were the last classes to be taught without computer-assisted practice and without the additional weekly one hour practice lab.

Controls:

(1) For the text-based and computer-based comparison, instructor effects were minimized.

* Only two instructors taught the lab courses. Neither instructor preferred one method to the other.
* The classes were counterbalanced.
* A common syllabus was followed for each course.

(2) For the practice lab/non-lab comparison, data was not available to control fully for instructor effects.

(3) Students did not know of the differences in classes at the time they registered for Reading Skills, nor were they told of the study or of the difference in methods of instruction during the semester.

(4) The three groups of students were nearly equivalent of several measures. They were nearly equivalent in age, ethnicity and gender. A one factor ANOVA was computed on the Nelson Denny pretests for the three groups, p=.98 (Burke, 1992).

Results

(1) The performance of the computer-assisted practice group and the text-based practice group was not significantly different, p=.336.

(2) The performance of the two practice lab groups was significantly higher than the performance of the group from 1989 that did not have the practice lab, p=.005. Although statistical comparisons for the two instructors could not be performed, it was noted that the means for their classes were higher for the practice lab classes than they were for the non-lab classes (Burke, 1992).

The computer-assisted practice group and the text-based practice

group did not differ significantly in gain scores on the Nelson Denny Reading Test. However, in a second comparison, a significant difference was found in reading gains for additional practice time. Currently, all classes are being taught using correlated computer-assisted and text-based practice in a collabortive setting. As they continue to monitor gain scores in their three and four unit classes, they hope to determine more conclusively how method and practice time effect reading improvement in developmental community college students (Burke, 1992).

The University of Toledo Community and Technical College offers "Effective Reading," (ER), which is a course designed to help developmental readers succeed in college reading through improved reading comprehension. The foundation of the course involves teaching students the "KWL procedure," in which students use a special three-column chart on which they list what they "Know" about the contents of a text prior to reading, what they "Want" to find out during the reading process, and what they "Learned" after reading (Stone, Miller, 1991). (Example of model attached).

This strategy has been effective for students in elementary school, and was developed by Donna M. Ogle in 1986. Ogle felt that teachers needed to honor what children bring to each reading situation and model for students the

importance of accessing appropriate knowledge sources before reading. She agreed with Anderson, (1977), that "...prior knowledge is exremely important in influencing how we interpret what we read and what we learn from reading."

Students entering the Effective Reading course at The University of Toledo Community and Technical College have Degrees of Reading Power unit scores which range from 60 to 70 or whose ability to process reading material at the instructional level with eighty percent comprehension averages 64 Degrees of Reading Power units. In the Effective Reading course, comprehension is taught as a series of strategies, cognitive processes which are voluntarily and consciously used to accomplish the reader's purpose. Brown and Palincsar (1982) have shown that strategies such as predicting, inferring, and summarizing can be taught, and that students' comprehension can be improved by learning such strategies (Stone, Miller, 1991).

KWL is foundational to the course, and every other strategy taught is sequentially linked to it. The KWL procedure enhances comprehension by getting readers to activate background knowledge relevant to the text, ask their own questions about the topic, then read to answer their questions. The success of KWL can perhaps be explained by research on schema theory, which has shown that students who pose their own questions about a passage are likely to comprehend it better than students who read to

WHAT I KNOW	WHAT I WANT TO FIND OUT	WHAT I LEARNED

Figure 2

answer questions posed by an instructor (Andre' & Anderson, 1978-79).

When the KWL chart is completed, the three completed columns show students that they have indeed comprehended and have learned something from reading a passage. The important point about the KWL technique is that it can help students gain independence at comprehending and at monitoring their comprehension (Stone, Miller, 1991).

Under the current model and course structure, the success rate, as measured by the percent of students passing the course, has soared. The initial 1986 pilot program produced a pass rate of 80% and the 154 students who took Effective Reading during Fall 1987 demonstrated a pass rate of 84%. The pass rate for 115 students in Fall 1988 was 77%. The criteria for passing the current ER course are as follows:- students must demonstrate ability to use a variety of reading strategies to meet different purposes. They must also successfully complete homework, assignments, journals, oral presentations, and teacher-made tests in addition to the DRP posttest (Stone, Miller, 1991).

The primary indicator of success, however, was the distribution of sociology grades of underprepared students enrolled in both reading and the corequisite sociology course. Past experience showed, that without transfer of reading

strategies to sociology, reading students' grades in sociology would be predominantly D's and F's. However, 72.4% of the students enrolled in reading and sociology in Fall of 1987 earned a grade of C or better in sociology, with their sociology grades approximating a normal curve. In 1988 no reading student earned an F grade in the sociology course. Therefore, the conclusion was reached that the corequisite status of reading strategies to sociology resulted in the achievement of passing grades (Miller, Stone, 1991).

Students have succeeded because they were shown the secrets of success for readers. They have learned about themselves as learners, and have discovered their potential to use and control the reading processes. They have also learned course content in sociology, the vehicle for practice of reading strategies. The conclusion reached is that underprepared college students can transfer strategy learning to other coursework, both in the immediate situation and in subsequent college courses (Miller, Stone, 1991). As Hardin (1988) has stated, developmental students can become active, successful learners if they are given instruction which is meaningful - instruction which shows them the secrets of success (Miller, Stone, 1991).

At St. Philip's College, one of the community colleges of the Alamo Community College District, (San Antonio, Texas), developmental students are scheduled for five hours of

instruction per week. Two of the hours are devoted to an individualized lab program, using print materials one day and computer software another day, with the instructor guiding the students through a prescribed program in a skills-mastery format. In this setting, critical reading primarily is approached by the types of questions asked of the student by the instructor (Otey, 1991).

When a student is having trouble with locating the main idea, for instance, the instructor will ask her to say what the writer was trying to get across before looking at multiple-choice possibilities. In other words, even in a setting in which skills are emphasized, interaction between the student, instructor, and text can encourage thinking beyond the literal comprehension level. It is in the three hours per week of classroom instruction, however, that group activities encouraging higher level thinking can be best utilized (Otey, 1991).

In order to develop strategies and find materials suitable for postsecondary developmental readers, Otey (1991) found it helpful to borrow and adapt teaching strategies designed for elementary and junior high classrooms. Instead of adopting the KWL procedure being used at the University of Toledo Community and Technical College, Otey uses a DR-TA approach in his classes. The steps are as follows:-

DR-TA MODIFIED FOR COLLEGE STUDENTS

RESOURCES: Short Essay or articles from periodicals; short stories

STEPS:

1. Preview briefly.
2. Divide into small groups of two or three
3. Partners read introductory paragraphs aloud.
4. Stop and ask where the writer seems to be headed and what questions may be answered.
5. Partners decide whether to continue reading aloud or to read to a certain point silently.
6. After reading the agreed-upon section, stop again and predict the ending.
7. Read the conclusion.
8. Decide together whether the predictions were accurate, whether the author delivered what was promised, whether the ending seems valid.
9. Groups compose a summary paragraph; reduce to a summary sentence, if possible.
10. Groups share summary statements with whole group.

For shared book reading, same basic process, with partners agreeing on places to pause and make predictions or revise earlier predictions. Some class time is set aside for partners to touch base each week (Ctey, 1991).

Directions to guide the student in preparing a pre-reading written organizer are:

PRE-READING WRITTEN ORGANIZERS

To write an organizing paragraph, follow these steps:

STEP 1: READ THE TITLE.

STEP 2: READ THE INTRODUCTORY PARAGRAPHS.

STEP 3: READ ANY SUBHEADINGS IN THE MATERIAL.

STEP 4: READ THE CONCLUDING PARAGRAPHS.

STEP 5: WRITE YOUR ORGANIZING PARAGRAPH.

HOW TO WRITE AN ORGANIZING PARAGRAPH

A. From information gathered in Steps 1, 2, 3 and 4. write a sentence which captures the main idea or main point of the article.

B. Next, write a series of sentences which provide details for the main idea sentence, or which relate to or explain the main idea. For these sentences, you may have to glance over the whole article to pick up important details.

C. On a separate sheet of paper, jot down anything that puzzles you about your preview. Are there any holes left?

STEP 6: READ THE SELECTION.

STEP 7: MAKE ANY REVISIONS OR ADDITIONS NEEDED TO TURN YOUR PRE-READING PARAGRAPH INTO A SUMMARY (Otey, 1991).

From among a variety of collaborative learning approaches likely to generate interation and shared thinking, Otey (1991)

chose to focus on two. One is the Jigsaw Method introduced by Aronson et al. in 1978 and adapted by Dolores Perin (1988). The second is an "adult" version of Think-Pair-Share, a technique proposed by McTighe and Lyman (1988):-

THE JIGSAW METHOD

RESOURCES: Texts from General Education Courses, such as psychology

STEPS:

1. Preview a chaper, using subheads to divide into "chunks."
2. Break into groups of equal size: number to match number of "chunks."
3. All groups read summary to get an overview of the material.
4. Each group member takes responsibility for a particular concept.
5. Groups disband and regroup with counterparts from other groups.
6. "Expert" groups read and discuss their section of chapter in depth.
7. Original groups re-form and share the knowledge of the experts.

THINK-PAIR-SHARE VARIATION

RESOURCES: Vocabulary lists or lists of roots and affixes

STEPS:

1. Establish a five-minute task: listing

synonyms of group of words, for instance, or thinking of several words from the same root. (Two students will have the same words or roots assigned).

2. Individuals think or write on their own for three minutes.
3. Pairs then team up to compare lists and add to them.
4. Each pair then shares with the class.
5. Their master lists are collated and copied for whole class to use in preparation for test.

Other tasks adaptable for this kind of quickie include inferencing from short passages or sorting the major and minor details in topical paragraphs. The main purpose is to stimulate interaction and to underline the importance of each individual's thinking (Otey, 1991).

As college students are encouraged to broaden their reading experiences and to enlarge their critical thinking abilities, needed are an array of resources, techniques, and strategies close at hand. From those, Otey (1991) believes, the most appropriate strategies can be pulled for the particular students being taught. Only by enlarging our teaching repertoires and remaining open to fresh approaches can we

motivate and nurture our students' growth as readers who think and thinkers who read (Otey, 1991).

REFERENCES

Anderson, R.C., & Pearson, P.D. (1984). A schema-theoretic view of basic processes in reading comprehension, In P.D. Pearson (Ed.), Handbook of Reading Research (pp. 225-291), New York: Longman.

Andre', M.E. D. A., & Anderson, T. (1978-79) The development and evaluation of a self-questioning study technique. Reading Research Quarterly, 14, 605-623.

Aronson, E., Stephan, C., Sikes, J., Blaney, N., & Snapp, M. (1978). The jigsaw classroom. Newbury Park, CA: Sage.

Becker, Sydney (1990). Guidelines for Community College Faculty and Support Staff. Conference Proceedings. Presented to City University of New York, N.Y. Inst. for Research and Development in Occupational Education. ED 331 278.

Brown, A.L. (1980). Metacognitive development and reading. In R.J.Spiro, B.C. Bruce, and H.F. Brewer (Eds.), Theoretical issues in reading comprehension (pp. 451-481). Hillsdale, NJ: Lawrence Erlbaum Associates.

Burke, Marilyn (1992). Computer-Assisted Vs. Text-Based Practice: Which Method Is More Effective? Presented at the Annual Midwest Reading and Study Skills Conference (5th). ED 350 046.

Castleberry, K. Sue (1990). Assessment: Stopping the Revolving Door at Rock Valley College. Reading Horizons, 271-278.

Clark, Burton R. & Neave, Guy C. (Eds.) (1992). The Encyclopedia of Higher Education, (Vol. 2). New York: Pergamon.

Hardin, C. J. (1988). Access to higher education: Who belongs? Journal of Developmental Education, 12, 2-6.

Kangas, Jon (1992). Success and retention rates for Gateway U Classes, Spring 1992. ED 349 049.

Martin, David A. (1971). Teaching Reading in a Community College -- A Remedial Activity. Journal of Reading, 369-424.

McTighe, J. & Lyman, F.T. (1988). Cueing thinking in the classroom. Educational Leadership, 42, 43-50.

REFERENCES

Otey, Jerry A. (1991). Beyond the Literal Level. Presented at the Annual Conference of the National Association of Developmental Education (15th). ED 331 572.

Reis, Elizabeth (1992). Remedial Reading Students at Moraine Valley Community College. ED 356 005.

Stone, Nancy & Miller, Karen (1991). Developmental college reading: secrets of our success. ED 329 317.

ANNOTATED BIBLIOGRAPHY

Martin, David P (1971). Teaching Reading in a Community College -- A Remedial Activity. Journal of Reading, 369-424.

This article discusses the importance of "definiteness" as the essential part of a corrective reading program. For the student, it is knowing how he is performing at all times, what he can do to improve, how far he can expect to improve, and what specific progress he is making. The article goes on to illustrate organization around one or two major objectives.

Otey, Jerry (1991). Beyond the Literal Level. ED 331 572.

This paper describes various strategies for teaching critical reading skills to developmental students. Relevant resources are cited, a step-by-step instructional approach is provided, and the purpose and goals of the specific strategy are reviewed.

Reis, Elizabeth (1992). Remedial Reading at Moraine Valley. ED 356 005.

This article discusses an open enrollment policy and the need for remedial/developmental education in community colleges. It summarizes retention, course completion, and graduation rates of students who took a remedial reading class at Moraine Valley in fall 1988.

Chapter 3 - Needs Assessment and New Directions

Recently studies have been conducted throughout the country in an attempt to gather information on the status of student assessment and developmental education in community colleges as perceived by administrators and instructors directly responsible for these efforts. Let us examine some of these findings:-

One of the major functions of Piedmont Virginia Community College (PVCC) is to provide developmental courses for students. All curricular students are required to complete an assessment program prior to registration. Assessment includes measuring current levels of skill in reading, writing, and mathematics. To measure reading skills, the Nelson-Denny Reading Test (Form E), is used, consisting of a vocabulary section and a reading comprehension section. Students scoring below the 10th grade equivalent reading level, as measured by the combined score on the test, are advised to take ENGL 08 (Reading Improvement). Once enrolled in developmental classes, all students receive further testing, both formal and informal, to assure accurate placement. A variety of tests are used in reading courses to assess reading (Walsh, Head, 1988).

In January 1984, PVCC began recording assessment results from the English Qualifying Exam and the Nelson-Denny test. Since that time, 1,960 students have been assessed. To determine what impact developmental courses have on other courses offered

at the college, 25 students were selected at random from all students assessed in 1985. The only criteria used to select these students were a score below 24 on the English Qualifying Exam and a total raw score below 64 (the 10th grade reading level) on the Nelson-Denny Test. Of the 25 students, 13 enrolled in developmental reading (ENGL 08) and 12 did not. Six of the 13 students enrolling in ENGL 08 successfully completed the course; 7 did not. Only 4 of the 12 students not enrolling in ENGL 08 enrolled in content courses at PVCC. The remaining 8 students either did not enroll at the college or took only developmental English, math, or chemistry courses. The data suggested that within a group of students with below a 10th grade reading level, those who successfully completed developmental reading generally had higher grades in content courses and withdrew less frequently than those who had not enrolled in ENGL 08 or who had enrolled in ENGL 08 but had not completed it (Walsh, Head, 1988).

It appears that the students who participate (at PVCC) in the reading developmental course are having their needs met. However, the problem seems to be that the choice is up to the student as to whether or not he/she will enroll, complete the course, etc. This seems to be a major flaw. It appears to this writer that the program should be a mandatory one; those students who are in need of reading remediation, but elect not to complete the requirements, should not be allowed to continue in the college. Additionally, there should be rules and guidelines for those

students who enroll in the program, but do not pass it. Can they repeat the course? If they are permitted to do so, and are still unsuccessful, what are the guidelines within the community college? These are questions that need to be addressed.

In 1990, a study was conducted to gather information on the status of student assessment and developmental education in Michigan's 29 public community colleges. Enrollment in developmental courses in the Fall term, 1988, totalled 38,178, with 7,469 of those students enrolled in reading. Administration of a standard diagnostic reading test was the most commonly reported assessment that took place within developmental reading classes. Only thirteen colleges (45%) reported that they had a system for monitoring student progress across developmental areas (1990). In 15 colleges (52%), students did not need to pass prescribed developmental coursework before they could enroll in college-level coursework (Michigan State Board of Education, 1990).

The five most frequently reported strengths of Michigan's community colleges' developmental efforts were: faculty, institutional support, cooperation/collaboration across departments, student benefits, and student assessment. The five most frequently reported areas of concern regarding Michigan's community colleges' developmental efforts were: adequate financial support for instruction, staff, and space; student placement, evaluation of student outcomes; professional development for developmental/

non-developmental faculty/staff; and "hard to serve" students.

The conclusion of the survey of Michigan's public community colleges was as follows:-

a. Community colleges should be certain that their assessment instruments are valid, reliable, free of bias, and used for their intended purpose, using more than one if necessary.

b. Community colleges should develop a procedure to ensure that all students are apprised of the academic implications of enrolling in developmental education (e.g., type of academic credit awarded, effect on grade point average, implications for transfer).

c. Community colleges need to examine their structure (centralized or decentralized) for providing services and courses to ensure that all students are provided equal success to needed developmental support.

d. Community colleges should examine the level of student support services available to evening and off-campus students who enroll in developmental courses.

e. Community colleges need to ensure that their developmental activities compliment college-level courses and produce the prerequisite skills needed in college-level courses.

f. Community colleges need to improve record and data keeping procedures to determine the impact of developmental services on

various student populations.

g. Community colleges need to utilize stronger evaluation methods to determine the effectiveness of developmental efforts and incorporate the results into their decision making process.

h. Community colleges need to ensure that their Activity Classification Structure Report (ACS #6) is accurate and reflects the amount of their credit and non-credit instructional activities in developmental education.

g. Community colleges need to ensure that their developmental education policies and practices are congruent with national financial aid "Ability to Benefit" regulations (1990).

Michigan Community Colleges do not mention mandatory course participation in reading remediation studies, a point over-looked in Piedmont Virginia Community College as well. If the general population of community college students are required to meet certain criteria, this writer questions why the completion of reading remediation courses (if needed), are not a prerequisite for staying in college.

In the state of California, The Curriculum Study in Reading was conducted to closely inspect the reading courses and programs currently offered in the state's community colleges. Some of the findings were as follows (Bogue, Barr, 1989):

* Fifty-four (87%) of the reporting colleges offer reading courses at the 10-12th grade level range. At most of these colleges coursework at this level is degree applicable but non-transferable.

* Sixty-one (98%) of these colleges offer reading coursework at the 8-10th grade level range. Coursework at this level is often non-degree applicable.

* Fifty-two (84%) of the reporting colleges offer reading courses at the 4-7th grade level range. Generally, coursework at this level is non-degree applicable.

* Forty-eight (77%) of the reporting colleges offer reading courses at the 0-4th grade level range. At most of these colleges, courses in this range are non-degree applicable; some colleges offer courses at this level on a non-credit basis.

Three major patterns or models of overall program configuration are apparrent:-

* Model I - Individulized to Classroom Offerings. With this model, reading instruction is provided through individualized reading programs, usually spanning the entire range, 0 through college level, and classroom or classroom-lab offerings are made available, usually beginning at the 8th or 10th grade level. Students who enter with low reading scores receive only individualized instruction. Upon reaching the level of the first classroom

offering in the sequence, students receive further reading instruction in the classroom; however, some of the students may receive additional reading instruction through the individualized programs instead.

* Model II - Classroom-lab and Individualized Instruction Spanning All Levels. In this model, colleges offer reading instruction across the entire range, 0 through college, in both individualized and classroom based courses, providing students flexibility and a greater number of options.

* Model III - Classroom or Classroom-lab Instruction Only. In some colleges reading coursework is offered only through the classroom or classroom-lab. In this model, reading coursework may not be made available across all levels; offerings at the lowest levels and/or the college level frequently are omitted.

READING COURSE CONTENT

* Courses at the 8-12 range place major emphasis in areas of comprehension, study skills, vocabulary, fluency, figuarative language, and critical thinking. Depending on the level of the offering, certain skill areas are given higher priority than others, with critical thinking and figurative language receiving major emphasis in the 10-12 range, but not in offerings at the 8-10 range. Courses in the latter range focus primarily on major aspects of vocabulary and comprehension

as well as Survey, Question, Read, Recite, and Review (SQ3r), a major study skill. Phonics, spelling and grammar and mechanics do not receive major emphasis in coursework in the 8-12 range.

* Courses at the college level address fewer subskills than those in the 8-12 range; most emphasize critical thinking, comprehension, fluency, figurative language, and SQ3R.

* Courses at the lowest level, 0-4, focus on fewer subskills than those in the 8-12 range also; most emphasize phonics (word attack and structural analysis of words), vocabulary, and spelling. Courses at the 4-7th grade level emphasize phonics and vocabulary, too, but comprehension is emphasized instead of spelling.

* Other aspects of content which can be noted are these: 1) figurative language and/or vocabulary development are emphasized in reading at all levels, 0 through college; 2) some comprehension subskills are emphasized in reading coursework at the 4 through college range; 3) grammar and mechanics are not emphasized in reading courses at any level.

CONCLUSIONS, IMPLICATIONS, AND FURTHER QUESTIONS

Among the key questions raised regarding assessment, range of offerings and program configuration, are the following:

1. Do some of the placement tests available on the market yield

more accurate information than others, given similar or equally matched groups of students?

2. Are the reading offerings made available to students scoring in the lowest percentile range sufficient to meet their needs?

3. Given similar or matched groups of students, is one program configuration, including the blend of offerings or options, course parameters, and range of offerings, more effective than another in terms of student gains and success in content area coursework taken later?

4. Would reading instruction be more effective as well as performance in the course at the next level if a closer match were reached between students' demonstrated performance on placement tests and the beginning grade level parameters of the reading courses in which the students are placed?

5. Would reading instruction be more effective as well as performance in the course at the next level if a closer match were reached between the end performance levels demonstrated by students and the end grade level parameters specified for the reading courses in which they are enrolled?

6. Would reading instructors be in a better position to evaluate the effectiveness of their instruction if they measured the gains made by their students using the standardized instruments available?

7. Should a reading test be used to determine eligibility for the AA/AS Degree? If so, what grade level/raw score should be attained to meet the graduation requirement? (Bogue, Barr, 1989).

Although this study describes the general features and questions raised in reading programs in community colleges in California, it is obvious that more research is needed pertaining to this at-risk population.

How can community colleges be both effective and efficient with large numbers of underprepared (at-risk) students and, what assists underprepared students to be more successful? In many community colleges, the assessment of students' basic skills in reading, writing, and mathematics and the placement of these students in courses that are appropriate to their skills levels have become key strategies for improving student success (Ahrendt, K., 1987). The emphasis is, first, on increasingly systematic basic skills assessment that provides data on students' learning needs; second, on directing and placing students in appropriate levels of classes; and, third, on establishing a system of accountability for student learning and retention for courses, programs, and degree completion (Ahrendt, K., 1987).

One emerging theme is that there is a significant link between the activities of assessment and instruction. Since a majority of community college students require developmental

assistance in reading, the goals and objectives of instruction have become increasingly dependent on assessment activities that monitor the growth of students from entrance to exit. The crucial relationship that is developing between assessment and instruction asks a new set of questions: How do assessment and appropriate placement improve learning and retention? What assessment tests are most appropriate for use in community colleges? What guidelines regarding assessment and placement should community colleges use? How can assessment and placement data help community college faculty to improve their teaching and increase learning outcomes for students? (Ahrendt, K., 1987).

Richardson (1983) asserts that the open door of the community college too often becomes a revolving door when students' needs are not met and program quality decreases. He indicates that a response by community colleges to the issue of open access should resolve questions related to defining the competencies needed for a reasonable chance of success in each program offered, assessing students to determine whether they have the requisite competencies, and placing them appropriately (Ahrendt, K. 1987).

The premise that individual student success (for at-risk students) is closely related to an institution's ability to organize for directing the student to this success is important. The central question is, who is responsible for the success of

the at-risk students, the institution or the student? Roueche (1984b,p.51) indicates, "...processes employed to manage students are as important as, if not more important than, instructional processes." However, based on the 101 community colleges that responded to the California Postsecondary Education Commission (1983), it was found that diagnostic testing and assessment of students' basic skills deficiencies in the community colleges ranged from nonexistent at one college to a sophisticated testing system in reading and writing at another, which gives students information not only about their test scores, but also about entry-level classes for which they are eligible and ineligible.

The 1979 report of the Community Colleges' Basic Skills Advisory Committee observed that "...colleges are not consistent in their approach to the initial assessment and advising of the student..." (Chancellor's Advisory Committee, p. 11). Great diversity exists as well in the testing instruments used, the populations tested, and the reasons for testing, be it for diagnosis, course placement, course entry, prerequisite fulfillment, or graduation proficiency (1983).

All California Community Colleges provided remedial course work in reading during 1981-82. According to the 1979 basic skills report of the Community Colleges, courses in reading

levels are offered by 98 percent of California's Community Colleges, and 96 percent of the colleges offer reading courses for students scoring under the seventh grade level. One of their reading courses is designed for illiterate or semi-literate students! Says a reading instructor at this college, "Many students have told me that they have come through high school without reading a book" (California State Postsecondary Education Commission, 1983).

Johnson (1989) specifically studied remedial reading programs. He concluded that remedial reading programs can be successful in assisting high-risk students in their academic endeavors provided the reading programs are well structured, linked with academic courses, taken concurrently, stress a supportive relationship with the instructor, include behavioral counseling, are interwoven with other services and function proactively instead of reactively (Jones, Jackson, 1991). Based on the current research, this writer is in full agreement with Johnson, and has developed a program for corrective strategies in reading for at-risk community college students. Incorporated in the program are ideas gleaned from community colleges cited in this paper:-

"UTOPIAN CORRECTIVE STRATEGY PLAN IN
READING FOR AT-RISK COMMUNITY COLLEGE STUDENTS"
Carole Yevoli

1. All curricular students must be required to complete an assessment program prior to registration. To measure reading

skills, the Nelson-Denny Reading Test (Form E) will be used. Students scoring below the 10th grade equivalent reading level as measured by the combined score on the test must take the Reading Improvement Course. (They may take the assesssment test only once). If at the end of the first semester, the student does not master the appropriate skills, they may repeat the course again. If after the second attempt the student fails to master the necessary skills, they may not continue to attend the community college.

2. A program assistant must be provided for students having difficulty. If necessary, the program assistant will provide spot tutoring, explain assignments, find the student a tutor, take the student to a counselor and confer with instructors about students having difficulties.

3. The foundation of the reading course will include teaching students the "KWL procedure," in which students use a special three-column chart on which they list what the "Know" about the contents of a text prior to reading, what they "Want" to find out during the reading process, and what they "Learned" after reading.

4. Sociology or Psycology will be taught in conjunction with reading remediation. (Without transfer of reading strategies, success is minimal).

5. Informal and formal tests must be given frequently to

test for the obvious: reading speed, comprehension and vocabulary.

Results must be carefully evaluated on a monthly basis assessing data on students' learning needs.

6. Student's are to be instructed in computer-assisted labs and must be required to send an E-mail report about what they have learned the previous five days in classes. This information must also be carefully monitored.

7. Students must be placed in appropriate levels of classes. A constant review of their progress will make this possible, and as a result, the students' needs will be met.

"As education approaches the twenty-first century, there is a greater body of knowledge about how and why persons learn, grow, and develop than ever before" (Clark, Neave, 1992). This writer respectfully submits her contribution to that body of knowledge in the hopes of helping the at-risk community college reading population.

Annotated Bibliography

Ahrendt, Kenneth M. (1987). Teaching the Developmental Education Student. New Directions for Community Colleges, Number 57. ED 280 519.

This collection of essays addresses various themes related to developmental education in two-year colleges. There are nine collections included. The one cited for this paper is "Assessment and Placement of Developmental and High-Risk Students," by Dorothy Bray, which relates skills assessment and course placement to student success and satisfaction.

Bogue, Carole and Barr, Robert (1989). Curriculum Study in Reading. ED 321 781.

In fall 1987, a study was conducted by the Learning Assessment Retention Consortium to closely inspect the reading courses and programs currently offered in the California community colleges. All 106 community colleges in the state were surveyed regarding testing instruments used, the number and level of reading courses offered, entry and exit criteria, and course content.

Walsh, Bette and Head, Ronald (1988). Developmental Reading and Writing at Piedmont Virginia Community College. ED 297 803.

A study was conducted at Piedmont Virginia Community college to analyze the college's assessment of students' reading and writing skills. Also investigated was the relationship between assessment scores and grades in specific content courses, establish the relationship between developmental course completion and content course grades, and measure skill improvement.

BIBLIOGRAPHY

Ahrendt, Kenneth M. (1987). Teaching the Developmental Education Student. New Directions for Community Colleges, Number 57. ED 280 519.

Bogue, Carole and Barr, Robert (1989). Curriculum Study in Reading. ED 321 781.

California State Postsecondary Education Commission, Sacramento (1983). Promises to Keep: Remedial Education in California's Public Colleges and Universities. ED 230 087.

Clark, Burton R. & Neave, Guy C. (Eds.) 1992. The Encyclopedia of Higher Education, (Vol. 2). New York: Pergamon.

Michigan State Board of Education, Lansing (1990). A Survey of Student Assessment and Developmental Education in Michigan's Public Community Colleges. ED 320 624.

Walsh, Bettye and Head, Ronald (1988). Developmental Reading and Writing at Piedmont Virginia Community College. ED 297 803.