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Reading in the Community College

THE ALARM ABOUT STUDENTS' apparent low reading ability is misdirected, and time spent teaching them study skills is time wasted. The reading tests used do not give accurate measures of reading ability, and some of the ways of teaching reading are ineffectual if not counterproductive. Since community colleges have spent large sums of money on testing and then teaching reading and study skills, it is important for teachers to understand how these efforts are misguided. A review of recent research does, however, also provide a basis for continuing to do some things that are already being done.

Open admissions has allowed many students into community colleges who do not meet the traditional expectations of college teachers. Data reported by Cross[1] indicate that many of these nontraditional students are poor readers and they don't like to read. Cline[2] and Wall[3] have called attention to the fact that many community college teachers are not using readability as a criterion in selecting textbooks and consequently are using textbooks that appear to be beyond the grasp of most of their students. On the other hand, correlation studies I have done concur with those done by Feuers[4] that tested reading ability gives no assurance of success or failure. Nevertheless, Freer[5] found that taking a reading course could significantly improve students' academic performance in a community college, a finding consistent with several of the studies of college reading programs cited by Fairbanks.[6] What does all this mean? Is reading important for community college students? While the research appears to be contradictory, a review of these studies reveals startling insights into both research and reading.

[1]K. Patricia Cross, *Beyond the Open Door* (San Francisco: Jossey-Bass, 1971, pp. 56-58, 77.)

[2]Terry A. Cline, "Readability of Community College Textbooks," *Journal of Reading,* 16 (1972), 33-37.

[3]Sinclair Wall, "Readability—A Neglected Criterion," *Journal of the Reading Specialist,* 9 (1969), 12-16, 22.

[4]Stelle Feuers, *The Relationship Between General Reading Skills and Junior College Academic Achievement,* Diss. UCLA 1969 (Ann Arbor, Mich.: University Microfilms, Order No. 70-2200).

[5]Imogene Johns Freer, *A Study of the Effect of a College Reading Program Upon Grade-Point Average in Odessa College, Odessa, Texas,* Diss. Michigan State U. 1965 (Ann Arbor, Mich.: University Microfilms, Order No. 66-6124).

[6]Marilyn Markussen Fairbanks, *An Analytical Study of the Relationship of Specified Features of Reported College Reading Improvement Programs to Program Effect on Academic Achievement,* Diss. West Virginia U. 1972 (Ann Arbor, Mich.: University Microfilms, Order No. 73-12,938.)

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Correlation Studies

One type of research that has been carried out involves correlations between reading scores and grade point averages (GPAs). The rationale for such studies goes something like this: If reading scores and grades are highly correlated, then a regression equation could be worked out to predict grades from reading scores. It is assumed that it would be desirable to be able to predict students' grades. Presumably those with very low predicted grades would be advised to take a reading course to improve their reading and to take other light reading courses *until* they improved their reading.

Feuers investigated the relationship between reading comprehension and academic achievement at Los Angeles Pierce College. Elective courses in eight subjects were used: art, architecture, chemistry, electronics, English, mathematics, psychology, and secretarial science. The analysis was based on the responses of 541 students on the Nelson-Denny Reading Test, Part I (Form B) and the Davis Reading Test (Form IB). There were no significant differences between males and females in reading skills with the exception of vocabulary, which was significant ($P = .05$) in favor of the females. There was no significant relationship between subject GPA and reading comprehension or between subject GPA and vocabulary. The correlations between college GPA and reading comprehension and between college GPA and vocabulary, although significant ($P = .01$), were not substantial enough ($R = .28$ and $R = .32$, respectively) for prediction of academic success. That means there is only 1 chance in 100 that this correlation is a fluke, but the correlation figure says it doesn't account for a whole lot. Reading comprehension and vocabulary scores accounted for less than 10% of the variance in college GPA. That means that the reading test scores could be used to predict less than 10% of the GPAs with any accuracy. From these reading scores you could guess a student's GPA less than 1 time out of 10 with any accuracy. That ain't hardly worth the bother. The point is that whatever the reading test scores represent you are going to be wrong more than 9 times out of 10 if you use them to predict GPAs.

My study at Forest Park Community College yielded about the same results. In the summer of 1972, 619 entering students took the Stanford High School Reading Test (Form W). The correlation between reading scores and their mean college GPAs for one semester was negligible ($R = .17$, $P = .05$) for predictive purposes. That means there are only 5 chances in 100 that this correlation is a fluke, and the correlation figure says it doesn't account for much of anything. Reading scores accounted for less than 3% of the variance in GPAs. From these reading scores you could guess a student's GPA less than 3 times in 100 tries with any accuracy. The story was similar for the correlations between reading scores and withdrawal rate ($R = -.08$)and reading scores and proportion of hours completed successfully (grades of A, B, C, and D) to hours attempted ($R = .08$). Subgroups were formed on the bases of race, curricula, range of GPAs, and range of reading scores. There were no correlations of any consequence for any subgroup. In only one instance did the reading scores account for more than 4% of the variance in GPA. That means the reading scores could be used to predict less

than 4% of the GPAs with any accuracy. From these reading scores you could guess a student's GPA less often than 4 times out of 100 tries. If you use these reading scores to try to predict GPAs, you are going to be off 96 times out of 100. Once again, that ain't hardly worth the time it takes to administer and score the tests.

Comparison Groups

Since from these studies less than 10% of the variance in GPAs can be attributed to reading, it would be surprising to find that taking a reading course had a significant effect on GPA. But that's what Freer found. She compared the GPAs of 40 students who took a reading course at Odessa Junior College with 40 who did not. The students were matched on the bases of their initial reading scores on the Nelson-Denny Reading Test, SCAT scores, class load, age, and sex. The mean difference in GPA was significantly ($P = .001$) higher for the group that took reading. That means there was only 1 chance in 1,000 that the higher GPAs of those who took the reading course were a fluke.

In a very sophisticated study, Fairbanks reviewed studies of 79 college reading programs, including Freer's study, to determine what contributed to increasing GPAs. She found that programs which significantly affected student achievement stressed determining main ideas of paragraphs and longer selections, differentiating fact and opinion, and recognizing and interpreting inferences. Also in the successful programs the students were informed of their difficulties and participated in diagnosing their problems, selecting the materials they would use, and evaluating their progress. These successful programs were voluntary, entailed 40 or more hours of instructional time over several months, and carried no credit. The class time was used for practice on individual needs, not for lecture and demonstration (as was the case in unsuccessful programs). Study skills did not emerge as contributing to improved academic achievement. Study skills were taught in many of the programs Fairbanks reviewed, but they did not come out as an important factor in making a program successful in terms of improving the student's GPAs. (Study skills referred to here were note-taking, outlining, summarizing, organizing materials, scheduling time, and/or using the library.) This is consistent with Thelen's[7] finding that teaching community college freshmen study skills had a negligible effect on their academic achievement.

In a carefully designed experiment at Forest Park Community College, Thelen compared the academic performance of students whose past performance in high school and on ability tests suggested they would fare poorly in college. The students were randomly placed in the control or experimental groups. All were fulltime students under 21 years of age. Race and sex were controlled. The experimental group was taught study skills, whereas the control group was not.

The basic idea as described by Witherspoon[8] in the course syllabus was that

[7]Alice M. Thelen, *The Effectiveness of Required Individual and Group Guidance in Promoting Change in Selected Characteristics of High Risk Junior College Freshmen,* Diss. U. of Wisconsin 1968 (Ann Arbor, Mich.: University Microfilms, Order No. 69-1,011).

[8]Fredda Witherspoon, *Group Guidance in Junior College,* Syllabus Forest Park Community College 1966 (Bethesda, Md.: Leasco, ERIC No. ED 016 487).

students would achieve better if they were taught "how to." They were taught how to prepare themselves to study, how to plan their work, how to take notes, how to read a textbook, how to build a vocabulary, how to prepare papers, how to use the library, and how to take objective and essay exams. Thelen investigated whether or not there were significant differences between the groups on increase of acceptance of self, awareness of attitudes and skills which produce effective study, and application of study techniques, among other criterion measures. Results related to knowledge and application of study-habit techniques varied but not in a very consistent way. Where trends toward significance were implied, the control group students who didn't learn "study skills" performed better than the experimental group who learned study skills. (It is possible, however, that by learning study skills students got a feeling of greater conscious control of what they do, but this wouldn't necessarily lead to improved performance, although it might lower some anxieties they might have.)

What then is it important for students to learn "how to" do? At the conclusion of her analysis of successful reading improvement programs, Fairbanks offers a set of guidelines for college reading improvement programs, and community colleges could probably use her guidelines to good avail. The value of her study, however, lies in the fact that she seems to have identified some of the factors involved in improving student achievement: determining the main ideas of paragraphs and longer selections, differentiating fact and opinion, and recognizing and interpreting inferences. If these are the things that help improve academic achievement, then it would be fair to infer that a test of students' ability to do these things would correlate well with grades. Tests that include other factors (such as vocabulary, rate, etc.) probably would yield lower correlations. In other words, Fairbanks may have pinpointed part of the reason why the above correlation studies turned out the way they did.

But more than that, even, can be deduced from her study. While the things she has identified as differentiating successful reading programs can be taught in reading courses, they can also be taught in most introductory college courses. Rather than instigating even voluntary reading programs, community colleges might be better off to train their teachers to systematically go over texts in class and have the students determine the main ideas of paragraphs and subtopics, differentiate fact and opinion, and identify and interpret inferences.

Psycholinguistic Studies

Correlations are only as good as the measures correlated are accurate. No one has come forward to defend GPAs as accurately calibrated measures of anything, although in a general way they are meaningful global indicators of academic achievement. Reading tests, on the other hand, have been regarded as accurate measures of what they claim to measure, namely reading ability. However, recent psycholinguistic studies of reading and learning to read have raised some serious doubts about conventional reading tests such as the Davis, the Stanford, and the Nelson-Denny. Whatever those tests measure may not be very good measures of reading ability. It may very well be that reading is not as readily quantifiable in

any meaningful way as we have up to this time thought it was. Reading, like writing, is a process, an activity, and there is no widely meaningful way to quantify writing.

Smith[9] observes that the background information people bring to the printed page plays an important part in their reading. Generally people read faster and with greater comprehension when they are familiar with the subject. They can predict more of what is going to be said and therefore they don't have to rely as heavily on the print for cues to meaning. The more unfamiliar the ideas are, on the other hand, the more the readers need to rely on the printed cues for meaning. This slows down the information processing and generally distracts from comprehending meaning.

If the passages in a reading test are about things the testees are already familiar with, this will have a halo effect on their scores. The same students might have great difficulty reading stuff they are unfamiliar with, as they might have to in college. If the students are unfamiliar with the material in the reading test, this handicap will more than likely be reflected in lower scores. Some college classes are structured so that the lectures, demonstrations, and discussions will familiarize the students with the stuff they will be reading about, and people with low reading scores may fare well in such classes. In other words, the variables are so complex that it is unlikely that reading test scores could measure beforehand (that is, before the various assignments in the different courses) the right factors as to the students' ability to read something.

Miscue analysis provides even more reasons to believe that the reading test scores used in the above correlation studies may not have been measuring the right things. Basically miscue research records and then analyzes the difference in the readers actual oral responses to the printed cues and the responses the researcher expects to hear for those cues.[10] The miscues (or oral responses other than those expected by the researcher) are then categorized linguistically either on the Goodman Reading Taxonomy or the shorter Miscue Inventory. The pattern of miscues is in the end analyzed to see what insights it can provide about the reader's ability to process printed symbols to derive meaning.

Menosky's[11] research with younger readers found significant differences in the reading miscues made in the first 250 words of a passage as compared with later portions of the passage. That was true for all readers in her study, but especially true for the poorer readers. By reading longer passages the readers learn to process the language of the author better. This insight probably applies equally well to late adolescent or adult readers. All of us know what it means to catch on to how to read a particular writer. It might take awhile but we can all eventually catch on to how to read Faulkner or John Hawkes, and our perseverance is usually well worth

[9]Frank Smith, *Understanding Reading: A Psycholinguistic Analysis of Reading and Learning to Read* (Holt, 1971).

[10]Kenneth Goodman, ed. and co-author, *Miscue Analysis: Applications to Reading Instruction* (NCTE and ERIC/RCS, 1973).

[11]Dorothy Mae Menosky, *A Psycholinguistic Description of Oral Reading Miscues Generated During the Reading of Varying Portions of Text by Selected Readers From Grades Two, Four, Six, and Eight*, Diss. Wayne State U. 1971 (Ann Arbor, Mich.: University Microfilms, Order No. 72-14,600).

the effort in the end. Plain English is nice but not a necessary condition for meaningful reading. The inescapable conclusion, however, is that reading tests using short passages put readers at a disadvantage. High scores on such tests probably are indicative of outstanding reading ability, but medium and low scores probably are not accurate measures of the students' true reading ability. Moreover, the same insight raises serious doubts about the much too common practice of (1) having students "read" a series of short passages unrelated to one another or anything else in their lives and then (2) answer some questions about what they "read" in an effort to teach them how to read better.

Page[12] uses miscue analysis in a different direction to cast serious doubt on the usefulness of isolated word recognition tests as a measure of reading ability. He points out that miscue research has emphasized the centrality of language in getting meaning from print, and tests that require isolated word recognition thereby eliminate the language context and make it difficult for the reader to gain meaning. While the procedure of omitting every tenth or so word might be a slight improvement over conventional vocabulary tests, it is nonetheless flawed by an insistence on an exact word in a multiple-choice answer where several (perhaps less precise) words might do for conveying meaning. The point is, good readers at any age or stage of the reading process read for meaning. They can frequently grasp the meaning even when they are not familiar with the particular word the tester wishes to have in the blank.

In other words, many conventional reading tests probably do not yield accurate measures of students' ability to read. It would probably be safe to conclude from the reading test scores that have been reported that many community college students are not good readers, but it would be difficult to tell from those scores how bad they really are. Any correlations using conventional reading test scores are probably not going to be reliable.

Conclusion

Where does that leave us? We know that most people learn new words by hearing them or reading them in a meaningful context. In this way they also learn new ways to manipulate old words. We know it is easier for people to read about ideas they are familiar with, and we know teachers can structure courses to familiarize students with ideas in the reading assignments before the students attempt to read the assignments. We also know that people find it progressively easier to read an extended work as they become familiar with the author's language and style. Therefore, the alarm over the readability levels of texbooks is misdirected, especially since the reading tests do not seem to provide accurate measures of the students' reading ability. (Of course, students who don't like to read may not even attempt the reading regardless of the readability of the text.) We know that the academic achievement of college students improves when they learn to identify main ideas, distinguish fact from opinion, and recognize and interpret

[12]William D. Page, "A Linguistic Appraisal of Isolated Word Recognition Testing," *The Michigan Reading Journal,* 5 (1971), 28-35.

inferences, and we know these things can be taught in reading classes or just about any other courses requiring reading. Since most freshmen are required to take English they could be taught in English, although teaching those things in just one course without the same being done in other first semester courses would not be enough. We also know that teaching study skills does not significantly improve students' academic performance. While research cannot prescribe a solution to all the problems nontraditional students might create for community colleges trying to teach them, the various research studies can help us understand the problems more clearly.