Career education is a wholistic concept which includes both job satisfaction and the imaginative use of leisure. It aims to facilitate education of all students so they may appropriately choose and prepare not only for their life's work but for all aspects of living. Since career education emphasizes the importance of developing vocational and intellectual skills, and, as such, pervades all subject areas, the need for good reading skills is axiomatic. The necessary reading skills, even at lower-level job entry, include more than decoding or word attack skills. Word meaning, comprehension, and study skills as well as critical reading and thinking skills must be taught and mastered. Eleven steps that enable teachers to relate the reading content of their particular disciplines to career education are presented. (TO)
Introduction

Career education has lately been somewhat capriciously described as a concept whose time has come. However, many of its components have long since been part of educational programs. The idea of career education is only new in the way it has reorganized, restructured and applied these elements in order to permeate the entire educational system. Career education is a wholistic concept which includes both job satisfaction and the imaginative use of leisure; it involves all members of the school family from the superintendent to the principal to the teacher and counselor, as well as the community at large. It aims to facilitate education of all students so that they may appropriately choose and prepare not only for their life's work but all aspects of living. It is far broader than the concept of vocational education, for it subsumes all career possibilities for students, from the occupational job entry at high school graduation to more technical or professional careers requiring additional schooling. It seems to me that its underlying appeal lies in the dignifying of all genuine productive human endeavor as worthy and creditable, and the realistic preparation for this through the educative process. The fact that it has met with such immediate nationwide enthusiasm bespeaks the urgency of reordering some of our educational priorities and dissecting the curricula to determine its...
relevance to today's students. In order that career education not become just another educational slogan destined to have its brief moment in the sun and then fade along with countless other evanescent educational enthusiasms, its philosophy must be thoroughly understood and integrated in the total instructional program so that education will be revitalized and be more responsive to the demands of the rapidly changing world in which we live.

To graduate students ill-prepared to enter the world of work, to fail to introduce them to and prepare them for the wide variety of career options open to them, is a dereliction of duty on the part of educators. For unless we lead our students through education and training toward economic independence and personal and social satisfaction, we are being profligate with the world's most important commodity, its youth, and vitiating society at its very base.

Importance of Reading

Career education subsumes the attainment of personal gratification not only through a sense of achievement at dignified work, but through developing a broader humanistic involvement in communal affairs and in the creative use of the burgeoning amount of leisure time. Since career education emphasizes the importance of developing the vocational and intellectual skills; and as such, pervades all subject areas, the need for good reading skills is axiomatic. There are no areas, Marshall McLuhan to the contrary, in either the academic world or the world of work in which reading
does not play a crucial role. Even at the minimal job entry level, a person has to be able to read and follow directions in order to complete simple tasks correctly, to read and fill out applications and other forms intelligently, to read newspapers and periodicals with adequate understanding so that he can make intelligent, independent judgments on political and social issues. Whether he is learning to follow the sequence of steps in a job sheet or fathoming a text on constitutional law, he must be able to understand and correctly interpret the printed word at whatever level of abstraction it is written.

The process of reading has been variously and laboriously defined, described, and frequently misperceived. Some have limited it to "breaking the code," where the ability to analyze each word into its structural and phonetic elements becomes an end in itself. This, of course, is self-defeating; decoding is only the mechanical aspect, and, as such, merely the means to the end of interpreting the meaning the author intended to convey by the printed symbols. Reading teachers, for the most part, are not rigid parliamentarians of the printed code, isolated from the totality of critical interpretation of printed materials. Reading, thus, in its broader sense, is a process that must be equated with thinking, for unless we develop skillful, discriminating reader-thinkers at all career levels, we defeat our purpose at its inception. E. L. Thorndike said, "In the reading of a paragraph, the connections from the words singly and from various phrases somehow cooperate to give total meanings." It is this understanding of the
interrelatedness of words and phrases and the concomitant thinking they evoke that we hold must be the aim of teaching reading at all school grades and in all subject areas.

The ultimate aim of education is to produce independence in the learner, independence to earn a living according to his interests and abilities, independence to think and act creatively as a citizen of the world community, independence to pursue avocational and recreational activities, independence to go on learning. This last is particularly important in a world where lightning changes and technological giant steps are the rule rather than the exception. The one security we can have is the knowledge that we are capable of change, of adaptation, of continuous learning, regardless of altered conditions. People now entering the job market will undoubtedly have to make numerous adaptive occupational changes and personal adjustments during their lives; this spiral of change in social and economic structures place an even greater emphasis on the need for effective reading-thinking skills. Because knowledge and the written records thereof is increasing at such breakneck speed, it is obvious that students cannot learn all there is to know in the course of his twelve years at school, or in the years of college and graduate school, even if they specialize in one particular area. The process skills of reading, knowing how and where to find needed information, how to read it evaluatively in terms of its pertinence to a particular need, how to organize this information so that it is manageable, logical, and easily retrievable, and how to retain those elements that are most
essential, all these assume far greater importance than the content of any one subject. As reading teachers, we must be sure that students know how to skim when looking for a particular fact or piece of information, when and how to read rapidly when only a general idea of the material will suffice, and when to lessen the reading pace when the material is loaded with information and/or technical language that requires more intensive reading. Mere exposure to printed facts without teacher direction as to the importance of relating and organizing them doesn't contribute very much to the development of the thinking-reasoning process so essential at all levels. Teachers must be concerned ultimately with developing these cognitive processes by helping students (1) find main ideas in printed materials and see that these ideas are extracted from and supported by the stated facts (2) make logical inferences by reading between the lines where there is factual evidence to give it credence (3) perceive the difference between fact and opinion (4) become familiar with propaganda devices and discriminate between connotative and denotative language. All of these and more are essential to educating students realistically in a career-oriented society.

Reading skills at the lower-level job entry may emphasize the literal interpretation of texts. In the vocational-occupational area, for example, such skills as understanding printed directions, following the steps in a sequence, learning a basic sight vocabulary of the technical terms in a given vocation, finding the main idea, noting specific details, using the dictionary and other resource materials, all these are essential. Recently I spoke to a group
of vocational-occupational teachers in a comprehensive high school. They exhibited an intense interest in learning how to help their students read the technical materials in their areas, admitting that most of their books and job sheets were generally overloaded with technical terms which made it difficult to read. We did an analysis of some of these materials in terms of breaking them down into specific skills needed in order to read them comprehensively. We also abstracted the vocabulary and suggested a number of ways of reinforcing new and difficult terms via graphic illustrations, filmstrips, class-made flip cards, labeling, display and bulletin boards, word of the day, and so forth. We found most of the skills did revolve around following directions in a sequence of steps where comprehension is immediately tested in the product or outcome. However, what was interesting was that one of the electronics teachers wanted to know how he could teach his students to do critical reading with his materials, how to get them to make intelligent inferences and draw reasonable conclusions from facts stated therein. What I mean is that, even at the lowest job entry level, good critical reading - reasoning skills are essential both to the adequate performance of the job and for personal development.

Both students and educators must be actively involved in the reading process. It must be made unequivocally clear to the student that reading plays a vital role in enhancing or impeding his future plans, whether these plans be for immediate or ultimate job entry; he must know that reading is not an abstract intellectual option but as necessary a tool of operation for the auto mechanic as for
the engineer or historian or lawyer. At the same time, teachers and administrators must recognize the importance of their role in preparing students to function at the highest reading level of which they are capable and for the greatest degree of personal gratification.

For the student, the whole range of literacy skills are needed in order to make career and vocational choices freely. Edwin Herr, Professor of Education at Pennsylvania State University has stated, "The ability to read and read with comprehension appropriate to the level of material being read, is one of the most essential of these skills." Some of the following are basic reading and study skills all students should acquire during their years of schooling.

1. **WORD-ATTACK SKILLS**
   a. Phonetic attack on new words
   b. Knowledge of inflectional endings
   c. Using context clues for pronouncing new words
   d. Knowledge of principles of syllabication
   e. Knowledge of compound words
   f. Extensive sight vocabulary
   g. Recognizing prefixes, suffixes, and roots

2. **WORD-MEANING SKILLS**
   a. Understanding technical terms
   b. Using the glossary
   c. Using the dictionary
   d. Using new terms in speaking and writing
   e. Understanding figurative language
f. Understanding the denotations and various connotations of words

g. Understanding technical vocabulary related to the different content areas

3. COMPREHENSION SKILLS
   a. Recognizing and understanding main ideas, whether explicit or implicit
   b. Selecting relevant details
   c. Recognizing relationship among main ideas
   d. Organizing ideas in sequence
   e. Understanding time and distance concepts
   f. Following directions
   g. Reading maps, tables, and other graphic material
   h. Distinguishing between facts and opinions
   i. Making judgments on what is read
   j. Reading widely to seek additional evidence
   k. Drawing inferences and giving supporting evidence
   l. Listening attentively and critically

4. STUDY SKILLS
   a. Using textbooks efficiently
   b. Using the library efficiently
   c. Organizing a body of material into an effective outline
   d. Taking notes systematically
   e. Scheduling time efficiently
   f. Preparing for examinations
g. Preparing for discussions and reports
h. Using reference materials efficiently
i. Adjusting rate of reading to suit purpose and content
j. Using research techniques where needed

In planning staff development to help all teachers gear reading instruction to the concept of career education, the dual purpose of reading must be kept in mind. Students read for information or for recreation, although the two are not necessarily disparate. A good reading program in a school will provide reading and reading instruction for both these components, though probably in different proportions. Students who are having difficulty with reading and find it onerous, will be more motivated if the reading is specifically related to a job-oriented task. The following steps are advocated for the teacher if he is to relate the reading content of his particular discipline to career education:

1. Analyze the content of each subject into the general skills needed in order for students to master that subject area.

2. Analyze the materials of instruction used in terms of specific reading skills needed to comprehend this material.

3. Set up a sequence of educational objectives based on this analysis.

4. Evaluate the students' reading levels and needs (via informal inventories, past records, word attack surveys,
vocabulary checks, anecdotal records, standardized tests, etc.)

5. Match the materials of instruction to the instructional levels of the students and group the class flexibly for reading needs and strengths.

6. Plan instructional strategies to meet needs of students in the areas of their deficits and in areas where increased development and refinement of skills should be ongoing.

7. Include listening, speaking and writing activities as they are all interdependent and interlocked with reading.

8. Provide saturation with other related reading materials for free reading at specified intervals (e.g. in the form of a classroom paperback library).

9. Provide appropriate evaluation as an ongoing, integral part of the instructional program.

10. Make sure that classroom instruction includes good questioning techniques, techniques which stimulate students to think creatively and critically, rather than just to spew back facts and figures. Questions should guide students to evaluate what he reads, to organize facts into a meaningful whole, to make intelligent judgments based on sound evidence rather than emotional reactions. There is little doubt that the kind of questions the teacher poses will engender the kind of thinking a student will do.
11. Help the student develop a vocabulary that is precise and extensive so that he can communicate ideas effectively.

Conclusion

It has been estimated that one third of the youth of our nation leave school without attaining sufficient reading skills to meet the demands of employment. As a result, they emerge into the adult world with little sense of personal worth, with social and vocational inadequacy, and with an overriding feeling of hopelessness and futility. Vast numbers of our junior and senior high school students yearly fall into this category; their deficits in reading and general literacy depress their accomplishment not only in the academic areas but in the vocational-occupational areas as well. It is increasingly evident that as a student advances through the grades it is progressively difficult for him to be failing in reading and to succeed in any other educational endeavor. In the sophisticated demands of an increasingly technological society, there is no room for the inadequate reader, for the technician who cannot translate technical material into comprehensible action, for the secretary whose language skills are inadequate for appropriate communication, for the economist, so dependent on learning from media, that he cannot properly interpret present trends in the light of the historical past.

If our educational system is aiming to prepare students for a future adumbrated with lightning and uncharted change, survival might very well depend on such skills as the ability to communicate
at all levels, competency in solving problems through creative and divergent thinking, and management of a vast conglomerate of steadily burgeoning knowledge. I submit that the one element indispensable to all of these is that exceedingly complex, interwoven amalgam of skills and processes known as reading.

Bibliography

Herr, Edwin L. Career Education: Some Perspectives