Professional Concerns: Reading and the Vocational/Industrial Arts Teacher

Michael T. Conroy
Staten Island, New York
PROFESSIONAL CONCERNS:
R. Baird Shuman, EDITOR

READING AND THE VOCATIONAL/INDUSTRIAL ARTS TEACHER

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Professional Concerns is a regular column devoted to the interchange of ideas among those interested in reading instruction. Send your comments and contributions to the editor. If you have questions about reading that you wish to have answered, the editor will find respondents to answer them. Address correspondence to R. Baird Shuman, Department of English, University of Illinois at Urbana-Champaign, Urbana, Illinois, 61801.

In most industrial arts and vocational education classes, there are students who have a high desire to design, create, and make a project. Simply stated, they want to learn. The student's built-in motivation can be used as a springboard to introduce reading into the shop area.

A few years ago, it was not uncommon to hear industrial arts and vocational educators respond to the idea of teaching reading skills with replies such as: "Who, me? I'm an industrial arts teacher, not a reading teacher."

Today the prevailing attitude seems to be that specific reading skills must be taught. Comprehension of printed material must be assured, and the industrial arts and vocational educator is the person most qualified to teach specific reading skills related to printed materials used in the shop. The teacher's knowledge of the industry, professional teacher training, skill with tools, machines, materials and processes, combined with an understanding of the students' individual strengths and weaknesses, enable him/her to teach the necessary reading skills. In addition, the teacher has first hand practical knowledge of the manner in which the printed items should be read, understanding of the concepts and technical terms, intimacy with the nuances of the trade, and a knowledge of the proper procedures and presentation of manual skills.

The physical plant, design, and layout of the shop enables the teacher to interact with students both formally and informally. The shop organization and instructional procedures lend themselves to teaching reading skills to a class, small group, or individuals. Students can be instructed in reading as they perform manual activities based upon instructional sheets at the work
bench or machine. In this way, the direct person-to-person type of instruction has immediate practical application.

Terminology

As one reads the printed pages used by industrial arts and vocational education teachers, it becomes obvious that the terminology is unique. The words are different from those used in other educational areas, in that technical terms relate directly to the language of a trade or industry. It is a language that must be learned and mastered before one can fully comprehend the printed words. For example: "The cut is locked up in the chase on the stone near the furniture."

Generally speaking, unless one is familiar with the vocabulary associated with letterpress printing, the sentence is not easily comprehended.

The words cut, locked up, chase, stone, and furniture are meaningful in a special way to the printer, as part of this technology's vocabulary. The industrial arts and vocational education teacher uses trade terms in the same manner in which others use familiar, every-day words.

Students benefit greatly from the teaching of reading skills by the industrial arts and vocational educator. When the teacher relates the skills taught directly to specific printed assignments, concrete gains can result. The shop teacher is providing the student with (1) the opportunity to learn or review a specific reading skill, (2) personal experience of the relationship between reading and shop work, (3) an opportunity to use reading in a practical situation, and (4) the opportunity to read, and immediately implement the instructions on printed pages with regard to the completion of a project.

A negative attitude toward school and reading may be replaced by a realization of the practicality of specific reading skills. The industrial arts and vocational educator can assist his students by identifying difficult or unfamiliar technical terms and by explaining new concepts in detail. The reading of words that have different meanings in different settings can be a stressful experience for students. Problems encountered in reading technical literature can be reduced by defining such terms in advance.

The instructor's careful planning (analysis of reading skills required to understand the material, concepts, technical terms, objectives) can result in an educationally worthwhile reading assignment. To achieve this end, the appropriate reading skills must be introduced into the lesson in a pre-planned, organized manner.

The Teacher—Opportunities to Teach Reading

Teachers of industrial arts and vocational education encounter many situations in which various reading skills can be taught.

1. Labeling. Wherever practicable, plastic adhesive backed labels should be attached to the exterior parts of machines the students are learning to operate. Appropriate descriptions and names should also be placed near tools in the tool closet.

2. Display Boards/Process Boards. Shops frequently display process
boards as instructional aids. These learning devices should be so designed as to contain the technical terms related to the mock-up or illustration displayed.

3. Instructional Sheets. These instructional aids are usually written by the teacher. Reading skills which can be taught through the use of instructional sheets are: drawing conclusions, getting the meanings of words from context, arranging details in order, and following printed directions.

4. Textbooks, used in industrial arts/vocational education are important tools. They offer background material pertinent to an industry—its tools, machines, processes, occupations, products, and terminology. Safety considerations are also frequently treated. Here word attack skills emphasized by the student's language arts/reading teacher are utilized and refined.

5. Research Reports. The shop teacher frequently assigns research reports on famous people known for their contributions to a specific industrial field. If such an assignment can be made to coincide with the language arts teacher's exploration of biography in general, the student's work will be doubly beneficial. The potential for cooperation between teachers of other departments and those in the shop field is great.

6. Safety. The importance of the safety factor in shop work is paramount. In order to reinforce certain safety precautions and procedures, the industrial arts/vocational teachers rely on the use of instructional sheets, tests, posters, and signs. The student who encounters difficulty in reading frequently makes an extra effort in this regard in the shop area. S/he realizes that certain tools and machines cannot be used if the operator is unable to comprehend and follow directions. The shop teacher can capitalize on this extra motivation by working with students in the design and execution of appropriate directions, signs, posters, and labels. Word recognition skills is one area that can thereby become highly developed.

Conclusion

The teachers of industrial arts and vocational education are in a unique position with regard to the remediation and development of reading skills. In the minds of many junior and senior high school students, "shop" has long been synonymous with meaningful activity culminating in a desired project. Shop work has frequently symbolized success for even the less academically oriented. Using this enthusiasm and motivation to aid students in the perfection of their reading skills is the challenge facing shop teachers.