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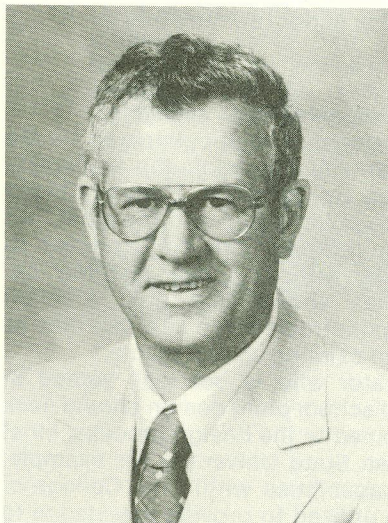
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The establishment of vocational programs is too important to be left to a haphazard system.

Criteria for establishing vocational programs

by Robert E. Scott



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The historical bench mark for vocational education programs occurred with the passage of the federal Smith-Hughes Act in 1917. The concept that vocational education should center upon manipulative skill development for specific defined occupations proved to be so successful that it was written into all authorization legislation which followed the Smith-Hughes Act. This act established a precedent and determined an operating philosophy for vocational education that was to remain virtually unchanged until the Vocational Education Act of 1963.

The 1963 act provided a new and more enlightened direction for vocational programs. This piece of legislation broadened the emphasis from occupational skill development to one of meeting both student and community employment needs. The overall effect of this significant shift in emphasis removed artificial barriers which had developed through the use of occupational service categories and hence, increased flexibility in student programming.

Today the local school administrator faces problems associated with the establishment of a vocational offering in the school setting. The need and necessity for wise vocational planning has never been more urgent. The demands for vocational education have been increasing at a rapid rate due to the overall growth in population and the expansion of our nation's economy. However, the public financial support whether at the federal, state or local levels has not increased proportionately in recent years. Planning for vocational programs, thus, has become essential for its very existence.¹

This need for planning is additionally highlighted by several factors such as: (1) The recognition that resources are limited and that priorities of needs must be determined (2) The changing of the occupational structure with some jobs becoming obsolete and other new jobs being created and (3) The fact that the establishment of school programs must involve more and broader community involvement if the systematic development and successful implementation of vocational programs are to become a reality.

Basically there are seven major questions that must be answered if one is to approach the establishment of programs with any degree of logic. The following items are not necessarily presented in any rank order. Satisfactory answers must be found for all items if the vocational program is to offer the quality of instruction currently being demanded by a majority of today's employers.²

1. What are the manpower needs in the labor market?

Few school officials want to operate vocational programs if full employment possibilities are not available for a majority of the program's graduates. A quick review indicates that we are contributing to a surplus of trained employees in many occupational areas. For example, presently vocational education is producing more auto mechanics than the labor market can absorb. On the other hand, we can not even come close to filling the manpower need of society in the areas of health services or office occupations.

Educators must begin to recognize and use the manpower data that is available through the state Division of Employment Security, U.S. Census Report and the **Monthly Labor Review** published by the U.S. Department of Labor. We now have time-proven research tools and devices that predict, with a high level of probability, where manpower shortages are going to appear in the future. The Vocational Education Amendment of 1968 requires that vocational and technical education programs prepare individuals for job vacancies that either presently exist or will exist in the near future.³ Vocational program administrators must pay more attention to employment and job placement than ever in the past. We must begin to reanalyze the out-moded idea of placing the greater concern upon student wants and desires rather than upon the larger manpower needs required to keep our society functioning.

2. How is the course teaching content to be determined?

If the student is going to be exposed to the most recent information and skills concerning his occupational specialty, the answer to this question is clear. Teaching content will be ascertained by means of a job and task analysis of the occupation under study. The analysis will encompass the skill, knowledges and attitudes that are necessary in order to enter, hold and progress on the job. The analysis may be completed by either observation, study, interviews or a combination of these methods.⁴

Although a study of worker attitudes, mobility, job satisfaction, etc., are important parts of the analysis and are of great help to both employers and school counselors, the job content most concerns educational planners. The concern with teaching content decisions primarily centers around the need for task performance data of workers on the job, what preparation is required to perform the tasks, how frequently the tasks are performed, and what importance is attached to the performance of those tasks by the employers.

3. What educational prerequisites are necessary for success?

Most vocational planners recognize that learning progresses most successfully if it is sequential in nature. Our function here is to determine the minimum level of education achievement that will be required for program entry. The level will concern both the quantity and quality of background experiences. Nothing is to be gained by placing students into vocational programs where their chances of success will be minimal. By reviewing past achievements of the learner, possibly a way can be found to enhance the current offering to the student's advantage.

4. What is the program time frame?

Two items need to be identified. How long, in terms of time, should the program last and how should the time frame be constructed? Typically not all vocational programs need to be the same length in order to teach or learn what is required. Attention must be directed to flexible scheduling where the requirements of the course will determine the length of the course rather than artificial standards such as semester or clock hours. As an example, some welding programs are nine months in length, while other welding courses are 12 months and still others are two years in length. All of these courses profess to teach entry level skills and cover approximately the same instructional content. Elementary logic indicates that if the nine month course is correct then surely the two year course can not be.

Course length must be determined by the program objectives, teaching effectiveness and cost-analysis. Nothing short of these criteria are acceptable. New programs must be designed to permit student entry at the first of any teaching week rather than forcing or allowing the student to enter only at the start of a school semester. A learner should be able to exit from the program and re-enter again according to his needs rather than at the convenience of the instructor or school administrator.

5. Are shop and laboratory facilities available?

Because the development of manipulative skills are an integrated part of vocational education, the availability of shops and laboratories are essential. Certainly these facilities are expensive to build, equip and maintain; but no vocational education program can be expected to produce quality students without these learning opportunities. Research has shown that cost efficient physical designs can be constructed into new facilities as well as the modification of existing school plants.⁵

A school administrator who is not well versed in vocational education and school plant design should seek outside consultants to expedite the design process. Most state universities, Kansas State University for example, have extended service capabilities within the College of Education which can be utilized to provide assistance to local school districts upon request.

6. How may school administrators attract and retain a quality instruction staff?

Current business and industry salaries and other educational management problems make it increasingly difficult to keep competent vocational teachers. Vocational instructors need to have recent occupational experience in the area in which they are teaching as well instructional and classroom management skills. The majority of states do not require a baccalaureate degree as a prerequisite for vocational teacher certification. However, the degree is certainly desirable.

It would be foolhardy to set up a program of instruction if a well-qualified instructor could not be placed in charge of the program. Some people argue that a poor instructor is better than no instructor at all. This might be true for a short period of time, but in the final analysis the learner will be seriously handicapped as he seeks employment and finds himself in competition with other job applicants who have been better vocationally educated.

Since the early 1930's research studies have clearly indicated that the instructor is the single most important variable in the delivery system of quality education.⁶

7. Are there sufficient numbers of students available to justify the program?

Only learners who have the interest, desire and ability to succeed should be considered. Vocational education is not a general education program that will appeal to all students. Time-proven techniques have been formulated to help insure wise selection of students for vocational offerings. The following is a sample listing of some of the major items that are currently being used.⁷ This list is not mutual exclusive or all inclusive, but these items do deserve major consideration:

- a. Has the student had some type of exploration or background orientation to the field of study that will enable him/her to make a wise vocational choice?
- b. Has the student the mechanical aptitude and abstract reasoning abilities and native intelligence which will allow him/her to succeed and secure satisfaction in the program?
- c. Does the student have the reading ability and communicative skills that are compatible with the demands of the occupation? In other words, the student must be competent in the general education fundamental processes, or remedial education must become an integral part of the vocational offering.
- d. A student should not complete a course until he is at least of legal age to work at the occupation studied. The age of entrance should be such that he will be graduated at the age he can secure legal employment.

- e. An in-depth interview should be scheduled with a vocational guidance counselor and the instructor of the course to interact with the prospective student so that the true vocational interest of the student can be better identified.

The establishment of vocational programs is too important and too costly to be left to a haphazard, catch-as-catch-can system. Only by following the guidelines that are mentioned here can the school administrator feel confident that he has planned most wisely.

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