

Occupational Education in Community Colleges, U.S.A.

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Occupational education is a major function of the community college. It is the outstanding characteristic of the college in its role as an institution of vocational education. Occupational programs are designed with the intention of serving students by preparing them for employment and serving industries by supplying them with trained workers.

Occupational education in postsecondary institutions has enjoyed enormous growth over the past twenty years. The number of students entering a two-year college who are eager to obtain an associate degree and go directly to work has increased. The growth in part-time, women, disadvantaged, handicapped, and older students also has contributed to the rise in occupation enrollments. Moreover, these program offerings encompass broad occupational fields from health and engineering to public service, business, and agriculture. These changes have strongly influenced the culture and climate of community colleges.

Definitions in Occupational Education

In occupational education in the community college, the meaning of terms sometimes has overlapping connotations. The most essential terms are "terminal education", "vocational education", "paraprofessional education", "technical education", and "occupational education".

The concept of "terminal education" developed from the idea that there were many students who did not intend to continue their attendance beyond their junior college stay. Some authors, however, objected to the idea of "terminal education" because of their emphasis upon lifelong learning.

The term "vocational education" has come to be restricted to preparation of less than university grade for specific job fields such as agriculture, trades, and homemaking. Such courses have been federally subsidized since the Smith-Hughes Act (1917) and have developed mostly

in secondary schools. Some community colleges have offered these programs which qualified them for federal aid.

The increasing development and application of technology in the professions has introduced the concept of the "paraprofessional" to free the professional from many of the tasks associated with the professional field. New fields have been opened for persons who can operate technical instruments under the direction of the professional. Such helpers need more than high school training, but in many cases less than the bachelor's degree. They include the teacher assistants, laboratory assistants, legal aids, and other workers who must combine, an in-depth understanding of the field.

In the area of "technical education", this concept prepares individuals for jobs in which some manipulative skills are required, but in which technical knowledge is emphasized. Technical education implies preparation for occupations within scientific and engineering fields where the worker will receive a concentration of science and math. It stresses the use of instruments rather than the use of tools and suggests mental effort rather than the muscular exertion. Moreover, "technical education" includes more depth of understanding and allows more independence in judgement.

All of these terms are inadequate as a single designation. However, the term "occupational education" is sufficiently broad enough to include all areas of study. It is best used to denote all organized community college programs of study that prepare students for employment (Grote, 1977, pp. 51-55).

Occupational Education Courses and Objectives

At the community junior college level, occupational education includes courses of two years duration or less, combining the development of skills required for entry into a locally important occupation with related knowledge and theory calculated to help the student progress on the job. Such courses of study include also general education courses calculated to prepare all students to assume responsible roles as citizens, as family members, and as individuals. In many institutions, occupational courses are planned as far as possible with an eye to the rapid changes that characterize the labor market. Emphasis is placed on preparing the student for families of related occupations rather than for a single job; fundamental abilities are developed so as to contribute to the student's adaptability as employment

opportunities change (Tornton, 1972, p. 70).

Need for Occupational Education in Community Colleges

The community college is becoming the educational agency which trains persons for entry into an ever widening number of skilled jobs--jobs which are requiring increasingly sophisticated, technical knowledge. In addition, the community college must retain employees for new jobs as old jobs become obsolescent. Workers need to be upgraded on their present jobs and made ready to transfer to better positions. Occupational programs are important and necessary for business and industry and labor unions in providing occupational training. However, it is not an easy task to decide what occupational programs are needed and how such courses are to be taught (Monroe, 1972, p. 33).

Industry, science, business, public services and health, the changing world of occupations, has met up with the occupational programs in community colleges and found a potential source of worth. The community college graduate can usually get a job that is related to his interests and training (Grote, 1977, p. 53).

Current Changes in Occupational Education

The major changes in occupational education include changes in form and focus, changes in college structure and function, and changes in students.

Changes in form and focus:

Over the past thirty years, community college occupational education has gone through label changes. The labels vocational, technical, career, and occupational education have all had their uses. In 1974, the American Association of Community and Junior Colleges (AACJC) went so far as to institute its own legislation entitled "The Occupational Education Act of 1974" as an alternative to existing vocational education legislation and the Association also recommended that the term "occupational" be used in the future for postsecondary education (Grede, 1977, p. 68).

Along with changing labels, the focus of the occupational education has shifted from the early emphasis on business, secretarial, and industrial related programs to embrace the applied and employable aspects of the entire spectrum of human knowledge (Grede, 1981 p. 9).

The expansion of the content and -scope of occupational education initiated a movement out of the school and classroom and into a close and continuing relationship with the world outside. What was important about this new and broader focus was to serve the training and educational needs of business and industry. Included were cooperative education programs in which students combine planned work experiences with conventional classroom, shop, and laboratory classes. The work-experience process, commonly applied to apprenticeship programs sponsored by an employer or labor union, was now applied to technician and midmanagerial positions. An even broader relationship was marked by the growth of what may be termed contracted inservice programs, 'in which community colleges provided a needs analysis of company employee training requirements, implemented training with instructors from the college or the company, and then added status to the process by granting academic credit (Grede, 1981, pp. 4-5).

One additional involvement of the community colleges has been with the military, for which community colleges and other postsecondary intitutions have developed programs ranging from basic literacy to full-degree offerings in occupational education. These programs are in close cooperation with officers of educational services on or near Army posts, Air-Force bases, and other military installations in the United States (Grede, 1981, P. 7).

Changes in college structure and function:

Four basic aspects of community college structure and function reflect the profound influence of occupational education: curriculum, instruction, support services, and institutional organization.

In curriculum changes, orientation toward the work requires that substantial or primary control of what is learned, and even how it is learned, be removed from the institution and its personnel, largely faculty. The educational program does not differ medically from in-service training provided by business and industry for its employees. In the process, the traditional academic pyramid is inverted. General education becomes supportive to the career focus of the student rather than remaining the primary focus.

For the changes in instruction, instruction in the occupational mode requires objective outcomes that essentially represent the skills and attitudes needed for success on the job. The diversity of interests and learning styles that accompanies the greater age range and heterogeneous backgrounds of today's more mature community college students calls for

individualized instruction with less emphasis on time frames. The four components- acquiring skills, performing task, receiving individualized training, and interacting with others- increasingly characterize occupational education instruction.

In supportive services, the services for students are varied in kind more than in degree from the old junior college era. Not only do they provide financial aid, a product of escalating costs and less affluent clientele, but they also provide career-oriented information, give occupational guidance and counseling, seek out students whose cultural and personal backgrounds encourage reticence, match students with programs and monitor progress, place students in jobs, and follow up with both students and employers.

For the changes in institutional organization, the dean of occupational programs, or an administrator, has risen to a -position of influence. Program coordinators have created a new dimension of supervision between department chairpersons and classroom teachers. New approaches to faculty organization have been evolving in response- to the occupational emphasis. Divisional structures have emerged with occupational titles, but organized around content areas that really represent the applied aspects of traditional academic areas. A representative group. of six would include: 1). engineering and insustriak, 2). business and secretarial, 3). health, 4). public and human services, 5). creative and performing arts, and 6). applied biology and agriculture. Where the old departments have remained, new occupationally oriented departments have emerged (Grede, 1981, pp. 7-8).

Changes in students:

Once the occupational educational students were looked upon as less capable of scholarly pursuits, less intelligent, less serious, and not of the same caliber as the transfer-oriented student (Devenport, 1981', p. 22). Martorana & Sturtz (1973) found that from the Occupational Education Act of 1971, the occupational students were defined as the following:

"...persons sixteen years of age or older who have graduated from or left elementary or secondary school (and are attending) an institution legally authorized to provide postsecondary education which is designed to prepare (them) for gainful employment as semi-skilled or skilled workers or technicians or subprofessionals in recognized occupations, or prepare (them) for enrollment in advanced technical education programs but excluding any program to prepare (them) for

employment in occupations which the Commissioner (of education) determines and specifies by regulation to be professional or which requires a baccalaureate or advanced degree"

(P. 19).

Today's occupational student is not a low-achieving, high school graduate who cannot make it in the baccalaureate curriculums. Rather, the majority are dedicated, goal-oriented, no-nonsense individuals who are in occupational courses because they want to be there. In addition to the eighteen-year-old high school graduate, a sizable percentage of students are part-time, older than the average college freshman, and inclined to take one or two courses rather than complete a total program. Women, racial and ethnic minorities, the employed, career changers, and unemployed all fall into this category (Arns, 1981, p. VIII).

Among the new type of occupational students, the number of women attending community colleges has increased markedly. Nearly five million students currently attend community and junior colleges across the country. About half of these are women. Many of these women are returning to school after a break in their education. Others want to change or improve their occupational status. And some of these are looking at programs they don't feel are tracked for female (AACJC Study, 1977, p. 29). Other groups who are interested in employment and attend the occupational programs are the economically and educationally disadvantaged and the handicapped (Dzierlenga, 1981, p. 95).

Martin (1974) found that "community colleges have always had a category known as the "transfer" student. recently introduced is a new category known as the "reverse transfer" This is a student who has a bachelor's degree and finds that the degree has not opened the doors to employment and that an occupational skill is also required for many initial jobs. One college reported that more than 100 applicants for its first-year nursing class already had their baccalaureate degrees (p. 31)

Programs that Meet the Needs of Students

The changes in the student bodies affects the occupational programs in the community colleges. The major group of these students is the part-time student. To meet the occupational needs of these individuals, occupational programs today are viewed in a threefold typology: 1). pre-service; 2). in-service; and 3). inter-service (or role change).

Traditionally, most of occupational education, particularly at the secondary level, has had a pre-service focus. It has been designed to prepare people with no prior skilled job experience for entry-level positions. Pre-service occupational programs usually have been full-time in the sense that it has been assumed that the student's primary task or role at the time is to prepare himself to enter the job market.

In-service occupational education has most often in the past been sponsored directly by employers, both private and public. Obviously, the most extensive in-service occupational education programs have been operated by the military services. Another major area has been apprenticeship and cooperative training. More recently, public post-secondary institutions have gotten into the act. Much of their involvement has come as a result of education requirements for continued employment or licensing in such diverse fields as law enforcement, firemanship, teaching, and the health related occupations.

"Inter-service" occupational education is the newest and perhaps the most rapidly expanding area, especially for community colleges and for private schools offering evening or short-term programs. The students matriculating into inter-service -business programs include people trained in jobs where there is an over-supply of labor, such as elementary teaching; people preparing to "retire" from one vocation, such as military or law enforcement; and people re-entering the job market after raising a family. Many of the most popular inter-service occupational programs in the business area are those where part-time employment opportunities exist.

The community college must not only offer new programs, but must offer them at different places, using new methodologies (Wenrich, 1977, pp. 28-30).

The needs of special populations : women, racial and ethnic minorities, the economically and educationally disadvantaged, and the handicapped have led to a number of programs in the community college. Evergreen Valley College offers the Transition to Technology Program, an interdisciplinary program including career advisement and guidance designed to provide an overview of the basic concepts of technology and the career options available in technical fields to those who have traditionally not been exposed to technological education.

Special programs for women are especially important in view of Eliason's finding that few women enrolled in vocational/occupational programs at two-year colleges have had much

exposure to vocational aptitude testing or counseling. Only 16 percent of the women surveyed were enrolled in programs that are nontraditional for their sex. The New Vocational Education for Women program at Foothill-De Anza Community College District is intended to help mature women entering the labor force prepare and enter technical careers (Dzierlenga, 1981, p. 95).

Assessment of Occupational Programs

As the enrollments in occupational programs and the needs for this program are increasing, community college officials need to assess their programs. The constant questions they will continue to face are: "How can we evaluate the efficiency and effectiveness of the program in preparing an individual for work ?", and "How can we assess the student's progress toward this goal ? " 'Some of the effective assessment instruments are as follows.

Standardized Assessment Measures :

A Variety of assessment instruments have been developed to measure student interests in and progress toward various occupational educational objectives. For an example, the Gordon Occupation Check List is an instrument designed to measure interest in more specific occupational fields. This check list is of particular interest to occupational educators in community colleges because it represents activities associated with jobs requiring less than baccalaureate-degree college preparation for entry, that is, jobs in the technical and semi-professional levels to which most of the community college programs are related.

Instructor Developed Tests and Related External Measures.

By far the most common assessment practice in community college occupational assessment is the use of tests developed by faculty in the academic division of the college providing the program of instruction involved. This practice builds on one of the community college' strongest features in providing occupational education an instructional staff that itself expert in the field of practice. Instructors of occupational subjects in community colleges have been successful in their specialty and are expected to keep up. their close acquaintance with new developments in their fields. Use of instructor-made tests is virtually universal and reflects both some strengths and some weakness in the assessment process.

In addition, the evaluation of the success or failure of students completing occupational programs can be made by follow-up studies of graduates. The follow-up studies of graduates began to appear very early after the first development of vocational education

under the Smith-Hughes Act of 1917. Recently, community colleges throughout the nation have shown increased interest and activity in determining, from their former students, how well their programs have served them, their career interests, and the work objectives of their employers (Martorana, 1977, p. 51-61).

Conclusions

Occupational education has substantially taken over the community college and represents the essence of comprehensiveness in terms of serving the broadly defined community through organization and through diverse individuals. This is the outstanding job. The community college makes every possible effort to identify and respond to the training needs of the employers and residents of the college's district. Today, occupational programs are affected by national policy, international policy, and technology advances.

The growth and changes in occupational education are crucial to faculty and administration. The program planners must be prepared to manage changing conditions. By all appearances, conditions ahead will require occupational educators who can adapt their programs to shifting enrollments, new clientele, and scarce resources (Seitz, 1981, p. 60).

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