The great diversity in vocational education programs in community colleges can, for the most part, be attributed to the wide range of occupations to be served and the colleges' attempts to meet the needs of their communities and the needs of the individuals within those communities. The vocational educator, however, must be aware of the restrictive rules and regulations imposed by external agencies responsible for administering some vocational programs. These conditions are based on the assumption that a vocational education program will be effective if the institution conforms to certain facility specifications or qualifications required of the teaching staff, instead of evaluating the competencies of the graduates themselves. There are indications of a trend in the approach to institutional evaluation for accrediting purposes that emphasizes the quality of the product over the requirements of the process. In conclusion it is suggested that a cooperative effort be initiated between local institutions and external agencies in formulating educational programs and standards of evaluation. (AL)
THE COMMUNITY COLLEGE LOOKS AT VOCATIONAL EDUCATION

by

Dr. Robert G. Harris
President, Johnson County Community College
Shawnee Mission, Kansas

to the

27th National Conference on Higher Education
March 7, 1972
Chicago, Illinois
As one looks at vocational education in the community colleges across the nation one recognizes that there is a great diversity in programs. Undeniably a major factor is that vocational education is preparing students for the increasing number of careers which require more than a high school education but less than a baccalaureate degree. Right now and in the foreseeable future such career areas offer by far the greatest number of employment opportunities.

There are at least two other responsible factors for the growing diversity in programs. In most community colleges, there is a liberal interpretation of vocational education. In many other institutions conducting vocational education, there are still remnants of the manual arts mentality which essentially says -- if one does not get their hands dirty or if there are no sparks flying or no chips on the floor, it cannot possibly be vocational education. Not so, however, in the comprehensive community college. The community college people have recognized the wide range of vocations that must be served.

A second major factor, but related to the wide range of vocations that must be served, is the needs-orientation of the community college. The community college programs are based on the needs of the community which it serves and the needs of the individuals within that community. Programs such as law enforcement, retail marketing, electronics technology, nursing, data processing, dental hygiene, drafting technology and fashion merchandising are found in many communities as we should expect, because many of the needs of most communities are basically the same. While all communities share many common needs, each community has certain significant differences. Consequently one observes numerous examples of unique vocational education programs as well as a repetition of many others throughout the community colleges of the United States.
In Rinelander, Wisconsin, Nicolet College offers a program titled, "Timber Producers Aide". This vocational program prepares the students for such work as logging operators, pulp producers, sawmill operators and many other jobs related to timber production. Colby Community College in Colby, Kansas, conducts a program in "Feedyard Management" which is characteristic of the needs of the cattle raising community of western Kansas. No one should be surprised that at the Leadville campus of the Colorado Mountain College, a vocational program in "Ski Area Management" is quite popular. There are many other examples of vocational programs that are tailored to fit the needs of the community -- marine biology in Maine, citrus orchard management in California.

There also are many examples of community colleges developing special programs to meet the needs of individuals. We are aware of programs especially designed for the Cuban refugees, the migrant farm workers and the urban minorities.

There has been substantial effort made in meeting the individual needs of the educationally, culturally and physically disadvantaged. As an example, in our College, Johnson County Community College, located in suburban Kansas City, we are in the second phase of a three-phase program to produce a vocational program for the hearing impaired or deaf student. At present, programs for the hearing impaired in secretarial careers and data processing are under way. The need for this hearing impaired program was determined during the conduct of an educational needs survey in the community college district prior to the opening of the College. At that time, it was discovered that an unusually high percentage of the residents of Johnson County were either deaf or had problems of hearing impairment. This was attributed to the fact that the
Kansas School for the Deaf is located in Johnson County. Over the past years many persons have moved to Johnson County in order to attend the Kansas School for the Deaf and, after completion of their studies at that school, have remained as permanent residents of the County.

So one can see that the great diversity in vocational education programs found in the community colleges is the result of at least two factors:

1. the liberal interpretation given to vocational education in recognition of the wide range of occupations that must be served, and
2. the acceptance of the responsibility to meet the needs of the community, and the individuals within that community, that each college serves.

I have often stated to my staff that the development of vocational education programs in response to the needs of our community is limited only by imagination and money, and mostly by money. However, in recent years I have had second thoughts about this statement. During the past few years, I feel the action of external agencies, both governmental and nongovernmental, have unduly limited the development of many vocational education programs by imposing rules and regulations that can be classified as either arbitrary, restrictive and/or discriminatory.

Examination of these restrictive measures that are imposed by external agencies indicates that they are generally concerned with the process of education rather than the product. It appears these agencies are more concerned with the input to the educational system rather than with the output.

As illustration, consider these examples: The Federal Aviation Administration in its Federal Aviation Regulations has specified that a college seeking approval of its
ground school program must have a classroom that meets the following conditions:

- At least 80 square feet of floor area for five students, plus at least 15 square feet for each additional student.
- Heat and ventilation in accordance with public health laws.
- Enough light to allow a person with normal eyesight to study or read without eye strain.

How do the physical dimensions and conditions of a ground school classroom really affect the competencies of the student pilot? Shouldn't the FAA be less concerned about the physical dimensions of the classroom and more concerned about the measurement of the flying ability of the candidate for licensure?

The Manual of Requirements for Kansas Schools of Nursing issued by the State Board of Nursing, states that "the director shall have a private office and not more than two instructors share an office".

Does a requirement of a private office for the director of nursing or a limitation of two instructors to a room really have any impact on the quality of the nursing program? Shouldn't the State Board of Nursing be more concerned with determining the competencies of the graduate of the nursing program and the establishment of proper standards for the licensing of nurses?

Another example from the State of Kansas is the set of requirements of the State Department of Education relative to the certification of instructors of dental hygiene. One of the requirements for the instructor is that he have completed 12 "approved" semester credit hours of instruction in vocational education. Does the fact that a dental hygienist instructor has, or has not, completed 12 semester hours in vocational education really have an effect on the quality of the dental hygiene program?
Shouldn't the State Board of Education be more concerned with developing methods to evaluate the competency of the graduate of a dental hygiene program?

There are many other examples of both governmental and nongovernmental agencies that impose similar restrictions on the local institution. In most cases the restrictive conditions are concerned with the input to the educational system. In a simplified version of an educational system there are essentially three quantities: input, output, and feedback.

In describing these quantities, the input of an educational system can be considered as two parts: the needs and the resources. The needs previously discussed can be considered as the needs of the community and the needs of individuals within the community. Resources would include the staff and faculty, the facilities, the instructional methodology, the students and the financial support of the institution. In the simplest form, the output of the educational system is student graduates. The feedback in an educational system could be titled "evaluation." Evaluation would be the result of the application of an evaluative criteria in the measurement of the output and its effect on the input -- the needs and resources. Evaluation criteria should be defined so that they are (1) objective, (2) a function of the output, (3) expressed in measurable terms, and (4) subject to continuous review to reflect the changing needs.
After describing the educational system, one should identify the roles of the local institution and the external agencies in the operation of the system. A cursory examination of the roles of the local institution and the external agencies indicates there must be a sharing of responsibility in all areas. The development of the evaluative criteria should be the result of a cooperative effort between the local institution and the external agencies. Since many educational programs require either the financial support or the sanction of the external agencies, there must be a cooperative agreement between the two parties relative to these matters. The external agencies should collaborate with the local institution in the development of procedures relative to the distribution of funds, the establishment of standards for licensure or approval and in the assessment of the societal needs of the larger community.

The local institution must bear the prime responsibility for the determination of local needs and for obtaining and maintaining the resources required for conducting the educational program.

The primary responsibility of the external agencies then becomes that of meeting the needs of the larger community, of administering the evaluative criteria to determine whether the vocational program actually produces qualified personnel for the vocation, and of exercising the proper control through the distribution of funds or the approval process of certification or accreditation. Both the governmental and the nongovernmental external agencies have an obligation to protect the well-being of society and the governmental agencies in particular must act in the best interests of society in the expenditure of public funds.
At present the development and extension of vocational education programs in the community colleges is seriously threatened and impeded by the actions of many of the external agencies. The imposition by many external agencies of restrictive conditions and rules and regulations must be reexamined before many of the needs of our communities and our country can be adequately served.

Within the last year there have been several indications of a new trend developing in the accreditation, certification and approval procedures of several external agencies. This trend indicates that there will be more concern with the evaluation of the outcome of education. Hopefully with this increased emphasis on the outcome of the educational process, there will be less interference with the local institution in the functions of the input and the process of education. An example of this new trend is found in the remarks by Dr. Norman Burns, Executive Secretary, North Central Association of Colleges and Secondary Schools, to the National League for Nursing, in October, 1971:

"...The time has come for a major change in the approach to institutional evaluation for accrediting purposes. The present approach, devised at an earlier time and under different circumstances than exist today, is based on the assumption that, if an institution possesses certain structural characteristics which are generally recognized as good, the probabilities are high that good education will take place. These characteristics, as you know, relate to such matters as provisions for institutional governance and administration, the instructional arrangements and qualifications of the faculty, the adequacy of the program of student services, the library and learning resource materials, and the physical facilities.
Recent developments in higher education permit and indeed demand a
new approach.

The accrediting agency must devise procedures and evaluative techniques
appropriate to these new educational patterns. No longer able to rely heavily on
its traditional measuring sticks of structure and form, it must develop new measures
to certify to the quality of learning experiences which may be made available outside
the traditional institutional arrangements of faculty, administration, library, and
physical facilities.

The new approach will involve heavier reliance on direct measurement of
educational outcomes than has characterized the past. Efforts along this line will
be facilitated by the increasing availability of increasingly sophisticated instruments
for direct measurement of outcomes."

A few weeks ago Johnson County Community College was invited to participate
in the field testing of some recently developed instruments and procedures for the
evaluation of vocational-technical education. These instruments and procedures were
developed as a part of a national study for accreditation of vocational-technical
education being conducted by the American Vocational Association with support from
the U.S. Office of Education. In a memorandum from Mr. Lane C. Ash, the director
of this national study, one can receive encouragement as to the direction the study
has taken. Mr. Ash in his memorandum discusses many innovative features of the
proposed evaluation. Four of the innovative features he discusses are:

1. To hold schools accountable for preparing students for gainful employment.

Traditional accreditation has held schools accountable for preparing students
for further education. Such an objective applied to vocational/technical education
would divert it from its purpose.
2. Product and process factors are clearly differentiated. Emphasis is on evaluation in terms of product (outcomes).

3. Objectives are expected to be in measurable performance terms permitting evaluation of achievement.

4. The relationship between need, objectives, and outcomes is expressed and used as a basis for evaluation (i.e., the product needed, the product promised, and the product produced).

Therefore, in summary, we find the community colleges responding to the needs of the communities and the needs of the individuals within the community in many diverse and imaginative ways. The further development of vocational education programs in the community colleges to meet the expanding needs is seriously hampered by restrictive, arbitrary and discriminatory conditions imposed by some agencies external to the college -- both governmental and nongovernmental in nature. These inhibiting conditions imposed by the external agencies are generally related to the input rather than the output of the educational programs.

In viewing vocational education as an educational system, it is suggested that a cooperative effort between the local institutions and the external agencies, with a proper definition of their respective roles, would facilitate the operation and maintenance of the programs required to meet the needs of our communities.

Recent pronouncements and actions of such influential agencies as the North Central Association and the American Vocational Association indicate a positive trend toward identifying the proper role for external agencies. This role is being identified.
with the evaluation of the outcomes of education rather than the input or process as it has been to date. This supports the proposition that the local institutions must have the responsibility of meeting the needs and managing the resources to meet these needs without undue interference from any external agencies -- either public or private.