Community colleges need to evaluate, free from prejudice, the nature and impact of their whole system. Lack of effective programs for minority students is one of many discrepancies between objectives held and those actually implemented. The goals of a successful evaluation are to measure and identify a combination of input and process factors that contribute to desired outcome criteria, and to provide such information as will give educators a more informed basis for determining what to change in the system in order to improve the educational experience. An evaluation depends on thorough research. As research resources for the community colleges are meager, it is necessary for the individual college to make effective use of available materials, to pool its information with other community colleges, and to consult and collaborate with relevant university-based research centers. The success of such a program depends on sufficient financial support, continued pooling of information, and the receptivity of the community colleges.
THE CIRCLE OF EVALUATION IN THE COMMUNITY

JUNIOR COLLEGE

UNIVERSITY OF CALIF.
LOS ANGELES

James W. Trent

JAN 12 1971

CLEARINGHOUSE FOR JUNIOR COLLEGE INFORMATION

CSB Report No. 63

November 1970
The CENTER FOR THE STUDY OF EVALUATION is one of nine centers for educational research and development sponsored by the United States Department of Health, Education and Welfare, Office of Education. The research and development reported herein was performed pursuant to a contract with the U.S.O.E. under the provisions of the Cooperative Research Program.

Established at UCLA in June, 1966, CSE is devoted exclusively to finding new theories and methods of analyzing educational systems and programs and gauging their effects.

The Center serves its unique functions with an interdisciplinary staff whose specialties combine for a broad, versatile approach to the complex problems of evaluation. Study projects are conducted in three major program areas: Evaluation of Instructional Programs, Evaluation of Educational Systems, and Evaluation Theory and Methodology.

This publication is one of many produced by the Center toward its goals. Information on CSE and its publications may be obtained by writing:

Office of Dissemination
Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, California 90024
NEED FOR EVALUATION

In society a tension inevitably exists between established norms and changing situations. The way to resolve inordinate tension is to reform the institutions that society depends on for its maintenance. Reform has never been more needed than now; our dis-enfranchised, the deterioration of the ecology of our human and natural resources, our urban crises and world stress are contemporary problems demanding social reform.

A major vehicle for reform is the college. This is true since higher education is the custodian of our culture and the catalyst for its development. Social reform, therefore, cannot follow without commensurate educational reform. Appropriate research and evaluation are prerequisites to forming sound programs for reform. In that context this paper will examine the need for evaluation of the community college as an important aim of higher education and consider strategies for establishing evaluation.

Obviously, research has value beyond the quest for knowledge. In addition to this important intellectual endeavor, research is essential to the continued understanding of society and its subsequent progress. It is important specifically to education which is a root of society. Obviously, too, research loses much of its value when it is not related to social action. The days of the exclusive ivory tower are gone. Instead these are critical
days for educational evaluators, and this is certainly true for those concerned with the two-year community college.

Increasingly, the community college is assuming most of lower-division higher education. Many educators and government officials regard the community college as the primary institution to implement universal higher education, for it has been established by federal decree that all who are capable are to have access to college. This means that the community college, more than it ever has before, must deal intensely with the lives, careers, and leadership of our coming generations. It also means that the community college must examine itself to assure that it is carrying out its mission in the most effective way. Yet the extensive reviews and critiques of the literature by Cross (1968) and Cohen (1969 a,b) indicate a dearth of systematic research and evaluation pertinent to the community college.

Because of the focal role of the community college in higher education, it can no longer continue to go unevaluated. It is too important to remain hidden behind debilitating defensiveness and clubbishness. The value of its functions and objectives and their proper implementation must be demonstrated and, if they are found wanting, a way must be sought for their improvement and implementation. We can no longer speak of an open-door college when it is evident that too often it is a revolving-door college. We cannot
speak of it as a community college when there is non-
communication with important segments of the community.
Nor is it appropriate to speak of it as a student-centered
college in the face of continual evidence of heavy attrition
among its students, a condition not salutary for many of
them.

What is necessary now is an assessment free from pre-
judgements and preconceptions, of the nature and impact of
the whole system of community colleges. Such evaluation
involves much more than what is accomplished by most of the
current research done in community colleges, such as counting
withdrawals and transfer students, predicting grade-point
averages from academic aptitude scores (which works for white
middle class students, but probably not for most minority
students), preparing for accreditation, or recounting selected
successes among graduates, as important as these matters are.

CASES IN POINT

For illustration, let us take a few cases in point.
Berg and Axtell (1968) have provided a landmark study in
their investigation of programs for "disadvantaged" students
in community colleges. Their comprehensive survey of students
and faculty in a representative sample of California community
colleges reveals that with very few exceptions, these colleges
have done nothing special to recruit minority students or to
assist them in meeting the expectations of the college. In
addition Knoell's (1969) recent study of the college-going behavior of high school graduates from various metropolitan areas indicates that black students enroll in college in the same proportion as white students of low socioeconomic status, and that talent is going untapped in both instances. Both studies call into question important objectives of the community college as much as it avowedly serves the total community but in fact does not do so in important ways.

A growing number of both two-year and four-year colleges, of course, are now initiating special programs for minority students. Examples of these programs were described at the 1969 Annual Conference of the American Personnel and Guidance Association. Although the programs recruited only a very small number of students they were generally successful in terms of the persistence records and grade-point averages of the students. A monitoring of the descriptions of the programs indicated elements that were common to most of them which may help to explain their success. They included: (a) a concerted, careful selection of students; (b) going beyond the recommendations of high school counselors to assess student potential; (c) inquiring beyond transcripts and records to discern student potential; (d) instructing teachers how to work with minority students, and not insisting upon the same academic regulations for minority students that exist for others; (e) avoiding self-imposed elitist segregation and installing a personal advocate for the students to communicate with all departments; (f) communicating with schools and
community colleges that serve minority students; (g) explaining and improving the image of the schools, especially for the parents of minority students; and (h) changing the institutions involved so that they can effect social change beyond the campus.

Issues that remain in the mind of the reviewer include the fact that: (a) only a very small proportion of minority students are included in these programs; (b) problems that are of the minority cultures' own making are ignored by the minority students and their advocates to their own disadvantage; (c) the fact that many programs appear to be hasty reactions to immediate pressures and which therefore provide only partial remedies, instead of the reasoned restructuring of the whole system which is needed to effect change toward desired educational and social reform; and (d) the fact that the programs had not been evaluated in an objective, systematic way that would allow replication of their positive features or suggestions or even demonstrate them conclusively, let alone indicate how best to integrate them into the entire system of higher education.

Clearly, an effective program for minority students is not possible on the basis of a special academic program alone. There must exist a supportive, sensitized atmosphere where there is prevalent an understanding of minority students, including their internal conflicts and divergent values. This is not possible if the students are made to conform to the college environment. Rather the environment
must be restructured to respond to them. The important question remaining is how to ascertain and develop that type of environment.

The same question is relevant to quite another type of program. One of the major features that Johnson (1969) found in his survey of innovations in community colleges was the use of audio- or auto-tutorial laboratories providing such materials as single-concept films for student viewing. An example Johnson cited is Michigan's Delta College which has developed a remarkable set of single-concept films and a tutorial laboratory for its nursing students. Recently the college held a conference to introduce these materials to representatives from colleges participating in the League for Innovation in Community Colleges.

There was a feeling at the conference that the single-concept films and auto-tutorial laboratory had made a considerable and unique contribution to the learning of the students. The enthusiasm seemed justified especially in reference to the very articulate and personable students who were present. But it was not apparent just how much difference the films made, if any, compared with other features of the nursing department and the institution as a whole. There existed, for example, faculty-student relations unique for their cordial, candid, and communicative inter-actions, a stress on humanitarian interpersonal relationships, an educational format that included general and small assembly
sessions designed to elicit expression and discussion of problems of both an intellectual and personal nature, and a competent, open administration that encouraged the department's efforts. Very likely it was the particular kind of institutional setting that made possible the sort of learning and living that was apparent at Delta College. It is, therefore, as important to examine the formation of the setting as it is to examine the particular instructional technique.

We might look at it this way: The research of Berg, Axtell, and Knoell shows the discrepancy that can exist between objectives that are held but which are not actually implemented, and points out directions to follow and evaluate. Programs can be found that appear to be following these directions. But whether the programs are designed to enhance the education of minority students or students at large, at this point they are reaching only a minute number of students. They are also very expensive at a time when higher education is faced with severe financial problems.

Programs for educational improvement will and, in many cases, should vary by institution. They should, however, be evaluated so that both their shortcomings—almost never mentioned—and their effective features can be determined objectively. Too often what is professed to be program evaluation is only a summary of the impressions of those involved in the program, as was the case with the minority student programs described at the 1969 annual
meeting of the American Personnel and Guidance Association. Though impression is sometimes helpful to evaluation, it is seldom sufficient. Systematic research and evaluation of these programs are essential in order to learn which principles and techniques, for minimum expense, are effective, replicable, and applicable to other institutions. To deal with reform properly the research must also consider the implications of the evaluated programs for change on a single campus and for the entire system of higher education. Moreover, the research should consider the implications not just for the next few years, but for many years to follow.

A BEGINNING BODY OF RESEARCH

Fundamental to a systematic evaluation of the community college and its programs is an understanding of the dynamics of the different institutions in the community college system and of the different students who attend these institutions. At present there is no systematic or system-wide information on the impact of the community college or any of its programs on its students or on the broader community it serves. Since 1960, however, there has begun to develop a body of research on the characteristics of community colleges, of their students, and of the outcomes of their programs. The research is relatively comprehensive and sophisticated, especially in comparison to research on the community college conducted before 1960.
Among the contributors are: Astin, Panos, and Creager (1966); Baird and Holland (1968); Berg and Axtell (1968); Clark (1960); Hills, Hoyt and Munday (1966); Knoell (1969); Knoell and Medsker (1965); MacMillan (1969a,b); Medsker and Trent (1965); Panos (1966); Richards and Braskamp (1967); Richards, Rand and Rand (1965a,b); Tillery (1964); and Trent and Medsker (1968). Evans (1968) has summarized and synthesized much of this research.

The research indicates measurable environmental characteristics of community colleges such as cultural affluence, technological orientation and transfer emphasis that distinguish among community colleges, between community colleges and four-year colleges, that are somewhat associated with the different characteristics of students attending diverse community colleges. More is known about the students than about the institutions and what is known is problematical. This is evident from the generalizations that follow, based on comparisons of two- and four-year college students.

Those who attend community colleges manifest less measured academic aptitude and less academic motivation as exhibited by such factors as the late decision to attend college, lack of interest in being there, and uncertainty about completing their program. They come from a broader, but generally lower, socio-economic status. They are less introspective, less self-directed toward articulated goals, and less knowledgeable about alternative goals, whether in reference to careers or education; they are, moreover,
less likely to realize their goals. They show less interest in ideas and abstractions and are generally less intellectually disposed and less autonomous in their thinking and attitudes; they are also less prone to change on these dimensions. They show less originality, fewer signs of leadership, and less involvement with college extracurricular or community activities. They are much less likely to persist in college beyond two years and more likely to take longer than four years to obtain their baccalaureate if they do transfer to a four-year college.

The findings summarized are not necessarily negative by implication. More needs to be known about the meaning of these findings and the ultimate attainments and behavior of community college students before such a judgment is warranted. Further, community college students are not all of a kind. There is a great deal of diversity among community college student bodies on the traits enumerated, and also a great deal of overlap between two- and four-year college students on these same traits.

SUGGESTIONS FOR EVALUATIONS

Regardness of everlapping data, the findings enumerated above are problematical on two counts: (a) they suggest that a number of characteristics shared by many community college students can hinder the realization of the potentials of the students, including their
potential contribution to society; and (b) they suggest that different characteristics of the colleges can have an impact affecting the traits and outcomes of students. We come, then, full circle: community colleges cannot realize their own potential or sufficiently help their diverse students to realize theirs until they have a clear understanding of the dynamics of their various institutional characteristics and programs and the effects of these elements on their students and the larger community. This entails, in turn, consistent and comprehensive research and evaluation.

A start in this direction--after obtaining research personnel--is to determine the criteria that will represent the desired outcomes of the community college. Initial criteria might well include the realization of student or institutional potential; the attainment of student goals such as ability to transfer to a four-year college, vocational competency, or general knowledge; the attainment of institutional goals such as the development of critical thinking and social awareness among students; or the achievement of the specified behavioral objectives of a program or course.

The demonstration of the criteria may begin with the posing of key questions. For example, does the community college make a difference in the values, attitudes, and attainments of its students? Does it influence different groups of students in the same way, such as those who are unmotivated academically, who are of low or very high
academic aptitude, minority students, or those who enter college with vague or unrealistic goals? Does the community college influence all of its students, even those who remain enrolled for only a short time? Or do "successful" students progress in spite of the college? If the college makes a difference, how? What critical combination of institutional, faculty, student and other factors lead to what results? To what extent are the processes leading to certain outcomes generalizable and replicable for use by others? For the future, what are the most effective strategies to use in the comprehensive evaluation of community colleges?

It is no easy matter to answer such mammoth questions, whether by the institutional research office in the individual community college or by the university researcher. From the beginning the researcher must be aware of the many problems in need of research and evaluation. He must also be able to pose them in operational, measurable terms. Although they may be simply stated under three categories, the terms are inevitably interrelated, multiple and complex: (a) they include input variables that reflect important background, aptitude, and dispositional characteristics of students that bear on their education; (b) they include important criteria that reflect outcomes of college attendance; and (c) they include a variety of educational and environmental variables, or what may be considered contextual, treatment, or process variables that intervene between students' entrance to and
departure from college, and which influence input variables
to change in light of specified outcome criteria.

An example is the important criterion raised above—
the realization of student potential. The question to begin
with therefore, is to what extent does the community college
help students of different input characteristics to realize
their potential? Potential can be defined operationally as
a student's aptitudes, satisfying concepts about himself,
and vocational and personal status compatible with his apti-
tudes and self-concepts. A person's aptitudes, self-concepts
and status are all measurable, and include the input vari-
bles of academic, vocational, and social aptitudes; goals;
interests; achievement motivation and needs; values; and
extent and accuracy of self-concept.

The original question now becomes more extensive and
specific: to what extent do students of different back-
grounds and aptitudes change their goals, become knowledg-
eable about themselves, and achieve educationally and
vocationally in ways that would indicate the desired out-
come? That is, to what extent do students manifest greater
realization of their measured potential after attending
college compared with their status at entrance? To what
extent are these changes associated with different con-
textual or process variables as indicated by measures of
faculty orientation, teaching techniques, and attitudes;
courses taken; the atmosphere or environment of the institu-
tion; peer relationships; and experiences at home, at work,
and in the community?

Potential is an abstraction that can be reduced to relatively concrete, albeit complex, terms. The important educational outcomes or criteria comprised by the realization of students' potential depend on the interactions of the different characteristics of entering students, the characteristics of the institutions they enter, the kinds of experiences they have while at college, and the kinds of experiences they have outside college. The objectives of evaluation are: (a) to measure and identify those combinations of input and process factors that contribute to the desired outcome criteria; and (b) to provide this information so that educators will have a more knowledgeable basis on which to determine what to change in the system, in light of desired outcomes, to improve the educational experiences for different types of students.

Systematic evaluation of this kind not only involves an understanding and delineation of the research problem and the subsequent assessment of the inter-action of many variables, but also the concomitant employment of a variety of research techniques. These include the construction and validation of instrumentation, survey analysis, participant observation, measurement of behavioral objectives, naturalistic field research to determine the status quo, and the determination of the effects of specific treatments through experimental-control group comparisons or the simulation of such comparisons through the appropriate mani-
population of large pools of data, especially through the use of multivariate, regression and factor analyses.

Evaluation is dependent upon thorough and innovative research design and implementation. Equally urgent, however, are increased awareness among faculty administrators and funding agencies of the problems to be researched, and consideration of the resources available for the research.

Since research resources are so meager in most community colleges every effort should be made to use resources effectively. From the start a capable person with a research orientation must be given adequate time to conduct the research. In his own institution he could then expand his efforts by consulting fellow faculty members about research design, statistical techniques, and reporting. He could also conduct a great deal of evaluation by fully analyzing data normally collected at his institution--particularly the type of data that can now routinely be made available from the student questionnaire of the American Council on Education or the Student Profile that comes with the academic aptitude scores of the American College Testing Program.

Given the present priorities of time, budget, and talent, however, a community college can rarely conduct sufficient evaluation of its own institution--apart from the fact that the whole system of community colleges is in need of evaluation. Consequently, community colleges must do more to pool their research resources for maximum use through inter-institutional cooperation. This appears to be a hopeful thrust of the Research and Development Committee of the
California Association of Junior Colleges. The research officers (where existent) could then not only share instruments, data, facilities, and expertise, but could also lobby in unison for a greater share of their institutions' budgets so that they could do a better job of evaluation. In addition, community college research consortia could establish regional seminars and internships so that their research officers could help train one another and also train additional researchers. In the process, they could begin to work on a serious evaluation problem that they could share together but which they could not undertake individually. They could also carefully develop and disseminate their research and evaluation—including resultant implications for policy and procedures. These activities and materials could then be the basis for instruction for faculty and administrators indifferent or hostile to evaluation. Finally, community colleges—or concerned personnel in them—could do much more to consult and collaborate with strategic and relevant university-based research institutes and centers. Productive collaboration of this kind would maximize the opportunity to field test and to advance generally research, development, and evaluation to the mutual advantage of the community college and the university.

PROMISING PRECEDENTS

Precedents are emerging for this kind of research, evaluation, and subsequent development. Examples may be found in
the objectives of the Higher Education Evaluation Project of the Center for the Study of Higher Education, and in the Project's collaboration with the Regional Educational Laboratory for the Carolinas and Virginia.

Objectives of the Higher Education Evaluation Project include: the consideration of evaluation strategies; measurements of outputs of various types of institutions and institutional programs; components and processes; the delineation of factors contributing to the outputs or criteria; and consequent information and techniques useful in planning the future directions of higher education on an institutional, regional, and national basis.

The ultimate worth of evaluation activities of this sort, however, is dependent on the research and evaluation efforts of the many individual colleges in America, whether or not they participate in the projects described. Here, again, a model of institutional participation in evaluation and development is emerging. The Regional Education Laboratory for the Carolinas and Virginia has established a program for Educational Development Officers (EDO's) with the intent that the EDO in each participating college be more than the institutional research officer familiar to many educators. He will make use of existing research to develop further research and evaluation in his own institution. In collaboration with the administration, his objectives are to uncover problems, suggest solutions, and generate ideas helpful to the highest level of decision-making and imple-
mentation regarding present and future programs in the college.

The Higher Education Project, in turn, is collaborating directly with the Regional Laboratory to provide means for the EDO to accomplish his evaluation and development tasks.

Sufficient financial support, continued collaboration among researchers, and also receptivity in the college will surely bring these current evaluative efforts to fruition and encourage their extension. Appropriate developmental reform in community colleges, as in all of higher education, can come in no other way.
REFERENCES


Knoell, D. M. A study of the college-going behavior of urban high school graduates, with particular attention to black youth not now in college. Washington: American Association of Junior Colleges, 1969 (Mimeo)


Medsker, L. L., & Trent, J. W. The influence of different types of public higher institutions on college attendance from varying socioeconomic and ability levels. Berkeley: Center for Research and Development in Higher Education, University of California, 1965.


