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ABSTRACT

The purpose of this paper is to suggest the kinds of research that would be most suitable for community college faculty members and to illustrate these, where possible, from actual examples of ongoing research efforts, or, alternatively, from hypothetical examples. Some of the benefits and potential benefits in the area of student development, faculty development, and community development are suggested, and some of the practical problems of implementation are discussed. Research is classified by methodology and objectives. Methodology is broken down into empirical studies or library research. Objectives of research are classified in terms of subject matter research, pedagogical research, or a combination of the two. It is suggested that the kind of research which combines intellectual inquiry into one's subject field with the process and substance of instruction and/or community service holds the most potential benefit for most faculty members. This type of research focuses on the need for academic renewal, keeping abreast of the subject field, or intellectual revitalization as an essential part of staff development. (Author/AH)

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THE COMMUNITY COLLEGE FACULTY MEMBER
AS RESEARCHER

by

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Center for Higher Education
University of Virginia
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FOREWORD

In a time of rapidly changing knowledge, lower student enrollment rates, and the resulting problems of steady-state staffing, faculty development has become an important issue. This paper addresses itself to a question seldom seriously explored, yet crucial to the successful performance of the community college faculty member.

Specifically, what does he/she do to renew and refresh a feeling for the subject matter conveyed in the classroom? How can the community college instructor best pursue knowledge as a teacher-scholar? Can he/she integrate research with a heavy teaching load? Is there an appropriate research function to be performed by faculty in community colleges?

Dr. Kellams, in a thorough analysis, suggests that not only is there a distinct role for research in the community college, but that the role he outlines will both enhance the instructor's academic competence and serve the community.

ABOUT THE AUTHOR

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THE COMMUNITY COLLEGE FACULTY MEMBER AS RESEARCHER

Community college lore has it that community colleges are "teaching" institutions. A minor activity of the academic staff, "research" is seen by some as potentially detrimental to the chief goal of the faculty member: To facilitate student learning through instructional services. Community college faculty members do not engage in specialized, esoteric research and its publication. There is no time, no support, and no reward for this kind of activity. Teaching has top priority.

Yet, this paper will argue that community college faculty members both need and profit by a selective involvement in research activities. A specific model is illustrated here which attempts to maximize the professional vitality of faculty members in a way consistent with their teaching role and the special mission of the community college.

The most recent faculty survey by the Office of Research of the American Council on Education indicates the extent to which research is undertaken in the community college.¹ Some examples: Almost 60% of the community college faculty had spent no time whatsoever in research and scholarly writing. During the last two years, 87% had published nothing. In contrast, 23% of university faculties had spent no time in research and 37% had published nothing in the last two years. As expected, other four-year colleges fell in between the two-year colleges and universities. Only 3% of the two-year college faculties

agreed that it was very difficult to achieve tenure if one does not publish. Thirty-one per cent agreed with this statement at four-year colleges and 68% agreed with it at universities. The teaching load was much greater at the community colleges and community college faculty members agreed that teaching effectiveness, not publications, should be the primary basis for faculty promotion (95%). Curiously, even at universities, 67% of the faculty would have teaching effectiveness be the chief criterion for promotion.

In comparison with four-year college and university faculty members, then, community college faculty spend much less time on research and writing, publish much less, and find that the institutional reward system, to their liking, reinforces their non-research orientation in favor of the teaching role.

However, some community college faculty members do research and many find that the kind of research they do actually enhances the teaching and community service functions of the community college. The same ACE Research Report indicates that about 40% of community college faculty spent time at scholarly or research work. Indeed, 24% received some financial support for their efforts, either institutional or extramural funds, within the last year.

The purpose of this paper is to suggest the kinds of research that would be most suitable for community college faculty members and to illustrate these, where possible, from

actual examples of ongoing research efforts, or, alternatively, from hypothetical examples. In addition, some of the benefits and potential benefits in the area of student development, faculty development, and community development will be suggested. Finally, some practical problems of implementation will be discussed.

Varieties of Research in the Community College

One way of ordering the kind of research done in the community college is to view it as "subject matter" (or "disciplinary") research, "educational" (or "pedagogical") research, or some "combination" of the two. This classification is based upon a difference in the object of study and the purpose of study. In "subject matter" research, one studies one's field in order better to understand it and to contribute to the store of knowledge in the field. In "educational" research one studies processes of learning, evaluates the effectiveness of various teaching techniques, or manipulates existing subject matter into new packages towards more efficient and effective student learning. In a "combination" of these two kinds of research, one generates or discovers new knowledge in one's field while serving a pedagogical purpose or developing new pedagogical forms.

Cross-cutting this taxonomy of research types is another way of ordering research based upon methodology. The small-scale, localized empirical study, using institutional laboratories, equipment or

the surrounding community as a "field" or "natural" laboratory is one dimension. This type of research could also include the development, simulation, demonstration or field testing of new processes or techniques in the technical or occupational fields. Library research is the second dimension based upon methodology. This kind of research includes reviews, summaries, analyses or syntheses of existing research, development and creative works reported in the periodical literature, monographs, books, films and other media.

Table I shows a 2 x 3 matrix summarizing these two ways of viewing community college research efforts. Where research is

TABLE I
TAXONOMY OF RESEARCH TYPES

	Pedagogical Research	Subject Matter Research	Combination of Subject Matter and Pedagogical Research
Empirical Studies			
Library Research			

now done in the community college, it is usually "pedagogical" research: The development of teaching materials, curriculum and instructional packaging and evaluation, small-scale institutional

studies of students, student learning, etc. Here are some concrete examples of pedagogical research, both empirically based and library-research based.²

A psychology instructor at a community college in Virginia is doing a literature search on attitude change in higher education to provide an understanding of why attitudes toward computer-assisted instruction are largely negative. The hope is to devise ways of fostering change toward CAI.

An electronics instructor in Illinois is investigating the effectiveness of laboratory reporting methods upon the attitude and achievement of students in electronic technology courses.

An English instructor in Virginia is developing a program of multi-media self-instructional materials in spelling. The development and testing of audio and visual mnemonics on "high reading" level and "low reading" level students is the core of the program.

An instructor of chemistry at a community college in Illinois is preparing instructional materials for use in a modified Keller plan course in chemistry. Student achievement using the Keller plan was compared to student achievement taught by the traditional lecture approach. The materials are being published as an ancillary text to a college chemistry textbook.

These are fairly typical educational research and development projects conducted by community college faculty members. Examples could be multiplied. Pedagogical research is important, of course, and should be continued. However, such research cannot be better than the vitality of the content which forms the substance of teaching and learning.

It is this "substance" with which "subject matter" research is concerned. While faculty members at universities are the

chief generators of new knowledge for the purpose of building the discipline which they represent, some community college faculty members also conduct such research. This kind of research has no direct aim in the instruction or service roles of faculty members. The purpose is to further understanding of a particular area of study. Some actual examples follow:

An instructor with an interest in astrophysics at one of the CUNY community colleges is conducting theoretical research on acceleration and diffusion of cosmic rays from the site of solar flares into interplanetary space. He has published his results in some of the standard physics journals.

Also at a New York community college, an instructor of English identifies himself as a specialist in the 20th century novel and Anglo-Irish literature. He has analyzed the most important short stories and novels and added biographical and bibliographical materials in a published work on Liam O'Flaherty.

Another instructor in the CUNY system indicates his field of expertise is "Modern Italy, Nationalism, Imperialism." His standard methods of historiography have been directed toward a study of Enrico Corradini and modern Italian nationalism - 1896-1923.

An instructor of English at a Virginia community college is undertaking a critical evaluation of the writings of Karl Jay Shapiro, American poet and critic, for the purpose of defining his role in the poetic revolution of the 1950's.

These projects will be recognized as quite traditional research of the "pure" variety. While the authors of these efforts feel their research keeps them fresh and intellectually alive in the classroom and, hence, benefits their students, this

is not the kind of research that most community college faculty members should do. The institutional support, the reward system, the teaching load, the kind of student attracted and the community college institutional mission in the system of higher education all seem to call for a different kind of scholarly research effort for community college faculty. Neither the pure pedagogical research nor the pure subject matter research embodied in the above examples seems appropriate for most faculty members.

Instead, a "combination" of these two kinds of research types more congruent with the community college mission should be encouraged. I shall suggest two kinds of studies of this type: The "small-scale empirical study" and the "library research study" (See Table I).

Localized, field or experimental studies, quantitative or non-quantitative, could be pursued using the equipment already available at the college and using the surrounding community as a field laboratory. Concern would not be to produce highly valid, reliable and broadly applicable knowledge. The purpose would be to use the methods of one's discipline to keep academically fresh and intellectually curious. A theory, principle, or idea becomes much more meaningful when it can be tested and found embodied in one's immediate environment. While the process of conducting the inquiry would be all important, the product of

the research might be useful to the local community or for illustrative purposes in teaching. Students could participate in the research process itself. The much heralded goal of "discovery" and "learning how to learn" would be enhanced.

Here are some examples of community college faculty members who are doing this kind of research:

An instructor in American history at a Florida community college has been conducting a study of a local Florida politician, land developer and carpetbagger, William Henry Gleason, a reconstruction era figure. Primary documents, local records and oral interviewing techniques are being used (Gleason's grandson has been interviewed twice). The materials will also be used in preparation for a course on Florida history to be given at the community college.

At a community college in Michigan, an instructor of physics has been investigating heat islands in an urban community, their effect on local climatology and their relationship to pollution problems in the area. Working with students in a meteorology class, he has collected temperature data at some 400 points about the city in an effort to identify "hot spots." The study was funded by his own institution.

At the same institution in Michigan, an instructor of art history has taken slides and gathered information on urban renewal projects in over 150 cities in the United States and Canada. Her art history classes now include materials on city planning. Slide presentations have been made to city and county officials and planning boards as well as to the local chapter of the American Institute of Architects.

Two faculty members in early childhood education in a New York City community college are collaborating with directors of day care centers to develop and test approaches for providing in-service training for assistant teaching staff in licensed day care centers. The program is a highly cooperative community effort with the Agency for Child Development, day care center personnel, and community college faculty members centrally involved. Students

are being used as research assistants in the project. The program will accept two groups of twenty directors who will participate in a variety of seminars and workshops which will include among other experiences: (a) Reviewing recent research relevant to the optimal development of young children, (b) Studying the identification and management of emotionally disturbed and brain-damaged children. Each director will put together a training program for the staff of his own center, evaluating and reporting on the strengths and weaknesses and making necessary adjustments.

An instructor of social sciences and geography at a Chicago area community college has done local field research such as: Studies of internal migration; first settler in Lake County, Illinois: site location of the Chicago World's Fair of 1933, etc. Using this information, and in collaboration with another faculty member in biology, he is developing a Bio-Geography Course on Metropolitan Chicago. The on-site study of landforms, flood plains, moraines and associated cultural elements will form part of the substance of the course.

All of the above examples are small-scale empirical studies of the more or less localized type. That is, they use the surrounding environment as a natural field laboratory for their research and development activities.

The library research study is another kind of research which is suitable for a community college faculty member. There is an abundance of reported research findings, analyses, descriptive materials and theories in the journal literature, books and monographs and conference papers. Community college faculty members could identify, select, organize, summarize and synthesize these findings in their fields of study. Such summaries would provide valuable resource materials for one's own use and for the

use of one's colleagues toward the task of "keeping up" with the knowledge boom.

The final product of this work need not be a written document. Displays, exhibits, tapes, films, simulation and gaming devices, and/or demonstration projects are other media for communicating such summaries and syntheses. Some hypothetical examples: An instructor of economics might review the latest studies on consumer responses to high food prices and prepare a series of graphs which summarize the results; an auto mechanics instructor might research the principles behind the latest anti-pollution and safety devices and set up a series of simplified demonstrations designed to portray these principles; an instructor of English might read the current literature on "women in modern society" and prepare a bibliographical essay to summarize and interpret the findings.

Here are two actual examples to further illustrate what can be done:

An anthropology instructor at a California community college has developed 30 television programs as a complete course in cultural anthropology. Extensive library research work was supplemented by interviewing about 35 anthropologists throughout the country. The idea was to develop a visualization of anthropological material in an integrated learning system. Syllabi and other written materials will support the TV series.

Another instructor in music at an Illinois community college has been working with a computer to develop tables to be used by music theory and composition majors in identifying tonal function for given structural qualities. The aim is to make the performance and creation of the

musical experience simpler, requiring less technical preparation for more people.

Potential Benefits of a Redefined Research Role

It is the contention of this paper that the kind of research which combines intellectual inquiry into one's subject matter with the process and substance of instruction and/or with community service holds the most potential benefit for most faculty members.

The benefits of this kind of research are considerable:

(1) To provide a mechanism for keeping up with the knowledge boom in one's field of expertise and to help one's colleagues keep up; (2) To promote intellectual revitalization of the faculty member through the process of inquiry and through sharing the products with fellow faculty members; (3) To engage the community both as a resource for learning and as an environment which needs improvement by all concerned community leaders, including community college faculty members; (4) Finally, to provide field experiences for students; to permit students to see the utility and importance of academic concepts; to promote a more active and exploratory form of learning; and, at the very least, to provide lively illustrative material for classroom teaching.

It is upon the first two benefits that I would like to focus more fully. Up to this time, faculty development efforts in community colleges have centered around pedagogical matters such as instructional systems, the development of self-learning

packages and the use of educational technology; other efforts have centered around the clientele of the community college such as the disadvantaged student or the "returning housewife" student; still other efforts have centered around professional welfare issues such as faculty rights and collective bargaining. But few efforts have been focused upon the need for academic renewal, subject matter up-date or intellectual revitalization.³

Yet this need seems to exist. Community college faculty members have the same problem that university faculty members have in keeping up with the rapid expansion of knowledge. According to the ACE study, fully 32% indicated they had "...fallen seriously behind." The figure for university faculty members was identical.

Yet community college faculty members spend fewer days away from their campus for professional activities and subscribe to fewer professional journals than faculty members in four-year colleges and universities. Moreover, fewer community college faculty members have had sabbaticals and fewer engage in outside public or private professional consulting, with or without pay for their services, than faculty members in other institutions of higher education. In other words, they are comparatively more professionally isolated from each other than are other college faculty members.

It is very important for professional development to have

the opportunity as a faculty member to engage in a process of systematic research and have the products validated by one's professional peers. Preparing for classes, with students as the main audience, is simply not the same thing as producing an academic product for a professional audience. It is not systematic enough, precise enough, continuous enough, and, importantly, it does not evoke the same kind of critical feedback which knowledgeable faculty colleagues could render. Community college faculty members need a forum where they can test new ideas. They need to communicate with each other, not only as pedagogues, but also as experts in a viable subject matter area.

Where community problems intersect the research interests of community college faculty, faculty members need to communicate and collaborate with leaders in business, industry, and government. Essentially, they would apply their general understanding and conceptual training in their own field to a localized, concrete community problem. Faculty members gain confidence and intellectual stimulation in seeing their knowledge and research efforts applied to concrete problems and in working with persons outside of their own field. The community college mandate for community service comes closer to realization and a public relations function is performed.

Finally, current student enrollment rates, even for community colleges, are beginning to force colleges into a posture of steady-

state staffing. A low rate of faculty turnover is likely to exacerbate the already relatively isolated position of the community college faculty member. Geographical mobility is an important mechanism of value and idea diffusion. Hiring of freshly trained teachers has been an important source of institutional innovation and idea renewal. With both of these mechanisms partially abridged, some form of internal capacity for faculty academic development becomes extremely important.⁴

Implementation: Some Practical Questions

The kinds of research typically conducted by community college faculty members have been defined and illustrated with actual ongoing examples. It has been argued that there exists a need for reconceiving of a faculty research role in the community college. It was suggested that the localized, small-scope, empirical study and the library research and development effort are most suitable for the bulk of the faculty members. Such research serves a much needed faculty academic development function rather than to elaborate the knowledge base in the several fields of study. It supports the faculty teaching and community service roles rather than conflicting with them.

So that more faculty members may engage in this kind of inquiry, an institutionally supported and rewarded program needs to be established. Important questions like the following must

be raised: Where will faculty members get the time to perform this research? Who will publish the findings? How will they be evaluated and rewarded? Will the "publish or perish" dilemma simply be transferred to the community colleges?

Clearly, doing any kind of research and writing takes time; teaching loads are already extremely heavy in the community colleges (about one-half of the community college faculty teach five or more courses per term; another one-fourth teach four courses per term). However, faculty members might very well rotate into a lighter teaching load for one or two terms with colleagues taking up the slack. At the end of the term or two terms, a reproducible or portable product would become available to the entire faculty. A written document, a tape, a film, a display, an exhibit, etc., would become a timely part of the intellectual resources available to interested faculty members. Faculty members within the same institution in different fields might gain a broader perspective which would serve to enhance their own interdisciplinary forays as they approach their teaching tasks. In many smaller community colleges, faculty members must wear the hats of several fields of study. They are frequently unprepared for some of the work in their minor fields or sub-specialties. The latest descriptive or analytical summaries done by other colleagues might well save a lot of time. Faculty members in the same field, of course, would be able to use these products directly. Each

faculty member would get his chance at the research term or term on a rotational basis. The frequency of rotation would be determined by such factors as size of student body, size of faculty, faculty-student ratios and their long-term changes as well as cyclical fluctuations due to student attrition.

The products of the research term could be handled centrally by the Learning Resource Center staff. Already a part of many community colleges, such a Center would be cast in the additional role of "subject matter" or "intellectual" resource for faculty members.

Systems of community colleges might also cooperate in this research program. Exchange of products among institutions would multiply the potential impact of each faculty member's effort. Faculty members in different institutions in the same or different fields might collaborate during the same term. It might be necessary (And it certainly would be desirable) for state systems to subsidize institutions on a rotational basis in order to permit hiring several part-time instructors to lighten the teaching load for a given term or terms. Whatever the logistical scheme, the goal would be to make time available in large blocks and to facilitate inter-faculty contact about academic and intellectual concerns related to their several fields of study.

Because a visible product would be required of each faculty member, evaluation would not be difficult. The contributions that a particular faculty member made could be evaluated by a

committee of colleagues -- perhaps an interinstitutional committee --as well as the Departmental, Program or Division Head. Such evaluations ought to be made available to the faculty member and be among the criteria for salary increase, promotion and/or retention.

The evaluations made of the research products would occur promptly at the end of each term. The possibility of future publication in one of the professional journals, delivery of a paper or the publication of a monograph by some outside agency would in no way affect the original evaluation. Publication in the usual sense, however laudable, would not carry the usual incentive. Instead of external criteria serving as the reference for research and publication, internal institutional criteria would prevail. This fact, together with the programmed and rotational nature of the research term/s, would be likely to prevent a "publish or perish" syndrome from sapping time and creativity from the teaching role.

One example of institutionalized support and encouragement for this kind of research is found at the Charles Stewart Mott Community College in Flint, Michigan.⁵ While the system at Charles Stewart Mott Community College does not contain all of the features or scope of that proposed above, it appears to be a strong beginning. Institutional funds are specifically earmarked for faculty research "...for the purpose of extending their

knowledge and enriching their instructional and professional capacities." Funds for research are disbursed through the Office of the Vice President upon recommendation by a Faculty Research Committee. The Research Committee consists of four faculty members chosen to represent the diverse interests of the faculty, for their research experience, and for their willingness to serve. Faculty members apply in writing and in person to the Research Committee for support. In the 1971-72 academic year, for example, five projects were funded in amounts ranging from \$75.00 to \$500.00. Progress reports are made to the Research Committee. Final reports are made to the Research Committee and the findings distributed to the faculty at large. Teaching loads are not affected in any way by participating in institutionally supported research activities. From the titles and descriptions of the research supported, it is clear that this arrangement has encouraged some faculty members to pursue research of the kind described here as most appropriate (Two of the earlier illustrations were taken from Charles Stewart Mott Community College faculty members).

Conclusion

Although community colleges are often considered "teaching" colleges, it is clear that "research" is also part of the role for many community college faculty members. For most faculty members, research means keeping up with the literature in prepara-

tion for classes. For others, research means studies of student learning, teaching techniques, and the packaging of existing subject matter into more assimilable forms. For some faculty members, their research and publications are indistinguishable from academic research done in the universities.

The question which this paper sought to address was: What kind of research do community college faculty members do which would promote academic and intellectual vitality on a more systematic basis and which would, at the same time, support the teaching and community service functions? The answer, termed a "combination of subject matter and pedagogical research," is inadequate as a label. It is probably best understood in operational terms using the actual illustrations given earlier.

While some faculty members will do research of this kind almost despite the institution, it seems apparent that an institutional commitment in the form of encouragement, support, and reward on an equitable and rotational basis would be necessary for greater faculty participation.

Needed is an institutionalized faculty academic development program for all faculty members where research geared to academic renewal and intellectual vitality is promoted, where community college faculty members can interact with their colleagues and their community on the level of academic substance, and where

proper controls and evaluation will prevent teaching from becoming an incidental function.

Footnotes

¹Alan E. Bayer, Teaching Faculty in Academe: 1972-73 (Washington, D.C.: American Council on Education, 1973). Figures quoted and comparisons made among faculty members at two-year colleges, four-year colleges and universities are taken from and/or based upon this data.

²The actual examples cited throughout this paper have been gathered from faculty members conducting the research via an open-ended questionnaire. Thirty institutions in six states were contacted: California, Florida, Illinois, Michigan, New York, and Virginia. No assertion is made that these faculty members or these community colleges or these particular states are representative of anything. No generalizations based upon these data are made. They serve only as examples for illustrative purposes.

³See, for example, Arthur M. Cohen, editor, Toward a Professional Faculty, New Directions for Community College Series (San Francisco: Jossey-Bass, Inc., Publishers, Spring, 1973). Also, Terry O'Banion, Teachers for Tomorrow: Staff Development in the Community Junior College (Tucson: The University of Arizona Press, 1972). In practice it seems as if academic renewal, where it occurs, results from individual faculty self-learning efforts or from taking courses at the universities. Both are often passive forms of learning, relying too much upon the conclusions and distillations of other "authorities."

⁴Raymond E. Schultz, "Low Turnover Creates Staff Development Problems," Community College Review, Vol. 1, #1, April, 1973, pp. 22-28.

⁵The information used here is based upon a personal communication and materials supplied by Dr. S. Olof Karlstrom, Vice President, Charles Stewart Mott Community College, 1401 East Court Street, Flint, Michigan. His cooperation is gratefully acknowledged.

Center for Higher Education

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