This review describes needed research in the junior college field. Section one focuses on the following projects to be undertaken by the ERIC Clearinghouse for Junior Colleges: (1) increasing research coordination assistance, (2) developing an annual review of trends and research in the junior college and related fields, and (3) initiating a study to synthesize ideas about the nature and purpose of the junior college. Section two recommends the following projects be undertaken by other agencies, in which the Clearinghouse stands ready to assist: (1) organizing a field user information service to translate basic research into plans of action for use by field practitioners; (2) developing models to assess teaching effectiveness, content validity of existing curriculums, schooling based on student learning, and school program outcome evaluation; (3) undertaking large-scale assessment studies of the effects of junior college schooling on students, of the characteristics and verbal skill requirements of students recruited to occupation-centered curriculums, of the impact of junior colleges on their parent communities, and of the organizational climates of junior colleges; and (4) developing instruments for conducting longitudinal studies of the attitudes and perceptions of professional staff members and lay trustees regarding the nature and purpose of the junior college, and measures for polling community opinion on the educational functioning of the junior college. (JO)
This report was developed to appraise the current state of inquiry in the junior college field and to suggest specific, potentially fruitful paths of investigation to researchers based in universities, on junior college campuses, and elsewhere. In attending to those objectives we have analyzed the literature on the two-year college with an eye to explicating the general research trends and conceptualizations in the field.*

Premises

Two premises are basic to this report. First, research efforts undertaken on the junior college have long been subordinated and unrelated to the promotional and developmental activities of the field. For example, it has always lacked a coordinating unit that could give direction to research efforts undertaken in the field. Although several research and development centers occasionally study junior colleges as a concomitant of their other projects, no center addresses itself particularly to the two-year college. Studies are prepared by research teams based at universities, regional laboratories, state departments and associations, and within the junior colleges themselves; but each institution or agency devises its own research modes and problems and investigates issues that it deems most important. There is little interaction among these groups and the research and scholarship of the field reflect this state of affairs. One result of all this is quite noticeable: the field has been blessed with only a handful of investigations that could properly be labeled "hallmark" studies.

Second, despite the fact that many people in the junior college view their field as "unique," it is commonplace to observe that the two-year college lacks an identity of its own [39]. Occupying a position somewhere between the secondary schools and the four-year colleges and universities, people within and without the junior college community do not hold consistent or comprehensive concepts regarding the institutional or educational functioning of the two-year college in America. In particular, those who occupy various roles within the institutions and those who speak for its professional associations display a marked lack of unanimity. The two-year college is variously viewed as a stepping stone to higher learning, a technical training institution, a community service agency, a "comprehensive" institution, and a sorting agency for a community's youth. If seen by some as the gateway to universal higher education [41], it is seen by others as a stumbling block for those seeking upward social mobility in American life [35]. In his address to the 1970 annual convention of the American Association of Junior Colleges, Edmund J. Gleazer, Jr., Executive Director of the Association, reflected this uncertainty about institutional identity when he suggested the possibility that junior colleges drop the word "college" and re-identify themselves as "community centers for educational development" [24].

The absence of comprehensive conceptions of the institutional and educational functioning of two-year
colleges makes for inadequate and indistinct analyses of their roles and practices, and consequently frustrates efforts to develop a "common language" for researchers and practitioners to deal with their educational problems. In this sense, researchers in the field have failed in their attempts to guide educational practice; and they have avoided what Medsker [39] has called the pressing need for dealing with the issue of the "identity crisis" in two-year colleges. The upshot of many research efforts has been a babel of investigations that seldom attend to disciplined inquiry and seldom speak to what Cohen [17] calls the "real" issues of the field.

Organization of This Report
Building on the information analysis and model-generating activity of the Clearinghouse, this report proposes a set of fifteen recommendations for research-related efforts in the junior college field. Each recommendation is supported by a rationale rooted in the literature of the field.

The report does not treat developmental activities or pre- and in-service staff training programs, such as those conducted by or under the auspices of university professors, professional associations, and regional educational laboratories. In some cases these same groups are interested in junior college research, but their service activities are not considered here.

The recommendations in the text are divided into two sections: (1) projects that the ERIC Clearinghouse for Junior Colleges at UCLA is presently engaged in or plans to undertake as part of its continuing activity; (2) projects that should be undertaken by other groups in the field.

SECTION ONE
Recommendations for projects that the ERIC Clearinghouse for Junior Colleges at UCLA plans to undertake as part of its continuing activity, listed in order of priority.

I. CONCEPTUALIZING RESEARCH DIRECTIONS
II. ANNUAL REVIEW OF JUNIOR COLLEGE RESEARCH
III. IDEAS OF THE JUNIOR COLLEGE MOVEMENT

RECOMMENDATION I: CONCEPTUALIZING RESEARCH DIRECTIONS

The ERIC Clearinghouse for Junior Colleges concerns itself with conceptualizing research directions in the field

The Clearinghouse is in an excellent position to be a research coordinating unit for the junior college field.

Two threads of thought permeate the rationales of these recommendations: the notion that research in the field must attempt to come to grips with the problems of institutional identity, and the idea that research efforts in the junior college should be addressed to accounting for the impact of junior colleges on their students, their parent communities, and society at large.

In some cases we have been explicit about the type of research perspective that should be taken in tackling future studies, using the distinctions postulated by Cronbach and Suppes [20] between "conclusion-oriented" and "decision-oriented" research. In conclusion-oriented research, problems are defined by the investigators, who are free to revise their approaches to inquiry while conducting their investigations. In decision-oriented research, problems are defined by the decision-maker—the teacher or administrator—and the researcher is obligated to work within the framework of the decision-maker's problems.

It is important that a contracting agency undertaking any research activity suggested in the recommendations be willing to work in association with groups of junior colleges. All the recommendations in the second category assume that studies will be undertaken with two-year colleges and that the junior college itself will not be treated as simply an object of research by remotely placed investigators. At this stage of its development, the junior college field needs formative research more than it needs summative studies. Moreover, as Havelock puts it, successful linkage between educational research and practice is achieved when user and resource system interact collaboratively, stimulating each other's problem-solving behaviors.

The ERIC Clearinghouse for Junior Colleges is fully committed to the realization of that vital linkage.

(Numbers in the text refer to the bibliography.)

Since it was organized four years ago, it has been formulating general guidelines on research activity with the aim of firming up a research tradition focused on improved educational practice. More specifically, the Clearinghouse has been engaged in testing models and procedures, conducting small-scale summative studies, and synthesizing concepts that are particularly relevant to the functioning of the two-year college.

These efforts have increased the salience of the Clearinghouse to its user community of practitioners, junior college-based researchers, and professional organizations. They have also made it possible for the Clearinghouse to serve the field effectively as a vital link between educational research and practice. The Clearinghouse feels that its service to the user community can be enlarged by emphasizing the role of the Clearinghouse as a "vital link" between research and practice. In this respect, for example, it seems particularly important for the Clearinghouse to assist in preparing Requests for Proposals (RFP's) for any large-scale investigations to be undertaken in the field.
RECOMMENDATION II: ANNUAL REVIEW OF JUNIOR COLLEGE RESEARCH

An annual review of junior college research should be published by the Clearinghouse

Reviews of the literature and research in the field have been very limited since the emergence of the junior college movement in the twentieth century. Apart from the research reviews in the Encyclopedia of Educational Research [39], which are published only every ten years, and the recent review in the Britannica Review of American Education [18], digests of the general literature and research in the field have been restricted to annotated bibliographies. These are valuable compendiums of information, but they are not suited to keeping either researchers or practitioners abreast of research developments in the field. For example, internal evidence suggests that the research review in the most recent edition of the Encyclopedia of Educational Research was written in 1966 or 1967. The one in the Britannica Review of American Education was addressed to a lay audience and not to the field’s researchers and practitioners. Annotated bibliographies seem to be used primarily for library acquisition and by graduate students preparing for examinations in the field.

The Clearinghouse has attempted to deal with the lack of research reviews in the field through its publication, in conjunction with the American Association of Junior Colleges, of a monthly Junior College Research Review. This Review, however, was designed to summarize ERIC documents over a wide range of specialized topics with the aim of encouraging practitioners to make use of the ERIC system. Issues of the Review do not typically deal with research questions per se, although some of the recent “expanded” numbers—such as this one—have been focused on such questions. Nonetheless, the Review is mainly a reportorial, not a critical, publication.

An annual review of research should help to clarify research efforts, undertaken within and outside the field, which focus on the junior college; the need for such clarity has been the central theme of this report. An annual review would bring both researchers and practitioners into close contact with the latest scholarship and literature of the field. Since the review necessarily would be a collaborative venture, it should promote a scholarly dialogue on the research problems and issues of the field. Moreover, the review would provide interested professionals with a comprehensive guide to the research and scholarship, addressed to practitioners, researchers in the field, and researchers in related fields—syntheses prepared by both practitioners and researchers. The third part would be devoted to substantive critiques of books, lengthy journal articles, and monographs that either deal directly with, or are particularly important to, the junior college field.

RECOMMENDATION III: IDEAS OF THE JUNIOR COLLEGE MOVEMENT

A study should be undertaken to synthesize the ideas of the American junior college movement

Medsker [39] has argued that the major effort of the junior college field in the 1970’s is to flesh out an “identity” for the junior college in American society and put to rest the “identity crisis” that has plagued this institution since its emergence. One way to deal with the problem of identity is to subject the historical development of ideas in the junior college movement to careful analysis.

There is a substantial body of “promotion” literature generated from within the junior college movement that attempts to treat the nature and purpose of junior colleges. This literature has been accumulating for more than fifty years and bespeaks a long-standing desire by junior college leaders to pinpoint, in Jencks and Riesman’s [31] phrase, “a distinct ideology” to justify to the public a countless array of activities and programs undertaken by the two-year colleges. Much of that literature is ahistorical in outlook and defensive in posture, leaving serious readers with reservations that the junior college movement lacks historical importance and that the junior colleges themselves lack institutional security. Nonetheless, on analysis, that literature may yield some fruitful insights into the historical development and the institutional functioning of junior colleges that could help the field take steps to resolve its “identity crisis.” Moreover, an analysis of literature might produce an understanding of the general problem of institutional identity that has arisen in American higher education during the past ten years or so.

SECTION TWO

Recommendations for projects to be undertaken by other agencies, in which the Clearinghouse stands ready to assist as a consultant or steering committee to interested parties. The recommendations in this section are ordered by priority.

IV. FIELD USER INFORMATION SERVICE
V. ASSESSING TEACHING EFFECTIVENESS
VI. ASSESSING CONTENT VALIDITY OF JUNIOR COLLEGE CURRICULUMS
VII. A MODEL OF JUNIOR COLLEGE SCHOOLING
VIII. PROGRAM ASSESSMENT MODELS
IX. EFFECTS OF JUNIOR COLLEGE SCHOOLING ON STUDENTS
RECOMMENDATION IV: FIELD USER INFORMATION SERVICE

A Field User Information Service should be organized for use by junior college practitioners

Putting educational knowledge and expertise into practice is one of the enduring issues of the field. And translating the work of researchers into a plan of action that can be used by a practitioner requires a variety of communication structures. As Cronbach and Suppes noted [20], too often an ill-considered emphasis has been placed on the belief “that practice derives linearly from research findings.” That belief tends to overlook the ever-changing and reactive nature of both research and practice in the educational process. Research, development, or dissemination centers simply cannot anticipate all questions about educational practice. Obviously they cannot treat all topics in which practitioners might express an interest, they cannot synthesize all the knowledge of the field, and they cannot overcome the inevitable time lag that attends any scholarly inquiry.

To bring expertise within the field immediately to bear upon practice in individual junior colleges requires: (1) the individualization of decision-oriented research, and (2) the means whereby practitioners may address their questions about practice to educational experts with facility and with the expectation of receiving speedy responses. These features of information dissemination are not presently available to practitioners in the junior college field except to the extent that staff members of the American Association of Junior Colleges, the ERIC Clearinghouse for Junior Colleges, and other knowledge groups are able to prepare informal responses. However, a Field User Information Service could be organized to attend more formally to those inquiries.

At the heart of the Information Service would be a group of from 50-100 experts in various areas of educational research and practice. The areas would follow ERIC descriptors. Each of these educational experts would receive all documents in the ERIC system and other materials related to his area of expertise, which he would use, in turn, as a resource base for responding to practitioners’ inquiries. The experts would include, among others, the project directors of the American Association of Junior Colleges and knowledgeable practitioners, professors, and researchers in and outside of the junior college field. The efforts of the group would be coordinated by a professional organization in the junior college field, such as the American Association of Junior Colleges.

The Information Service would be able both to individualize the treatment of practitioners’ inquiries and to provide them with speedy replies. Depending on the nature of the inquiry, the replies could suggest either practical solutions that are rooted in research or point to pertinent documents in the ERIC collection and related resource bases.

Implementation of the Information Service would stimulate inquiries from practitioners and consequently foster a greater reliance of educational practice on research. Besides, use of the Information Service by practitioners would alert researchers to the “real” concerns of the field. The long-term effects of such a service might be twofold. On the one hand, the service might promote a badly needed dialogue between researchers and practitioners, and, on the other hand, it might help to narrow the gap between theory and practice in education.

RECOMMENDATION V: ASSESSING TEACHING EFFECTIVENESS

Models should be developed for decision-oriented assessment of teaching effectiveness

Junior colleges are self-defined as “teaching institutions;” indeed, a leading text of the field [54] suggests that either the junior college “teaches excellently, or it fails completely.” During the past ten years or so, the need for improving instruction in the two-year college has been the theme of countless symposia and a great deal of prescriptive literature. Yet in a recent monograph summarizing the research and thought on teaching effectiveness and faculty performance, Cohen and Brawer [19] argued that the whole area of teacher evaluation is beclouded with ambiguity and bereft of determinate criteria. They concluded that efforts to evaluate faculty performance and teaching effectiveness will be innocuous until clearly stated definitions and criteria related to teaching effectiveness — and hence faculty performance — are rooted in the variable of student learning.

Research on teaching effectiveness has been promoted in recent years under the rubric of “improving instruction.” Several approaches to the topic have been taken within the field. There has been some interest in student evaluation of teachers [7], pre-service assessment of “teaching” personalities [9], the variable of student learning via measurable objectives and defined outcomes [7], and research on instructional treatments. The actual research base is so limited that it would be hazardous to venture any generalizations, but it does point up the pertinence of Cohen and Brawer’s arguments about ambiguity and indeterminate criteria. Moreover, little, if any, of this research has affected existing practices of teaching evaluation. Teacher evaluation remains wedded to supervisory ratings by administrators [19].

It is a truism that evaluation of teaching effectiveness is complex. Accordingly, we suggest the need for holistic models for assessing teaching effectiveness that will attend to several variables. These models will have to serve both as a means for evaluating faculty performance and as a “way into” purposeful instruc-
tional research. To give direction to the formulation of at least one such holistic model, we suggest that it be developed on the following assumptions: (1) that teachers are accountable to their students for intended or planned as well as for unintended or unplanned effects of instruction, and (2) that evaluation of teaching effectiveness is concerned with measuring the efficacy of cognitive and affective transactions between teachers and students.

Some measures to be considered in a model rooted in these assumptions include a reliable and valid evaluation device to be used by students in assessing their teachers as well as dependent and independent measures of student learning that indicate changed cognitive and affective behavior on the part of students.

**RECOMMENDATION VI: ASSESSING CONTENT VALIDITY OF JUNIOR COLLEGE CURRICULUMS**

Models should be developed for assessing the content validity of junior college curriculums

Curriculum inquiry in the junior college field has been centered on philosophical statements regarding institutional purposes [25] and descriptions of transfer education, general education, vocational training, etc. [44]. Some attention has been focused on describing the external influences that impinge on junior college curriculums [10] and the intra-institutional forces that shape certain curricular decisions [6], but most of it has been purely observational. Only one major investigation [42] sustains the premise that two-year college transfer curriculums are governed to a great extent by the practices of nearby senior institutions. The California study of general education [33], published two decades ago, revealed that general education was then a captive of the transfer curriculum, but a recent observer has argued that general education is now a euphemism for programs designed for "terminal students" [18]. The Clark study [14] suggested that junior college curriculums were untowardly constricted by community pressures. Recently, though, Jencks and Riesman [31] suggested that two-year college curriculums are hidebound by the national disciplines of knowledge. No studies have been undertaken to assess the content validity of occupation-centered curriculums, and few efforts have been made to appraise the validity of instructional materials used in junior colleges.

Apart from the lack of information about the content and focus of the junior college curriculum, the welter of conflicting notions suggests the need for assessment models of content validity. Frameworks need to be developed within which researchers can ferret out the types of educational objectives, the sources of subject matter, and the kinds of instructional materials used in junior colleges. One study, presently under way [40], is examining the development of "black studies" in junior colleges in terms of the conceptual system developed by John I. Goodlad. Content validity is not an insignificant issue. At stake is the rational planning of coherent learning opportunities for students — students who have been complaining loudly about irrelevant curriculum in higher education. Properly conceived assessment models of content validity can make it possible for junior college practitioners to engage in rational curriculum planning.

**RECOMMENDATION VII: A MODEL OF JUNIOR COLLEGE SCHOOLING**

A model of junior college schooling, based on the notion of student learning, should be formulated

Three assumptions appear to underly the way practitioners and researchers in the field look at junior colleges. The overriding assumption seems to be that people have to be certified by schools and colleges in order to "make it" in American life. It is assumed that enrolling in a junior college — provided of course that all other avenues to higher education are closed — is the best option open to every high school graduate. It is further assumed that junior colleges themselves are the most flexible educational agencies for certifying and recruiting potential student clients, i.e., black and other minority group students, to the junior college [35].

Although these assumptions may not be unworthy of the two-year college, they strongly suggest that junior colleges are primarily social agencies for sorting youth and "safety valves" for cooling out the unrealistic educational expectations of many high school graduates [31,14].

In some respects, the assumptions above must be sustained with a degree of disingenuousness on the part of junior college professionals, because two-year colleges generally sort their students by way of placement examinations and letter grades in the same manner as four-year colleges and universities. Also, they have such high drop-out rates that they become, more often than not, "one-year colleges." While many professionals lament these high drop-out rates, some of them apparently believe that high attrition is an outward sign of inward academic excellence [45].

Cohen [15] has argued for the notion that the "teaching institution" should be a "learning institution" that purposefully collects evidence of student learning. He has proposed the outlines of a model of student learning in terms of defined outcomes, measurable instructional objectives, and stimulus-response learning theory. It is on these elements that further work needs to be done, for a comprehensive model of school learning must come to terms with the cognitive rationalists, such as Bloom [5] and Croll [12], and it must have points of contact with the "fantasy and feeling" notions of Jones [32] and others.

The Clearinghouse suggests the development of an action-model of junior college schooling that would involve working directly in junior college settings with staff members and students. Such a project would yield an empirical model of schooling, summative data on institutional and educational functioning, and a series of target communications for researchers and practitioners.
RECOMMENDATION VIII:
PROGRAM ASSESSMENT MODELS

Program assessment models should be developed for evaluating the outcomes of junior college schooling

Program assessment has not been undertaken by junior colleges at the institutional level. Medsker [42,43] has twice assessed the institutional characteristics of a national sample of two-year colleges with respect to a few contextual variables. There have also been sporadic attempts to appraise particular programs of study in the two-year college — especially nursing curriculums. And Johnson [14] has called for program evaluation of innovative practices. There are several Clearinghouse Topical Papers that provide designs for conducting decision-oriented research in the junior college; however, each of these designs is limited to a single topic or concept and does not address the broader issues of program assessment. Yet it is commonplace for junior colleges to draw up “five-year” plans that are divorced from any comprehensive effort at appraising contemporary institutional or educational functioning.

We suggest a model for evaluating the outcomes of junior college schooling as they apply to the four major societal functions two-year colleges typically perform—student sorting, student custody, community service, and student learning. The model would define these four functions and set forth appropriate evaluative criteria for each. The proposed model would be designed specifically for institutional self-study.

RECOMMENDATION IX: EFFECTS OF JUNIOR COLLEGE SCHOOLING ON STUDENTS

Large-scale studies should be undertaken to assess the effects of junior college schooling on students

There is a rich literature dealing with the impact of four-year college and university schooling on student populations and alumni [22]. This research on “impact” has enlarged our understanding of college students and the institutions they attend. Unfortunately, information about the effect of junior colleges on their students is not a part of that literature. We have only fragmentary information regarding the effect of junior college schooling on students.

The Knoell and Medsker investigation [37] of junior college transfer students is the only substantive study in the field that deals with the impact of junior colleges on students. This study concluded that junior colleges were more supportive of their transferring students than were the receiving institutions — a conclusion that was not at all surprising. Pace and Hendrix have developed Junior College Environment Scales [48] based on Pace’s College and University Environmental Scales [47], but the avowed purpose of this instrument is to predict junior college environments that are most conducive to transfer student learning. In the same vein, two other studies have attempted to assess the institutional characteristics of junior colleges [51] in terms of the model devised by Astin and Holland [2] for senior institutions. Although those studies revealed evidence of regional variability in junior college institutional characteristics throughout the country, the indices of variability seem to be essentially predictive of what sections of the nation are most likely to have junior colleges with environments that support transfer students. This approach to research on student impact complements the work of Pace and Hendrix.

However, only a minority of students actually transfer to senior college from junior college. And there are no serious studies or measures of the impact of junior college schooling on the many drop-outs or on those who terminate their formal schooling after completing a two-year college program of study. Moreover, there is no indication that any investigations are being planned to conduct large-scale studies of the impact of junior colleges on the majority of students who do not transfer to senior institutions, although plans are now under way to establish certain national data bases.

Impact studies, both flat-time and longitudinal, are needed to reveal the strengths and weaknesses of junior college schooling. As social agencies, supported for the most part by public funds, junior colleges are accountable to the public for the effects of their programs on students and alumni. In the 1970s it seems likely that the public will be demanding more information from all levels of schooling about the impact of formal education on students. Well-conceived investigations should enlarge our present understanding of the nature of junior colleges and the people who attend them.

A number of paths of inquiry are open to researchers interested in assessing the impact of junior college schooling. We suggest that particular attention be devoted to appraising the effect of junior colleges on student personalities. The conceptual framework devised by Brawner [8] is one model of inquiry that deserves such use by researchers.

A current project, A Study of Junior Colleges, is an example of Clearinghouse involvement in helping to plan and conduct studies of this type. James Trent, the initiator, has drawn heavily on models supplied by the Clearinghouse. In addition, the Clearinghouse staff is providing literature reviews and bibliographic support for the project.

RECOMMENDATION X: STUDENT CHARACTERISTICS IN OCCUPATION-CENTERED CURRICULUMS

Studies should be undertaken to appraise the characteristics of junior college students recruited to occupation-centered curriculums

Research on junior college students has focused principally on two topics. There is a substantial body of research findings on the characteristics of junior college students — research, however, that is based on predictive measures and models of inquiry designed to characterize senior college and university students. This research has been carefully reviewed by Cross [4]. The upshot of that research is that junior college students do not generally compare favorably with their peers elsewhere in higher education on traditional predictive measures, and it sustains the validity and re-
liability of the measures used to gather the data.

There are also a number of studies of junior college transfer students concerned, in the main, with the impact of junior college schooling on transfers to senior institutions. The research on this topic was summarized a few years ago by Hills [30] and revealed that junior college transfers do not, on the whole, perform as well academically as native students; nor do transfers graduate as readily. These conclusions were confirmed again in the recent work of Trent and Medsker [55].

But the field knows very little about students recruited to sub-baccalaureate occupation-centered training programs. To date, research efforts have been limited to identifying salient variables that account for student selection of "voc-tech" curriculums [33], but this research is not sufficiently broad in scope to warrant any generalizations. Virtually all of its subsumes the notion of rationality in student selection of occupation-centered curriculums, a premise seriously questioned by Trent and Medsker [55]. A couple of researchers have toyed with Holland's [27] empirical theory of vocational choice, which is rooted in personality theory. Their efforts were undertaken to verify the Holland framework and not to implement it in decision-making, although Holland's work was designed for both conclusion-oriented and decision-oriented research. In brief, the field is simply ignorant about the characteristics of students recruited to occupation-centered programs that could give meaning to both the students and the programs.

RECOMMENDATION XI: ASSESSING VERBAL SKILL DEPENDENCY

Conclusion-oriented and decision-oriented studies should be undertaken to assess the verbal skill dependency of occupation-centered curriculums

In spite of countless inquiries within the field, conclusions about the verbal skills of junior college students remain relatively stable. It is consistently reported that, on the whole, two-year college students are not as verbally proficient as their peers elsewhere in higher education [21]. Besides, remedial efforts to correct verbal deficiencies have been singularly unimpressive [3]. Nearly all the research on verbal skills subsumes that language proficiency is the central criterion for academic success. In the case of transfer educational programs, which are highly verbal curriculums, this argument is clearly defensible. By way of contrast, however, verbal proficiency may not be a dependent variable of equal importance in such occupation-centered curriculums as automotive mechanics.

Occupation-centered curriculums are rapidly becoming the most important part of many junior college instructional programs. Yet most junior colleges appear to shunt enrolling students with low scores on measures of verbal proficiency into occupation-oriented curriculums without regard to the issue of verbal skill dependency. The field simply does not know what actual—in contrast to desired—level of verbal proficiency is needed for people to be satisfactory wage-earning technicians. There is no available information on the extent of verbal skill dependency in existing occupation-centered curriculums. Consequently, neither junior colleges nor potential employers are able to deal realistically with the question of verbal proficiency in technical and semi-technical vocations.

Conclusion-oriented investigations should concentrate on finding answers to two questions: What is the minimal verbal proficiency of practicing automotive mechanics and other wage-earning technicians? and What is the verbal skill dependency in existing occupation-centered junior college curriculums? Further investigations would preface a variety of decision-oriented studies that would attempt to answer pertinent questions regarding the minimum level of verbal proficiency needed for students to succeed in different types of occupation-centered curriculums and to function satisfactorily in a variety of wage-earning vocations. Together, these investigations should yield an index to verbal proficiency in a host of technical occupations.

RECOMMENDATION XII: IMPACT OF JUNIOR COLLEGES ON PARENT COMMUNITIES

A large-scale study should be conducted to assess the impact of junior colleges on their parent communities

Since 1960 there has been a rapid expansion of the number of junior colleges and the number of students seeking higher education in them, but there has been no attempt to assess the impact of junior colleges on their parent communities. The growth and expansion of two-year colleges seem to be the major criteria of their success and efficacy [1].

Undeniably, the expansion of educational opportunities beyond high school by way of the junior college has played an important role in democratizing American higher education. However, this does not speak to questions about the impact of the colleges on the communities that organized and funded them. Among those questions would be: (1) Has the establishment of two-year colleges outside of urban areas stemmed, accelerated, or left unaffected the tide of young people moving to urban centers? (2) How are parent community economic systems affected by the presence of junior colleges? (3) Does local tax support of public junior colleges syphon off funds that would otherwise be invested in elementary and secondary schooling or other social agencies? and (4) Has the presence of junior colleges in communities led public and private employers to up-grade educational qualifications for entry-level employment?

In a very important sense, these questions and a number of others, addressed to the social and economic utility of junior colleges, would be of inestimable value to state and local planning agencies, legislatures, opinion leaders, and businessmen in parent communities, as well as to the lay trustees and officers of the colleges. Besides, the research contemplated under this topic would enlarge considerably our knowledge about the political economy of education. Such knowledge will be especially important as the schools generally become involved in accounting for their effects.
RECOMMENDATION XIII:

ASSESSING ORGANIZATIONAL CLIMATES

Studies should be conducted to assess the organizational climates of junior colleges

Most of the substantive efforts to appraise the organizational climate of junior colleges has been conducted by Blocker and various associates [4]. The Blocker studies concluded that organizational structures in junior colleges should be responsive to indigenous conditions and that patterns of organization and staff interaction vary considerably from one college to another. These investigations are valuable, but further research on organizational climate is needed. For, despite the work of Blocker in particular, administrative research and theory in the junior college field remain devoted to the formal-legalistic tradition. A great number of studies, for example, have focused on an analysis of formal statements of rules and procedures, and an abundance of prescriptive literature has been written on how administrators should behave in junior colleges.

To get a better perspective on the organizational Geist of junior colleges, studies need to be conducted in the tradition of Gorden [26] on task orientation, of Halpin [28] on esprit and community, and of Parsons [49] on the “associational” characteristics of academic communities. From such investigations will emerge clearer identities of junior colleges as educational institutions; a fulfillment of this need has been the plea of countless professionals in the field.

RECOMMENDATION XIV:

ATTITUINAL STUDIES

Instruments should be developed for conducting longitudinal studies of the attitudes and perceptions held by junior college professional staff members and lay trustees with regard to the nature and purpose of junior college schooling

A widely held assumption in the field is that many teachers and administrators are recruited to the junior college without much knowledge of its purpose or nature. A wealth of prescriptive literature calling for pre-service and in-service training of practitioners emphasizes the study of institutional characteristics and goals in the two-year college. The W. K. Kellogg Foundation has funded several programs within the past ten years or so to “train-up” prospective practitioners for service in the junior college field, and most junior colleges conduct some sort of in-service training session, focused on their special nature and purpose, for their new faculty members. These in-service orientation programs have been analyzed recently by Kelly and Connolly [36]. The underlying premise of the call for pre-service and in-service orientation of practitioners is simple enough: the junior college wherein the practitioners are fully cognizant of its functions will be a more effective educational institution.

Research on the topic has been limited. No investigations have been undertaken to study the institutional perceptions and attitudes held by administrators. One study of the educational attitudes of lay trustees in junior colleges [13], which sampled opinions from junior college board members in California, was concerned with the institutional functioning of the two-year college. Conclusions reached in that study suggest that the issue of institutional identity is troublesome for lay trustees.

A major piece of research was conducted several years ago by Medsker [42] on the topic of faculty perceptions and attitudes. He concluded that there was more than ordinary disagreement among teaching staffs regarding institutional identities and instructional purposes. He also observed that some of the disagreement undoubtedly stemmed from the relative ignorance or lack of interest of teachers about the nature and purpose of junior college schooling. Although this study was recently updated [43], his conclusions are the same. The earlier study by Medsker heavily influenced the conclusions reached by Blocker and associates [6] in their synthesis of research and literature on the topic. Rooted in reference-group theory, Medsker’s methodological approach is likely to characterize much of the future research on the general topic of professional staff and trustee perceptions of junior college schooling. Yet a complementary approach to the topic is needed that stresses the relationship between perceptions and attitudes on the one hand, and institutional functioning on the other. At the present time, two researchers are attempting to develop a model for this particular type of inquiry into attitudes [16].

RECOMMENDATION XV:

POLLING COMMUNITY OPINION

Measures should be developed for polling community opinion on the educational functioning of junior colleges

Within the past decade it has become popular to refer to the two-year college as a “community college.” A number of books and articles have celebrated that functional definition [29]. Although this concept intentionally suggests that the two-year college is responsive to the needs of its parent community, there is every indication that the colleges simply assume the needs of their parent communities because they have not undertaken systematic polls of community opinion.

Measures for polling community opinion about the functioning of junior colleges could be useful devices in educational planning, in making the community aware of the existence of the two-year college, in timing the call for bond and tax elections, and in guiding direction to the educational programs of the college. Regular polling of community opinion would surely indicate to community residents that the two-year college expects to serve expressed “needs.”

Summary

This report has presented recommendations for fifteen studies needed if people in the junior college field are to become more aware of their purposes, processes, and effects. The list is not—nor was it meant to be—exhaustive. On the contrary, we undertook the task in
order to stimulate dialogue on the issues presented. Members of other research groups may wish to prepare and submit their own lists. If so, the editors of Junior College Research Review will be pleased to present them. Rather than studies to be conducted, the recommendations offered here might better be considered areas of continuing investigation to be pursued. The junior college is far too important an institution—and the ideas it represents are far too basic to American education—for it to continue developing without involving itself in serious, disciplined inquiry.

BIBLIOGRAPHY


53. Sapper, Charles K. Selected Social, Economic, and Attitudinal Characteristics of the Trustees of California's Public Junior Colleges. (ED 027 876; available from University microfilms; MF-$3.00; Xerox $9.90).


Since its inception in mid-1968, the Clearinghouse has acted on its initial charge to "stimulate and upgrade the quality of research on the junior college." Accordingly it has addressed itself primarily to analysis, synthesis, and criticism and has issued three series of publications directed primarily to practitioners and junior college-based researchers: the Junior College Research Review, Monographs, and Topical Papers. All were purposely designed to analyze pertinent information and to suggest models of inquiry and practice to professionals in the junior college field. Each is original; each is research-based.

The Junior College Research Review, published ten times a year, is the only nationally circulated research-reporting journal in the field. Each issue analyses current literature on a single topic such as curriculum, adult education, or experimental programs. Topics for the Review are determined mainly by the nature of requests for information received at the Clearinghouse and by the documents available for review. Its special function is to encourage and facilitate use of the ERIC document collection by practitioners and junior college-based researchers; Clearinghouse correspondence suggests that it has been successful.

The Clearinghouse Monograph series now has ten titles. Each contains a substantive and often critical discussion of a leading program or issue in junior colleges. The monographs are addressed to the junior college field and to the general educational community. Some monographs, such as Student Activism in the Junior College: An Administrator's Views, provide thoughtful perspectives on problems that practitioners must deal with daily. Others, notably Measuring Faculty Performance, challenge professionals in the field to question their assumptions about educational practice in the light of theory and research. A few, such as State Master Plans for Community Colleges, are mainly repportorial studies designed to flesh out our understanding of developments in the field.

Most of the Topical Papers published by the Clearinghouse propose models for decision-oriented research that can be conducted by classroom teachers having little or no familiarity with either research design or statistical inference. The series includes a three-part model for developing remedial educational programs, an experimental design for measuring the effects of innovative practices, etc. One paper, The Person: A Conceptual Synthesis, is an original formulation of empirical theory about student personality, designed especially for guiding research and practice in junior college schooling. These publications represent a continuing Clearinghouse activity. Plans are to continue the Review (ten issues a year), and to produce from four to six monographs and four to six topical papers in the coming year.
MONOGRAPHS

Each Clearinghouse monograph is an in-depth study or interpretation of research on topics related to the junior college field. The monographs are published by and are available from the American Association of Junior Colleges, One Dupont Circle N.W., Washington, D.C. 20036.

No. 1 Salvage, Redirection or Custody? Remedial Education in the Junior College, John E. Roueche, February 1968. 77p. Price $2. ED 019 077 (MF-$0.50; HC-$3.95).

This first comprehensive report on the effectiveness of junior colleges in educating the disadvantaged, low-aptitude student reveals that even though most community colleges agree with the open-door concept, only about half provide remedial instruction. While revealing a severe lack of agreement on objectives of remedial programs and showing that existing programs are based on unproved assumptions rather than on research findings, the author presents some revolutionary approaches and examples of colleges that are departing from traditional practices in remedial education.


Interviews, plus 28 studies from 70 junior colleges, reveal current research on student characteristics, faculty, instruction, curriculum, services, operations and testing. Approaches were observational studies, group comparisons, and correlation for prediction and counseling. Comments and recommendations are made regarding methodology and results. Research and institutional evaluation are the president's responsibility.

No. 3 Personality Characteristics of College and University Faculty: Implications for the Junior College, Florence B. Brawer, November 1968. 89p. Price $2. ED 026 512 (MF-$0.50; HC-$3.95).

Viewing the community college as a teaching rather than research-oriented institution, the author analyses materials that can assist in the selection and placement of junior college faculty and help people involved in the junior college movement to know better what they, personally, and the movement are about. Twenty recommendations are made to specific levels of administration, faculty, and student groups.

No. 4 Measuring Faculty Performance, Arthur M. Cohen and Florence B. Brawer, February 1969. 81p. Price $2. ED 031 222 (MF-$0.50; HC-$4.60).

This is an examination of practices of teacher evaluation at several levels of education, particularly the junior college. The authors reached the conclusion that, as currently practiced, teacher evaluation is a futile exercise. They make recommendations for abandoning teaching evaluation and replacing it with other measures of faculty that may have more value or significance.


The role of the college president as an educational leader and agent of change is presented in this publication. Contending that the president should be more than a mere institutional manager, the authors urge the president to ask the right questions about his institution's education program. The study is based, in part, on a random sample of 10 percent of the 912 existing community and junior colleges in 1968.

No. 6 Student Activism in Junior Colleges: An Administrator's View, John Lombardi, April 1969. Price $2. ED 028 767 (MF-$0.50; HC-$4.25).

This is an overview of all forms of student activism, its causes, and response to it. Included are such groups as the New Left, Black Power, Mexican-Americans, Rightists, student body officers, and others. This history of the student rights movement is traced from the Free Speech Movement to the present.

No. 7 The Multi-Institution Junior College District, Frederick Kintzer, Arthur Jensen, and John Hansen, April 1969. Price $2. ED 030 415 (MF-$0.50; HC-$3.30).

Noting that multi-campus junior college districts have begun appearing at unprecedented rates during the 1960's, the authors devote attention primarily to clarifying the relationship between the district office and the colleges within the district. An examination of the theoretical bases of this type of administration is made; authority in the areas of instruction, staff, personnel, student services, business, and other administrative services is studied; case studies of five districts are made; and guidelines and recommendations are presented.


After reviewing state master plans in use or recommended by nineteen states, the author analyzes major uses and objectives of the plans, positive and negative aspects of state control, the nature of planning involvement, and planning priorities. He then considers major content
areas of existing plans—including philosophy, recruitment of personnel, finance, and devices for plan development.


Freshmen entering a suburban Los Angeles junior college were studied to determine their potential for persistence or withdrawal, and their degree of heterogeneity compared to University of California freshmen. Measurement instruments included the Adaptive-Flexibility Inventory, the Omnibus Personality Inventory, and a general questionnaire devised by the authors.


A community college's orientation program can play a significant part in helping faculty members adjust to their new environment. This study develops a model for such an orientation, and includes suggestions for pre-orientation planning and activities, actual program goals and considerations, and methods for post-program evaluation. Studies of three programs currently in existence, and a consideration of future environmental conditions to which these programs must adapt provide perspective for viewing the model.

---

**TOPICAL PAPERS**

The topical papers series is comprised of models for research in junior colleges. In addition, occasional statements on pertinent topics and issues in the junior college field are reported in this series. A limited supply of each paper is available from UCLA Student's Store, Mail Out, 308 Westwood Plaza, Los Angeles, Calif. 90024.


This contains some simple, practical research procedures for analyzing remedial-student characteristics. Data can be gathered to answer questions on interrelationships of motivation, performance, effectiveness of instruction, etc. Complete instructions are included for selecting students, administering tests, calculating statistics and drawing inferences from findings.


This, the second in a series of research plans for studying junior college remedial education, is a scheme to develop a scale for measuring student attitudes. The four steps in constructing the scale are described in detail, as well as the use of the scale for other groups such as parents, teachers, and vocational students.

No. 3 *Student Activism and the Junior College Administrator: Judicial Guidelines*, Dale Caddy, December 1968. 47p. Price $1.20. ED 028 039 (MF-$0.25; HC-$2.75).

This analysis of student activism, militancy, or agitation presents specific examples, court decisions, general principles derived from these specifics, and recommendations for administrators and students concerned about the legal status of their behavior.

No. 4 *Students as Teachers*, Stuart R. Johnson, January 1969. 11p. Price $.35. ED 026 999 (MF-$0.25; HC-$1.15).

This, the fourth in a series presenting paradigms for studying the effects of changed practices in junior colleges, offers a unique strategy for changing student attitudes. Presented in simple form is a rationale for teachers to use in designing learning activities that deliberately capitalize on the effects upon students of their attempts to teach (or otherwise influence) other students. Detailed instructions and procedures are included for three different models.

No. 5 *Is Anyone Learning to Write?*, Arthur M. Cohen, February 1969. 15p. Price $.70. ED 030 422 (MF-$0.25; HC-$1.00).

This is a simple, easy-to-use research scheme to measure change in student composition writing. It is a pre- and post-test design and complete instructions are included for selecting participants, developing a scoring key, checking reliability, choosing topics, implementing the study, etc.

No. 6 *Is It Really a Better Technique?* (Procedures for comparing the performance of two groups), Aikin Connor, March 1969. 17p. Price $.70. ED 030 410 (MF-$0.25; HC-$1.15).

This is a rationale and a simplified procedure for statistically evaluating instruction. It is
aimed at the full-time junior college teacher interested in comparing the performances of two groups of students (e.g., day vs. evening) who have been exposed to the same instruction. Clear step-by-step procedures are given using different subject-matter examples.

No. 7 A Developmental Research Plan for Junior College Remedial Education, Number 3: Concept Formation, John R. Boggs, August 1969. 16p. Price $.70. ED 032 072 (MF-$0.25; HC-$1.00).

This, the third in a series of research plans for studying junior college remedial education, is a rationale and simple procedure for modifying instruction to promote concept formation in the less able student. Included are (1) a realistic description of how learners form concepts, (2) an example of instructional activities to promote concept learning, and (3) a scheme to evaluate the effectiveness of the instruction. This plan, like the others in the series, is intended for use by junior college teachers interested in remedial education but lacking simple effective instruments with which to accomplish it.

No. 8 The Junior College in International Perspective, Budd L. Hall, January 1970. 39p. Price $1.00. ED 025 417 (MF-$0.25; HC-$2.20).

The author discusses the philosophies and purposes (expressed and implied) of junior colleges in eight countries. He points out the differences from and similarities to community colleges in the United States, and considers the conditions leading to the establishment and growth or to the rejection of these institutions in other countries.

No. 9 Identifying the Effective Instructor, Edward F. O'Connor, Jr. and Thomas B. Justiz, January 1970. 34p. Price $.85. ED 035 416 (MF-$0.25; HC-$1.00).

This technique for measuring an instructor's general teaching ability is based on the observable changes in learner behavior that the instructor produces during a single class period. Two sample lessons are included so that a teacher may conduct his own experiment.


A revolving loan fund that provides the operational costs of a public or private education for everyone is suggested as a means of meeting the current financial crisis in higher education. Problems that might be encountered and changes likely to take place in the college scene if the proposal is adopted are noted.


Individual behavior can best be understood and appraised when a person views himself or is viewed as a total being. Intrinsic and extrinsic forces acting on and through the individual, in addition to one's use of previous experience, are incorporated into a systematic model to make such an appraisal possible.
To: Publications Department  
American Association of Junior Colleges  
One Dupont Circle, N.W.  
Washington, D.C. 20036

MONOGRAPH ORDER BLANK

From: Name__________________________________________________________

Title______________________________________________________________

Institution_________________________________________________________

City, State, Zip_____________________________________________________

Enclosed is a check for $____________________ in payment for the ERIC Clearinghouse for Junior Colleges monograph(s) number_________ at $2.00 each.

Signature___________________________________________________________

To: UCLA Student's Store-Mail Out  
308 Westwood Plaza  
Los Angeles, California 90024

TOPICAL PAPER ORDER BLANK

From: Name________________________________________________________

Title______________________________________________________________

Institution_________________________________________________________

City, State, Zip_____________________________________________________

Please send one copy of topical paper number(s)___________

Signature___________________________________________________________

To: Publications Department  
American Association of Junior Colleges  
One Dupont Circle, N.W.  
Washington, D.C. 20036

SUBSCRIPTION BLANK  
(JUNIOR COLLEGE RESEARCH REVIEW)

From: Name________________________________________________________

Title______________________________________________________________

Institution_________________________________________________________

City, State, Zip_____________________________________________________

Enclosed is a check for $____________________ in payment for_____ subscription(s) to the Junior College Research Review at the rate of $3.00 per year.

Signature___________________________________________________________
The Clearinghouse operates under contract with the U.S. Department of Health, Education and Welfare, Office of Education. The Junior College Research Review is published ten times per academic year. Annual subscriptions are $3.00 each from AAJC, One Dupont Circle, N.W., Washington, D.C. 20036. Published and copyrighted by AAJC. Copyright is claimed until June 1975.

In addition to the sources noted, all Clearinghouse publications are available on Microfiche (MF) or in Hard Copy (HC) from ERIC Document Reproduction Service, National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014. Payment must accompany orders totaling less than $5.00 and must include a handling charge of $.50 plus state sales tax where applicable.

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY THE AMERICAN ASSOCIATION OF JUNIOR COLLEGES TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

ADVISORY BOARD

Delegates (with expiration date of term)

WILLIAM BIRENBAUM (June 1972)
President
Staten Island Community College, New York

CLYDE L. BLOCKER (June 1972)
President
Harrisburg Area Community College, Pennsylvania

R. DUDLEY BOYCE (December 1971)
President
Golden West College, California

ALFREDO de los SANTOS (June 1971)
Dean
Northampton Area Community College, Pennsylvania

DANIEL FADER (December 1970)
Professor of English
University of Michigan

ROBERT M. HAYES (December 1970)
Director, Institute of Library Research, UCLA

RUSSELL P. KROPP (December 1971)
Institute of Higher Learning
Florida State University

TERRY O'BANION (June 1971)
Assistant Professor of Higher Education
University of Illinois

The Following Organizations Are Permanently Represented

Council of State Directors of Community Colleges
(ALBERT A. CANFIELD, Chairman)

American Association of Junior Colleges
(EDMUND J. CLEAZER, JR., Executive Director)

Graduate School of Education
(C. WAYNE GORDON, Associate Dean)

University Library
UCLA
(ROBERT VOSPER, University Librarian)