The fiscal and demographic realities of the 1980's require increased levels of cooperation between universities and community colleges. Motivated by their mutual self-interest, a large midwestern university, the University of Kansas (KU), and one of its feeder institutions, Johnson County Community College (JCCC), a large comprehensive community college, have established an ongoing cooperative relationship for the purpose of conducting joint research, evaluation, and planning. The first joint project conducted by the institutions was an attempt to determine the actual extent of the transfer phenomenon between JCCC and KU. This study was followed by an investigation of the smoothness of the students' transition from the two-year to the four-year college. One of the most notable results of these initial studies was the consensus established among the postsecondary institutions in Kansas in support of a statewide study of community college transfer students. Another important by-product of these cooperative research efforts has been the routine sharing of information about students, potential markets, employment trends, and research methodologies. This review of the joint research ventures of JCCC and KU includes information on the operational procedures used, as well as brief research results. (Author/EJV)
JOINT VENTURES IN RESEARCH, EVALUATION AND PLANNING:
UNIVERSITY AND COMMUNITY COLLEGE COLLABORATION

by

Donald S. Doucette, Director, Institutional Research,
Johnson County Community College
and
Deborah J. Teeter, Director, Institutional Research
and Planning, University of Kansas

Paper presented at the Twentieth Annual Conference of the
Society for College and University Planning
Chicago, Illinois, July 8, 1985
ABSTRACT

The fiscal and demographic realities of the 1980's require increased levels of cooperation between universities and community colleges. Motivated by their mutual self-interest, the University of Kansas, a large midwestern university, and one of its feeder institutions, Johnson County Community College, a large comprehensive community college, have established an ongoing cooperative relationship for the purpose of conducting joint research, evaluation and planning. Operational procedures for conducting joint projects, the results and the benefits of several selected studies, ranging from analyses of the academic performance and the transitional experiences of community college and "reverse" transfers to joint market research for the institutions' common market areas, are described.
Introduction

There is an extensive literature on various aspects of the movement of students between two-year and four-year institutions of higher education. Research on community college transfers, on selected aspects of the transitional experience between community colleges and universities, and on "reverse transfers" is not unique. However, an extensive literature on cooperative relationships between community colleges and universities for the purpose of conducting such research does not exist, for such relationships have been rare. There is some evidence that increased numbers of cooperative relationships have recently been developed, though many of these remain undocumented in the literature.

It is the purpose of this paper to describe the relationship established between the University of Kansas and Johnson County Community College specifically to conduct cooperative research on matters of mutual interest. The context and the motivation for establishing this relationship, the design and the procedures used in conducting several cooperative research projects, and the results and benefits provided by selected studies will be briefly sketched.
Context and Motivation

The University of Kansas is a large research university, with an enrollment of approximately 24,000 students, located in Lawrence, Kansas, 35 miles west of Kansas City. Johnson County Community College is a comprehensive community college of approximately 8,000 students located in suburban Kansas City. Both institutions are the largest of their respective types in the state. Both institutions were motivated to establish a cooperative working relationship by their simple, enlightened self-interest.

As pools of traditional college age students have continued to shrink, the University of Kansas has placed greater emphasis on reducing student attrition and on attracting students from less traditional markets. A market of particular concern to the university is the community college transfer. While articulation agreements have been established that provide for the transfer of credits between institutions, the university has realized that other support needs to be provided if the transfer experience is to be successful. Initial efforts, including liaison and scholarship programs have begun, but a systematic and comprehensive study of the transfer phenomenon had not been available to guide the university's efforts.

Additionally, the University of Kansas has recognized that Johnson County Community College is located in the midst of one of the largest and the fastest growing urban areas in the state, if not the Midwest. Demands for educational services in the area
are great and growing, yet many of these demands are beyond the scope of a two-year college. Thus, the university has realized that it must meet the market demands of the Johnson County area or be faced with the possible expansion of the community college to a four-year institution due to local pressure. The university would clearly prefer to remain a friendly competitor for traditional college age students from Johnson County, while expanding its cooperative efforts to maintain and enhance the transfer of students from the community college, its principal "feeder" institution. Also, the university would prefer to work cooperatively with the community college, which has specific restrictions on the level of courses and programs that it can offer, to provide post-associate's degree education to the residents of Johnson County than to contend with the intrusion of other, sometimes struggling, colleges and universities eager to make inroads in the rich Johnson County educational market.

Johnson County Community College, on the other hand, is motivated to pursue cooperative arrangements with the University of Kansas because it recognizes the university to be the preeminent research university in the state, and because it serves an affluent and highly educated community that aspires to educational opportunities that extend beyond two years of college. Many alumni of the University of Kansas hold positions of responsibility and influence in Johnson County and throughout the state, and the university has long been the first choice transfer institution for JCCC students -- 60 to 70 percent of whom indicate their intention to continue their education beyond
the two-year degree. As well, the college has been actively engaged with other community groups promoting the economic development of the county, which while growing rapidly in financial, real estate, business services, health services, light assembly, and transportation and distribution industries, has not been able to attract high technology and other brain-intensive industry, due, at least in part, to the absence of a substantial presence of a major research university in the county. The community college believes supporting in whatever way possible the increased presence of KU in Johnson County to be in the best interests of its students and its community.

Another more subtle reason for choosing to cooperate closely is the perception, held by many of the constituents of both institutions, that both the University of Kansas and Johnson County Community College are high quality institutions, maybe the best of their respective types in the region, and that it is desirable to associate with other institutions of high quality. This bias is fueled by the large number of JCCC faculty and administrators who hold advanced degrees from KU.

It was within this context that the chief academic officers of their respective institutions encouraged joint research on transfer students and on market demands affecting both institutions. With this blessing, the two institutional research offices embarked upon a series of studies that have not only provided valuable information to their institutions, but have actually begun to influence and encourage cooperative relationships in the instructional and student services areas of
both institutions. The nature and benefits of these cooperative research efforts are described below.

Initial Studies: Extent and Nature of the Transfer Phenomenon

The initial joint project was, logically enough, an attempt to determine the actual extent of the transfer phenomenon between Johnson County Community College (JCCC) and the University of Kansas (KU). The procedures were straightforward -- generation of semester reports identifying the number and basic demographic and academic characteristics of JCCC transfers enrolled at KU using the university's computerized student records system. However, while the procedures were straightforward, the definition of terms was not, and the experience of negotiating how a "transfer student" would be defined provided a useful introduction to both the difficulties and the benefits of cooperative research.

Transfer students can be variously defined from variables contained in a student database, including self-reported institution last attended, actual credit hours transferred and semester(s) of enrollment or credit hours earned at previous institution(s), and the elapsed time since most recent enrollment. The number of previous institutions and the myriad of possible attendance patterns complicate the determination of an appropriate definition. In this case, the resolution of the fundamental definitional problem -- who is a Johnson County Community College transfer student? -- was best accomplished within the context of the joint research project. Researchers
from both institutions perceived different problems with variously suggested definitions due to their own information needs, as well as their own perceived institutional interests. As a result, definitions were agreed upon that served several purposes simultaneously.

Specifically, all students identifying JCCC as the institution last attended or having transferred credit hours from the community college were tentatively identified as transfer students. This relatively inclusive group was then split into three groups based upon community college attendance patterns -- attended during high school only, attended during the summer session only, and attended during a fall or spring semester. In fact, separate analyses that were not originally anticipated were conducted using these compromise definitions. The results provided increased understanding of the nature of the community college transfer student that might not have been gained if researchers from either institution had conducted the investigation independently using their own, unchallenged definitions.

Probably the most basic result of this initial research was a confirmation of the need to continue to study community college transfers from Johnson County Community College to the University of Kansas because their numbers were large and growing. In the spring of 1983, nearly 10 percent of the university's undergraduate enrollment had taken at least one course at the community college, which represented a major increase from the previous semesters. It was also noted that there had been
significant increases in the numbers of "summer session only" students, which resulted in a decline in the average number of credit hours transferred. In addition, a profile of community college transfers, including the high schools from which they graduated, their academic majors, age, ACT scores, and GPA's was established. Other findings included the following observations: 1) there was a positive correlation between credit hours transferred and cumulative GPA at the university after transfer, 2) the three categories of transfers were not significantly different from one another in major demographic or performance characteristics, and 3) community college transfers and native university students (those who had initially enrolled at KU) had many characteristics in common.

Transitional Experiences and Student Satisfaction

After having established that there were a significant number of students who had attended both institutions, the researchers agreed that it was important to investigate the "smoothness" with which students moved from the community college to the university. If problems in the articulation process could be identified, intervention efforts could be focused on these areas at either institution. Consequently, a survey which asked students to rate the level of difficulty they had experienced during their transitional semester at the University of Kansas and their level of satisfaction with selected aspects of both institutions was administered to former JCCC students enrolled at KU during the fall of 1983. Also, a second survey containing all
relevant items from the first survey was administered to a matched group of "native" university students -- non-transfers -- to control for differences that might be an artifact of attending two different institutions.

While the results of those surveys provided considerable insight into the differences -- and lack of differences -- between transfer and native university students, and between the community college and the university, the process of conducting a joint survey research project was as interesting. The survey underwent several drafts at the hands of the two research teams, and the editing from two different perspectives eventually did provide an instrument that was more comprehensive and representative than any that might have been produced by a single perspective. While JCCC typeset and printed the survey instrument, KU identified the students, printed the mailing labels and prepared the mailing. The cover letter to the students was signed by the chancellor and the president of the respective institutions. The survey was sent by KU to local university addresses, and KU collected responses while JCCC wrote the computer program to conduct the data analysis and prepared for data entry. After analyzing the data, researchers from both institutions summarized data for their respective samples, and then synthesized those into a final joint report. The joint effort took no longer than a similar size project would have taken if conducted by either institutional research office individually, yet as a result of the cooperative effort, the resources (both human and financial) required of either office were essentially half.
Additional benefits accrued to the joint effort. The survey results identified a number of areas of concern at both institutions, and the joint sponsorship of the project provided additional weight to these concerns. Distribution of the report was essentially twice what it would have been as a solo effort, and because some of the identified concerns involved areas of interface between the institutions, joint efforts were proposed to attempt to resolve outstanding problems. In this case, joint research may beget jointly sponsored solutions to identified concerns in the instructional and student services areas of these institutions.

**Statewide Efforts**

Perhaps one of the most notable, and potentially influential, direct results of these initial studies was the consensus that was established among the 6 four-year institutions and the technical institute in the state, governed by the Kansas Board of Regents, and the 19 community colleges, coordinated by the Kansas Association of Community Colleges, to sponsor and support a comprehensive statewide study of community college transfer students. Essentially, all of the public institutions of higher education in Kansas joined together to investigate student movement among them by replicating and extending at the state level the initial JCCC/KU studies.

The statewide study, the first of its kind conducted cooperatively in Kansas in the absence of an external mandate, was more comprehensive than the initial JCCC/KU efforts not only
because it involved all of the community colleges and state universities in the state, but also because it included a longitudinal study designed to compare the academic performance, progress, persistence and degree achievement of community college transfers to that of their native university counterparts. The research questions and design were as follows:

Part One:

1. How many students move from the Kansas community colleges to the state universities, and how has this number changed in the last five years?

2. What are the characteristics of these students, and how have they changed?

The student data bases at the six state universities and the technical institute were examined for fall, 1979 through spring, 1984 to provide answers to these questions.

Part Two:

3. How do these students evaluate their experiences at both the community colleges and state universities? Were they satisfied? What problems, if any, did they encounter?

Surveys of former Kansas community college students enrolled in the state universities in fall, 1984 were conducted to answer these questions.

Part Three:

4. How well do former community college students perform academically at the state universities, particularly in comparison to "native" university students?

A longitudinal study of selected groups of native university and community college transfer students was conducted by analysis of student records at the state universities to answer this question.
Both the conduct of the study and its results have had important impact on the public institutions of higher education in the state. The study found that the number of community college students subsequently enrolling in the state universities was large and growing, having increased to over 10,000 students, or over 17 percent of the state universities' undergraduate enrollment, by the fall of 1983. The results also indicated that an important change was occurring: while increased numbers and percentages of community college students were transferring to the state universities, they were completing fewer credit hours before doing so. As foreshadowed in the initial JCCC/KU analysis, increased numbers of students whose apparent principal intention was to enroll in the state university were choosing to begin their college work by earning a limited number of credit hours at the community college prior to university enrollment.

Student responses to the statewide survey, a modified version of the JCCC/KU survey instrument, indicated that they were generally satisfied with their experiences at both institutions that they had attended. They reported having few major difficulties in the transition from community college to university, losing few credit hours in transfer and suffering only minor losses in grade point averages. However, the initial results of the longitudinal study indicated that while community college transfers earned grade point averages and credit hours toward degrees at essentially the same rates as their native university counterparts, they persisted, and thus graduated, at lower rates than students "native" to the university. The data
did indicate that the higher attrition rates of community college transfers was essentially confined to their first year at the university, and that those transfers who persisted to the second year in residence persisted and graduated at very similar rates to natives.

These results immediately spurred a number of intervention strategies, some of which -- primarily those associated with assisting community college transfers to persist through their first year at the university -- will likely be attempted in the near future. Some community college officials have suggested formation of "alumni" groups for specific community colleges at selected state universities to act as support groups for recent transfers from the "home" community college and to provide informal peer orientation and advisement to help new arrivals learn the ropes of the larger institution.

A second major result of the somewhat problematic and difficult results of the study was the call for continued research on the transfer phenomenon, particularly to address important questions left unanswered due to the limitations of the first statewide effort. One of the original sponsors of the study, the presidents of the Kansas community colleges, have voted to sponsor and support continuation of the statewide cooperative efforts, and the other principal sponsor, the chief academic officers of the Regents universities, are expected to continue their endorsement of the study once the research agenda is established.
So, what began as a volunteer, cooperative effort among two institutions mushroomed into an ongoing statewide research effort with characteristic benefits that could not accrue to single institutional studies. First, the results of these multi-institutional studies necessarily represented the consensus of all of the institutions involved, and the results were thus substantially protected from criticism or contradiction by separate, uncoordinated, and possibly incompatible, studies. Second, the results received a statewide audience, including institutional officials, governing boards, the state legislature and the press. With such an audience, pressure to address problems identified by the study was increased. Finally, these cooperative efforts yielded the much greater possibility of statewide or systemwide solutions to identified problems -- coordinated solutions that must ultimately benefit students, many of whom move among the numerous public institutions in the state.

**Reverse Transfer Phenomenon**

The cooperative efforts of the institutional research offices at the University of Kansas and Johnson County Community College have shed light on another increasingly important student mobility pattern -- reverse transfer. Again, because of the size of the two institutions (both the largest of their type in the state) and because of the importance of the relationship between them, research on reverse transfers enrolled at JCCC, including those transferring from KU, has provided considerable insight into the larger phenomenon -- and could conceivably spur a similar statewide investigation.
Student records at Johnson County Community College were systematically examined to identify all students enrolling for the first time during the spring of 1984 who had attended a four-year college or university during at least one of the previous two semesters. Using doctoral students enrolled at the University of Kansas, a sample of reverse transfers who were currently enrolled at JCCC and who had previously enrolled at KU were interviewed. On the basis of these interviews, a survey was constructed and administered to the population to determine reasons given by students for reverse transfer. This initial research identified the "homing pigeon instinct" -- the apparent tendency of students to return to the community, in this case Johnson County, in which they had previously been closely tied or firmly established -- as a principal cause for much of the reverse transfer phenomenon. Presently, additional research using both qualitative and quantitative research methods, including records analysis, case study, key informant interviewing and surveying, is being conducted as part of a doctoral dissertation from the University of Kansas with informal direction and support of the resident institution, Johnson County Community College.

Again, the benefits of cooperative research were demonstrated. This investigation took advantage of records, institutional research expertise and human resources at both institutions (including inexpensive but expert doctoral students), and it may have been difficult or impossible to conduct by either research office separately. Another direct
result of this research were changes in the student data base at Johnson County Community College to identify routinely an important student client, the reverse transfer. Because of the leadership that JCCC has taken among the community colleges in Kansas in such matters, these changes may be considered at other institutions, and a more comprehensive study of the phenomenon is under discussion.

In general, as a result of improved understanding of student mobility, in both directions, between four-year and two-year institutions, curriculum, student services and administrative processes are being considered for modification. In the case of the University of Kansas and Johnson County Community College, this knowledge is spawning cooperative responses to student demands, not competition for students that some might fear would be the result of such knowledge.

Market Research

One of the most important by-products of these cooperative research efforts has been the routine sharing of information about students, potential markets, employment trends, and even research methodologies. Several studies concerning the career and educational interest of Johnson County high school students, the aspirations that Johnson County parents have for their children, and job prospects and training requirements of Kansas City business and industry conducted by Johnson County Community College have been shared with the University of Kansas. Another joint effort was a market research study conducted specifically
to determine the educational needs of Johnson County residents that might be served by either institution.

Due to a specific internal mandate to determine the facilities requirements of the community college and to a more generalized responsibility to assess continually the educational interests and needs of Johnson County residents, the Office of Institutional Research at JCCC planned a rather extensive telephone and mail survey of nearly 4,000 households. Realizing that similar information might also be of interest to the University of Kansas, which draws an important share of its students from the same market area, the institutional research office at KU reviewed the original survey instruments and suggested modifications that ultimately resulted in valuable market information at no additional cost to either institution. In fact, one of the major results of the surveys was documentation of the strong interest among potential adult students for cooperative agreements between the University of Kansas and Johnson County Community College that would allow "two plus two" programs resulting in 3rd and 4th year courses and a bachelor's degree awarded by the university for work completed entirely on the community college campus. This arrangement was even preferred over the establishment of a free-standing university branch campus in Johnson County.

The impact of this market research study has been substantial. Partly as a result of this study's documenting that the most pressing educational need in Johnson County was for post-associate's degree education, professional training and
development, and continuing education in business and other fields, and partly as a result of the previously mentioned forces that have encouraged JCCC and KU to cooperate, the two institutions have engaged in informal joint facilities and academic planning. Officials at both institutions have discussed joint facilities usage and development intended to serve the need for a full range of programs leading to bachelor's degrees in Johnson County and for graduate degree, post-degree and non-degree courses and programs. In this vein, academic administrators have met to plan "two plus two" programs offered jointly by JCCC and KU. The first of such programs, providing the residents of Johnson County the opportunity to earn a bachelor's degree in computer science by taking two years of coursework offered by the community college and two additional years of coursework offered by the university -- but drawing upon community college facilities, and in some cases faculty -- has recently been implemented. Other such programs in business fields, engineering and the liberal arts are in the discussion and planning stages.

Clearly, such pragmatic and tangible results argue that cooperation, rather than competition, benefits both institutions. In this instance, both institutions stand to benefit by increased enrollment of students who might not otherwise have taken advantage of the educational programs of either institution. In fact, JCCC and KU appear so confident of their non-competitive roles, that the community college includes promotion of all of the university's courses and programs offered in Johnson County.
in its tri-annual course schedule and bulletin that is mailed to every household in the county.

Summary

While the idea that community colleges and universities should cooperate in research, evaluation and planning activities is not particularly novel, examples of such partnerships are apparently not numerous. The example of the University of Kansas and Johnson County Community College engaging in such joint ventures has demonstrated that such efforts provide both tangible and intangible benefits that are well worth the investment involved in establishing and maintaining the relationship. The benefits of cooperative research, evaluation and planning activities can be generalized to any pair or group of institutions.

The most obvious tangible or direct benefit of cooperative research are the research results themselves. These provide information for decision-making at both institutions. Because the information was developed as a shared effort, it commands more attention and is more difficult to ignore. Cooperative efforts make efficient use of the combined resources and often different expertise of both institutions, and thus tend to increase the quality and comprehensiveness of the research results. In fact, as a result of these joint ventures, the research offices of both institutions have realized that their staffs' expertise tended to be complementary rather than duplicative, and informal staff exchanges for professional
development purposes have begun. Also, a relationship developed initially to conduct a cooperative research project serves as a vehicle for subsequent studies, and for cooperative efforts in other areas of mutual interest.

The intangible benefits of cooperative efforts may be more enduring, and ultimately more important, than the tangible benefits. Individuals involved in these efforts gain greater insight into the significant characteristics of other institutions and into issues important to these institutions' constituents. Contact among individuals, including administrators, faculty and staff, at both institutions is increased, and this invariably results in improved working relationships in numerous areas of institutional activity. Cooperative relationships in research, evaluation and planning lead to cooperative efforts in other areas, including academic programming, student services and facilities planning. Finally, such efforts lead to the development of an ethic of cooperation, rather than one of competition -- and this may be the most significant benefit, with important implications for long-term institutional survival.

It is clear to these institutional researchers that the relationship is truly synergistic -- that the result is greater than the sum of the parts -- and that both institutions have benefitted and will continue to benefit substantively from the continuation and expansion of the initial cooperative efforts described in this paper. It must be remembered that the initial
motivation for these two institutions to enter into this relationship was not altruism, not cooperation for cooperation's sake. Rather, the University of Kansas and Johnson County Community College have pursued their self-interests in agreeing to cooperate closely, and their foresight in doing so becomes increasingly apparent.