In an era of tight budgets and declining enrollments, two-year colleges are increasingly viewed as feeder schools by larger, four-year colleges and universities, and are themselves exploring the costs and benefits of cooperative arrangements. Research has isolated five general types of cooperative arrangements between two- and four-year institutions. In Type 1 (Articulation and Coordination) agreements, academic programs and services are coordinated between institutions and course contents are roughly comparable, but institutions retain separate administrative processes. The second type of arrangement (on-site upper division course offerings) occurs when four-year colleges offer upper-division courses on the community college campus. This type of arrangement often represents a testing ground for closer, more permanent cooperation. In Type 3 (on-site degree programs) cooperative arrangements, two-year colleges construct buildings on their campuses expressly to house degree programs offered by four-year institutions, while type 4 arrangements (satellite campus) occur when a satellite campus of the four-year institution is established on a two-year campus. Finally, under the fifth type of cooperative arrangement (satellite university/university college) a four-year institution and one or more two-year colleges participate in a consortium agreement, necessitating uniform application and financial aid processes. In developing a cooperative arrangement, institutional research can play a crucial role by providing support for administrative decisions, data collection/assessment services, and general information. Includes an examination of the changing demographics affecting college attendance patterns, a review of the literature on cooperative arrangements, and a list of 18 partnership projects involving 50 two-and four-year institutions nationwide. (PAA)
When Four-Year and Community Colleges Collide: Studies in Planning for Enrollment Maximization

James E. Prather
Georgia State University

and

Christina E. Carlson
Emory University

When Four-Year and Community Colleges Collide:
Studies in Planning for Enrollment Maximization

National recovery from the recession of the late 1980s and early 1990s promises to be a protracted and painful process. As both state and federal governments cut back on spending in order to balance budgets and to pay back deficits acquired during the freewheeling 1980s, colleges and universities are increasingly feeling the pinch as two principle sources of funding begin to ebb. Strained financial circumstances which were once considered a temporary aberration by institutions of higher education are now accepted as fact.

As colleges and universities look toward the next century, the adjustment of institutional structures to this new and enduring state of affairs will become a planning priority. While most institutions' first response to their slashed budgets was to cut costs through trimming budgets and severely curtailing hiring, such procedures can not continue indefinitely if an institution is to survive. Learning to live with—and to make the best of—new fiscal situations will become the preeminent concern of colleges and universities. Increasingly, institutions are faced with the prospect of doing more with less—meeting increased societal demands for higher education while coping with diminished support from the state and federal governments.

In this new academic climate, the role of institutional research will also need to evolve in order to survive. While many researchers have already begun augmenting their workload with studies concerning cost-effectiveness and demand, this trend, too, will change as administrators look beyond such short-term emergency measures and begin to focus on long-term planning. The institutional research function can play a key role in such planning processes, especially when innovative measures are being considered.

This paper will consider one such innovation—the formation of cooperative arrangements between two-year colleges and four-year universities. Due to financial and political pressures, colleges and universities which traditionally have followed a singular approach to maximizing enrollment, revenues and educational quality have begun looking beyond the perimeters of their campuses to attain these goals. In this era of tight budgets and declining enrollments, two-year colleges are increasingly looked upon as feeder schools by larger, four-year colleges and universities. And community colleges themselves are looking for ways to improve educational quality as a means of attracting more students. As a result of these pressures, many colleges have recently begun to explore the costs and benefits of working out cooperative arrangements with one or more other institutions. More than any other function, institutional research is frequently in a position to facilitate this exploratory process, as well as to analyze the results and effectiveness of the steps along the way to the establishment of cooperative arrangements.

This paper first examines the changing national demographics which are making cooperative arrangements attractive for all concerned. The second section presents a review of the literature on cooperative arrangements. The third section discusses the five general types of cooperative arrangements our research revealed, including the costs and benefits of each. The conclusion discusses the role of the institutional research function in the process of forging and implementing cooperative arrangements. It outlines plans for institutional researchers to follow in initiating a research and evaluation program for the establishment of a cooperative arrangement, and in disseminating information about the program.

Demographics

During the 1980s community colleges experienced a growth surge in which their enrollment rates outpaced those of four-year institutions. From 1980 to 1990, enrollments at two-year colleges grew 15 percent, while enrollments at four-year colleges grew only 13 percent. While estimates from the U.S. Department of Education do not project that this growth trend will continue apace during the 1990s, neither will it decline precipitously. Two-year college enrollments are projected to increase to 6 million by 2003, a 12.3 percent increase. Four-year institutions are projected to increase their enrollments by 13.3 percent—to 10.2 million.

Community colleges already command a sizable portion of the market share in higher education. According to the department, 5.2 million of the United States' 13.7 million undergraduates (38 percent) were enrolled in the nation's 1,200 two-year institutions in 1990. By 1992, that number had increased to 5.3 million. An estimated 480,000 associate's degrees were awarded by two-year colleges in 1992; this is
projected to grow to 557,000 degrees by 2003. It would seem that community colleges have emerged from the 1980s having carved a significantly larger niche for themselves—a niche which is likely to remain.

Students choose community and junior colleges for a number of reasons. Low tuition, emphasis on job skills and convenient class scheduling are all advantages of two-year colleges. The average age of students at such institutions tends to be higher than at traditional, four-year institutions. In addition, the enrollments of minorities and women at community colleges are proportionally higher than at four-year institutions. Community colleges enroll between 40 percent and 60 percent of all black, Hispanic and Native American college students in the United States. Twenty percent of the freshman classes of two-year colleges in 1989-90 were minority students; at four-year schools only 16 percent of the freshman classes were members of minority groups. According to 1992 U.S. Department of Education figures, the proportions of minority groups choosing to attend two-year colleges are often much higher than the proportion of whites. Among Hispanic-Americans 55 percent of college students attended two-year institutions; among Native Americans the proportion was 53 percent; and among African-Americans it was 42 percent. In contrast, only 38 percent of Asian-American and 35 percent of white college students attended two-year colleges.

Two-year colleges also stand to benefit from growth in the college-age cohort which will occur in the 1990s as the children of the baby boomers reach majority. The U.S. Department of Education estimates that 2.5 million students graduated from high school in 1992. The department projects that the number will grow each year, reaching 3 million by 2003—a 22.5 percent increase. This represents a reversal of the trend of declining graduation rates begun in the 1980s.

The current generation of college-bound seniors are at once more financially constrained—both by the effects of the recession and by escalating tuition rates—and more likely to spend longer in college than were students a decade ago. Due to uncertain employment prospects, students are increasingly reluctant to pile up large education debts which they may have difficulty repaying. The relative glut of persons with bachelor's degrees is eroding the status of the degree; students are increasingly electing to obtain master's degrees as a means of enhancing their marketability. The combined desires to reduce the overall cost of higher education and to enhance opportunities for graduate school through academic achievement have proven to be an enrollment watershed for two-year colleges.

Literature Review

While the number of cooperative arrangements has begun to increase, scholarly studies on the topic are scarce and the literature has yet to be well-developed. The foundations of cooperative arrangements are in articulation and transfer—every arrangement we encountered incorporated some combination of these two goals. In many instances the scholarly research in these areas has some application in the area of cooperative arrangements. But because cooperative arrangements institutionalize these factors and seek to broaden their use, there are often additional consequences which are unique to cooperative situations and which influence their success or failure; thus the existing literature is largely limited in its applicability to cooperative arrangements.

In her 25-year retrospective on transfer, articulation and collaboration, Knoell (1990) found that voluntary cooperative activities were more likely to be successful than those required by law, and state agreements supporting cooperative arrangements originally made at local or regional levels are more likely to be successful than top-down mandates. Since cooperative arrangements are frequently based on simpler articulation agreements, factors which contribute to the success of articulation agreements often affect the success of cooperative arrangements as well. For instance, in their study on articulation models for community colleges with high schools and with four-year institutions Ughetto and Hoerner (1987) explore seven articulation agreements, ranging from simple credit-transfer situations to cooperation arrangements involving high schools, community colleges, four-year institutions, state-level departments and businesses. Their findings supported Warmbrod and Long's (1986) 10 principles for successful articulation, which can also serve as guidelines for establishment, expansion and improvement of cooperative arrangements.

1. Provide leadership and commitment from the top.
2. Involve faculty early in the articulation process.
3. The relationship with the other articulated organizations should be built on respect and trust.
4. Ensure that all parties benefit. All must see the advantages of participation or they will not be willing to give what is required for meaningful articulation.
5. Put agreements in writing.
6. Communication between parties involved in the articulation process should be open, frequent, and clear.
7. Programs should start small and build. Articulate in a graduating manner—courses, programs, degrees.
8. Make someone responsible for the articulation.
9. Develop competency-based curricula for the learning activities.
10. Focus on the goals of the agreement and not on turf protectionism.¹

The findings of the National Academic Achievement and Transfer Project (NAATP) built on these earlier findings and established additional guidelines which are applicable to institutions forming cooperative arrangements. NAATP, a 1989 program sponsored by the Ford Foundation and the American Council on Education, initiated programs designed to improve the quality of education at two-year schools and to increase the number of students transferring to four-year schools. Applications for partnership grants were required to include a public, comprehensive two-year college that maintains enrollments with a minimum of 20 percent black or Hispanic students, and a four-year public or private institution with graduating classes made up of at least 10 percent community college transfer students. Eighteen partnerships—comprising 50 two- and four-year institutions—participated in the project (for a listing of the colleges participating in the partnership grant program, please see Appendix I). In the 1992 analysis of the project’s results, success was reported in three areas: curriculum development and revision; improvement of transfer management; and faculty development. In addition, however, participating institutions expressed a number of concerns regarding the implementation of the transfer programs (Eaton, 1992). The four most frequently cited were:

- Transfer data collection and analysis capacity on the campuses need to be strengthened.
- Effectiveness measures to determine the success of transfer efforts need to be established.
- Institutional data collection should not be hampered by state or other external system demands.
- The institutions need to realize that the efforts are intended as long-term, systemic changes in institutional functioning.

The role of institutional research in supporting the implementation of these guidelines is clear. In the early stages, research, the compilation of comparative data and impact projections are key to assisting administrators in making the initial decision to form a cooperative arrangement (Decker and Silverman, 1984). During the actual process, data collection and analysis, in addition to the dissemination of information become important as both administrators and constituent groups become interested in the progress and success of the arrangement, as well as in plans for future expansion (Knoell, 1990).

Constituency opposition can come from both outside and inside the affected institutions. One of the main roadblocks from an outside constituency comes from alumni. Often alumni feel that the character, reputation or even the very existence of their alma mater may be threatened by a cooperative arrangement. Members of this group may have significant entrenched interests—either financial or sentimental—in one or more of the institutions involved in the arrangement. Governments, too, may oppose cooperative arrangements for a number of reasons. Conflict over differential funding and previously established funding formulae may hinder government support for an arrangement, as may conflict with statutory authorities and boards. Legislative support may be hindered due to the lack of a clearly defined constituency of arrangement supporters. Among the internal constituencies, faculty may

feel threatened by the changes involved in the establishment of a cooperative arrangement, and therefore need to be involved at an early stage (Funk, et al., 1987; To-Dutka and Weinman, 1991). They may perceive potential threats to their jobs, research interests or reputations as the result of an arrangement. Students may feel that the character of their institution is changing—either for better or worse. While four-year college students may feel that the cooperative arrangement dims the reputation and academic excellence of their institution, two-year students may be intimidated by new, more stringent academic criteria (Knoell, 1990). The fears of students at both institutions will have to be addressed if enrollments are not to decline, and participation in the arrangement's transfer program is not to falter.

**Typology**

There are many reasons for institutions to initiate cooperative arrangements. Some arrangements are motivated by distance considerations, such as when no four-year colleges or universities exist within commuting distance of a two-year college. Others grow from historic and demographic connections between the two institutions, such as when significant proportions of students transferring to a four-year institution come from one or more two-year colleges. Still others are constructed when—for economic or political reasons—states restrict the number of public four-year colleges or universities in their borders. The nature of these arrangements are likewise diverse. Cooperative arrangements frequently contain articulation agreements, yet go beyond them in their scope to include space and resource sharing. Our research has isolated five general types of cooperative arrangements, each with its own set of consequences, benefits and costs.

**Type 1—Articulation and coordination**

This type of cooperative agreement takes the standard articulation agreement one step further. Academic programs and services at the two-year college are coordinated with those at the four-year institution. Students at the community college continue to take courses at their college, but they are assured that these courses will be accepted at the four-year college and that the course contents are roughly comparable.

At this stage, there is often significant and frequent communication between the appropriate staff and academic personnel of both colleges to increase the compatibility of the programs and majors at the two institutions in order to facilitate transfer. The community college student is able to make the transition to the four-year institution with a minimum of inconvenience. To obtain this end, both institutions usually institute a series of measures to ease the coordination. These may include such activities as:

- holding joint faculty meetings to ensure that courses offerings at the two institutions are complementary and will transfer;
- tuition agreements by which students at community colleges are allowed to take classes at four-year institutions with no increase in fees;
- familiarization of two-year college students with the physical, social and academic environment of four-year institutions through course offerings at the four-year school and meetings with its faculty;
- ensuring that service and support staffs of the two institutions have opportunities for close communication;
- establishment of a joint transfer council with both institutions having equal input;
- establishing a joint task force which oversees liaison officers who facilitate faculty exchanges and feedback on the progress of students who have transferred;
- a faculty-based academic transfer center to assist instructional faculty in identifying instructional and emotional problems in the transfer process;
- cooperating in a joint venture for the recruitment of high school students; and
- facilitating one-to-one contact between the faculty and staffs of both institutions.

With this type, both institutions become more attractive to potential students. Community college students may be drawn by the potential to transfer to a bachelor's degree program; students at the four-year institution may be drawn by the potential cost-savings of taking core courses at the two-year college. Community college students are frequently better prepared for the transition; university faculty and administrators have fewer problems with un- and under-prepared students.
A potential problem for institutions participating in this type of arrangement is that it may lead two-year college students to have unrealistic expectations of benefits. They may have greater problems in making the adjustment to the four-year college than they anticipated, they may have greater trouble adjusting to the four-year institution than they expect. In addition, certain aspects of Type 1's less-formalized arrangements—such as comparability—may not be enforced or carried out as expected by the institutions involved during the first few years. Academic coordination poses many problems for faculties at the participating institutions. In some cases, attempting to achieve comparability of courses may be an exercise in comparing apples and oranges. Faculty at four-year institutions may fear the watering down of their curricula, while faculty at two-year colleges may fear that more challenging requirements could lead to the alienation of a traditional student base—those who are underprepared or who require remedial work.

Type 2—On-site upper division course offerings

The second type of cooperative arrangement occurs when four-year colleges offer upper-division courses on the community college campus. The four-year college either leases space at the two-year school for the course offerings or space is provided gratis. Such course offerings may be applied toward a degree at the four-year institution. With this type, there are still separate applications and fee structures; there may also be some incompatibility in the academic programs and course offerings of the two institutions.

This type of cooperative arrangement is often used as a transitional stage between the relative loose linkages of articulation agreements and of Type 1 arrangements and the closer, more institutionalized cooperative arrangements described later. It provides a testing ground for the demand for and feasibility of a closer arrangement. Because special buildings and separate faculties are not created, the arrangements do not have large sunk investments. Due to this, a lack of permanence may be perceived regarding the upper-division course offerings—both by students and by faculty and administrators—which could lead to unwillingness to participate.

There are benefits to the relatively uninstitutionalized Type 2 arrangement, however. Alumni and other constituents are not likely to feel "threatened" by a Type 2 arrangement, as both institutions remain discrete. At the same time, a successful experience with a Type 2 arrangement may diminish any reservations these groups may have about establishing a closer, more institutionalized arrangement.

Type 3—On-site degree programs

Two-year colleges which construct a building or buildings on their campuses expressly to house degree programs offered by four-year institutions have a Type 3 cooperative arrangement. In this situation, the arrangements are lent permanence by having facilities dedicated for their use. The funding for these buildings may come from state appropriations, from the four-year institution or from private sources such as industry. A community college with a Type 3 arrangement has articulation agreements with the participating institutions, but program coordination may not be fully clarified at all levels. A dual application system for admissions may exist initially, but frequently this is phased out quite quickly.

A primary benefit of Type 3 arrangements is the availability of a four-year degree program within the cost structure of a two-year college. A significant cost savings is realized because limited programs housed at two-year institutions do not have to shoulder the costs associated with research and graduate studies that many four-year institutions have. The emphasis on teaching and student contact of the two-year college's full-time faculty will in all likelihood be carried over into the upper-level courses and degree programs.

Drawbacks exist, however. Foremost is the potential for an identity crisis arising from its hybrid nature: Is the institution perceived as a two-year or a four-year college? Will it receive the funding usually allotted to four-year institutions or will it remain at community college funding levels? The four-year degree programs offered at the community college may not be perceived as being as prestigious or as academically valid as similar programs offered entirely at the four-year school.

Type 4—Satellite campus

A Type 4 cooperative arrangement occurs when a satellite campus of the four-year institution is established on the campus of the two-year college. This type of arrangement necessitates a permanent teaching faculty and support staff assigned to the satellite campus. Students wishing to transfer to the
four-year institution need not go through a separate application or financial aid process. The faculty, staff, and administrations of the participating colleges work closely together in order to fully integrate and coordinate curricula, services and degree programs. Baccalaureate and graduate programs would be offered on the two-year campuses as community demands and needs dictated.

An immediate benefit of this type of cooperative arrangement is that it directly addresses the issues of identity and reputation which plague Type 3 arrangements. Degrees are offered and awarded by the four-year institutions, and there is a discrete faculty for those degree programs. Other benefits for the four-year institutions are administrative and cost efficiency. Because satellite campuses need not offer a full complement of courses and because the degree-programs offered at the satellites are frequently demand-based, high levels of efficacy can be established.

The main cost which can result from this type of cooperative arrangement is the "stepchild syndrome." The satellite campus may not be perceived as the "real" institution; it may develop an erroneous image as an inferior or discounted degree. Without the support of a research function, graduate students and a high-profile athletic program, the satellite campus may have trouble attracting students and may experience a transfer exodus to the more prestigious "main" campus, thereby diminishing its mission.

Type 5—Satellite university/University college

Under this type, a four-year university and one or more two-year colleges participate in a consortium agreement—also sometimes referred to as a university college. At this stage, the cooperative arrangement is formal and hierarchical. This type necessitates single application and financial aid processes. The academic administrations of each campus would meet regularly in order to coordinate activities and degree programs. Students would enter the satellite college with the intention of continuing their education at the affiliated university upon completion of their course of study.

A satellite university set-up provides students at the two-year college with a faculty and staff dedicated to academic excellence and sensitive to the specialized needs of the new college student. It has professionals trained to give personalized support to students making the transition from secondary to college work. It would be more likely to offer smaller classes taught by full-time faculty whose primary energies are not directed to research. Cost savings could be achieved through consolidation of lower-level course offerings. Some core curriculum courses from the four-year institution could be offered at the two-year institution as a way of releasing space at the former for research and upper-level course offerings.

Many of the costs of this type of cooperative arrangement are similar to those of Type 4, but with certain differences. This arrangement may not fully prepare these students for integration into the academic and social life of the four-year institution. The transition from a highly personalized, teaching-intensive college to a sprawling, research-oriented institution where faculty contact is infrequent may result in an academic and social shock for the university college student.

Involving Institutional Research

More than any other function, institutional research is frequently in a position to assist institutions considering initiating a cooperative arrangement. It is in the position to conduct the exploratory research—identifying potential partner institutions and constituencies, projecting the impacts of different types of arrangements, and helping to frame measures of each potential arrangement's success.

Our involvement in research on cooperative arrangements began in 1991 when we were asked to do an analysis of institutions participating in such arrangements. Our typology was culled from a study of more than 20 cooperative arrangements. From discussions with institutional researchers at colleges participating in cooperative arrangements and from literature on the subject, we identified three main roles for institutional research in the cooperative process: administrative decision support; data collection and assessment; and information provision.

Many administrators will not consider the role institutional research can play in cooperative arrangements—in conducting initial research, and in laying the groundwork for the arrangement. Institutional researchers often have access to data which can allow them to project the potential impact the arrangement may have on their institution. Calculations of the potential number of transfer students, as well as the potential impact of the influx on the four-year institution can be performed by institutional research offices. Researchers at two-year colleges may project the cooperative arrangement's effect on
their own enrollments by balancing projections of the number of students who may be attracted to the
college by the arrangement and of the number who may be deterred by it. Indeed the work of institutional
researchers can play a key role in allowing administrators to deal with what might become the premier
roadblock to a cooperative arrangement—convincing students and alumni of the benefits of such an
endeavor. Alumni, especially, tend to regard any changes in the format of their alma mater with misgiving
and suspicion; their opposition is a significant concern of administrators, and information generated by
institutional research can prove key to winning them over.

The role of institutional research in supporting the implementation of these arrangements is clear.
In the early stages, the compilation of comparative data and impact projections are key to assisting
administrators in making the initial decision to form a cooperative arrangement. During the actual
process, data collection and analysis become important as both administrators and constituent groups
become interested in the progress and success of the arrangement, as well as in plans for future
expansion. Institutional researchers at both two-year and four-year participating institutions will need to
develop and maintain data bases on transfer students. At two-year colleges, such databases can help to
identify potential transfer students, to track their process through their lower-division courses and to keep
track of transfer success. Four-year institutions can track transfer student performance and persistence,
and can compare the performances of transfer students from particular two-year colleges and from other
four-year colleges, with the performance of "native" students; this can help to identify successes of the
cooperative arrangement as well as potential weaknesses and problems.

Our research has shown that one of the main impediments to the implementation of cooperative
arrangements is the limited availability of information about cooperative arrangements in general and the
specific arrangement being considered in particular. From the cases we have gathered, it appears that
there are as many types of cooperative arrangements as there are colleges participating in them. Each
pair of institutions formulates an agreement to suit their unique needs. The paucity of information can lead
to a lack of support or even to negative support among constituents. Institutional research can be
instrumental in helping to package the cooperative arrangement as a solution to the separate needs of
each institution. By being as specific as possible about the details of the cooperation, and by presenting
the arrangement as a win-win rather than a zero-sum situation, Institutional Research can do much to
waylay the fears of both internal and external constituencies. By providing accurate and up-to-date
information on the programs and policies of the cooperative arrangements, institutional research can
assist students, faculty and administrators seeking to comply with the terms of the arrangement.

The success of cooperative arrangements as solutions to the financial and academic problems of
the participating institutions is as yet difficult to gauge. At the present time, certain aspects of the
cooperative process are unclear; time and future research will help to shed light on the
comprehensiveness and stability of our typology of arrangements. Preliminary research suggests that the
addition of a time element may be useful in analyzing cooperative arrangements. Time-series research
may show that certain of the first types of cooperative arrangements may be, in effect, steps taken toward
the implementation of a more sophisticated arrangement. Should this prove true, a second dimension will
have to be added to the existing typology.
Appendix I
Partnership Grant Program Participants by City

**Baltimore**—Coppin State College and New Community College of Baltimore participated. The faculty in English, Science and Mathematics met together to examine courses and transfer practices. The community college developed a one-year transfer program for students initially rejected by Coppin. The focus was upon high-risk students.

**Boston**—Northeastern University and Roxbury Community College participated. This is an example of a private four-year institution being paired with a public two-year college. The institutions developed a cross-registration program for 25 minority students. Roxbury students attending Northeastern paid only community college tuition. A joint transfer council oversaw the project.

**Chicago**—Chicago State University and Olive-Harvey College participated. The two-year college reviewed the contents of transfer courses and modified syllabi as needed to ensure the transferability of its courses. Joint academic policy meetings were held to propose new teaching techniques, class sizes and course contents. The two-year college's developmental studies courses were reviewed to assure they shared contents and values consistent with obtaining a four-year degree.

**Chicago**—Loyola University and Harry S. Truman College participated. Minority students who had completed one year of work at the two-year college were eligible to take an inter-disciplinary course at Loyola. This course was jointly developed and team-taught; its purpose was to expose Truman students to the academic, physical and social environment of Loyola. The course included intensive writing skills and study strategies components. A development workshop was used to familiarize faculty with minority issues.

**Detroit**—Mercy College of Detroit and Highland Park Community College participated.

**El Paso**—University of Texas, El Paso and El Paso Community College participated. The two institutions engaged in curriculum development in order to revise a key English course taken by potential transfers. They shared assignments, materials, standards and expectations to ensure comparable preparation at both institutions. Community college students taking the course attended class at the university. University staff met with community college students at both campuses in order to help reduce the psychological barriers to transfer.

**Houston**—University of Houston and Houston Community College participated.

**Kansas City**—University of Missouri, Kansas City and Penn Valley Community College participated.

**Los Angeles**—University of California, Los Angeles and Los Angeles Southwest College participated. A joint effort was made by faculty to establish the nucleus of a liberal arts-based transfer curriculum. Southwest students were provided with a sheltered transfer experience and gradual entrance into the university. A transfer council oversaw the project.

**Memphis**—Memphis State University and Shelby State Community College participated. Each institution established a transfer office on the other's campus. The two institutions were equal partners in the development of a transfer council. Joint meetings of faculty in English composition and Social Sciences met to discuss curriculum, pedagogy, students and learning outcomes in order to facilitate transfer.

**Newark**—Rutgers University, Newark and Essex County College participated.

**New Orleans**—University of New Orleans and Delgado Community College participated. The Louisiana legislature recently established a statewide system of community colleges. It also mandated that the four-year college drop its open-admissions policy and establish admissions criteria. Some students who previously directly entered the university must now attend a community college first. Each institution established a liaison officer to manage the project under the guidance of a joint task force. Activities included teaching faculty exchanges in Mathematics and English, and a system of feedback from the university to the community college to assess progress.

**New York**—Hunter College and Borough of Manhattan Community College participated. These institutions planned new courses in Science and Mathematics to fulfill the liberal arts requirements for the four-year college. These jointly developed courses will be taught and required on both campuses.
New York—City College of New York and Kingsborough Community College participated. A joint meeting of the English-as-a-Second-Language faculties planned an intensive program to strengthen student reading, writing, listening and speaking skills.

St. Louis—University of Missouri, St. Louis and St. Louis Community College, Forest Park participated. The two institutions established a faculty-based Academic Transfer Center. The purpose of the center is to assist instructional faculty to identify potential transfer students who need appropriate instructional and emotional support, to establish links between the institutions, to facilitate transfer of students to the university, and to maintain the nurturing environment needed to support former two-year college students now attending a four-year institution. Faculty jointly engaged in curriculum development to restructure liberal arts curriculum emphasizing writing, critical thinking and interdisciplinary learning. Students were supported through the development of faculty-student mentor teams.

San Antonio—University of Texas, San Antonio and San Antonio Community College participated. Faculty jointly developed core courses for a new interdisciplinary studies curriculum. The courses were equivalent at both institutions. A permanent process of faculty consultation between institutions was established.

San Diego—San Diego State University and Southwestern College participated.

San Francisco—Holy Names College, San Francisco State University, Laney College and Merrit College participated.
Bibliography


