Past and present forces affecting curriculum articulation between schools and colleges are discussed. There now exist sufficiently pressing conditions, at both secondary and postsecondary school levels, to bring the issue of program continuity to the forefront. Particular attention should be paid to the assumptions underlying new articulation designs, to the recommendations of noted individuals and organizations, and to the increasing interest of government agencies because their effect on both schools and students will be far reaching. (Author)
SCHOOL-COLLEGE ARTICULATION: COOPERATIVE PROGRAMS AND PRACTICES LINKING SECONDARY AND POST-SECONDARY CURRICULA

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Report 5

CENTER FOR INSTRUCTIONAL DEVELOPMENT, SYRACUSE UNIVERSITY
Preface

The purpose of this paper is to provide the reader with some insight into past and present forces affecting curriculum articulation between schools and colleges. There now exist sufficiently pressing conditions, at both secondary and post-secondary school levels, to bring the issue of program continuity to the forefront. Particular attention should be paid to the assumptions underlying new articulation program designs, to the recommendations of noted individuals and organizations, and to the increasing interest of government agencies because their effect on both schools and students will be far reaching.
Articulation

The term articulation is used in a variety of ways, and its use in this report should be clarified. In its most general sense, articulation is often used to mean "the smooth transition of students from one educational level to another" (Kintzer, 1970; Willingham, 1972). Implicit in this concept is the need to systematize the activities influencing all aspects of student progress and movement. Still others have used the term to signify "the coordination of educational programs" (Blocker, 1966); "the process and procedures by which coordination is achieved" (Kintzer, 1970, 1971); and "the coordination of a variety of educational practices and services" (Knoell and Medsker, 1965). In this report, articulation is used to refer to "planned programs and practices which link secondary and post-secondary curricula and involve a high degree of systematic cooperation between the two levels."

Background

In the past, there has been little incentive for schools and colleges to work together. High schools and colleges have developed as separate, self-contained components of the larger educational system (Pincus, 1974). Even community colleges, which were, in many cases, connected to secondary schools, have sought to separate themselves from such ties in their quest for recognition (Gleazer, 1973). Universities have traditionally emphasized theory and have insisted that there be no compromise of rigorous thinking and scholarly inquiry. They have often faulted secondary school personnel for what they regard as short-sightedness in handling problems and casualness about verifying results. High schools, on the other hand, have tended to see university people as little concerned with practical problem solving or with actually implementing complicated theories. These differing perspectives have bred mutual distrust.

From the post-World War II period until the mid 1960's, there was significant discontinuity between the two levels. Competition to place students in a limited number of college openings prompted the high schools to strengthen their curricula. As a result, many entering college students found themselves doing, in college, academic work which had already been taught in their high schools. They also discovered
that much of the teaching at the college level was handled by graduate students who often compared badly with their high school teachers. While the high schools and students went through this period of anxiety and activity, the colleges were frequently complacent and aloof (Carnegie Commission, 1973; Spurr, 1970).

This complacency eventually ended, however, when college enrollments began to decline, costs began to increase, and post-secondary school options began to proliferate. These changes have produced a new climate of cooperation between secondary and post-secondary institutions (Carnegie Commission, 1973; Commission on Non-Traditional Studies, Gould, Chairman, 1973). Community college officials suggest that the most significant linkages in the next ten years for their institutions will be with the secondary, vocational, and community schools from which they draw their students (Gleazer, 1973). In addition, colleges are beginning to re-think seriously many aspects of their curriculum practices in light of the changing student population.

Rationale and Impetus for Articulation

The investigation and planning of new kinds of opportunities for students to make sensible, effective, and timely transitions from secondary to post-secondary education have been important issues for educational planners in recent years (Carnegie Commission, 1973; Honey, 1973; Rainsford, 1972). In this era of universal access to higher education, a large number of students have a pressing need for instruction that includes remedial activities and tutorial services, both necessary to increase their likelihood of success in college programs. Magill (1973) noted that many students are more physiologically, intellectually, and academically advanced than were their counterparts a generation ago and that often entering college freshmen are particularly well advanced in the field of general education. In addition, many educators now acknowledge that much learning takes place outside the classroom which can be evaluated for academic credit (Creager, 1973). But, as Alan Tom (1973) recently commented, "School-university cooperation is typical of educational sacred cows. Everyone favors it, few practice it, and hardly anyone realistically describes the result. . . . Many, if not most, cooperative ventures experience tension, frustration, and ultimate failure."

A great deal of evidence suggests that considerable curriculum duplication exists, particularly between the last two years of high school and the first two years of college. Osborn (1928) showed that 17-23% of high school physics,
English, and history was repeated in college. Russell (1940) found that, on the average, a B.A. major in English will have studied Shakespeare’s *Julius Caesar* four times during his total school program. More recently, Blanchard (1971) conducted an extensive survey of college and high school curriculum practices and found that nearly one-third of the subject-matter content during the first two years of college was merely a repetition of what had already been taught in high school. That is, one-third of the content of the four areas of the college curriculum (English, science, social studies, and math) may be nothing more than "high school courses rearranged into a college course and then offered under a new name, but unmistakably continuing as high school substance" (Blanchard, 1971, p. 17). Although Blanchard and many others recognize that some repetition of subject matter may be desirable, such duplication should have a specific purpose. Until better communications channels develop such that high schools and colleges can develop some consensus on curriculum planning, such ill-conceived duplication is likely to continue.

New instructional roles may be emerging for secondary schools. Although certainly an unsettled issue, more educators are beginning to feel that high schools can start to assume more of the responsibility for general education courses that currently make up a major portion of a student’s first two years of college. Crowley (1960) cites lack of interest among a substantial portion of college faculty in this area of teaching, the dominant status of the research function, and the frequent emphasis on special rather than general education as reasons favoring such a shift. De Vane (1964) reported that moving more of the responsibility of developing basic competencies in English composition and foreign languages to the high schools would probably benefit higher education.

Other forces promoting better articulation are those which focus on the economic aspects of inadequate coordination between school and college. Nelson (1972), at a recent meeting of the Upper Midwest Association for College Registrars and Admissions Officers, notes that legislators are becoming increasingly concerned about the rising costs of education and are not happy about any waste or slippage. With new forms of higher education gaining recognition (e.g., University Without Walls, private occupational and business schools, home study, the external degree), colleges, if they are to survive, must find ways of better serving the large number of students who are selecting these options more and more (Nelson, 1972; "Inside Education," June, 1972). Using 1965-66 figures, Blanchard (1971) calculates that, because of the extent of overlapping subject materials, nearly three
million freshmen and sophomores enrolled in public and private institutions of higher education are paying tuition and required fees of over $420 million dollars for course content for which their parents have already reimbursed the state during their child's secondary education.

Many high schools have allowed, indeed actively encouraged, academically capable students to take heavy course schedules throughout their first three years. As a result, high school students often complete requirements for graduation as juniors or find themselves with only one or two required subjects in their senior year. Even given the seemingly exciting prospect of early graduation or light senior year course loads, some problems have emerged. Bowen (1973) notes that the 30-year-old practice of early graduation from high school and early admission to college may be desirable for some students but doesn't work for all who qualify and may have a bad effect on secondary schools. Relatedly, parents often want their children to remain in school in the local community for the full four years and want the schools to "beef-up" the senior year. Teachers complain that it is difficult to motivate juniors and seniors after they have been accepted at college. Administrators are not happy about losing many of their better students, a loss which directly affects state and federal aid and which may reduce teaching positions. Students often look forward to the extracurricular activities of the senior year which are lost with the early graduation option. It is becoming increasingly evident that high schools and colleges can no longer stand worlds apart in educational planning and that the ineffective coordination and transition between secondary and post-secondary education will have to be dealt with imaginatively.

Models of Articulation

As noted earlier, articulation, as used in this paper, refers to "cooperative programs and practices linking secondary and post-secondary curricula." Other categories of school-college articulation, such as sharing of facilities and services, joint advisory programs, student counseling, and tutorial arrangements, also represent important joint ventures (Buder, 1974; Carnegie Commission, 1973; Gleazer, 1973). Because of the recent forces previously discussed, direct aid, and guidance from commissions, foundations (Carnegie Commission, 1972; Carnegie Commission 1973; Fleischmann, 1972), and state education departments (e.g., Oregon, New York, Florida), many high schools and colleges have begun to experiment more boldly with
the cooperative design and delivery of many kinds of educational activities and services.

A recent survey of articulation programs (Wilbur, 1974) has revealed imaginative new approaches as well as more effective and extensive use of options that have been available for some time. This investigation and a review of the literature suggest that these programs can be organized within the conceptual scheme indicated below.

**COURSE DESIGN**

<table>
<thead>
<tr>
<th>Teaching Responsibility</th>
<th>Regular Catalog</th>
<th>Special Design</th>
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<tbody>
<tr>
<td>College Faculty</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>High School Faculty</td>
<td>C</td>
<td>D</td>
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</tbody>
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Figure 1. Four General Models of School-College Articulation Practices

Programs in all four cells generally have at least two characteristics in common:

1. Recognition that some high school students are capable of real achievement in college courses.

2. Certain high school students can and should be allowed to earn college credit or eligibility for advanced placement by participating in cooperative school-college programing.

Cell A of the matrix includes programs whose design involves regular college catalog courses being taught by college faculty to non-matriculating high school students. Perhaps the most common type of cooperative program, this design creates opportunities for high school students to take college courses, either in their high school or at a nearby campus, for college credit while still enrolled in high school. Often referred to as a "split-day" arrangement (Bremer, 1968), this cooperative programing allows academically able students to interact with college professors, experience college-level course requirements, and earn credit applicable toward both high school graduation and baccalaureate degrees. (See Appendix A for case examples of articulation practices that fall within all...
four areas of the classification system.)

The second category of program design includes programs that would be classified under Cell B. College faculty, often in conjunction with high school representatives, design special programs of study for advanced high school students. Faculty from the college, as indicated on the matrix, are responsible for classroom instruction. Among such programs are special colleges which allow high school students simultaneously to complete requirements for graduation and complete many of their initial college courses. Other programs are designed to operate in the high school as part of a student's elective program.

Programs falling in Cells C and D are particularly interesting because they share a basic underlying assumption: at the same time colleges are recognizing the ability of high school students to complete college work successfully, they are also recognizing the capability of the high school teacher to present college-level learning experiences (Lindsay, 1965). This basic premise seems to account for many of the differences in program design. Bremer (1963) writes that articulation programs that are not "high school-focused" deny that the high school has the ability to present a college-level course. The result, he observes, is that the college, rather than the high school, becomes the focal point of acceleration and assumes the instruction-evaluation role. Secondary schools, therefore, serve merely to identify students who they feel are capable of participation.

Type C programs are, by far, the least common of the four categories of articulation practices. Several colleges, including Syracuse University, have programs operating which give high school students an opportunity to earn college credit for courses taught by their high school teachers. Specially selected high school faculty are trained by college faculty to offer the program. Usually, courses carry credit which is applicable toward high school graduation requirements and is transferable to post-secondary institutions for credit or advanced placement toward degree requirements. Since existing high school faculty and facilities are used for programs falling into this area, tuition can be kept remarkably low (e.g., 25% or less of on-campus cost).

A number of other programs are included in the fourth area, Cell D. Once again, high school faculty are responsible for teaching college-level courses. Standardized testing programs (e.g., College Level Examination Program, Advanced Placement) often involve specially designed courses of study that result in norm-referenced scores or ratings for which increasing numbers of post-secondary institutions are granting course exemption, both with and without college credit (College Entrance Examination Board, 1974 A). Other cooperative experiments
involve high school and college faculty designing courses that are also
taught by the high school faculty and carry college credit.

Although slowly increasing in number and variety, such programs and
opportunities are still inadequate and are largely the result of local initiative
rather than systematic educational planning at the state or national
level (See Appendix A: Case examples of current articulation programs; Appendix B:
Preliminary compendium of post-secondary institutions sponsoring articulation
programs). Several exceptions, however, deserve attention. A New York State
study commission has recommended a major reorganization of secondary education
that would give students at least three options for Grades 11 and 12: continued
high school, early college entrance, or vocational training (Fleischmann, 1972).
Ewald B. Nyquist, President of the University of the State of New York and
Commissioner of Education, has invited the higher education community of New
York to experiment more boldly with the delivery of educational services. Nyquist
heads a current study, sponsored by the National Academy of Education, which
is investigating existing and proposed articulation programs in the state in
order to develop a compendium of practices and policy recommendations for the
state. Regional conferences of educators and publications are planned to dis-
seminate the information. The State of Oregon has developed specific guidelines
which secondary and post-secondary institutions can use to facilitate the transfer
among institutions of credit earned in cooperative high school-college programs
(Oregon High School-College Relation Council, 1973). Florida and California have
also taken steps to make systematic articulation an important issue and educational
priority.

Important Issues and Problems

Inherent in most of the cooperative efforts previously described is the
recognition that high schools and colleges must begin to work more closely
to eliminate needless curriculum duplication between the two levels and
provide in other ways for a more effective continuum. "Articulation," as
Kintzer (1970, p. 2) points out, "can also be described as an attitude--the
reactions of personnel responsible for student progress through an educational
system and from one system to another." Cooperation and commitment will be needed
to identify and resolve deep-seated problems and barriers to effective articulation
before they become crises. Otherwise, high schools and colleges will be fighting
over students rather than educating them.

1. Economic. Many problems interfering with successful articulation practices are economically based and affect both institutions sponsoring the programs and those receiving the students. Certain designs, for example, require college faculty to teach courses in high school. High school teachers are often concerned about job security. Relatedly, Magill (1973) warns that articulation programs which shorten the time required for a college degree by one or more semesters could have potential fiscal perils, particularly in the private sector. As credit and time requirements are reduced, colleges may have difficulty compensating for the subsequent reduction in enrollment. Still another consideration is that courses most likely to be reduced through articulation practices (i.e., large enrollment, general education programs) cost the institution less money than do upper division and graduate courses (Dresser and Chapman, 1972; N.Y. State Education Department, 1972). Furniss and Martin (1973) point out that the problem is not so much the transfer of students or credit but rather practicing sound fiscal policy. If the acceptance of transfer credit helps an institution in some way to "balance the books," then students with such experiences will be sought. If not, they will be avoided.

2. Institutional and Faculty Autonomy. Nelson (1972) identifies other restraining forces interfering with improvement of articulation: "For openers, we might consider institutional integrity--you know, that feeling that you'll be damned if you're going to have another institution dictating who you'll admit and on what terms." (p. 10). He cites that a similar reason often expressed by faculty members is that they view some of the thrusts of articulation as encroachments on their academic prerogative to decide what to teach and how to teach it. Students who complete several general education courses, for example, prior to college admission and who expect course exemptions with credit may be pre-empting faculty decisions on degree requirements and student standing at their institution. Oregon, Florida, and other states have recently found it necessary to issue legislative guidelines to their public institutions on credit transfer and other aspects of articulation within the states.

3. Credit Transfer. High school students participating in articulation programs present colleges with a relatively new problem: what to do with students
who earned college credit prior to high school graduation. Lloyd Elliott (1973), President of George Washington University, feels that transfer of credit must be made much easier for students than has been the case among traditional institutions of higher learning. Colleges, he adds, "must take into full account the needs, interests, and circumstances of the students and put those matters above the convenience of the institution" (p. 7).

Currently, institutions differ widely on their transfer policies. What may be accepted at one institution for course exemption and credit toward graduation may be flatly rejected for such consideration at another institution. Many studies have shown the large numbers of variables involved and practices that currently occur (Gleazer, 1973; Creager, 1973; Sneider, in progress). Furniss and Martin, in a recent article (1973), mention several barriers to transfer which may directly affect the recognition of credit earned in articulation programs: lack of standardized grading systems, lack of agreement on core curricula, lack of coordination between admissions office and departmental requirements, and lack of agreement on credits from accredited and non-accredited institutions. Factors such as the student's choice of major, his persistence in finding ways through and around the institutional system, and the college's recruitment needs can all affect credit transfer. In an Arlie House Conference on College Transfer Policies report, Martorana (1974) wrote, "It will be interesting when someday the American Civil Liberties Union examines cases where individuals seem to be treated whimsically or capriciously by responsible officials of an institution, public or private, which claims to serve the individual by pursuing his just due" (p. 117). The frequent lack of simplicity, flexibility, and consistency of transfer policies and practices makes it extremely difficult for those planning, operating, and participating in articulation programs.

Schools and colleges must find better ways to work together. The present waste of student and faculty time can be avoided if people at both educational levels cooperate in coordinating their instructional programs. State and federal offices, accreditation and testing agencies, and professional education associations can all play an important part in removing barriers to school-college articulation. State departments of education, which have traditionally been slow to act in this
area, are in a particularly strong position to bring about much needed change; they should provide far-sighted direction so that secondary schools and colleges can develop, analyze, and plan together curricula that will most benefit our students. Long established practices, roles, and assumptions must be re-examined so that when inevitable change does come we will be ready for it.
Appendix A: Case Examples of Current Articulation Programs

**Type A**

The State University of New York at Fredonia has developed a cooperative arrangement with 14 local school districts whereby qualified high school seniors can enroll in regular freshman courses at the Fredonia campus while they continue to take courses at their high schools. If they can successfully split their days between the two locations, students have the opportunity to earn 9 or more college credits while completing the requirements for high school graduation. Fredonia also recognizes some work completed in high school for college credit and, therefore, has some of the characteristics of a Type C program.

Another example within this category would be the cooperative program between Chaminade High School and C.W. Post College, a branch of Long Island University. High school students who meet Post's admissions criteria can earn both a high school diploma and 30 freshman credits during their senior year at high school. Courses are taught at Chaminade, a private high school, by faculty of C.W. Post. Students take a full load of regular Post freshman courses, not a mix of college and high school courses. By remaining in the high school setting, students can continue to participate in extracurricular activities, retain social contacts, and receive guidance counseling and placement services.

**Type B**

A grant from the Carnegie Corporation assisted the State University of New York at Albany in opening the James E. Allen Collegiate Center on the Albany campus. The Allen Center accepts qualified high school students at the end of their junior year into a full-time college schedule. Designed to absorb 12th-grade course work by eliminating overlap, students study philosophy, history, and the visual arts in an integrated, interdisciplinary curriculum. Faculty from the University design and jointly teach the course offerings. With agreement from each student's high school, students complete any remaining requirements for high school graduation while finishing a full freshman course load. Tuition, fees, and living expenses are the same for the Allen Center students as for other State University of New York at Albany degree candidates.

A project slated to begin in September 1974 is LaGuardia Community College's (Queens, New York) "Middle College High School." Designed as an alternative to high school, the program will initially enroll 125 tenth graders who have academic
potential but are not achieving. LaGuardia faculty members will provide the
students with increased remedial attention, counseling, and individualized cur-
iculum alternatives. After five years in the program, participants will be
eligible for associate degrees, career skills, and options to transfer to a
four-year college.

Type C

In the fall of 1973, Syracuse University, in cooperation with nine New York
State high schools, piloted Project Advance. The program was designed to allow
motivated high school students an opportunity to enroll in Syracuse University
courses as part of their regular high school schedule. High school teachers are
specially selected and trained to teach courses which have undergone at least
three years of planning, designing, and field testing at Syracuse University's
Center for Instructional Development before being moved into the schools.
Project Advance operates in the high school, and courses carry high school as
well as college credit. Academic standards, which are the same as for students
enrolled at the University, are carefully monitored by college faculty and by
evaluation staff. Students pay a small tuition fee and, upon successful com-
pletion of a course, receive credit on a regular Syracuse University transcript.
Credit has proven widely transferable to colleges and universities around the
country. For the academic year 1974-75, forty high schools and over 2000 students
are participating in the program.

Type D

The State University of New York at Plattsburg, Hudson Valley Community
College, and Shaker High School in the North Colonie School District have coop-
eratively designed a program to give qualified high school seniors the opportunity
to earn up to 24 credit hours of college work. Faculty members from the three
institutions have designed the curriculum and evaluation methodology. Special
seminars prepare Shaker High faculty who teach the courses at the high school.
Tuition is free and credit transfer is limited to the two participating colleges.

The Advanced Placement Program, sponsored by the College Entrance Examination
Board, enables high schools to offer a specially designed college-level curriculum
in a number of subject areas. Colleges participating in the program grant students
credit toward their degrees, exemption from required courses, or placement in
advanced courses, depending on their performance in the Advanced Placement Program;
all of these are meant to be direct replacements for specific college courses. The acceleration of the student's progress towards his educational career objectives is an important goal of the program. Content and evaluative instruments for each A.P. course are planned by a group of content specialists representing both secondary and post-secondary institutions. High school teachers are responsible for teaching a recommended course of study in the high school. Dual credit (high school and college) is often awarded to program participants. Only the top, 5-10% of the student body (in terms of academic achievement) usually enroll and take the examination. Cost of the examinations is approximately $30.
Appendix B: Preliminary Compendium of Post-Secondary Institutions Sponsoring Articulation Programs

<table>
<thead>
<tr>
<th>Institution</th>
<th>State</th>
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<td>Empire State College</td>
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