

## INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure complete continuity.
2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.
3. When a map, drawing or chart, etc., is part of the material being photographed, a definite method of "sectioning" the material has been followed. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.
5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.

**University  
Microfilms  
International**

300 N. Zeeb Road  
Ann Arbor, MI 48106



8328450

**Andrews, Frances Kennedy**

THE DEVELOPMENT OF A FRAMEWORK FOR AN ARTICULATION PLAN  
FOR THE TRANSFER OF CREDITS FROM TWO- TO FOUR-YEAR PUBLIC  
EDUCATIONAL INSTITUTIONS IN NORTH CAROLINA

*The University of North Carolina at Greensboro*

Ed.D. 1983

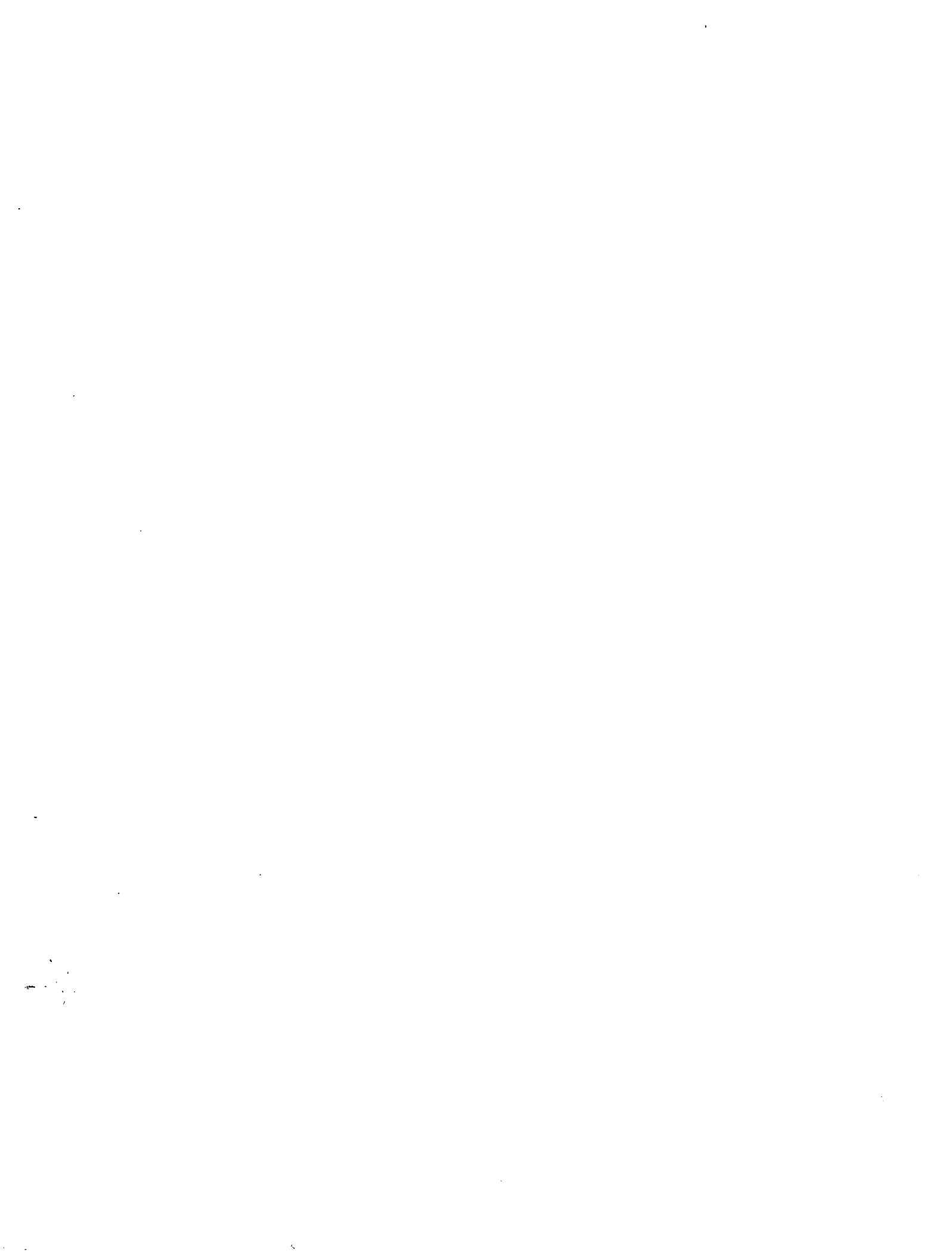
**University  
Microfilms  
International** 300 N. Zeeb Road, Ann Arbor, MI 48106

**Copyright 1984**

**by**

**Andrews, Frances Kennedy**

**All Rights Reserved**



PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark .

1. Glossy photographs or pages \_\_\_\_\_
2. Colored illustrations, paper or print \_\_\_\_\_
3. Photographs with dark background \_\_\_\_\_
4. Illustrations are poor copy \_\_\_\_\_
5. Pages with black marks, not original copy \_\_\_\_\_
6. Print shows through as there is text on both sides of page \_\_\_\_\_
7. Indistinct, broken or small print on several pages
8. Print exceeds margin requirements \_\_\_\_\_
9. Tightly bound copy with print lost in spine \_\_\_\_\_
10. Computer printout pages with indistinct print \_\_\_\_\_
11. Page(s) \_\_\_\_\_ lacking when material received, and not available from school or author.
12. Page(s) \_\_\_\_\_ seem to be missing in numbering only as text follows.
13. Two pages numbered \_\_\_\_\_. Text follows.
14. Curling and wrinkled pages
15. Other \_\_\_\_\_

University  
Microfilms  
International



THE DEVELOPMENT OF A FRAMEWORK FOR AN ARTICULATION PLAN  
FOR THE TRANSFER OF CREDITS FROM TWO- TO FOUR-YEAR  
PUBLIC EDUCATIONAL INSTITUTIONS  
IN NORTH CAROLINA

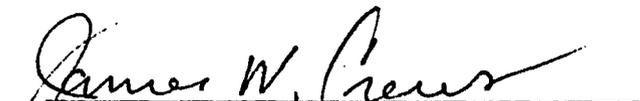
by

Frances Kennedy Andrews

A dissertation submitted to  
the Faculty of the Graduate School at  
The University of North Carolina at Greensboro  
in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

Greensboro  
1983

Approved by

  
Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee  
of the Faculty of the Graduate School at the University of North  
Carolina at Greensboro.

Dissertation  
Adviser

James W. Crews

Committee Members

Lois V. Edinger  
Donald L. Elser  
W. Hugh Hagan

May 27, 1983  
Date of Acceptance by Committee

May 27, 1983  
Date of Final Oral Examination

## ABSTRACT

ANDREWS, FRANCES KENNEDY. The Development of a Framework for an Articulation Plan for the Transfer of Credits from Two- to Four-Year Public Educational Institutions in North Carolina: (1983)  
Directed by: Dr. James W. Crews. Pp. 130.

It was the purpose of this study to develop a framework for an articulation plan to transfer credits for courses from two- to four-year public educational institutions in North Carolina. In 1981, 109,951 students were enrolled in the 58 institutions in the North Carolina Community College System. The problem precipitating the study was the lack of a plan whereby these students could transfer credits to institutions in the North Carolina University System. Only those students following a prescribed program of study in the College Transfer programs in the 23 community colleges in the system could transfer credits to the University System.

A search was made of the education professional literature, and the articulation plans for higher education in other states were studied. Data were solicited through the use of a questionnaire mailed to the chief administrative officer of the two-year public postsecondary institutions in all 50 states. The 43 states (86 percent) from which data were received enrolled approximately 97 percent of students attending public two-year postsecondary educational institutions in the United States as of October, 1981. The states rated their plans using criteria developed by the researcher based on information gathered from the literature.

From the data collected the following conclusions were drawn: Only four states, Arizona, Maryland, Oklahoma, and Tennessee, have acceptable articulation plans when evaluated against criteria. There is no assurance

that states having master plans for higher education will have formal articulation plans. States having upper-level universities are no more likely to have formal articulation plans than states without upper-level institutions. The administrative plan for governing two-year post-secondary educational institutions is not a good predictor of whether a state will have a formal articulation plan or how effective it will be. For most states which have formal articulation plans, credit transfer policies are vague and insufficient. Legislative mandates relative to development of articulation plans in the various states have not resulted in formal articulation plans in most states. On the basis of the evaluation of the criteria, no national pattern emerged concerning the development of articulation plans and their characteristics.

## ACKNOWLEDGEMENTS

The researcher is sincerely grateful to many persons for their encouragement and assistance throughout the doctoral program that culminated with the writing of this dissertation.

I am especially grateful to Dr. James W. Crews, chairman of my committee, whose patience, encouragement, and assistance made this investigation possible. Sincere appreciation is also due to Dr. Dwight F. Clark, Dr. Lois V. Edinger, and Dr. W. Hugh Hagaman for their support and guidance as members of my doctoral committee.

I would also like to thank Dr. Larry J. Blake, Dr. G. William Dudley, Jr., Dr. Charles Fancher, and Dr. James Hinson, Jr., for reviewing the questionnaire and making helpful suggestions in its development.

I thank Judy E. Douglas, typist, for the time and effort spent in completing the final copy of this study and for her patience in preparing many draft copies.

A special thanks to Dr. J. F. Hockaday, President of Central Carolina Technical College, and to the Board of Trustees for granting me educational leave to pursue this degree.

A very special thanks to my mother, Evelyn Wade Kennedy, for her constant encouragement and for her help in assuming responsibilities which normally would have been under my purview.

## TABLE OF CONTENTS

	Page
APPROVAL PAGE . . . . .	ii
ACKNOWLEDGMENT . . . . .	iii
LIST OF TABLES . . . . .	v
 CHAPTER	
I. INTRODUCTION . . . . .	1
Statement of the Problem . . . . .	4
Purpose of the Study . . . . .	4
Need for the Study . . . . .	5
Definition of the Terms Used in the Study . . . . .	16
Limitations of the Study . . . . .	18
Design of the Study . . . . .	18
II. REVIEW OF RELATED LITERATURE . . . . .	21
National Studies . . . . .	21
Southern Regional Studies . . . . .	32
Studies Relative to Success of Transfer Students . . . . .	33
Development of the North Carolina Community College System . . . . .	36
Role of the North Carolina Community College System . . . . .	43
Summary . . . . .	47
III. METHOD . . . . .	48
IV. AN ANALYSIS OF DATA . . . . .	52
Description of Public Two-Year Postsecondary Systems . . . . .	52
Number, Type, and Enrollment of Public Two-Year Educational Institutions . . . . .	52
Status of Master Planning . . . . .	55
Types of State Governance . . . . .	57
Number of Upper-Level Universities . . . . .	60
Status of Articulation Plans . . . . .	62
Formal Articulation Plans . . . . .	66
Titles of Formal Articulation Plans . . . . .	66
Types of Formal Articulation Plans . . . . .	67

	Page
Credit Transfer Policy in Formal	
Articulation Plans . . . . .	69
Evaluation of Formal Articulation Plans . . . . .	71
Description of Formal Articulation Plans	
for States with a 4.0 or Higher Rating . . . . .	75
Oklahoma . . . . .	75
Arizona . . . . .	78
Tennessee . . . . .	80
Maryland . . . . .	84
Informal Articulation Plans . . . . .	89
Titles of Informal Articulation Plans . . . . .	89
Types of Informal Articulation Plans . . . . .	91
Credit Transfer Policy in Informal	
Articulation Plans . . . . .	92
Evaluation of Informal Articulation Plans . . . . .	94
Description of Informal Articulation Plans	
for States with a 4.0 or Higher Rating . . . . .	96
Summary . . . . .	98
V. CONCLUSIONS, RECOMMENDATIONS, AND EPILOGUE . . . . .	101
Conclusions . . . . .	101
Framework for an Articulation Plan . . . . .	103
Organizational Preliminaries . . . . .	103
General Articulation Practices . . . . .	104
Associate of Arts Degree . . . . .	105
Other Associate Degrees . . . . .	108
Non-Associate Degree Admissions . . . . .	108
Recommendations . . . . .	109
Epilogue . . . . .	109
BIBLIOGRAPHY . . . . .	111
APPENDIX A. QUESTIONNAIRE RECIPIENTS . . . . .	115
APPENDIX B. QUESTIONNAIRE JURY . . . . .	120
APPENDIX C. QUESTIONNAIRE . . . . .	122
APPENDIX D. LETTERS . . . . .	125

LIST OF TABLES

Table	Page
1 Enrollment and Number of Public Two-Year Postsecondary Institutions by Type and State . . . . .	53
2 Status of Master Planning by State . . . . .	55
3 Type of State Governance of Public Two-Year Postsecondary Institutions . . . . .	58
4 Number of Upper-Level Universities By State . . . . .	61
5 Status of Articulation Plans By State . . . . .	63
6 Titles of Formal Articulation Plans Received By State . . . . .	66
7 Type of Formal Articulation Plans By State . . . . .	68
8 Credit Transfer Policy For Bachelor's Degree . . . . .	69
9 Self-Evaluation of Formal Articulation Plans By State . . . . .	73
10 Titles of Informal Articulation Plans Received By State . . . . .	90
11 Type of Informal Articulation Plans By State . . . . .	92
12 Credit Transfer Policy For Bachelor's Degree . . . . .	93
13 Self-Evaluations of Informal Articulation Plans By State . . . . .	94

CHAPTER I  
INTRODUCTION

The Declaration of Independence authored by Thomas Jefferson in 1776 is considered by many to be the highwater mark of all mankind. That every man be considered equal to all others and be treated equally under the law was unheard of in any civilization or any country of the world. Jefferson said, "'If a nation expects to be ignorant and free in a state of civilization, it expects what never was and never will be.'"<sup>1</sup> Believing education to be the great equalizer, Jefferson was the champion of education for all Americans. He was the master planner and father of the University of Virginia and an advocate of the ladder system of education. In a letter concerning the Virginia school system written in 1821 to General Breckenridge, Jefferson said, "'Let us keep our eye steadily on the whole system.'"<sup>2</sup> He wanted the organization of the school system in Virginia to be so thorough that the common schools and the university could "'go hand in hand forever;"<sup>3</sup> and that provision be made "'systematically and proportionally' for 'all other intermediate academics.'"<sup>4</sup>

---

<sup>1</sup> Merrill D. Peterson, Thomas Jefferson and the New Nation (New York: Oxford University Press, 1970), p. 145.

<sup>2</sup> The Department of Superintendence, The Articulation of the Units of American Education, Seventh Yearbook (Washington, D. C.: National Education Association, 1929), p. 4.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

Although it is evident that the need for articulation was recognized quite early in the development of the American education system, it was not until April, 1926, that an Articulation Commission was appointed by Randall J. Condon, then president of the Department of Superintendence. The Commission sought to make a careful analysis of the functions of each administrative school unit and a searching study of supervisory and curriculum practices within the various units so that overlappings, omissions, and contradictions might be avoided. The Commission organized five committees: Elementary Education, Secondary Education, Professional and Higher Education, Teacher Training, and Adult Education.<sup>5</sup>

Jesse H. Newlon, Chairman of the Secondary Education Committee which dealt with articulation from the junior high school through junior college, said:

[T]he junior college represents a tendency to extend the common school by the addition of two more grades. . . . [I]f the junior college prevails, it means that the burden of general education will be placed squarely on the shoulders of the secondary schools, and these schools will also have to provide more definitely for the beginnings of specialization and for terminal vocational and technical education for large numbers of students.<sup>6</sup>

Samuel P. Capen, Chairman of the Professional and Higher Education Committee, said:

the articulation problems of today [1929] are not those of twenty years ago, or even ten years ago.  
 . . . . .  
 automatic articulation between high school and college is still far from realization. If it should ever be desirable,

---

<sup>5</sup> Ibid., pp. 4-5.

<sup>6</sup> Ibid., p. 114.

it cannot be realized until the sharply ascending<sup>7</sup> curve of collegiate enrolments [sic] has begun to flatten.

Capen also said that the independent attitude of colleges, which had long been unpopular with school men and had led to many abuses, had produced almost chaotic irregularities in the entrance requirements which have in the past been so serious a check on the ordered and reasonable development of secondary and higher education. He allowed, however, that the unwillingness of the colleges to conform even to each other's practices had led to the wide range of constructive experimentation in higher education and the upward trend of educational standards. He said that independence characterized both private and public higher education and without defending or condemning that independence noted that it was one of the factors in the general problem of articulation.<sup>8</sup>

While the number of private two-year institutions has declined, (from 236 in 1928 to 164 in 1981), the growth of public two-year post-secondary institutions in the United States has been phenomenal, from 146 public institutions in 1928<sup>9</sup> to 1,055 public institutions in 1981.<sup>10</sup> North Carolina had 8 private junior colleges, 23 public community colleges, 29 technical colleges, and 6 technical institutes, with 114,978 students enrolled during the 1981-82 academic year (2.35 percent of the

---

<sup>7</sup> Ibid., p. 289.

<sup>8</sup> Ibid., p. 288.

<sup>9</sup> Ibid., p. 216.

<sup>10</sup> American Association of Community and Junior Colleges, 1982 Community, Junior, and Technical College Directory (Washington, D. C.: American Association of Community and Junior Colleges, 1982), pp. 76-77.

4,887,675 students enrolled in public and private two-year postsecondary institutions in the United States and its territories).<sup>11</sup>

Not only has the number of public two-year postsecondary institutions increased, but they are now placed in the higher education category theoretically and tend to be aligned with college and university systems or to have separate governing boards. While the majority of the students enroll in two-year postsecondary institutions for purposes other than to transfer to a four-year college or university, a significant number of them do continue their educations. The ease with which students are able to move from one level of education to another is extremely important.

#### Statement of the Problem

Generally, this study involved consideration of articulation between two- and four-year public educational institutions in North Carolina relative to the transfer of credits. Specifically, the following questions were addressed: (1) What are the criteria by which articulation plans should be developed, and (2) how can these criteria be utilized in developing an articulation plan for North Carolina?

#### Purpose of the Study

The purpose of this study was to develop a framework for an articulation plan for the transfer of credits from public two-year postsecondary institutions to public four-year institutions in North Carolina. It is hoped that this study will ultimately assist students in the smooth

---

<sup>11</sup> Ibid., p. 75.

transfer of credits for courses from the 58 public two-year postsecondary institutions to the 16 public four-year postsecondary institutions in North Carolina.

### Need for the Study

The state of North Carolina has two systems of postsecondary education: the North Carolina Community College System of 58 institutions, which is governed by the North Carolina State Board of Community Colleges, and the North Carolina University System of fifteen universities and the North Carolina School of the Arts, which is governed by the Board of Governors of the University of North Carolina.

The purpose of the North Carolina Community College System is to fill the gap in educational opportunity existing between high school and the senior college and university. In carrying out this role, the institutions offer academic, cultural and occupational education, and training opportunities from basic education through the two-year college level, at a convenient time and place and at a nominal cost, to anyone of eligible age <sup>12</sup> who can learn and whose needs can be met by these institutions.

Even though only the 23 community colleges are empowered by their charters to offer college transfer programs, many of the technical colleges and institutions offer college transfer courses through contractual agreements with four-year colleges and universities.

In 1976, the Commission on Goals for the North Carolina Community College System was established by the North Carolina State Board of Education. Its report titled Total Education: The Duty of the State was published in 1977. The Commission recommended that "Every avenue be

---

<sup>12</sup> Department of Community Colleges, North Carolina Community College System: Biennial Report 1976-1978 (Raleigh, N. C.: North Carolina State Board of Education, 1978), p. 16.

pursued to achieve total articulation between the Community College System, the Public Schools System, the University System, and other state educational organizations and agencies."<sup>13</sup>

The Commission felt that the transfer of credit process should be simplified and that the transfer of college credit from the community college to the senior institution was a matter of concern. The Commission further recommended that the Joint Committee on College Transfer Students established in 1965 to improve the transition of students from one institution to another be continued and supported in order to assure students of an uninterrupted educational career.

An analysis of the 1981 publication of the Joint Committee, Policies of Senior Colleges and Universities Concerning Transfer Students From Two-Year Colleges in North Carolina, 1981-82, indicates that there is no system-wide policy concerning transfer of students in the college transfer curriculum at community colleges. A close examination of the policies concerning the acceptance by public senior colleges in North Carolina of credits from technical colleges and technical institutes shows that such transfer is quite limited.<sup>14</sup>

In an effort to serve those students who wish to transfer from two-year colleges, many technical colleges and technical institutes in

---

<sup>13</sup> The Commission on Goals for the North Carolina Community College System, Total Education: The Duty of the State (Raleigh, N. C.: North Carolina State Board of Education, 1977), p. 41.

<sup>14</sup> Joint Committee on College Transfer Students, North Carolina Association of Colleges and Universities, Policies of Senior Colleges and Universities Concerning Transfer Students From Two-Year Colleges in North Carolina, 1981-1982 (Chapel Hill, N. C.: The University of North Carolina General Administration, 1981), pp. 1-92.

North Carolina have contractual agreements with either private or public senior colleges and universities to offer general education courses on the campuses of the technical institutes. For example, Central Carolina Technical College has a contractual agreement with Campbell University to offer up to 64 semester credit hours of coursework in general education which will transfer to Campbell University. Randolph Technical College has a contractual agreement with the University of North Carolina at Greensboro. Subsequently, those semester credit hours can also be transferred to any college or university which will accept transfer credit from Campbell University and the University of North Carolina at Greensboro.

In addition to making contractual agreements with four-year colleges and universities, technical colleges and technical institutes have sought to become community colleges so their students can transfer to a four-year college or university. On March 11, 1982, the State Board of Community Colleges denied Guilford Technical Institute in Greensboro community college status which its president insists was sought to enable its students to transfer credits to colleges and universities with an ease available only to community colleges. An editorial in the March 14, 1982, edition of the Greensboro Daily News admonished the local private college leaders who successfully lobbied against the name change "to prove their charge that the transfer issue is lamb's wool disguising the empire-building wolf. To do that they must help Guilford

Technical Institute find a way to make transfer to a four-year school possible without attaining community college status."<sup>15</sup>

Further confusion concerning transferability of credits arises when a four-year college accepts credits for coursework taken at a technical institute, technical college, or community college, and the student subsequently transfers all the course credits including those transferred and those taken at the four-year institution to yet another four-year institution.

Dr. James W. Crews, Head of the Department of Business and Distributive Education, University of North Carolina at Greensboro, expressed concern over the confusion which exists when students have transferred credits from a technical institute, technical college, or community college to a regionally accredited four-year college and subsequently transfers all the course credits, including those transferred, to yet another four-year institution. For example, a certain regionally accredited four-year school accepted credits from a student for courses taken at a technical institute and subsequently awarded the student a baccalaureate degree. That student later sought admission to the graduate school of a university. The university, which is regionally accredited by the same association as the four-year institution, will not generally accept credits for courses taken at a technical institute to apply toward a baccalaureate degree. However, it will accept the transfer of credits to its undergraduate programs for courses taken at

---

<sup>15</sup> "Fruitless Battle," Editorial, Greensboro Daily News, March 14, 1982, sec. F, p. 2, cols. 1-2.

that four-year college and will accept graduates of that four-year college into the Graduate School. What is the university to do? Can it deny admission to the student whom the regionally accredited four-year college has declared to have met all the requirements for graduation because it accepted credits from a technical institute to apply toward the degree? If it does admit the student to the Graduate School, is it reasonable to deny the transfer of those same credits from the technical institute to its own undergraduate programs?<sup>16</sup>

In April, 1980, the University of North Carolina General Administration printed Guidelines for Transfer Recommendations of the Joint Committee on College Transfer Students. The articulation guidelines were first developed in 1967, revised and expanded in 1973, 1976, and again in 1979 by the Joint Committee on College Transfer Students. Guidelines are given for general education, liberal arts, fine arts, basic sciences, mathematics, natural sciences, humanities, English composition, social and behavioral sciences, paraprofessional and professional education, and nontraditional education.<sup>17</sup>

The guidelines for transfer recommended by the Joint Committee on College Transfer Students are too vague. North Carolina needs to have an articulation plan to assure all of its citizens a smooth transition from one level of education to another to maximize human and financial

---

<sup>16</sup> Personal interview with Dr. James W. Crews, 27 January 1983.

<sup>17</sup> Joint Committee on College Transfer Students, North Carolina Association of Colleges and Universities, Guidelines for Transfer Recommendations of the Joint Committee on College Transfer Students. (Chapel Hill, N. C.: The University of North Carolina General Administration, 1980), pp. 17-66.

resources and to eliminate the frustrations and disappointments which transfer students from two- to four-year educational institutions presently experience.

In 1981, 2,096 students transferred from institutions in North Carolina public community colleges to North Carolina public senior institutions. This represents a decrease of 5.7 percent from the 2,223 students transferrring to public senior institutions in 1980 despite a 0.3 percent increase in the total number of students transferring.<sup>18</sup>

The "sharply ascending curve of collegiate enrolment [sic]" Capen talked about in 1929 has begun to flatten. The planning, the policies, the curricula, the facilities, etc., of colleges and universities which have been based on continued growth assumptions will have to take new directions.

Total enrollment in higher education has increased 34 percent in the ten years from 1970 to 1980, from 8,581,000 to 12,376,000. Enrollment in public and private two-year postsecondary institutions has increased 123.84 percent during that same period from 2,223,000 in 1970 to 4,976,000 in 1980.<sup>19</sup> In 1981, enrollment in public and private two-year institutions increased while enrollment in four-year institutions remained stable.

---

<sup>18</sup> The University of North Carolina General Administration, Statistical Abstract of Higher Education in North Carolina 1981-82 (Chapel Hill, N. C.: The University of North Carolina General Administration, 1982), p. 63.

<sup>19</sup> National Center for Educational Statistics, Projections of Education Statistics to 1986-87 (Washington: U. S. Government Printing Office, 1978), pp. 20-24.

Enrollment in Two-year and Four-year Schools<sup>20</sup>

	<u>Fall, 1980</u>	<u>Fall, 1981</u>	<u>Percent Change</u>
Two-Year Schools	4,519,132	4,744,186	+5.0
Four-Year Schools	7,577,763	7,578,283	0

In the fall of 1981, 54,895 of the 188,178 students enrolled in higher education institutions in North Carolina were enrolled in private colleges, 118,761 were enrolled in the public universities, and 13,132 were enrolled in community college transfer programs.<sup>21</sup> In addition to the 13,132 students in the community college transfer program, 96,373 students were enrolled in other degree or diploma programs in the community colleges, technical institutes, and technical colleges.<sup>22</sup>

As indicated in the following table, students attending the community colleges, technical colleges, and the technical institutes tend to be older than students attending public four-year colleges in North Carolina.

Average and Percent of Ages of Undergraduate  
Students Attending Public Two-year and  
Four-year Schools in North Carolina  
Fall, 1981<sup>23</sup>

<u>School</u>	<u>Percent 31 Years Plus</u>	<u>Average Age</u>
University of North Carolina Students	6.6	22
Community College Transfer Students	20.5	25
Technical and Vocational School Students	29.8	29

<sup>20</sup> "Estimated College Enrollment in Fall, 1981," Chronicle of Higher Education, December 9, 1981, p. 19, col. 1-6.

<sup>21</sup> University of North Carolina General Administration, op. cit., pp. 9-11.

<sup>22</sup> Ibid., p. 21.

<sup>23</sup> Ibid., pp. 23-25.

Enrollment trends which will impact on public senior college enrollment over the next two decades include the following:

1. The number of part-time students in public community college transfer programs and in public senior institutions continues to increase.<sup>24</sup>

2. The number of women enrolled in college transfer programs in community colleges and in public senior institutions continues to increase.<sup>25</sup>

3. The number of female part-time students in public community college transfer programs and in public senior institutions exceeds the number of male part-time students enrolled at those institutions.<sup>26</sup>

4. In the 1980 calendar year, 16,965 GED (General Educational Development) diplomas were issued by the North Carolina Department of Community Colleges.<sup>27</sup> Twenty percent of all students finishing high school each year do so through the North Carolina Community College System.

5. According to the North Carolina Department of Public Instruction the estimated high school dropout rate in 1979-80 was 9.10 percent, or

---

<sup>24</sup> Ibid., pp. 9-10.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> North Carolina GED Statistical Report, 1980, (Raleigh, N. C.: North Carolina Department of Community Colleges, 9 February 1981), p. 2.

33,689 students.<sup>28</sup> It also indicated that the number of high school graduates who plan to attend a public two-year school has increased.<sup>29</sup>

6. In 1980, there were 69,593 high school graduates in North Carolina. The number is projected to decline each year to reach a low in 1986 of 62,017. There will be small increases in the number of high school graduates in 1987-89 only to start a second downward trend in 1990 when it is projected that there will be 62,547 high school graduates in North Carolina.<sup>30</sup>

7. According to the 1980 census data of the North Carolina population, 55.3 percent of persons over 24 years of age finished high school. That is up from 38.5 percent at the 1970 census.<sup>31</sup>

The profile of curriculum students, i.e., students working toward a degree or diploma, enrolled in the North Carolina Community College System in 1979 indicates a great diversity of students. The opportunity for higher education for these students has not been available for most of them through the traditional four-year schools for a variety of reasons. For example, the educational attainment and the marital status show a great variation.

---

<sup>28</sup> North Carolina Department of Public Instruction, Statistical Profile of North Carolina Public Schools (Raleigh, N. C.: North Carolina Department of Public Instruction, May, 1981), sec. I, p. 35.

<sup>29</sup> Ibid., sec. I, p. 27.

<sup>30</sup> Ibid., sec. I, p. 44.

<sup>31</sup> North Carolina State Data Center Newsletter, (Raleigh, N. C.: North Carolina Office of State Budget and Management, August, 1982), p. 1.

<u>Educational Attainment</u> <sup>32</sup>	<u>Percent</u>
Less than High School Graduate	3.6
General Educational Development (GED)	7.8
High School Diploma	40.
Postsecondary Study to College Graduate	46.4
Graduate Work	2.2
	<u>100.</u>

<u>Marital Status</u> <sup>33</sup>	
Single	45.
Married	45.1
Widowed	1.5
Separated	3.5
Divorced	4.8
	<u>100.</u>

There is reason to be concerned about the smooth transition of students in technical programs from one level of education to another. For example, it is expected that jobs for business graduates will continue to increase, that enrollment in business programs in two-year postsecondary schools will continue to increase, and that the number of business graduates of two-year postsecondary schools who wish to transfer to four-year schools of higher education will also continue to increase. It is inconsistent with the philosophy of this country to deny equal opportunity to all its citizens to progress to as high a level of education as their desires and abilities will permit them to achieve.

States other than North Carolina have articulation problems and have attempted to solve them in a number of different ways. New Jersey and Illinois have statewide articulation agreements which improve the

---

<sup>32</sup> Robert W. Sharron et al., Putting Learning to Work: A Profile of Students in North Carolina Community Colleges, Technical Institutes and Technical Colleges (Raleigh, N. C.: North Carolina State University, 1980), p. 97.

<sup>33</sup> Ibid., p. 25.

accommodation of nontraditional programs, strengthen institutional integrity, and improve communication among institutions. Southern Illinois University has established The School of Technical Careers which provides program-to-program articulation and contract majors.<sup>34</sup>

The state of Minnesota has a statewide curriculum articulation model for occupational programs in home economics to enable students to progress to other levels without experiencing overlaps or gaps in instruction, that is, instructional repetition of skills already mastered and/or omission of skills needed. The model has five main parts: task lists, performance objectives, tests, competency records, and instructional materials.<sup>35</sup>

By failing to accept transfer students into their programs, the schools in the North Carolina University System eliminate

1. mature adult students who have returned to school after an absence, especially women;
2. many GED recipients who begin their return to school at a two-year postsecondary institution;
3. many students who seek degrees in business and other technical curricula where critical shortages of personnel exist.

The citizens of North Carolina would be well served if an articulation plan could be developed to assure students of a smooth transition

---

<sup>34</sup> Francis E. Masat, "Easing the Trauma of Transfer," Community and Junior College Journal, 50, No. 5 (Feb., 1980), 10-13.

<sup>35</sup> Florence K. Stater et al., "The Minnesota Model for Statewide Curriculum Articulation of Occupational Programs in Home Economics," Illinois Teacher, November-December, 1979, pp. 96-100.

from two-year public postsecondary institutions to four-year public postsecondary institutions without loss of credit and gaps and overlaps in the curriculum, and with time efficiency and cost efficiency for both the students and the institutions, and ultimately tax savings for the taxpayers.

#### Definition of the Terms Used in the Study

Several terms used in this study have a special meaning.

1. Framework as used in this study refers a set of characteristics for an articulation plan to transfer credits from two- to four-year educational institutions.
2. Articulation as used in this study is a process that provides a continuous, smooth flow of students from level to level and from institution to institution.
3. Community college and junior college will be used interchangeably to mean a two-year postsecondary school which awards associate degrees and has a college transfer program.
4. Technical college and technical institute will be used interchangeably to mean a two-year postsecondary school which awards associate in applied science degrees in technical programs.
5. North Carolina University System refers to the public senior higher education system in North Carolina which is composed of fifteen universities and the North Carolina School of the Arts.
6. North Carolina Community College System refers to the 58-member system which includes 23 community colleges, 29 technical colleges, and 6 technical institutes.

7. Accredited college or university refers to accreditation by a regional accrediting agency such as the Southern Association of Colleges and Schools (SACS).
8. Native student refers to a student who enrolled in a four-year college or university as a freshman.
9. Senior college refers to a four-year college or university which offers a baccalaureate degree.
10. Transfer student refers to a person who transfers from a two-year educational institution which offers an associate degree to a two-year or four-year educational institution which offers a baccalaureate degree.
11. A technical program refers to a two-year program culminating in an Associate of Applied Science degree usually thought of as a terminal program.
12. A vocational program refers to a one-year or a two-year program culminating in a diploma.
13. A technical specialty program refers to a one-year program of a technical nature which culminates in a diploma.
14. Vocational-Technical program refers to a combination of vocational and technical programs.
15. A college transfer program refers to a community college program which will transfer for comparable credit at four-year colleges and universities.
16. Open door institution refers to the philosophy of the North Carolina Community College System which grants admission to any person who is a high school graduate or who is eighteen years of age.

17. An upper-level university refers to institutions enrolling only juniors, seniors, and graduate students.

18. A lower-level university refers to an institution where enrolled students include freshmen and sophomores as well as juniors, seniors, and graduate students.

#### Limitations of the Study

This study was limited to the development of a framework for an articulation plan for the transfer of credits from two- to four-year public educational institutions in North Carolina. No effort was made

1. to develop an articulation plan for a specific discipline;
2. to examine the lateral transfer of courses from one senior institution to another senior institution or from one community college to another or to examine the downward vertical transfer from a senior institution to a community college;
3. to examine the transfer of courses to or from any private postsecondary schools; or
4. to examine the articulation of courses from the secondary schools to the postsecondary schools.

#### Design of the Study

Procedures used in this study were as follows:

1. The review of the literature.
2. The development of a set of criteria against which to judge state articulation plans.
3. The request of a copy of existing articulation plans from the chief administrative officers of the two-year public postsecondary systems in the 50 states.

4. The development of a questionnaire to send to the chief administrative officers of all two-year public postsecondary systems in the United States requesting an assessment of the effectiveness of their articulation plans and a description of their systems.

The questionnaire was designed to solicit a response concerning each criterion identified by the researcher, and a preliminary draft of the questionnaire was submitted to the four faculty members of the University of North Carolina at Greensboro who made up the Doctoral Advisory Committee and who directed the study. The questionnaire was revised based on their suggestions and comments about its content and form.

In addition, the revised questionnaire was sent to the chief administrative officers of the North Carolina Community College System and the three border states of Virginia, Tennessee, and South Carolina. This jury of four state chief administrative officers was asked to criticize the completeness and the nature of the questionnaire and the clarity of the cover letter. They were asked to indicate any items on the questionnaire which were unclear or ambiguous and to provide alternatives when feasible. The questionnaire and the cover letter were revised based on their recommendations and mailed to the chief administrative officer of each two-year public postsecondary system in the United States. A follow-up was made to insure that responses were received from states whose aggregate enrollments comprised at least 70 percent of the students enrolled in two-year public institutions in the United States.

The plans received from each of the various states were evaluated using as a guide the criteria which are set forth in Chapter III. The results of those evaluations are included in the data presentation chapter. Based on those evaluations and insights acquired by the researcher, a framework for an articulation plan was developed for the transfer of credit from public two-year postsecondary institutions to public four-year postsecondary institutions in North Carolina.

Specifically, the study is divided into five chapters. The statement of the problem, the purpose of the study, the need for the study, the definition of terms used in the study, the limitations of the study, and the design of the study are presented in Chapter I.

A review of the appropriate literature is presented in Chapter II. Particular attention is given to national and regional studies and to the development and role of the North Carolina Community College System. The procedures used in the study are described in Chapter III.

The data collected from the questionnaires and from the individual state articulation plans are presented in Chapter IV. The framework for an articulation plan is presented in Chapter V along with conclusions and recommendations.

## CHAPTER II

## REVIEW OF RELATED LITERATURE

A search of the literature relative to the subject of articulation and transfer of credit between the two-year postsecondary institutions and the four-year colleges and universities produced a significant amount of information. A number of national and regional studies have been conducted, many of them dealing with the extent of articulation practices between two- and four-year colleges and the magnitude of the problems which prevent the smooth transition of students from two-year to four-year institutions.

National StudiesKnoell-Medsker (1962)

The national study by Knoell and Medsker of the Center for the Study of Higher Education at the University of California at Berkeley involved "10,000 students, 345 two-year institutions which they entered as freshmen, and a diverse group of forty-three senior public and private colleges and universities to which they transferred."<sup>1</sup> The two main sources of data were college transcripts and nonacademic biographical data, obtained from a ninety-item questionnaire administered to the transfer students. An abbreviated, twenty-item form of the questionnaire was given to a sample of the native students, and transfer

---

<sup>1</sup> Dorothy M. Knoell and Leland L. Medsker, From Junior to Senior College: A National Study of the Transfer Student (Washington, D. C.: American Council on Education, 1965), p. vi.

students who withdrew voluntarily and who were dismissed because of poor scholarship were sent an additional questionnaire.

Knoell and Medsker found a very low level of articulation and coordination activity in the forty-three four-year colleges and universities in California, Florida, Georgia, Illinois, Kansas, Michigan, New York, Pennsylvania, Texas, and Washington in 1960 when the junior college students transferred to the four-year institutions.<sup>2</sup> In 1964 when the study was completed, they reached the following conclusions:

[1.] Junior colleges are making it possible for increasing numbers of high school graduates to begin work for baccalaureate degrees--students who would not otherwise be able to do so for reasons of academic or economic deficiency or for lack of family encouragement. . . .

[2.] The general public . . . tends to undervalue the contribution of the junior college to higher education and view it as a kind of refuge for the 'cannots,' academically, and the 'have nots,' financially.

[3.] . . . . The advantages gained by expanding opportunity in the junior colleges may well be negated by failure to provide new types of opportunity and additional spaces in existing upper division programs to accommodate the growing numbers of transfer students. . . .

[4.] The door should be kept open to allow capable junior college students who are attracted into terminal occupational programs to transfer. . . .

[5.] All or most junior college students could be successful in achieving their degree goals after transfer if they would select four-year institutions and major fields which are appropriate to their ability and prior achievement. . . .

[6.] A number of major state universities are now admitting transfer students somewhat indiscriminately . . . on grounds that all such students must be given an opportunity to attempt programs of their own choosing. . . .

---

<sup>2</sup> Ibid., p. 9.

[7.] . . . . Transfer students with very similar grades from the same junior college, often in the same field, will have quite different degrees of success in different four-year institutions, both in their persistence to graduation and their upper division grades. . . .

[8.] The C grade and the C grade point average earned in junior college are relatively meaningless as indicators of a student's likelihood of success in four-year institutions.

[9.] Junior colleges are doing a more effective job in educating their good students; i.e., those who have aptitude for college work and good high school grades, than in preparing students with serious high school deficiencies for transfer to four-year institutions. . . .

[10.] There is so much overlap in the distribution of academic aptitude of the transfer students who graduate and those who drop out that test scores do not distinguish very efficiently among the successes and failures. . . .

[11.] The average ability level of graduates who were freshmen in the major universities is higher than that of their counterparts who began their baccalaureate degree programs in two-year colleges, although there is considerable overlap in the ability of the students in the two types of colleges. . . .

[12.] . . . . Most students will suffer some drop in grades in their first semester after transfer, but the size of the drop and the degree of improvement afterward varies with the institution. . . . Significant positive differentials will be fairly rare and might be viewed with some concern as possible indicators of overly tough junior college grading standards.

[13.] . . . . Under present financial arrangements and programs, many junior college students are developing false expectations about transfer and are having to drop out after finding that they cannot solve their financial problems.

[14.] Counseling about college attendance and career choice needs to be greatly improved at all levels--high school, junior college, and in the four-year institutions. . . .

[15.] In many four-year institutions transfer students are being overlooked in planning orientation programs, in offering counseling services to new students, in inviting their participation in social and extracurricular activities, and, above all, in giving appropriate academic advice at the time of their first registration.

[16.] The good performance of the students after transfer is consistent with their appraisal of the quality of instruction they received in the junior college. . . . Methods of instruction, techniques for evaluation, assignments of reading, and term papers--all these could be made to approximate university instruction somewhat more closely as the time approaches for the students to transfer.

[17.] There is no reason why junior college transfer students should require more time and units than native students to complete their degree programs, if the two- and four-year colleges work together on problems of articulation of their courses and curricula. . . .

[18.] Attrition after transfer, for all causes, is higher than it ought to be and could probably be reduced through joint efforts on the part of the two- and four-year colleges. . . .

[19.] Present articulation machinery in many states and in many institutions is inadequate to solve the problems which will be brought on by an increasing volume of transfer students. . . . A multi-college approach at the state level is needed to achieve good articulation of the two- and four-year programs and to preserve the individual college's right to experiment and<sup>3</sup> innovate as well as to protect the student's transfer credit.

Guidelines of the Joint Committee on  
Junior and Senior Colleges (1966)

A Joint Committee made up of members of the Association of American Colleges, the American Association of Junior Colleges, and the American Association of Collegiate Registrars and Admissions Officers developed guidelines for transfer of students. The Joint Committee on Junior and Senior Colleges organized the guidelines into five sections: Admissions; Evaluation of Transfer Courses; Curriculum Planning; Advising, Counseling, and Other Student Personnel Services; and Articulation Programs. Guidelines were revised on the basis of the Knoell-Medsker Study and then

---

<sup>3</sup> Ibid., pp. 87-102.

tested in a series of conferences in each of the ten states that participated in the Knoell-Medsker Research, and the guidelines were revised on the basis of the conferences.

Among other suggestions, the Joint Committee recommended that

1. Public four-year institutions use an overall C average as a standard for admission from junior college.

2. The performance of students in a junior college be considered most important in admission decisions.

3. Admission standards be clear enough to let junior college students know at any time whether they will be eligible to transfer.

4. Grade point differentials should not be used as the only basis for raising grading or admission standards.

5. Transfer students should be admitted to four-year institutions soon enough to compete equitably for housing and financial assistance.

6. Transfer applicants from new junior colleges be treated the same as regionally accredited colleges until accreditation is denied.

7. No limit should be placed on the amount of credit transferred. Four-year institutions may protect the integrity of their degree programs by adopting an upper division residence requirement.<sup>4</sup>

Willingham-Findikyan Survey of  
Admission Patterns (1967)

The major purpose of the survey of transfer admissions in a nationally representative group of 146 senior institutions was to obtain

---

<sup>4</sup> Joint Committee on Junior and Senior Colleges, Guidelines for Improving Articulation Between Junior and Senior Colleges (Washington, D. C.: American Council on Education, 1966), pp. 7-9.

national data on the movement of transfers. It was found that 10 percent of the junior college transfer students lost at least one semester credit;<sup>5</sup> that only about 25 percent of the colleges studied encouraged transfers in publications or visits to junior colleges to talk with prospective transfer students;<sup>6</sup> that requests by transfer students for financial assistance exceeded the resources available in almost half of the four-year institutions studied; and that only 20 percent had aid set aside for transfer students and only 14 percent of transfer students received aid compared to 33 percent of all new freshmen.<sup>7</sup>

Kintzer Survey of Articulation  
in the 50 States (1970)

Kintzer's research indicated that little progress had been made since the Knoell-Medsker report of 1965. He argued for rapid development of statewide plans and predicted that states will move to formulate agreements and cease examining individual junior college courses.<sup>8</sup> According to his research the following numbers of states have completed or were developing various articulation efforts:

---

<sup>5</sup> Warren W. Willingham and Norhan Findikyan, Patterns of Admission for Transfer Students (New York: College Entrance Examination Board, 1969), p. 30.

<sup>6</sup> Ibid., p. 9.

<sup>7</sup> Ibid., p. 26.

<sup>8</sup> Frederick C. Kintzer, Nationwide Pilot Study on Articulation (Los Angeles: University of California, ERIC Clearinghouse for Junior Colleges, 1970), p. 3.

<u>Type of Articulation Effort</u>	<u>Number of States</u>
Some junior college legislation	28
Master plans for higher education	16
Plan for junior college education	25
State committee on articulation	17
Office of college relations in university or state colleges	11
Articulation guidelines	
Single senior institutions	22
Statewide	14
Core curricula	5 <sup>9</sup>

In his book, Middleman in Higher Education, Kintzer discussed articulation models and articulation agreements in the various states. He feels that even though a state organization may be necessary, it should not be a substitute for a local committee. Kintzer stressed that articulation is an attitude as well as a process. He identified three styles of articulation agreements in the fifty states:

1. The statewide formal agreement, perhaps with a legal basis.
2. The agreement defined under the leadership of a state governmental agency.
3. The agreement developed on a voluntary basis among groups of institutions.<sup>10</sup>

#### Willingham Update of Knoell-Medsker Study (1972)

In 1972, Warren L. Willingham reviewed the literature and updated the Knoell-Medsker study using a structured telephone survey of the same 43 institutions which Knoell-Medsker included in their 1964 survey. He

<sup>9</sup> Frederick C. Kintzer, "Junior College-Senior College Articulation in the '70s," College and University, 46 (1971), 587-605.

<sup>10</sup> Frederick C. Kintzer, Middleman in Higher Education (San Francisco: Jossey-Bass, Inc., 1973), pp. 33-162.

formulated his questions around the Guidelines for Articulation advanced by the Joint Committee (1966). The 43 institutions followed about half of the guidelines on the average, although some colleges adhered to most of the guidelines and others adhered to very few.<sup>11</sup> One significant finding was that 83 percent of the public four-year colleges were accepting "D" grades compared to about 50 percent in the 1967 Willingham-Findikyan study.<sup>12</sup>

#### Wasson (1974)

Wasson sought to isolate, define, and contrast articulation problems in higher education for business as perceived by senior-institution business-college deans and community college division chairmen in selected states and to make comparisons between the magnitude of those problems in states which do and do not have a master plan for higher education or for community colleges. Survey instruments were completed by 63 college of business deans and 222 community college division of business chairmen in 12 selected states: Alabama, Arizona, California, Connecticut, Florida, Illinois, Iowa, Massachusetts, New Jersey, Oregon, Pennsylvania, and Washington.

Wasson made the following conclusions based on the findings of the study:

1. Community college division of business chairmen believe that articulation problems are more serious than do college of business deans in senior institutions.

---

<sup>11</sup> Warren W. Willingham, The No. 2 Access Problem: Transfer to the Upper Division (Washington, D. C.: American Association for Higher Education, 1972), pp. 41-42.

<sup>12</sup> *Ibid.*, p. 27.

2. The community college division of business chairmen tend to believe that their students are advised to avoid senior institutions which accept few hours of business course work in transfer, thereby affecting transfer enrollment patterns.

3. Community college division of business chairmen believe that senior institutions are reluctant to accept certain specialized business courses because they want to protect their own faculties and/or sources of funding. Senior institution college of business deans believe the reasons are that freshman and sophomore years are too early for specialization to begin, and because the American Assembly of Collegiate Schools of Business prohibits specialization.

4. There was no significant difference between schools accredited by AACSB and those which are not accredited in interest in obtaining community college transfer students, in raising of business course numbers from lower division to upper division between 1968 and 1973, or in methods of providing for community college transfer students who have completed upper division business courses in the community college.

5. Articulation problems appear to be more serious in states where master planning has been done. Master planning appears to make institutions more aware of articulation problems; it does not necessarily solve them.

6. College of business deans and community college division of business chairmen in states without master planning feel that their articulation problems are less serious than in states with master planning, and they are less likely to feel that legislation is necessary to solve articulation problems.<sup>13</sup>

#### Peng and Bailey (1977)

A national study of a sample of over 20,000 high school seniors in the class of 1972 compared those students who enrolled in four-year institutions immediately after high school with those who transferred from two-year colleges. The comparisons were made on background variables, individual characteristics, and financial aid status. The results

---

<sup>13</sup> Ruth Ann Wasson, "A Study of Selected Factors in Community College-Senior College Articulation in Education for Business" (Doctoral dissertation, Northern Illinois University, 1974), pp. 100-118.

indicated that transfers came from lower socioeconomic backgrounds, had lower academic ability, lower high school achievement, and lower educational aspiration than native students. Transfers were less likely to receive scholarships, fellowships, or grants, and they showed lower achievement in the year after transfer.<sup>14</sup>

Menacker feels that the issue of terminal and transfer courses creates a serious problem because students are not "simple, robot-like persons, programmed at high school graduation to pursue one career path or another." He feels that "programs may be labeled as terminal, but courses never should be," and that "the university is wrong to impose unrealistic dichotomies on junior college courses."<sup>15</sup>

National Task Force on Better Information  
for Student Choice (1977)

A three-year project supported by the Fund of the Improvement of Postsecondary Education included eleven demonstration institutions, three of which were community colleges, to identify new models for providing better information to prospective students. In 1977, the project was continued for an additional three years and called Center for Helping Organizations Improve Choice in Education (CHOICE), with nineteen institutions participating, eight of which were community colleges. Of the eleven four-year institutions, two undertook projects which were inappropriate to treat transfer students differently and one

---

<sup>14</sup> Samuel S. Peng and J. P. Bailey, Jr., "Differences Between Vertical Transfers and Native Students in Four-Year Institutions," Research in Higher Education, 7, No. 2 (1977), 145-54.

<sup>15</sup> Julius Menacker, From School to College: Articulation and Transfer (Washington, D. C.: American Council on Education, 1975), pp. 77-78.

dealt with continuing education units. Not one of the other eight four-year institutions gave special consideration to transfer students in the information they produced despite the fact that the criteria to select the institutions to participate were a willingness to produce better information for prospective students, evidence of interest in undertaking a successful on-campus information project, and a willingness to cooperate and share information and experience with other institutions. In the information they produced for prospective students, they appeared to be thinking only of freshmen and not transfer students. Vaughan and Dassance feel that "the failure of institutions of higher education to meet the needs of students transferring from community colleges mocks the open access concept."<sup>16</sup>

Thompson (1978)

States which have been identified by John Thompson as having established upper-division universities include Florida, Michigan, Texas, Illinois, New York, California, Minnesota, and Pennsylvania. Florida is generally credited with giving the major impetus to the concept of upper-division universities.

There are several advantages to the transfer student who attends an upper-level institution including the curriculum design, the absence of competition with native students, and better acceptance by the faculty.<sup>17</sup>

---

<sup>16</sup> George B. Vaughan and Charles R. Dassance, "The Missing Link in the Student Consumer Movement," Improving Articulation and Transfer Relationships, New Directions for Community Colleges (San Francisco: Jossey-Bass, Inc., 1982), pp. 35-40.

<sup>17</sup> John W. Thompson, "The Growing Role of Community Colleges," Journal of College Student Personnel, 19 (January, 1978), 11-15.

### Southern Regional Studies

#### Southern States (Florida, Georgia, Mississippi, and Tennessee) - Smith (1973)

The purpose of Smith's study was to determine the presence and extent of articulation activities between and within postsecondary occupational programs in the public vocational-technical schools and public junior colleges of the states bordering Alabama.

The results indicated a need for improved articulation between occupational programs in vocational-technical schools and junior colleges. The tradition of a separate system of vocational education from the rest of the education system was in sharp contrast with the newer concept of the comprehensive community college and the traditionally single-purpose vocational trade school.<sup>18</sup>

#### Southern Regional Education Board (1979)

The Southern Regional Education Board made a study of the transfer agreements in operation or under study in the 14 Southern Regional Education Board states. Responses to the inquiries sent to the senior institutions and community colleges revealed that there were over 50 types of coordinated programs through which students could move from community colleges to senior institutions in technical and career-oriented fields. There appears to be a lack of consistency in the baccalaureate degree designation for completion of technical programs of instruction; the question concerning the degree to which general education

---

<sup>18</sup> Nathaniel David Smith, "Articulation of Career Oriented Education Programs at the Post-Secondary Level" (Doctoral dissertation, Auburn University, 1973).

should be specified is unanswered; and there is a need for evaluation of the results since many of the articulation programs are relatively new.<sup>19</sup>

#### Studies Relative to Success of Transfer Students

In addition to the national and regional studies, there have been a number of studies which document the success of students matriculating at four-year colleges who transferred from two-year institutions. In a study to determine any differences in academic success between native students, community and junior college transfer students, and transfers from other four-year institutions, Dragon found that:

1. There is no significant difference in academic performance between native students and community and junior college students in Accounting, Finance, and Management and Organizational Behavior and final grades earned in the program capstone course requirement.

2. Community and junior college students performed with a significantly higher degree of academic success as measured by final cumulative grade point averages in the field of marketing:

3. The rate of suspensions from the college of community and junior college transfers was the same as that of the native students, and the rate of voluntary withdrawal from the college by the community and junior college transfer group was significantly lower than that by the native students.<sup>20</sup>

---

<sup>19</sup> Southern Regional Education Board, "2 + 2 = Expanded Opportunity" (Atlanta, GA: Southern Regional Education Board, 1979).

<sup>20</sup> Albert Leon Dragon, "An Investigation of the Academic Success of Community and Junior College Transfers Entering a Four-Year College of Business" (Doctoral dissertation, Boston College, 1980).

A study by Attwood and Woltanski in 1977 examined the performance of 129 students who transferred from two-year technical programs to the University of Michigan's Undergraduate Occupational Teacher Education Program. The results indicated that 105 of the 129 students eligible for graduation between December, 1972, and December, 1976, persisted to graduate (81.4%). The mean GPA was 3.27 with a range of 2.23 to 4.00. They had a higher mean GPA than all university students by .22 points and higher than School of Education juniors and seniors by .17 points.

In February, 1977, 77 of the 105 graduates identified by Attwood and Woltanski responded to a survey by mail. Since completing the program, 39 (50.6%) had begun advanced degrees and 23 (29.8%) had earned master's degrees and three were enrolled in doctoral programs. All of the graduates who responded were employed: 30 percent teaching full-time in secondary schools; 28.5 percent held community college positions, and 6 percent held university appointments, and 16.8 percent were employed in industry as trainers, patient educators, or clinical educators; and ten were working in their technical occupation for economic reasons.<sup>21</sup>

A study by Powell centered on business students in New Jersey public senior institutions of higher education. He sought to determine whether the academic performance of transfer students differed from that of native students and to identify variables related to upper division academic performance of transfer students. Spring, 1976, baccalaureate

---

<sup>21</sup> Madge L. Attwood and Mary Woltanski, "Performance of Technical Transfer Students at the University of Michigan," Improving College and University Teaching, 28, No. 4 (Fall, 1980), 166-71.

degree graduates of accounting, business administration, management, and marketing programs at Rutgers - the State University, and New Jersey state colleges were studied. A criterion-group ex post facto research design was utilized with transfer students representing the criterion group. The dependent variable studied was the grade point average of transfer and native students.

The following conclusions were made from the data collected:

1. Transfer students differed characteristically from their native counterparts in that they tended to be older, they had lower SAT scores and high school percentiles, and they took more semesters of lower division enrollment and more hours of credit in the lower divisions and upper divisions.

2. The lower division academic performance of transfer students was significantly higher than that of native students.

3. Transfer and native students did not have a parallel experience in terms of their enrollment in eight business core courses (Accounting 1 and 2, Business Law 1 and 2, Economics 1 and 2, Management, and Marketing) during the lower division.

4. Transfer students did not suffer from transfer shock after their first semester in the upper division.

5. The upper division academic performance of transfer students was approximately the same as that of native students.

6. The best single predictor of the GPA at the end of the upper division was GPA at the end of the lower division for transfer students and native students. When the GPA at the end of the lower division was deleted from the analysis of potential predictors, the lower division

grade for Marketing was the best predictor of GPA at the end of the upper division for the transfer students.<sup>22</sup>

Development of the North Carolina  
Community College System

The groundwork for the North Carolina Community College System began in 1950 when the State Superintendent of Public Instruction directed Dr. Allan S. Hurlburt, Director of the North Carolina Survey of Public Education, to make a study of the need for state-supported community colleges and to project a basic plan for their development. The State Superintendent appointed a committee representing the legislature, state-supported senior colleges, public, private, and denominational junior colleges, industry, the public schools, and the State Department of Public Instruction to work with Dr. Hurlburt. After an eighteen-month study, the Committee recommended in 1952 that a system of community colleges be established in North Carolina. It further recommended that the offerings of the community colleges should include cultural, academic, citizenship and vocational training, and curricula and services of the following types:

1. A two-year academic program that will fit students for further college work or professional training.
2. A general education program for all who enroll.
3. Terminal courses for vocational, vocational-technical, and semi-professional training on the pre-employment level for both youth

---

<sup>22</sup> Robert Lee Powell, Jr., "An Analysis of the Factors Related to the Academic Performance of Community College Transfer and Native Business Students at New Jersey Public Institutions of Higher Education" (Doctoral dissertation, Temple University, 1979), pp. 58-71.

and adults. The latter might be seeking re-education for one of many reasons. This program would be slanted toward entrance into employment immediately after leaving the college. Curricula in this program might be two years in length, or they might be of the short course type.

4. In-service training to help people already employed to improve themselves in their jobs or to lead to advancement.

5. Leisure-time education and services, especially for adults.

6. Educational opportunity for school "drop-outs" to help them overcome their educational deficiencies.

The Committee further stated that the increased enrollment in the senior colleges by the transfers from community colleges would make it possible for the senior colleges more nearly to meet the ever-increasing need for engineers, doctors, dentists, architects, lawyers, educational administrators, teachers, and professional leaders for all occupational groups. The Committee recommended that the senior colleges not undertake the type of program that was planned for the community college. Those higher educational institutions should be preserved to provide the upper division work of high academic quality and expanded programs of research.<sup>23</sup>

The Committee further recommended that when a student successfully completed any curriculum that required a minimum of sixty semester or ninety quarter hours, the college issue a diploma or confer the associate of arts degree. The college would issue a diploma or certificate testimonial of completion of other curricula in the college.<sup>24</sup>

---

<sup>23</sup> Allan S. Hurlburt, "Publication No. 285, Community College Study," Educational Publications of the State Superintendent of Public Instruction of North Carolina, Vol. X, Nos. 268-292, 1948-1953, pp. 8, 9, and 12.

<sup>24</sup> Ibid., p. 28.

In 1957 the North Carolina Legislature passed a Community College Act to initiate and develop community colleges which would be under the administration of the North Carolina Board of Higher Education. Before the Community College Act was implemented, the North Carolina General Assembly in 1957 appropriated funds to the State Board of Education and authorized it to contract with local boards of education for establishment of industrial education centers. The schools were to receive federal, state, and local support. Federal support was to come from various federal acts already in effect which provided funds for aid to vocational education and were to be distributed by the state. To qualify for one of these vocational institutions, local governments were required to provide and maintain the physical plant. Funds for instructional costs, teachers, equipment, supplies and materials were to be provided by Federal funds and matching funds from the State of North Carolina. The responsibility for administering the funds and operating the schools was placed with local boards of education who were also responsible for operating the public schools.

At its April 3, 1958, meeting the State Board of Education approved the establishment of several of the institutions. Some began operations immediately, while others were delayed until additional funds were appropriated by the 1959 North Carolina General Assembly. By 1961, there were 18 industrial education centers at some stage of development, and 23,000 students were enrolled in them.

An extension unit plan was approved by the State Board of Education on February 2, 1961, to make the industrial education center program more accessible to the people of North Carolina. Five extension units

were begun as branches of a parent industrial education center. They were operated by an agreement between the Board of Trustees of an industrial education center and a local Board of Education.

In 1961 five community (junior) colleges under local trustees and the State Board of Higher Education were also developing. These community colleges were College of the Albemarle in Elizabeth City, Wilmington College in Wilmington, Mecklenburg and Charlotte Colleges in Charlotte, and Asheville-Biltmore College in Asheville. Both the community colleges and the industrial education centers served needs for education beyond the high school.

In 1962, the Carlyle Commission, which had been appointed by Governor Terry Sanford, recommended that the two types of institutions be brought into one administrative organization under the State Board of Education and under local boards of trustees, thereby developing the comprehensive community college system.

The 1963 North Carolina General Assembly authorized the creation of the Community College System under the State Board of Education by enacting into law General Statute 115A. At that time, three of the six community colleges operating under the 1957 Community College Act were converted to four-year state colleges, leaving the College of the Albemarle, Mecklenburg College, and Gaston College as two-year institutions. Mecklenburg College combined with the Central Industrial Education Center in Charlotte to form Central Piedmont Community College. Gaston College combined with Gaston Technical Institute, a division of N. C. State University and the Gastonia Industrial Education Center. The twenty industrial education centers previously established by

authority of the General Assembly also came under the administration and control of the Department of Community Colleges.

Since 1963, several completely new community colleges have been established and all of the industrial education centers and extension units, while continuing to carry out the purposes for which they were established, have expanded their offerings.<sup>25</sup> They were called either technical institutes or community colleges until May, 1979, when the General Assembly passed a bill to permit technical institutes to change their names to technical colleges with the approval of the Board of Trustees and the County Board of County Commissioners. Since then, 29 of the 35 technical institutes have changed their names to technical college.

The Department of Community Colleges now operates under Chapter 115D passed by the North Carolina General Assembly in 1979. Chapter 115D also established the North Carolina State Board of Community Colleges effective January, 1981.

The North Carolina Community College System is now composed of 58 institutions:

22 Community Colleges

Beaufort County Community College  
Central Piedmont Community College  
Coastal Carolina Community College  
College of the Albemarle

---

<sup>25</sup> DCC, North Carolina Community College System: Biennial Report 1976-1978, pp. 13-15.

Craven Community College  
Davidson County Community College  
Gaston College  
Halifax Community College  
Isothermal Community College  
Lenoir Community College  
Martin Community College  
Mitchell Community College  
Pitt Community College  
Rockingham Community College  
Sandhills Community College  
Southeastern Community College  
Surry Community College  
Tri-County Community College  
Vance-Granville Community College  
Wayne Community College  
Western Piedmont Community College  
Wilkes Community College

1 Community College and Technical Institute

Caldwell Community College and Technical Institute

29 Technical Colleges

Anson Technical College  
Asheville-Buncombe Technical College  
Bladen Technical College  
Blue Ridge Technical College

Brunswick Technical College  
Carteret Technical College  
Catawba Valley Technical College  
Central Carolina Technical College  
Cleveland Technical College  
Edgecombe Technical College  
Haywood Technical College  
James Sprunt Technical College  
Johnston Technical College  
Mayland Technical College  
McDowell Technical College  
Montgomery Technical College  
Nash Technical College  
Pamlico Technical College  
Piedmont Technical College  
Randolph Technical College  
Richmond Technical College  
Roanoke Chowan Technical College  
Robeson Technical College  
Rowan Technical College  
Sampson Technical College  
Southwestern Technical College  
Stanley Technical College  
Technical College of the Alamance  
Wake Technical College

## 6 Technical Institutes

Cape Fear Technical Institute

Durham Technical Institute

Fayetteville Technical Institute

Forsyth Technical Institute

Guilford Technical Institute

Wilson County Technical Institute

### Role of the North Carolina Community College System

General Statute 115A provides "for the establishment, organization, and administration of a system of educational institutions throughout the State offering courses of instruction in one or more of the general areas of two-year college parallel, technical, vocational, and adult programs."<sup>26</sup>

The law further states:

the major purpose of each and every institution operating under the provisions of this chapter, shall be and shall continue to be the offering of vocational and technical education and training, and of basic, high school level academic education needed in order to profit from vocational and technical education, for students who are high school graduates or who are beyond the compulsory age limit of the public school system and who have left the public schools.

Thus, the State of North Carolina, through legislative action and through State Board of Education policy decisions, has assigned to the institutions in the North Carolina Community College System, whether

---

<sup>26</sup> Ibid., p. 15.

community college or technical institute, a specific role in the accomplishment of certain broad educational objectives found to be necessary for the common welfare of the people of the state. Along with the roles assigned to the public schools and to the four-year colleges and universities, the community college system makes possible the realization of the concept of total educational opportunity.

Consistent with this purpose, the following goals have been established to guide long-range planning:

1. To open the door of each institution to all persons of eligible age, who show an interest in and who can profit from the instruction offered, with no individual denied an educational opportunity because of race, sex, or creed.
2. To provide a variety of quality, postsecondary educational opportunities below the baccalaureate level consistent with the abilities, desires, and needs of the students to fit them with the skills, competencies, knowledge, and attitudes necessary in a democratic society.
3. To provide for industry, agriculture, business, government, and service occupations the pre-service and in-service training that requires less than baccalaureate-level preparation.
4. To provide specific training programs designed to assist in fostering and inducing orderly, accelerated economic growth in the state.
5. To provide activities and learning opportunities which meet the adult educational and community service needs of the residents of the community served by an institution.
6. To direct the resources of the community college system toward a search for solutions to urgent community problems.

7. To provide, in both curriculum and noncurriculum programs, the education needed to assist individuals in developing social and economic competence and in achieving self-fulfillment.

8. To improve institutional services and excellence in training opportunities through constant evaluation and study.

The accomplishment of these goals requires understanding of and commitment to the role assigned to the community college system, including especially the significance of the open door admission policy with selective placement in programs, provisions made for student retention and follow-up, comprehensive and balanced curriculum and extension offerings, and instruction adapted to individual student needs. It also requires that each institution develop fully the unique educational needs of its own service area; that it adapt its educational programs to such needs; and that it maintain effective correlation with the public schools, with four-year colleges and universities, and with employers in the area.

Open door admission of both high school graduates and others who are 18 years old or older but not high school graduates is an essential requirement for filling the educational opportunity gap. The door is also open to the school dropouts between 16 and 18 years old, providing that their needs can better be served in one of these institutions rather than in the public schools.

People served by these institutions include the following:

Adults who wish to complete grade levels one through eight.

Adults seeking high school diplomas or the equivalent.

High school graduates or school dropouts who wish to prepare for trade level employment.

High school graduates who wish to prepare for technician level employment.

High school graduates who desire the first two years of college training (community colleges only).

Employed adults who wish to upgrade their occupational skills.

Adults seeking general cultural and citizenship level improvement.<sup>27</sup>

Since the publication of the Hurlburt Report in 1952 recommending that a system of community colleges be established, the North Carolina Community College System has evolved to become the third largest in the nation. Following the Hurlburt Report, the next significant events were the appropriation of funds to establish industrial education centers under the State Board of Education and the passage of the Community College Act, both in 1957. The passage of General Statute 115A in 1963 brought together the two types of institutions into one administrative organization under the State Board of Education, and the passage of General Statute 115D in 1979 established the State Board of Community Colleges. We now have a comprehensive community college system comprised of the former industrial education centers and the community colleges.

The goals of the 23 community colleges today are essentially the same goals outlined by the Hurlburt Committee, but the goals of the 35 technical colleges and technical institutes have been expanded to include

---

<sup>27</sup> Ibid., pp. 15-18.

all those goals of the community colleges with one exception. They do not provide adults with the first two years of college training or award the associate of arts degree.

#### Summary

In 1929, Samuel P. Capen said, "the articulation problems of today are not those of twenty years ago, or even ten years ago."<sup>28</sup> However, the review of the literature indicates that the problems today concerning articulation and the transfer of credits from two- to four-year educational institutions are, indeed, those of twenty years ago when Knoell and Medsker conducted their national study and even ten years ago when Willingham updated the Knoell-Medsker Study, i.e., how to protect the receiving institution's academic freedom and institutional integrity and at the same time guarantee transferring students of acceptance and equal treatment by the four-year institutions. The research shows that the best predictor of a student's grade point average at the end of the second two years of college is the student's grade point average at the end of the first two years of college, both for transfer and native students, but it does not show that transfer students are actively recruited and treated the same as native students upon enrolling in the four-year institution.

---

<sup>28</sup> The Department of Superintendence, op. cit., p. 289.

## CHAPTER III

## METHOD

The purpose of this study was to develop a framework for an articulation plan for the transfer of credits from two- to four-year public educational institutions. It is hoped that such a framework will ultimately assist students in the smooth transfer of credits for courses from the 58 public two-year postsecondary institutions to the 16 public four-year postsecondary institutions in North Carolina.

The procedures used in this study were as follows:

1. A search was made of the literature to determine the magnitude of articulation problems. Special attention was given to national studies which have dealt with the establishment and implementation of articulation agreements in the various states.

2. A set of criteria was developed based on the findings from the review of the literature against which to evaluate the articulation plans received from the various states.

3. A questionnaire was developed and sent to the chief administrative officers of the two-year public postsecondary schools in the United States to determine the following:

- a. the number and type of public postsecondary institutions in each state

- b. the type of governing boards of the public two-year postsecondary institutions in each state

c. the states which have master plans for postsecondary higher education

d. the number of upper-level colleges or universities (enrolling only juniors, seniors, and graduate students) in each state

e. the states which have had legislative mandates to two-year and four-year postsecondary institutions to find ways to improve articulation and the transfer of credits

f. the states which have articulation plans for postsecondary education

g. the effectiveness of any existing articulation plans as evaluated by the chief administrative officers. The administrative officers were asked to evaluate their plan using the following criteria developed by the researcher from the review of literature:

- (1) An institution articulation plan
- (2) A clear policy statement concerning transfer credit for courses transferred from a third institution, College Level Examination Placement (CLEP), advanced placement, United States Armed Forces Institute, and courses taken through independent study, radio, TV, or computer
- (3) For transfer by students who have earned an associate of arts degree, an associate of applied science degree, or less than a degree
- (4) For the transfer of all courses within the program either as required or elective courses provided the four-year institution offers the same course or its equivalent
- (5) For the transfer of credits for courses with grades of "D"
- (6) Assurance that students who follow the plan will be accepted at the four-year institution

- (7) A way for students to transfer credits for courses taken before making a decision to transfer
- (8) For efficiency of time for students in that they can finish a four-year program in four years
- (9) For published criteria and prerequisites for admission to any programs which have limited access due to space or fiscal limitations so that transfer students have the same opportunity for admission as students who take their lower division work at the four-year institutions
- (10) For an evaluation by administrators at both the two-year and four-year institutions
- (11) For cooperative planning by faculties and administrators at the two-year and four-year institutions
- (12) For procedures for modification of the plan
- (13) A smooth transition for two-year students to four-year institutions

The questionnaire was designed to solicit a response concerning each criterion identified by the researcher, and a preliminary draft of it was submitted to the four faculty members of the University of North Carolina at Greensboro who made up the Doctoral Advisory Committee and who directed the study. The questionnaire was revised based on their suggestions and comments about its content and form.

In addition, the revised questionnaire was sent to the chief administrative officers of the North Carolina Community College System and the three border states of Virginia, Tennessee, and South Carolina. This jury of four state chief administrative officers was asked to criticize the completeness and the nature of the questionnaire and the clarity of the cover letter. They were asked to indicate any items on the questionnaire which were unclear or ambiguous and to provide alternatives when feasible. The questionnaire and the cover letter were revised based on their recommendations.

4. Copies of existing articulation plans were requested from each state's chief administrative officer.

The chief administrative officer of each two-year public postsecondary system in the United States was identified, (See Appendix A.) and each of them was mailed a copy of the questionnaire along with the cover letter requesting the above specified information. (See Appendices B and C.)

A follow-up was made to insure that responses were received from states whose aggregate enrollments comprise at least 70 percent of the students enrolled in two-year public postsecondary institutions in the United States. (See Appendix D.)

5. The plans received from each of the various states were evaluated using as a guide the criteria which are set forth above. Based on the self-evaluations made by the chief administrative officers, the evaluations of the plans and insights acquired by the researcher, a framework for an articulation plan was developed for the transfer of credits from two- to four-year public educational institutions in North Carolina.

6. Descriptive data were collected from each state concerning the types of institutions, the type of governance, the existence of master plans for postsecondary education, the actions of state legislature to mandate articulation, the existence of upper level institutions (enrolling only juniors, seniors, and graduate students), and the existence of formal or informal articulation plans.

CHAPTER IV  
AN ANALYSIS OF DATA

Data were solicited through the use of a questionnaire mailed to each of the states, and responses were received from 43 states (86 percent). The 43 states from which data were received enrolled approximately 97 percent of students attending public two-year postsecondary educational institutions in the United States as of October, 1981.<sup>1</sup>

The data have been analyzed using the following four major divisions: (1) Description of Systems, (2) Status of Articulation Plans, (3) Formal Articulation Plans, and (4) Informal Articulation Plans. Each of these four divisions is subdivided into appropriate topical areas.

Descriptions of Public Two-year Postsecondary  
Educational Systems

There are four subdivisions which describe the two-year postsecondary public educational systems: (1) Number, Type, and Enrollment of Public Two-Year Educational Institutions, (2) Status of Master Planning by State, (3) Type of State Governance of Public Two-Year Postsecondary Institutions, and (4) Number of Upper-Level Universities by State.

Number, Type, and Enrollment of Public  
Two-Year Educational Institutions

Postsecondary enrollment in each of the 50 states and identification of the number and type of postsecondary institutions in each of 43 states that responded are shown in Table 1.

---

<sup>1</sup> American Association of Community & Junior Colleges, op. cit., p. 76.

Table 1  
 Enrollment and Number Of Public Two-year  
 Postsecondary Institutions  
 by Type and State<sup>a</sup>

State	Enrollment as of October, 1981 <sup>b</sup>	Number of Community and Junior Colleges <sup>c</sup>	Number of Technical Colleges and Institutes <sup>c</sup>	Number of Area Vocational Schools
Alabama	192,138	21	21	
Alaska*	15,890	--	--	
Arizona	114,564	15	--	3 <sup>d</sup>
Arkansas	11,433	6	--	
California	1,264,444	106	--	
Colorado*	47,010	--	--	
Connecticut	43,126	12	5	
Delaware	7,406	1	--	5
Florida	216,532	28	--	
Georgia	38,032	15	--	
Hawaii	22,658	6	--	1 <sup>d</sup>
Idaho	4,122	2	--	6
Illinois	371,446	52	--	
Indiana*	29,677	--	--	
Iowa	37,858	11	4	
Kansas*	38,935	--	--	
Kentucky	21,980	12	1	
Louisiana*	13,905	--	--	
Maine	9,462	--	6	
Maryland	96,468	17	--	
Massachusetts	72,623	15	--	
Michigan	212,321	29	--	
Minnesota	42,304	14	--	
Mississippi	38,714	16	--	
Missouri	57,324	10	--	
Montana*	3,439	--	--	
Nebraska	29,837	6	--	
Nevada	19,847	4	--	
New Hampshire	6,439	--	7	
New Jersey	104,772	17	--	

Table 1 (Continued)

State	Enrollment as of October, 1981 <sup>b</sup>	Number of Community and Junior <sup>c</sup> Colleges <sup>c</sup>	Number of Technical Colleges and Institutes <sup>c</sup>	Number of Area Vocational Schools
New Mexico	18,156	3	3	
New York	271,382	30	6	
North Carolina	109,951	23	35	
North Dakota	7,589	5	--	
Ohio	154,209	8	17	
Oklahoma	51,690	14	2	
Oregon	70,183	15	--	
Pennsylvania	83,060	14	--	44
Rhode Island	11,721	1	--	
South Carolina	39,618	--	16	
South Dakota*	0	--	--	
Tennessee	43,312	10	--	
Texas	291,344	60	4	
Utah	15,750	3	2	
Vermont	2,875	1	1	16
Virginia	114,365	23	--	
Washington	134,523	27	--	
West Virginia	16,909	3	--	
Wisconsin	95,375	--	16	
Wyoming	12,226	7	--	
Totals	4,728,944 <sup>e</sup>	662	146	129

<sup>a</sup> Does not include two-year institutions which are branches of or were operated by four-year colleges and universities.

<sup>b</sup> Enrollment from 1982 Community, Junior, and Technical College Directory, American Association of Community and Junior Colleges, Washington, DC, 1982, p. 76.

<sup>c</sup> Number and type from data collected for this study.

<sup>d</sup> Skill Centers.

<sup>e</sup> Enrollment in 7 states which did not respond is 148,856 or 3.1 percent of total enrollment.

\* Did not respond.

The total enrollment in public two-year postsecondary institutions in the United States as of October, 1981, was 4,728,944. The total aggregate enrollment of the 43 systems which responded to the questionnaire was 4,580,088, which represents 96.9 percent of the students enrolled in public two-year institutions in the United States at that time.

Those 43 states have 662 community and junior colleges, 146 technical colleges and institutes, 4 skill centers, and 129 area vocational schools. Two-year institutions which are branches of or were operated by four-year colleges and universities were not included in the data collected. Area vocational schools which are operated by secondary school systems also were not included in the data collected.

#### Status of Master Planning

There is a constant change in educational plans at most levels of education. Master plans for education have been developed in many states, but not in all. Table 2 indicates which states have master plans for higher education and those that are preparing such plans.

TABLE 2

#### Status of Master Planning by State

State	Master Plan	No. Master Plan	Preparing a Master Plan
Alabama		X	
Alaska*			
Arizona		X	
Arkansas	X		
California	X		

TABLE 2 (Continued)

State	Master Plan	No Master Plan	Preparing a Master Plan
Colorado*			
Connecticut			X
Delaware		X	
Florida	X		
Georgia	X		
Hawaii	X		
Idaho	X		
Illinois	X		
Indiana*			
Iowa	X		
Kansas*			
Kentucky	X		
Louisiana*			
Maine		X	
Maryland	X		
Massachusetts			X
Michigan	X		
Minnesota		X	
Mississippi		X	
Missouri	X		
Montana*			
Nebraska		X	
Nevada		X	
New Hampshire		X	
New Jersey	X		
New Mexico	X		
New York	X		
North Carolina	X		
North Dakota		X	
Ohio	X		
Oklahoma	X		
Oregon			X
Pennsylvania	X		
Rhode Island	X		
South Carolina	X		

TABLE 2 (Continued)

State	Master Plan	No Master Plan	Preparing a Master Plan
South Dakota*			
Tennessee	X		
Texas	X		
Utah	X		
Vermont*			
Virginia	X		
Washington	X		
West Virginia			X
Wisconsin	.	X	
Wyoming		X	
Totals	26	12	4
Percent of 42 Responding	61.9	28.6	9.5

\* Did not respond.

Twenty-six states (61.9 percent) have master plans for postsecondary education, 12 states (28.6 percent) do not have master plans for postsecondary education, four states (9.5 percent) are in the process of developing master plans for postsecondary education, and eight states did not respond.

#### Types of State Governance

Many two-year postsecondary institutions in the United States began as divisions of four-year colleges and universities or grades 13 and 14 of secondary school systems. However, many states now have independent boards which govern their two-year postsecondary institutions as shown in Table 3.

TABLE 3

Type of State Governance of Public Two-year  
Postsecondary Institutions<sup>a</sup>

State	Separate Board	Board of Higher Education <sup>b</sup>	Board of Public Education <sup>c</sup>	One Board for all Education
Alabama			X	
Alaska*				
Arizona	X			
Arkansas		X		
California	X			
Colorado*				
Connecticut <sup>d</sup>		X		
Delaware	X			
Florida				X
Georgia		X		
Hawaii		X		
Idaho			X	
Illinois	X			
Indiana*				
Iowa			X	
Kansas*				
Kentucky		X		
Louisiana*				
Maine			X	
Maryland	X			
Massachusetts		X		
Michigan				X
Minnesota	X			
Mississippi			X	
Missouri		X		
Montana*				
Nebraska	X			
Nevada		X		
New Hampshire				X
New Jersey		X		
New Mexico		X		
New York		X		
North Carolina	X			
North Dakota		X		
Ohio		X		

TABLE 3 (Continued)

State	Separate Board	Board of Higher Education <sup>b</sup>	Board of Public Education <sup>c</sup>	One Board for all Education
Oklahoma		X		
Oregon			X	
Pennsylvania		X		
Rhode Island		X		
South Carolina	X			
South Dakota*				
Tennessee		X		
Texas		X		
Utah <sup>e</sup>		X		
Vermont	X			
Virginia	X			
Washington	X			
West Virginia		X		
Wisconsin	X			
Wyoming	X			
Totals	14	20	6	3
Percent of 43 Responding	32.5	46.5	14.0	7.0

<sup>a</sup>Does not include two-year institutions which are branches of or were operated by four-year colleges and universities.

<sup>b</sup>The board which governs four-year colleges and universities also governs two-year postsecondary institutions.

<sup>c</sup>The board which governs public secondary education also governs two-year postsecondary institutions.

<sup>d</sup>Technical Colleges in Connecticut operate under a separate board.

<sup>e</sup>Technical Colleges in Utah operate under the State Board of Public Education.

\*Did not respond.

There is a great diversity in the type of governance of public two-year postsecondary institutions. Of the 43 states which responded,

14 states have separate boards which govern two-year postsecondary institutions. In 20 states, two-year postsecondary institutions are governed by the same board which governs the four-year colleges and universities, i.e., the Board of Higher Education, the Board of Governors, or the Board of Regents. Texas, however, has a Coordinating Board of Texas College and University System, which has no governing authority. There are several systems in that state which have a single governing board and some other institutions have one each. In six states, two-year postsecondary institutions are governed by the same board which governs public secondary education, i.e., the Department of Public Education. In three states, all public educational institutions are governed by one board.

#### Number of Upper-Level Universities

In trying to find ways to serve students who want to transfer from two-year postsecondary institutions to four-year colleges and universities, several states have established upper-level institutions, that is, those institutions enrolling only juniors, seniors, and graduate students. Table 4 indicates those states which have established upper-level institutions and the number in each one.

TABLE 4  
Number of Upper-level Universities<sup>a</sup> by State

State	Number	State	Number
Alabama	1 <sup>b</sup>	Montana*	--
Alaska*	--	Nebraska	0
Arizona	0	Nevada	2
Arkansas	0	New Hampshire	0
California	0	New Jersey	0
Colorado*	--	New Mexico	0
Connecticut	0	New York	1
Delaware	0	North Carolina	0
Florida	3	North Dakota	0
Georgia	0	Ohio	0
Hawaii	1	Oklahoma	0
Idaho	0	Oregon	0
Illinois	2	Pennsylvania	1 <sup>c</sup>
Indiana*	--	Rhode Island	0
Iowa	0	South Carolina	0
Kansas*	--	South Dakota*	
Kentucky	0	Tennessee	0
Louisiana*	--	Texas	10
Maine	1	Utah	0
Maryland	1	Vermont	4
Massachusetts	0	Virginia	0
Michigan	0	Washington	6
Minnesota	1	West Virginia	1
Mississippi	0	Wisconsin	0
Missouri	0	Wyoming	0
		Total	35

<sup>a</sup> accepts only juniors, seniors, and graduate students.

<sup>b</sup> a part of the community college system.

<sup>c</sup> PSU - CAP Campus

\* Did not respond.

Out of 43 states, only 14 indicated there were one or more upper-level institutions located in the state. However, the report of 35 institutions in 14 states shows a tremendous growth in upper-level institutions despite Kintzer's report in 1979 that the 22 institutions in eleven states suffered from poor communication and poor coordination with two-year colleges. Kintzer said also that a close association with junior and community colleges with attention to academic programmatic articulation is the lifeblood of the public, upper-level college.<sup>2</sup> As noted in the table, Alabama is the only state in which the upper-level institution is a part of the community college system.

#### Status of Articulation Plans

States are at various stages in the development of articulation plans, some of which have been mandated by the state legislatures. Table 5 shows the status of articulation plans by state.

The status of articulation plans revealed a wide variation in the progress which has been made by states in finding ways for students to move smoothly from one educational level to another without a loss of time and credits.

Ten state legislatures in Florida, Hawaii, Illinois, Massachusetts, Michigan, New Mexico, Oklahoma, Oregon, Texas, and Virginia have mandated that two-year and four-year public postsecondary institutions find ways to improve articulation and the transfer of credits. In addition, Maine and Minnesota currently have similar bills in their legislatures.

---

<sup>2</sup> Frederick C. Kintzer, "The Role of the Upper-Level University in American Higher Education," Community College Frontiers, 7, No. 4 (Summer, 1979), pp. 35-40.

TABLE 5

## Status of Articulation Plans by State

State	Plan Mandated	Formal Plan	Formal Plan Evaluated	Informal Plan
Alabama	no	no		yes
Alaska*				
Arizona	no	yes	no	no
Arkansas	no	no		no
<u>California</u>	no	yes	yes <sup>b</sup>	
Colorado*				
Connecticut	no response	no		yes
Delaware	no	yes	no	
Florida	yes	yes	no	
<u>Georgia</u>	no	yes	no	
<u>Hawaii</u>	yes	no		yes
<u>Idaho</u>	no	no		yes
<u>Illinois</u>	yes	no		yes
Indiana*				
<u>Iowa</u>	no	yes	yes	
Kansas*				
<u>Kentucky</u>	no	no		no
Louisiana*				
Maine	no <sup>a</sup>	no		no
<u>Maryland</u>	no	yes	no	
Massachusetts	yes	yes	in process	
<u>Michigan</u>	yes	no		yes
Minnesota	no <sup>a</sup>	no		yes
Mississippi	no	no		yes
<u>Missouri</u>	no	yes	no	
Montana*				
Nebraska	no	no		yes
Nevada	no	yes	no	
New Hampshire	no	no		no
<u>New Jersey</u>	no	no		yes
<u>New Mexico</u>	yes	no <sup>c</sup>		yes
<u>New York</u>	no	no		yes
<u>North Carolina</u>	no	no		yes
<u>North Dakota</u>	no	no		yes
<u>Ohio</u>	no	no		yes

TABLE 5 (Continued)

State	Plan Mandated	Formal Plan	Formal Plan Evaluated	Informal Plan
<u>Oklahoma</u>	yes	yes	no	
<u>Oregon</u>	yes	no	--	yes
<u>Pennsylvania</u>	no	yes	no	
<u>Rhode Island</u>	no	yes	no	
<u>South Carolina</u>	no	yes	no	
South Dakota*				
Tennessee	no	yes	no	
<u>Texas</u>	yes			yes
<u>Utah</u>	no	yes	in process	
<u>Vermont</u>	no	no		no
<u>Virginia</u>	yes	yes	no	
<u>Washington</u>	no	yes	in process	
<u>West Virginia</u>	no	yes	no	
<u>Wisconsin</u>	no	no	no	
<u>Wyoming</u>	no	no		yes
Totals	10	19	2	18
Percent of 43 Responses	23.3	44.2	4.7	41.9

\* Did not respond.

<sup>a</sup> Bill currently in the Legislature.

<sup>b</sup> Copy not available.

<sup>c</sup> Will begin developing a state-wide plan during 1983-84.

Of those ten states which have received mandates from their legislatures, only Florida, Massachusetts, Oklahoma, and Virginia have developed formal articulation plans; Hawaii, Illinois, Michigan, Oregon, and Texas have developed informal articulation plans; and New Mexico began developing a state-wide plan during the 1983-84 academic year.

Of the 19 states which developed state-wide formal articulation plans, only California and Iowa have conducted formal evaluations of those plans. However, copies of the evaluations are not available at this time. Massachusetts, Utah, and Washington are in the process of conducting formal evaluations of their formal articulation plans.

The data collected for this study support Ruth Ann Wasson's research concerning the relationship between state master planning for higher education and the development of articulation plans. Of the 26 states (indicated by an underscore in Table 5) which have master plans for higher education, only 14 have a formal articulation plan. Wasson reported that even though master planning appeared to have had a significant effect on the seriousness of the articulation problem as perceived by the respondents in her study, it had no significant effect on the desirability of focusing all levels of higher education in a state under the policy direction and implementation of one agency. It also had no significant effect on the encouragement of articulation agreements by state boards of higher education or the mutuality of agreement between two-year and four-year institutions on which business courses should be transferable.<sup>3</sup> In effect, the existence of a master plan creates a more acute awareness of articulation problems but does not result in a solution.

---

<sup>3</sup> Wasson, op. cit., pp. 106-112.

Formal Articulation Plans

Titles of Formal Articulation Plans

The researcher received articulation plans and other documents from 17 of the 19 states with formal articulation plans; the titles of those plans and documents are given in Table 6.

TABLE 6

Titles of Formal Articulation Plans Received  
by State

State	Titles of Formal Articulation Plans Received
Arizona	Persistence, Performance, and Degree Achievement of Arizona Community College Transfers in Arizona's Public Universities and 1982-83 Course Equivalency Guide
California	Transfer of Credit, Executive Order #167
Delaware	Transfer of Credit Matrix 1982-1985
Florida	Florida State Board of Education Administrative Rules (pp. 164C - 164H)
Georgia	Core Curriculum
Maryland	Student Transfer Policies
Massachusetts	Articulation Between Community Colleges and Baccalaureate Degree Granting Institutions
Missouri	College Transfer Guidelines
Nevada	Course Transfer Guide. Academic Program Review and System Articulation Policy
Oklahoma	Policy Statement on the Articulation of Students Among Institutions in the Oklahoma State System of Higher Education
Pennsylvania	Policy on Articulation

TABLE 6 (Continued)

State	Titles of Formal Articulation Plans Received
Rhode Island	Transfer Guide for Students
South Carolina	Agreement on Policies for Students Transferring from Associate in Arts and Associate in Science Degree Programs.
Tennessee	Guidelines for Articulation Between Community Colleges and Universities in the State University and Community College System of Tennessee.
Utah	Issues Relating to Roles and Access in the Utah System of Higher Education
Virginia	(A copy available from the Office of the Secretary of Education, Summer, 1983)
Washington	Text for Direct Transfer Agreements, University of Washington
West Virginia	Policy Regarding the Transferability of Credits and Grades at the University Level.

There are many different titles given to formal articulation plans in the various states. It is interesting to note that 14 out of 17 states use either the term articulation or transfer in their documents.

#### Types of Formal Articulation Plans

Of the 19 states which have formal articulation plans for post-secondary education, 16 supplied information relative to the type of articulation that had been developed as shown in Table 7.

TABLE 7

## Type of Formal Articulation Plans by State

State	Institution Articulation Plan	Program Articulation Plan	Course Articulation Plan
Arizona*	--	--	--
California*	--	--	--
Delaware	x	x	x
Florida	x	x	x
Georgia	--	x	--
Iowa	x	x	--
Maryland	x	--	x
Massachusetts*	--	--	--
Missouri	--	x	--
Nevada	x	--	--
Oklahoma	x	--	--
Pennsylvania	x	x	x
Rhode Island	x	x	x
South Carolina	--	x	x
Tennessee	x	--	x
Utah	x	x	--
Virginia	--	x	x
Washington	--	--	x
West Virginia	x	--	--
Totals	11	10	9

\* Did not respond.

Four states, Delaware, Florida, Pennsylvania, and Rhode Island have formal articulation plans which include institution plans, program plans, and course plans. At some institutions all degrees, programs, and courses will transfer to a four-year institution, while at other institutions, only certain programs will transfer to four-year institutions. In still other institutions, courses are evaluated on a course-by-course

basis and accepted or not accepted for credit based on that evaluation.

Iowa and Utah have a combination institution and program articulation plan. Maryland and Tennessee have a combination institution and course articulation plan. South Carolina and Virginia have a combination program and course articulation plan.

Nevada, Oklahoma, and West Virginia have an institution articulation plan. Georgia and Missouri have a program articulation plan. Washington has a course articulation plan.

#### Credit Transfer Policy in Formal Articulation Plans

Of the 19 states with formal articulation plans for postsecondary education, 17 responded to the question concerning policy statements relative to the source of transfer credit toward bachelor's degrees as shown in Table 8.

TABLE 8

#### Credit Transfer Policy for Bachelor's Degree

State	Courses Trans. from a Third Institution	College Level Exam. Placement	Adv. Placement	United States Armed Forces Institute	Independent Study, Radio/TV, or Computer	Total Yes
Arizona	no	no	no	no	no	0
California	yes	yes	*	*	*	2
Delaware	no	yes	no	no	no	1
Florida	yes	yes	yes	yes	yes	5
Georgia	no	yes	no	no	no	1
Iowa	no	no	no	no	no	0
Maryland	no	yes	yes	yes	no	3

TABLE 8 (Continued)

State	Courses Trans. from a Third Institu- tion	College Level Exam. Place- ment	Adv. Place- ment	United States Armed Forces Insti- tute	Indepen- dent Study, Radio/TV, or Computer	Total Yes
Massachusetts*						
Missouri	no	yes	no	no	yes	2
Nevada	no	yes	yes	no	no	2
Oklahoma	yes	yes	yes	yes	yes	5
Pennsylvania	no	no	no	no	no	0
Rhode Island	no	yes	no	yes	no	2
South Carolina	no	no	no	no	no	0
Tennessee	no	no	yes	no	no	1
Utah*						
Virginia	yes	yes	yes	yes	yes	5
Washington	no	no	no	no	no	0
West Virginia	no	no	no	no	no	0
Total Yes	4	10	6	5	4	

\* Did not respond.

Only Florida, Oklahoma, and Virginia have articulation plans which are comprehensive enough to contain clear policy statements concerning transfer credit toward bachelor's degrees for courses transferred from a third institution, CLEP, advanced placement, United States Armed Forces Institute, and courses taken through independent study, radio, TV, or computer.

Ten of the states which have formal articulation plans have clear policy statements concerning transfer credit toward bachelor's degrees for college level examination placement (CLEP), and six have policy statements concerning the transfer of credit toward bachelor's degrees which was earned through advanced placement.

#### Evaluation of Formal Articulation Plans

The chief administrative officer in each state was given an opportunity to evaluate the effectiveness of the state's articulation plans. Table 9 provides the evaluations of the 19 states which have formal articulation plans, using a scale of 5 - always, 4 - usually, 3 - sometimes, 2 - rarely, and 1 - never to indicate the existence of the criterion.

The average evaluation for the criterion concerning "transfer by students who have earned an associate of arts degree" was 4.7, indicating that the formal articulation plans almost always provided for transfer by students who have earned an associate of arts degree. Eleven states responded "always," and six responded "usually."

The criterion which received the second highest average rating, 4.1, concerned the "assurance that students who followed the plan would be accepted at the four-year institution." Six responded "always," five responded "usually," three responded "sometimes," one responded "rarely."

The researcher realizes that in averaging items, equal weight was given to each of the items; it is probable that some of the items are more important than others to a plan of articulation. For example, the acceptance of courses with grades of "D" as compared to the acceptance of courses completed for an associate of arts degree probably would not

be comparable in the judgment of most professionals. Nevertheless, averaging seemed to be the most expeditious way to determine which plans most nearly met the criteria established. The model plan would "usually" include provisions for the criteria listed in Table 9.

The criterion which received the lowest rating, 2.8, concerned the component of providing "a way for students to transfer credits for courses taken before making a decision to transfer." Three states responded "always," four responded "usually," two responded "sometimes," one responded "rarely," and six responded "never."

In the evaluation by the chief administrative officers of the articulation plans as measured against the criteria, Oklahoma seemed to have the most acceptable plan with an average rating of 4.6. The second most acceptable plans were from the states of Arizona and Tennessee, both with an average of 4.4. The third most acceptable plan was from Maryland with an average of 4.1.

The average rating for all the states with formal articulation plans was 3.5 which means that when states were asked to rate their plans, their answers were "sometimes" or "usually" to the listed criteria for this study.

On the basis of the evaluation of the criteria, no national pattern emerged concerning the development of articulation plans and their characteristics.

Florida, Iowa, Virginia, and Washington never accept transfer credits from students who have earned an associate of applied science degree.

TABLE 9

Self-evaluations of Formal Articulation Plans by State  
 [(Rating Scale: Criterion Exists (5) Always, (4) Usually, (3) Sometimes, (2) Rarely, (1) Never)]

Criteria	AZ	CA	DE	FL	GA	IA	MD	MA	MS	NV	OK	PA	RI*	SC*	TN	UT	VA	WA	WV	AVGS.
Transfer by students who have earned an Associate of Arts Degree	4	5	4	5	5	5	5	4	4	4	5	4		5	5	5	5	5	5	4.7
Transfer by students who have earned an Associate of Applied Science Degree and Less	4	*	3	1	3	1	5	3	*	4	4	2		4	4	1	1	5		3.0
Transfer of all courses either as required or elective credit	4	1	2	5	1	3	4	3	*	5	5	*		5	4	3	4	4	4	3.5
Transfer of credits for courses with grades of D	3	1	1	5	3	2	3	2	*	3	4	4		3	2	1	5	4		2.9
Students who follow the plan will be accepted at the 4-year institution	5	5	3	4	4	*	5	4	*	3	5	4		5	3	2	4	5		4.1
Transfer of credits for courses taken prior to decision to transfer	5	5	1	1	1	3	4	4	*	1	5	2		3	4	1	4	1		2.8
Students can finish a 4-year program in 4 years	4	1	2	4	5	4	4	3	4	2	5	4		5	2	3	3	5		3.5
Published criteria so transfer and native students have same opportunity for admission	5	1	3	5	4	1	3	3	5	3	5	4		4	3	4	3	1		3.4
Evaluation by administrators at 2-year and 4-year institutions	5	1	2	4	5	1	4	3	*	3	5	2		5	3	3	5	4		3.4
Cooperative planning by faculties and administrators at 2-year and 4-year institutions	5	5	2	4	5	2	4	3	1	3	5	3		5	3	1	4	4		3.5
Procedure to modify plan	5	1	3	5	5	4	4	2	5	3	3	1		5	2	2	5	1		3.3
A smooth transition from 2-year to 4-year schools	4	5	3	4	5	4	4	3	*	3	4	4		4	3	4	4	4		3.9
Averages	4.4	2.8	2.5	3.9	3.8	2.7	4.1	3.2	3.8 <sup>a</sup>	3.1	4.6	3.1		4.4	3.2	2.5	3.9	3.6		3.5

<sup>a</sup> Probably unreliable due to no response for six items. \* Did not respond.

California, Delaware, and Virginia never accept transfer of credits for courses with grades of "D."

Delaware, Florida, Georgia, Nevada, Virginia, and West Virginia have no provision for students to transfer credits for courses taken before making a decision to transfer.

Students transferring from two-year institutions in California cannot finish a four-year program in four years.

California, Iowa, and West Virginia have no published criteria and prerequisites for admission to any programs which have limited access to provide students transferring from two-year institutions the same opportunity for admission as native students.

California and Iowa have no provisions for an evaluation by administrators at both the two-year and four-year institutions.

Missouri's articulation plan does not provide for cooperative planning by faculties and administrators at the two-year and four-year institutions.

Pennsylvania and West Virginia have no procedures for modifications of their articulation plans.

Delaware State College has a Cooperative Career Technology Program designed to accept students from Delaware Technical and Community College. The student receives a bachelor of technology degree. Delaware Tech has contracted with the University of Delaware to provide a University Parallel Program at two campuses, wherein university parallel courses are taught by university faculty and transcripts are housed at the University of Delaware.

South Carolina's formal articulation plan affects only 13 of 133 programs in its Technical College System.

Descriptions of Formal Articulation Plans for States with a 4.0 or Higher Rating

Oklahoma. With a rating of 4.6, Oklahoma has fourteen community colleges and two technical colleges coordinated at the state level by the Oklahoma State Regents for Higher Education. The enrollment in the two-year postsecondary institutions as of October, 1981, was 51,690. The institution articulation plan has a clear policy statement concerning transfer credit toward bachelor's degrees for courses transferred from a third institution, for credit through CLEP, advanced placement, or for credit earned through the United States Armed Forces Institute or through independent study, radio, TV, or computer.

An evaluation of 3 (sometimes) was given by Oklahoma to the criterion concerning a provision for modification of the plan. However, an examination of Oklahoma's plan shows that an advisory articulation committee composed of representatives of the various types of institutions within the State System of Higher Education has been established to work with the State Regents' staff to review and evaluate articulation policies and practices and to make recommendations for improvement as needed.

A student who has completed the prescribed lower-division requirements of a state system institution developed in accordance with prescribed standards including the basic 33 semester hour general education core may transfer into a bachelor of arts or a bachelor of science degree program at any senior institution of the state system and be assured of completing his or her program in sequential fashion. Senior

institutions may, with the approval of the State Regents, require that transferring students complete additional general education work for the degree. However, such additional work is programmed as a part of the upper-division requirements of the senior institution in order for students to complete a baccalaureate program in a number of semester hours equal to the total specified for graduation published in the receiving institution's official catalog.

It might be necessary for teacher education candidates to take additional courses in general education to meet minimum certification requirements, as defined by the state, i.e., health and physical education, geography, Oklahoma history, etc., or similar additional requirements of other professional fields. However, completion of these requirements does not preclude requirements of senior institutions of particular grade points for admission to professional departments or fields.

It is the responsibility of the transferring institution to provide adequate counseling to enable a student to complete during the freshman and sophomore years those lower-division courses which are published prerequisites to pursuit of junior-level courses in his or her chosen major disciplinary field.

The baccalaureate degree in all Oklahoma senior-level institutions will be awarded in recognition of lower-division (freshman-sophomore) combined with upper-division (junior and senior) work. The lower-division general education requirement of the baccalaureate degree shall be the responsibility of the institution awarding the associate degree providing the general education requirements specified are met. If, for any reason, a student has not completed an approved general education program

prior to his transfer to another institution, the general education requirements shall become the responsibility of the receiving institution.

Lower-division programs in all state institutions enrolling freshmen and sophomores may offer introductory courses which permit the student to explore the principal professional specializations that can be pursued at the baccalaureate level. Those introductory courses can be counted toward the baccalaureate degree for students continuing in such a professional field of specialization. The determination of the major course requirements for a baccalaureate degree, including courses in the major taken in the lower division, is the responsibility of the institution awarding the degree. However, courses classified as junior-level courses yet open to sophomores at senior institutions, even though taught at a junior college as sophomore-level courses, are transferable as satisfying that part of the student's requirement in the content area.

Other associate degrees and certificates may be awarded by institutions for programs which have requirements different from the aforementioned degrees, or a primary objective other than transfer. Acceptance of course credits for transfers from such degree or certificate programs are evaluated by the receiving institution on the basis of applicability of the courses to the baccalaureate program in the major field of the student. Each receiving institution is encouraged to develop admission policies that will consider all factors indicating the possibility of success of these students in its upper-division.

Each baccalaureate degree-granting institution lists and updates the requirements for each program leading to the baccalaureate degree

and publicizes these requirements for use by all other institutions in the State System. Each baccalaureate degree-granting institution includes in its official catalog information stating all lower-division prerequisite requirements for each upper-division course. All requirements for admission to a university, college, or program are set forth with precision and clarity. The catalog in effect at the time of the student's initial full-time enrollment in a college or university governs lower-division prerequisites, provided that he or she has had continuous enrollment as defined in the college or university catalog.

An advisory articulation committee composed of representatives of the various types of institutions within the Oklahoma State System of Higher Education has been established to work with the State Regents' staff to review and evaluate articulation policies and practices and to make recommendations for improvement as needed.

Arizona. With a rating of 4.4, Arizona has fifteen community colleges and three skill centers which are governed by the State Board of Directors for Community Colleges of Arizona. The enrollment in the community colleges as of October, 1981, was 114,564. The plan does not have a clear policy statement concerning transfer credit toward bachelor's degrees for courses transferred from a third institution, for credit through CLEP, advanced placement, or for credit earned through the United States Armed Forces Institute or through independent study, radio, TV, or computer.

The 1982-83 Course Equivalency Guide was developed by the Arizona Commission for Postsecondary Education in conjunction with the Arizona Board of Regents, the State Board of Directors for Community Colleges of

Arizona, and the Arizona Higher Education Coordinating Council. General information includes the policy statements of each of the four-year public postsecondary institutions about the maximum semester hours transferable, grades of "D," the level of courses transferable, the transferability of technical or vocational courses, and other information, all of which is different for each of the four institutions.

The 1982-83 Course Equivalency Guide includes a chapter for each of the fifteen community colleges in which there is a list of courses offered at that particular college arranged in a vertical formation on the left side of the page. Across the horizontal axis is listed the name of each four-year institution; under the name of each four-year institutions is an indication of the acceptability of each course taught at the community college.

The course numbers are not standardized throughout the community college system, nor do the four-year institutions use the same number for equivalent courses. However, each course has one of the following indications under the name of each four-year institution:

- |         |  |
|---------|--|
| N.T.    | Not acceptable for transfer credit (Non-transferable)  |
| XX-101  | Accepted as being equivalent to that specific course at the College or University  |
| XX-101* | Will transfer as an equivalent course, but at a lower division credit.   |
| E       | "University - College Transfer Credit." A limited number accepted as fulfilling hours in lower division needed for graduation, but not meeting either departmental or general (liberal) studies credit. Check specific degree limitations. (Elective General University) |
| DEC     | "University - College Transfer Credit." A limited number accepted as credit in department indicated to fulfill lower division elective credit in major or minor area. Check departmental major. (Departmental Elective Credit)   |

- GSC "University - College Transfer Credit." A limited number accepted as fulfilling credit hours in one of the general (liberal) studies areas. Check degree requirements. (General Studies Credit)
- Tech  
\*\*\* or \*\*\* Technology - Refer to University of Arizona general transfer statement. "Footnotes" indicate some additional information. This information will be located immediately following the individual course listing or at the end of a discipline listing.
- U/S Course currently being evaluated, but evaluation process has not been completed at the time of printing.

All of the criteria were answered with "always" or "usually," with the exception of a provision for the transfer of credits for courses with grades of "D." The Course Equivalency Guide indicates that two of the four-year institutions will accept grades of "D" under certain conditions.

Tennessee. With a rating of 4.4, Tennessee has ten community colleges which are governed by the State Board of Regents. The enrollment in the community colleges as of October, 1981, was 291,344. The plan is an institution plan and a course articulation plan, and institutions are required to develop and update annually course equivalency lists. Although the plan has a clear policy statement concerning transfer credit earned through advanced placement toward bachelor's degrees, it has no statement relative to credits transferred from a third institution. College Level Examination Placement (CLEP), United States Armed Forces Institute, and courses taken through independent study, radio, TV, or computer. However, students who earn an associate's degree in a transfer major prior to entering the university receive all associate degree credits regardless of source.

Each institution is required to develop and maintain counseling services which include collecting and disseminating information pertaining to the structure and requirements of degree programs offered by the universities and community colleges in the System. A specific institutional office, or officer, is designated to serve as the contact for transfer student advisement and for interinstitutional articulation and is clearly identified in institutional catalogs and other appropriate publications.

Each institution works cooperatively with community colleges in developing and maintaining current course-by-course transfer lists and, when feasible, curriculum-by-curriculum transfer outlines. Copies of the documents produced through this process are filed with the office of the Vice Chancellor for Academic Affairs.

Where a transfer student has satisfactorily completed an associate degree designed for transfer to a university, with an area of emphasis which is the same as the degree major to be pursued at the university, the university will grant credit toward completion of the baccalaureate degree for all courses completed for the associate degree. However, the requirements for the senior institution's degree programs must be met, and credit need not be granted for any course which would not be accepted by the university for its native students. Where a transfer student is not awarded an associate degree designed for transfer purposes, each university accepts those level-one (freshman and sophomore) courses completed at a community college which have been determined to be equivalent to level-one courses offered by the university, as creditable toward completion of relevant requirements for degree programs at the

university, to the same extent that the courses would be creditable toward completion of the degree programs by the university's native students with the same degree major.

The community college programs designed for transfer are clearly identified in the catalog of the community college. For career programs the community college includes the following statement very prominently for each program: "This program is designed for the student who does not intend to transfer to a baccalaureate degree program."

Each university and community college uses one or more of the following criteria to determine the courses to be offered as level-one courses:

- (1) courses which build upon high school preparation in primary areas of knowledge and academic skills, or courses which provide a next step in the student's formal study beyond high school;
- (2) courses which consist of an overview or introduction to a broad or general area of inquiry;
- (3) courses with survey content which can be applied in many areas;
- (4) courses which provide knowledge and skills which are fundamental and prerequisite for advanced study;
- (5) courses which are job oriented or technological in nature and are designed to aid in preparing students for employment at the beginning technician level after a maximum of two years of college study;

(6) courses which are broadly established as traditional level one offerings at colleges;

(7) courses which meet the standards for level one curricular offerings as specified by accrediting agencies.

The credit offerings by community colleges are limited to level one courses within the above criteria.

Courses classified as level-two courses yet normally open to freshmen or sophomores at a university, even though taught at a community college as level-one transfer courses, are transferable as satisfying that part of the student's requirement in the content area.

The universities do not impose additional admissions requirements upon transfer applicants who (1) are transferring from a system community college after earning 18 or more transferable quarter hours of credit, (2) are not seeking admission to programs with special admissions requirements, and (3) meet the retention standards of the university.

During the transfer process, the transcripts from sending institutions must include, or have attached, an explanation of the complete grading system.

There is no limit to the number of credits transferred from a community college to a university within the System. However, the application of these credits to meet degree requirements will vary according to the degree sought, and the transfer student must meet the requirements for level-two work and residency at the university.

Transfer students have the same privileges of catalog options as native students at the receiving institution, i.e., the option of complying with the catalog for the transfer student's freshman year to the extent that this privilege is provided for native students.

The content of student orientation programs includes information designed specifically for transfer students.

Transfer students are afforded all the privileges and opportunities of native students at the receiving institution in the areas of awards, honors, housing, financial aid, enrollment in classes of limited size, and appointments to special positions such as editors of the yearbook or college newspaper.

All institutions cooperate fully with the staff of the State University and Community College System of Tennessee in developing research dealing with transfer students.

A standing coordinating committee on articulation functions as a referral body for problems and issues pertaining to articulation which cannot be resolved at the institutional level. It is composed of five members appointed annually by the Chancellor as follows:

- one representative from the staff of the Board
- two representatives from universities
- two representatives from community colleges

Maryland. With a rating of 4.1, Maryland has seventeen community colleges coordinated at the state level by the State Board for Community Colleges. The enrollment in the two-year postsecondary institutions as of October, 1981, was 96,468. It is primarily an institution articulation plan; however, when the policies are not met, there is a course-by-course evaluation. The plan has a clear policy statement concerning transfer credit toward bachelor's degrees for College Level Examination Placement (CLEP), advanced placement, and United States Armed Forces Institute. It does not have a clear policy statement concerning transfer credit

toward bachelor's degrees for courses transferred from a third institution and courses taken through independent study, radio, TV, or computer.

Public four-year colleges and universities require attainment of an overall 2.0 average on a four-point scale by Maryland resident transfer students as one standard for admission. If the student has attended two or more institutions, the overall 2.0 is computed on grades received in courses earned at all institutions attended unless the student presents an associate in arts degree.

(1) Each public institution of higher education designates a person responsible for coordinating transferability.

(2) Efforts are made to counsel students on the basis of their likelihood of success in various programs and at various institutions.

(3) Procedures for reporting the progress of students who transfer within the state have been developed as one means of improving the counseling of prospective transfer students.

Admission requirements and curriculum prerequisites are stated explicitly in institutional publications. Students who enroll at Maryland Community Colleges are encouraged to complete the associate in arts degree or to complete 56 hours in a planned sequence of courses which relate to general education and the selection of a major before transfer. Subsequent graduation from the receiving four-year institution is not assured within a two-year period of full-time study.

(1) Students from Maryland Community Colleges who were admissible to the four-year institutions as high school seniors and who have attained an overall 2.0 average in college and university

parallel courses are eligible for transfer at any time, regardless of the number of credits. Those students who have been awarded the associate in arts degree or who have successfully completed 56 hours of credit with an overall 2.0 average, in either case in college and university parallel courses, are not denied transfer to an institution. If the number of students desiring admission exceeds the number that can be accommodated in a particular professional or specialized program or certain circumstances exist which require a limitation being placed on the size of an upper division program or on the total enrollment, admission is on criteria developed and published by the receiving institution, which provides equal treatment for native and transfer students.

(2) Course semester hour requirements which students must meet in order to transfer with upper division standing are clearly stated by the receiving institution.

(3) The establishment of articulated programs is required in professional and specialized curricula.

Information about transfer students who are capable of honors work or independent study is transmitted to the receiving institution.

Transfer students from newly established public colleges which are functioning with the approval of the State Board for Higher Education are admitted on the same basis as applicants from regionally accredited colleges.

Credit earned at any public institution in Maryland is transferable to any other public institution in Maryland provided:

- (a) the credit is from a college or university parallel program;
- (b) the grades in the block of courses transferred average 2.0 or higher; and
- (c) the acceptance of the credit is consistent with the policies of the receiving institution governing students following the same program.

Credit for the CLEP general examinations is considered for transfer only for scores at the 50th percentile and above of the combined national men-women sophomore norms. The exact number of credits awarded, if any, in transfer is determined by the same regulations that pertain to native students in the receiving institution.

The associate in arts degree serves the equivalent of the lower division general education requirements at the receiving institution where the total number of credits required in the general education program in the sending institution is equal to or more than that required in the receiving institution and where the credits are distributed among the arts and sciences disciplines.

The determination of the major program requirements for a baccalaureate degree, including courses in the major taken in the lower division, is the responsibility of the institution awarding the degree.

Transfer of credits from the following areas is consistent with the State minimum standards and is evaluated by the receiving institution on a course-by-course basis:

- (1) Courses from technical (career) programs.
- (2) Orientation courses.

- (3) Remedial courses.
- (4) Courses credited by a university or college which has no direct academic and administrative control over the students or the faculty involved in the courses.
- (5) Credit for work experience.

Credit earned in or transferred from a community college is normally limited to approximately half the baccalaureate degree program requirement, but in no case more than 70 credits, and to the first two years of the undergraduate educational experience.

Transfer students are given the option of satisfying graduation requirements which were in effect at the receiving institution at the time they enrolled as freshmen at the sending institution, subject to conditions or qualifications which apply to native students.

Institutions notify each other as soon as possible of impending curricular changes which may affect transferring students. When a change made by one institution necessitates some type of change at another institution, sufficient lead time is provided to effect the change with minimum disruption.

Community college students are encouraged to choose as early as possible the institution and program into which they expect to transfer.

The Segmental Advisory Committee continues to review articulation issues and recommends policy changes as needed to the State Board for Higher Education.

In the event a transfer student believes he or she has not been accorded the consideration presented in the policy statement, the student has the opportunity to have the situation explained or reconciled.

Initially, differences of interpretation regarding the award of transfer credit are resolved between the student and the institution to which he is transferring. If a difference remains unresolved, the student presents his or her evaluation of the situation to the institution from which the student is transferring. Representatives from the two institutions then have the opportunity to resolve the differences.

The sending institution has the right to present an unresolved case to the Segmental Advisory Committee through a written appeal to the State Board for Higher Education. The Segmental Advisory Committee receives relevant documentation, opinions, and interpretations in written form from the sending and receiving institutions and from the student. This committee sends the written documentation to a preestablished articulation committee which, after review, will submit its recommendations to the Segmental Advisory Committee.

Copies of the recommendation are forwarded by the student within one calendar year of his or her enrollment in the receiving institution.

#### Informal Articulation Plans

In addition to the state-wide formal articulation plans, 18 states reported that informal articulation plans existed, many of which are quite comprehensive and detailed.

#### Titles of Informal Articulation Plans

The titles of informal articulation plans and other documents received from eight states for study by the researcher are listed in Table 10.

TABLE 10  
Titles of Informal Articulation Plans Received  
by State<sup>a</sup>

State	Titles of Informal Articulation Plans Received
Connecticut	Agreement Between the Boards of Trustees of the Connecticut State Colleges and University of Connecticut on Student Transfer from Two-Year Collegiate Programs.
Illinois	Rules of the Illinois Community College Board
Michigan	Planning for Continuous Occupational Education Programs Among Two- and Four-Year Institutions
Nebraska	Goals and Recommendations for Transferability of Credit and Articulation of Postsecondary Educational Programs
New Jersey	The Statewide Plan for Higher Education
New Mexico	Academics Council for Higher Education Engineering Articulation Agreement
North Carolina	Analysis: Policies of Senior Colleges and Universities Concerning Transfer Students from Two-Year Colleges in North Carolina  Guidelines for Transfer: Recommendations of the Joint Committee on College Transfer Students.  Policies of Senior Colleges and Universities Concerning Transfer Students from Two-Year Colleges in North Carolina.
Texas	Upper-Level Institutions and Off-Campus Educational Units of Texas Public Universities.  Informing the Future: A Plan for Higher Education for the Eighties and Working Papers  The Articulation Project: Transfer Curriculum Review and Evaluation

TABLE 10 (Continued)

State	Titles of Informal Articulation Plans Received
Texas (continued)	General Provisions for the Transfer of Credit Policies for Public Junior Colleges

<sup>a</sup>Alabama, Hawaii, Idaho, Minnesota, Mississippi, New York, North Dakota, Ohio, Oregon, and Wyoming also reported that they had informal articulation plans but did not submit their plans to the researcher.

The most striking difference between the formal and informal articulation plans is the lack of state-wide conformity of the informal plans. Usually, the articulation plans involve two or more institutions and are developed at the local level, or the plans involve only one or two programs within an individual two-year institution.

#### Types of Informal Articulation Plans

Of the 18 states which have informal articulation plans for post-secondary education, six supplied information relative to the type articulation plan that had been developed, as shown in Table 11.

States which have informal articulation plans but did not respond to this question are Alabama, Connecticut, Idaho, Minnesota, Mississippi, New Jersey, New Mexico, Oregon, and Wyoming. Michigan, Nebraska, and New York responded that the plan is different for each institution.

North Carolina and Ohio have plans which are institution, program, and course articulation plans, depending on the individual institution, the particular program, and the specific course.

TABLE 11

## Type of Informal Articulation Plans by State

State	Institution Articulation Plan	Program Articulation Plan	Course Articulation Plan
Hawaii			X
Illinois			X
North Carolina	X	X	X
North Dakota	X		
Ohio	X	X	X
Texas			X
Totals	3	2	5

Hawaii, Illinois, and Texas have informal articulation plans which are course articulation plans; i.e., each course is evaluated by the senior institution and accepted or not accepted toward a bachelor's degree based upon those evaluations.

Credit Transfer Policy in Informal  
Articulation Plans

Of the eighteen states which have informal articulation plans for postsecondary education, seven responded to the question concerning policy statements relative to transfer credit toward bachelor's degree as shown in Table 12.

TABLE 12

## Credit Transfer Policy for Bachelor's Degree

State	Courses Trans. from a Third Institu- tion	College Level Exam. Place- ment	Adv. Place- ment	United States Armed Forces Insti- tute	Indepen- dent Study, Radio/TV, or Computer	Total Yes
Hawaii	no	no	no	no	no	0
Illinois	no	yes	yes	yes	no	3
Nebraska	no	no	no	no	no	0
New Jersey	no	no	no	no	no	0
North Carolina	no	yes	yes	yes	no	3
North Dakota	no	no	no	no	no	0
Texas	no	yes	no	no	yes	2
Total Yes	0	3	2	2	1	

States which have informal articulation plans but did not respond to this question are Alabama, Connecticut, Idaho, Michigan, Minnesota, Mississippi, New Mexico, New York, Ohio, Oregon, and Wyoming.

Informal articulation plans in Illinois, North Carolina, and Texas have clear statements regarding transfer credit toward bachelor's degrees for College Level Examination Placement (CLEP). Only Illinois and North Carolina have a clear statement regarding transfer credit toward bachelor's degrees for United States Armed Forces Institute. Texas is the only state with informal articulation plans which have clear statements

regarding transfer of credit toward a bachelor's degree for courses taken through independent study, radio/tv, or computer.

#### Evaluation of Informal Articulation Plan

Table 13 provides the evaluations of eight of the 18 states which have informal articulation plans in terms of their effectiveness, using a scale of 5 - always, 4 - usually, 3 - sometimes, 2 - rarely, and 1 - never.

TABLE 13

#### Self-Evaluations of Informal Articulation Plans by State

[(Rating Scale: Criterion Exists  
(5) Always, (4) Usually, (3) Sometimes, (2) Rarely, (1) Never)]

Criteria	HI	IL	MS	NC	ND	OH	OR	TX	Averages
Transfer by students who have earned an Associate of Arts degree	3	4	4	5	5	5	5	*	4.4
Transfer by students who have earned an Associate of Applied Science degree and less	2	3	2	3	4	3	5	*	3.1
Transfer of all courses either as required or elective credit	4	3	4	4	3	4	5	4	3.9
Transfer of credits for courses with grades of D	2	3	2	2	4	2	4	2	2.6
Assurance that students who follow plan will be accepted at the four-year school	4	4	4	5	4	4	5	*	4.3
A way for students to transfer courses taken before making a decision to transfer	4	4	1	5	4	2	5	4	3.6

TABLE 13 (Continued)

Criteria	HI	IL	MS	NC	ND	OH	OR	TX	Averages
Efficiency of time for students in that they can finish a four-year program in four years	2	4	4	4	4	4	5	3	3.8
Published criteria and pre-requisites for admission to programs with limited access so transfer students have the same opportunity for admission as native students	5	3	3	2	2	3	4	*	3.1
Evaluation by administrators at two- and four-year institutions	5	2	3	4	3	2	2	*	3.0
Cooperative planning by administrators and faculties at two- and four-year institutions	3	3	3	5	4	2	3	*	3.3
Procedures to modify plan	4	3	2	5	2	3	5	*	3.4
A smooth transition from two- to four-year schools	4	3	4	4	4	4	4	*	3.9
Averages	3.5	3.3	3.0	4.0	3.6	3.2	4.3	3.3 <sup>a</sup>	3.5

\* Did not respond.

<sup>a</sup> Probably unreliable due to no response for eight items.

The criterion which received the highest average rating, 4.4, by the states concerned "transfer by students who have earned an associate of arts degree." The criterion which received the second highest average rating, 4.3, concerned the "assurance that students who followed the plan would be accepted at the four-year institution."

By measuring the articulation plans as evaluated by the chief administrative officers of each state with informal plans against all the criteria, Oregon had the most acceptable plan with an average rating of 4.3. The second most acceptable informal plan as evaluated by the chief administrative officers was from the state of North Carolina with an average rating of 4.0.

The average rating for all the states with informal articulation plans was 3.5, which is the same as the average rating for all the states with formal articulation plans.

Descriptions of Informal Articulation Plans for States with a 4.0 or Higher Rating

Oregon did not provide the researcher with any written documents explaining its plan. North Carolina's plan has been developed by a joint committee made up of representatives of the University of North Carolina, the State Board of Community Colleges, and the Association of Independent Colleges and Universities.

North Carolina's two publications, Policies of Senior Colleges and Universities Concerning Transfer Students from Two-Year Colleges in North Carolina and Guidelines for Transfer: Recommendations of the Joint Committee on College Transfer Students, are prepared voluntarily for voluntary use by representatives of colleges and universities in North Carolina. It is entirely up to the receiving institution to determine the admission of students and the acceptance of transfer credits.

Although the policies of senior colleges and universities concerning transfer students from two-year colleges in North Carolina

includes both public and private institutions, the following description concerns only public institutions.

Only one public four-year institution in North Carolina limits the number of transfer students. Five of the sixteen public four-year institutions do not require a standardized test for transfers. The other ten do if students do not transfer a prescribed minimum number of hours, which is less than one year of college work in three of the institutions.

No standardized test is required with an associate degree. However, six of the sixteen institutions do require a high school transcript and require all transfer students to meet high school unit requirements.

Ten of the sixteen public four-year institutions recommend that students have an associate degree. However, the associate degree does not improve the student's chance of acceptance to six of the institutions.

Three four-year institutions will accept an associate of applied science degree from a technical college or technical institute for junior status. Four will not accept an associate of applied science degree from a technical college or technical institute. The remaining eight public four-year institutions will accept transfer students from a technical college or technical institute into four specific programs or will accept credit for courses which are evaluated on a course-by-course basis. The four specific programs are

Bachelor of Technology offered by one institution

Bachelor of Science in Applied Science in Business offered by one  
institution

Bachelor of Engineering Technology and Criminal Justice Technology  
offered by one institution

It appears that North Carolina has been successful in providing almost all graduates of its two-year programs an opportunity to transfer to some four-year institution, either public or private, to pursue a bachelor's degree in some program. However, statements such as "an associate degree and a recommendation from a community college do not improve a transfer student's chance of acceptance" make it difficult for guidance counselors to advise students. It also appears that students suffer undue frustrations when they have to negotiate for themselves the acceptance of credits earned at two-year institutions.

Summary

Thirty-seven (86.1 percent) of the forty-three states responding have formal or informal articulation plans. Ten state legislatures have mandated that two- and four-year public postsecondary educational institutions find ways to improve articulation and the transfer of credits, and two other states have similar bills in the legislatures.

Four states, Arizona, Maryland, Oklahoma, and Tennessee, have acceptable formal articulation plans when evaluated against criteria established by the researcher. Oregon and North Carolina have the most acceptable informal articulation plans when evaluated against the criteria. The main difference between the formal and informal articulation plans is the lack of state-wide uniformity of the informal plans. Usually, the informal articulation plans are voluntary agreements between two or more institutions and sometimes involve only one or two programs in an institution.

The framework for an articulation plan for the transfer of credits from two- to four-year public educational institutions in North Carolina, which is developed in Chapter V, takes into account the evaluations of the established criteria by the chief administrative officers. Three criteria were either not desirable or practical inasmuch as they were absent from the plans studied and received low ratings by the chief administrative officers of the public two-year educational systems. Therefore, the following characteristics were eliminated from the framework for an articulation plan:

1. Transfer by students who have earned an associate of applied science degree.
2. A way for students to transfer credits for courses taken before making a decision to transfer.
3. The criterion concerning transfer of credits for courses with grades of "D" by the four-year institutions has been altered to include the statement "only to the extent that grades of "D" fulfill degree requirements of native students."

Other criteria emerged from the study as being more important and perhaps more easily implemented, and the following characteristics have been included in the framework for an articulation plan.

1. A coordinating committee appointed by the chief administrative officers of the two- and four-year systems should review appeals from students who have encountered difficulties in transferring from a two-year institution to a four-year institution.

2. The coordinating committee should promote cooperative research in the area of articulation between individual institutions in such areas as admissions, curriculum design, and follow-up of transfer students.

3. There should be no limit to the number of credits transferred from a public two-year postsecondary institution to a public four-year institution. However, students who are transferring from two-year institutions must meet the degree requirements of the degree sought and the requirements for residency at the four-year institutions.

## CHAPTER V

## CONCLUSIONS, RECOMMENDATIONS, AND EPILOGUE

Conclusions

Although each two-year educational system is different and each state's plan for articulation is unique and somewhat tailored to its own particular institutional organization, it is clear that major articulation problems exist.

After an examination and analysis of the data gathered for this study, the researcher concludes as follows:

1. Only four states, Arizona, Maryland, Oklahoma, and Tennessee, have acceptable articulation plans when evaluated against criteria established by the researcher. It appears that state leaders either have not been interested or have not been able to develop articulation plans which would provide a smooth transition from public two-year to four-year educational institutions.

2. There is no assurance that states having master plans for higher education will have formal articulation plans. Of the twenty-six states which have master plans, only fourteen have formal articulation plans for postsecondary education. However, it appears that having a formal articulation plan increases the probability that a state will have a master plan. Of the nineteen states which have formal articulation plans, fourteen have master plans.

3. Of the fourteen states which have upper-level universities, only six have formal articulation plans. States with upper-level universities are no more likely to have formal articulation plans than states without upper-level universities.

4. Of the nineteen states which have formal articulation plans, seven are governed by a separate board, while nine are governed by the Board of Higher Education. In addition, of the four states which have the most satisfactory formal articulation plans when evaluated against the criteria used in this study, two are governed by separate boards and two are governed by the Board of Higher Education. The administrative plan for governing two-year postsecondary educational institutions is not a good predictor of whether a state will have a formal articulation plan or how effective it will be.

5. For most states which have formal articulation plans, credit transfer policies are vague and insufficient. Only three of the nineteen states have plans which are comprehensive enough to contain clear policy statements concerning transfer credit toward bachelor's degrees for courses transferred from a third institution, CLEP, advanced placement, United States Armed Forces Institute, and courses taken through independent study, radio, TV, or computer.

6. Legislative mandates relative to development of articulation plans in the various states have not resulted in formal articulation plans in most states. Only four of the ten states with legislative mandates have developed formal articulation plans.

7. On the basis of the evaluations of the articulation plans, no national pattern emerged.

### Framework for an Articulation Plan

Articulation was defined in this study as a process that provides a continuous, smooth flow of students from level to level and from institution to institution. For the purposes of the framework for an articulation plan which follows, the definition is expanded to include attitudes and practices that facilitate the transfer process. Inherent in this definition is an attitude of cooperation and trust between and among the two-year and four-year educational institutions.

Based on the evaluations of articulation plans by the chief administrative officers in twenty-five states, on a review of the plans received from twenty-five states, and a review of the related literature, the researcher recommends that the following framework for an articulation plan for the transfer of credits from two- to four-year public educational institutions in North Carolina be considered for adoption.

1. Organizational Preliminaries. The presidents of the University of North Carolina and the North Carolina Community College System appoint a coordinating committee made up of administrators and faculty members from both systems to initiate and oversee the articulation effort, including but not limited to

a. the appointment of sub-committees in the various disciplines composed of faculty members from two- and four-year institutions.

b. a continuing review and evaluation of the articulation plan.

c. a review of appeals from students who have encountered difficulties in transferring from a two-year institution to a four-year institution, with its decisions being advisory to the institutions involved.

d. the development of a procedure for modifying the plan, updating curricula and courses so that each institution is notified as soon as possible of impending curriculum changes, and

e. the establishment and promotion of cooperative research in the area of articulation between individual institutions in such areas as admissions, curriculum design, and follow-up of transfer students.

2. General Articulation Practices. The following activities which would improve the transfer process be ongoing at the two- and four-year institutions:

a. Each two- and four-year postsecondary institution designate a person responsible for coordinating transferability.

b. All policies and practices concerning transfer students from two-year institutions be published in the school catalogs of all the institutions along with the name of the person or office responsible for transferability.

c. All prerequisites for admission to four-year programs be published, especially those programs which have limited access. In addition, transfer students from two-year institutions be given the same opportunity for admission as students who take their lower division work at four-year institutions.

d. The two-year and four-year institutions develop and publish policies concerning transfer credit for courses obtained through other than traditional classes. For example, students need to know at the outset if they can transfer credit for courses taken from a third institution, College Level Examination Placement (CLEP), advanced placement, United States Armed Forces Institute, independent study, radio, TV, or computer.

e. Transfer students from two-year institutions be given the same option as native students in terms of satisfying graduation requirements which were in effect at the receiving institution at the time they enrolled as freshmen.

f. Student orientation programs at four-year institutions include information designed especially for transfer students from two-year institutions.

g. Four-year institutions provide transfer students from two-year institutions all the privileges and opportunities of native students in the areas of awards, honors, housing, financial aid, enrollment in classes of limited size, and appointments to special positions.

h. Two- and four-year institutions maintain close interinstitutional communication and a spirit of cooperation and trust to insure that transfer students are allowed to continue their education with a minimum of credit loss and frustration.

3. Associate of Arts Degree. All the two-year and four-year institutions work cooperatively to update and improve the General Education programs.

a. Sub-committees in various disciplines composed of faculty members from two- and four-year institutions develop course transfer guides. It would be helpful if a course-by-course evaluation could be made culminating in a course equivalency guide or a transfer of credit matrix.

b. All two- and four-year institutions work cooperatively to keep the course-by-course lists updated and strive toward developing curriculum-by-curriculum transfer outlines.

- c. Students who earn an associate of arts degree be able to
- (1) transfer to any public four-year college in North Carolina with junior standing without taking standardized tests and without a high school transcript except for use as a guidance tool;
  - (2) transfer credits with grades of "D" providing credits for courses with grades of "D" count toward the baccalaureate degree for native students and the transfer student has a grade point average of 2.0;
  - (3) transfer credit for all courses taken at the two-year institution either as:
    - (a) the same course as the one at the four-year institution or as a comparable course if the course numbers are not the same, or as
    - (b) a department elective course which is counted toward fulfillment of specific department requirements at the four-year institution. Students in two-year postsecondary schools may take introductory professional specialization courses that can be counted toward the baccalaureate degree if students continue in such a professional field of specialization. The determination of the major course requirements for a baccalaureate degree, including courses in the major taken in the lower-division, is the responsibility of the

institution awarding the degree. However, courses classified as junior-level courses yet open to sophomores at senior institutions, even though taught at a junior college as sophomore-level courses, should be transferable as satisfying that part of the student's requirement in the content area, or as

- (c) a general elective course which is counted toward fulfillment of total credits needed for graduation. There be no limit to the number of credits transferred from a public two-year postsecondary institution to a public four-year postsecondary institution. However, the transferring student must meet the degree requirements of the degree sought and the requirements for residency at the receiving institution.
- (4) complete the requirements for a baccalaureate degree in two additional years. The only exceptions would be:
- (a) professional and specialized departmental prerequisites, which could be minimized through articulation efforts. These prerequisites be published in the appropriate college literature;
  - (b) any additional general education coursework requirements, which should be programmed to enable students to complete a baccalaureate

degree in a number of hours equal to the total specified for graduation in the four-year institution's catalog.

4. Other Associate Degrees. Students who earn an associate of applied science or other degrees which have requirements different from the associate of arts degree be able to transfer with junior status to a four-year institution which has an appropriate four-year program to provide the two years of additional coursework in the area of study. The names of the programs and the four-year institutions at which they are offered be stated in the catalogs of the four-year institutions as well as the catalogs of the two-year institutions.

5. Non-Associate Degree Admissions

- a. Equivalent associate of arts degree courses be transferable to the four-year institutions at a minimum as general elective credit.
- b. Two-year college students be strongly encouraged to complete their lower division programs before transfer, but qualified students may apply for transfer.
- c. An applicant who does not satisfy the four-year institution's requirements upon graduation from high school complete the equivalent of 30 semester credit hours with an overall "C" average at the two-year institution to qualify for admission to a four-year institution.

### Recommendations

1. It is recommended that a detailed articulation plan be developed for North Carolina within the framework noted above.
2. It is recommended that consideration be given to establishing articulation programs in professional and specialized curricula.
3. It is recommended that further study and research be given to an articulation plan for technical programs which lead to an associate of applied science degree. Those curricula which lead to an associate of applied science degree at the two-year institution and a bachelor's degree at the four-year institution should receive priority; for example, accounting, business administration, secretarial science, data processing, and associate degree nursing. It is important that GED recipients, mature adults, women, the poor, and the culturally disadvantaged be allowed to advance to as high a level of education as their desires and abilities will permit them to achieve.

### Epilogue

Problems of articulation are perhaps heightened by the diverse purposes and philosophies of the North Carolina University System and the North Carolina Community College System. The institutions in the North Carolina University System are obviously concerned about academic freedom and maintaining institutional integrity. They are proud of their reputations and continually strive for academic excellence.

The institutions in the North Carolina Community College System have been given great flexibility in designing and implementing their educational programs. They are community-oriented and responsive to the

needs of the local people, agencies, businesses, and industries. It is important that the institutions maintain the ability to be innovative, and even experimental, in their approaches to programs and instruction.

Nevertheless, I believe that we ought always to keep the needs of the students in sharp focus and not discount as futile efforts to initiate changes because they appear to be difficult to accomplish. In establishing the need for a community college system in North Carolina, Dr. Hurlburt stressed economic deprivation; and it is as true today as it was in 1950.

The tragedy of the economic barrier to post-high school education lies in the fact that there is little relationship between the ability to benefit from a college education and the ability to pay for it. Of children with equal ability, those whose parents are in occupations with high incomes have the greater probability of attending college.

Allowing the opportunity for higher education to depend so largely on the economic status of the individual not only deprives thousands of deserving young people of the chance in life to which they are entitled, but deprives the State of a vast amount of potential leadership, technical skill, and social competence which is sorely needed.

This situation presents a definite need which can be satisfied by providing publicly supported community colleges within commuting range of all of our ablest youth. For the group which will transfer after two years and continue in senior colleges, the entire cost of establishing and maintaining community college education could well be justified.<sup>1</sup>

Is it not possible for the two systems of postsecondary education in North Carolina to work together cooperatively, each contributing and each gaining from the experiences of the other; yet at the same time, retaining the sole responsibility for determining the character of its own program?

---

<sup>1</sup> Hurlburt, op. cit., p. 11.

**BIBLIOGRAPHY**

## BIBLIOGRAPHY

- American Association of Community and Junior Colleges. 1982 Community, Junior, and Technical College Directory. Washington: American Association of Community and Junior Colleges, 1982.
- Attwood, Madge L., and Mary Woltanski. "Performance of Technical Transfer Students at the University of Michigan." Improving College and University Teaching, 28, No. 4 (Fall, 1980), 166-71.
- The Commission on Goals for the North Carolina Community College System. Total Education: The Duty of the State. Raleigh: North Carolina State Board of Education, 1977.
- Crews, James. Personal interview. Greensboro, North Carolina, January 27, 1983.
- The Department of Superintendence. The Articulation of the Units of American Education, Seventh Yearbook. Washington: National Education Association, 1929.
- Dragon, Albert Leon. "An Investigation of the Academic Success of Community and Junior College Transfers Entering a Four-Year College of Business." Doctoral dissertation, Boston College, 1980.
- "Estimated College Enrollment in Fall, 1981." Chronicle of Higher Education, December 9, 1981, p. 19, col. 1-6.
- "Fruitless Battle." Editorial. Greensboro Daily News, March 14, 1982, sec. F, p. 2, cols. 1-2.
- Hurlburt, Allan S. "Publication No. 285, Community College Study." Educational Publications of the State Superintendent of Public Instruction of North Carolina, Vol. X, Nos. 268-292. Raleigh: Department of Public Instruction, 1953.
- Joint Committee on College Transfer Students, North Carolina Association of Colleges and Universities. Guidelines for Transfer Recommendations of the Joint Committee on College Transfer Students. Chapel Hill: The University of North Carolina General Administration, 1980.
- Joint Committee on College Transfer Students, North Carolina Association of Colleges and Universities. Policies of Senior Colleges and Universities Concerning Transfer Students From Two-Year Colleges in North Carolina, 1981-1982. Chapel Hill: The University of North Carolina General Administration, 1981.

- Joint Committee on Junior and Senior Colleges. Guidelines for Improving Articulation Between Junior and Senior Colleges. Washington: American Council on Education, 1966.
- Kintzer, Frederick C. "Junior College-Senior College Articulation in the '70s." College and University, No. 46, 1971, pp. 587-605.
- Kintzer, Frederick C. Middleman in Higher Education. San Francisco: Jossey-Bass, Inc., 1973.
- Kintzer, Frederick C. Nationwide Pilot Study on Articulation. Los Angeles: University of California, ERIC Clearinghouse for Junior Colleges, 1970.
- Kintzer, Frederick C. "The Role of the Upper-Level University in American Higher Education." Community College Frontiers, 7, No. 4 (Summer, 1979), 35-40.
- Knoell, Dorothy M., and Leland L. Medsker. From Junior to Senior College: A National Study of the Transfer Student. Washington: American Council on Education, 1965.
- Masat, Francis E. "Easing the Trauma of Transfer." Community and Junior College Journal, 50, No. 5 (Feb., 1980), 10-13.
- Menacker, Julius. From School to College: Articulation and Transfer. Washington: American Council on Education, 1975.
- National Center for Educational Statistics. Projections of Education Statistics to 1986-87. Washington: U. S. Government Printing Office, 1978.
- North Carolina Department of Community Colleges. North Carolina Community College System: Biennial Report 1976-1978. Raleigh: North Carolina State Board of Education, 1978.
- North Carolina Department of Community College. North Carolina GED Statistical Report, 1980. Raleigh, 1981.
- North Carolina Department of Public Instruction. Statistical Profile of North Carolina Public Schools. Raleigh, 1981.
- North Carolina Office of State Budget and Management. North Carolina State Data Center Newsletter. Raleigh, 1982.
- Peng, Samuel S., and J. P. Bailey, Jr. "Differences Between Vertical Transfers and Native Students in Four-Year Institutions." Research in Higher Education, 7, No. 2 (1977), 145-54.

- Peterson, Merrill D. Thomas Jefferson and the New Nation. New York: Oxford University Press, 1970.
- Powell, Jr., Robert Lee. "An Analysis of the Factors Related to the Academic Performance of Community College Transfer and Native Business Students at New Jersey Public Institutions of Higher Education." Doctoral dissertation, Temple University, 1979.
- Sharron, Robert W., et al. Putting Learning to Work: A Profile of Students in North Carolina Community Colleges, Technical Institutes and Technical Colleges. Raleigh: North Carolina State University, 1980.
- Smith, Nathaniel David. "Articulation of Career Oriented Education Programs at the Post-Secondary Level." Doctoral dissertation, Auburn University, 1973.
- Southern Regional Education Board. "2 + 2 = Expanded Opportunity." Atlanta: Southern Regional Education Board, 1979.
- Stater, Florence K., et al. "The Minnesota Model for Statewide Curriculum Articulation of Occupational Programs in Home Economics." Illinois Teacher, November-December, 1979, pp. 96-100.
- Thompson, John W. "The Growing Role of Community Colleges." Journal of College Student Personnel, 19 (January, 1978), 11-15.
- The University of North Carolina General Administration. Statistical Abstract of Higher Education in North Carolina 1981-82. Chapel Hill, 1982.
- Vaughan, George B., and Charles R. Dassance. "The Missing Link in the Student Consumer Movement." Improving Articulation and Transfer Relationships: New Directions for Community Colleges, San Francisco: Jossey-Bass, 1982.
- Wasson, Ruth Ann, "A Study of Selected Factors in Community College-Senior College Articulation in Education for Business." Doctoral dissertation, Northern Illinois University, 1974.
- Willingham, Warren W., The No. 2 Access Problem: Transfer to the Upper Division. Washington: American Association for Higher Education, 1972.
- Willingham, Warren W., and Norham Findikyan. Patterns of Admission for Transfer Students. New York: College Entrance Examination Board, 1969.

APPENDIX A

CHIEF ADMINISTRATIVE OFFICERS OF PUBLIC TWO-YEAR POSTSECONDARY EDUCATIONAL  
SYSTEMS TO WHOM THE QUESTIONNAIRE WAS SENT

## APPENDIX A

STATE ADMINISTRATORS TO WHOM A LETTER  
AND QUESTIONNAIRE WERE SENT

ALABAMA: George L. Layton, Assistant Superintendent for Post-secondary Education Services, 817 South Court Street, Suite 203, Montgomery, Alabama 36130, (205) 832-3310

ALASKA: Edwin Biggerstaff, Chancellor, Division of Community Colleges and Rural Education, University of Alaska, 2221 East Northern Lights Boulevard, Anchorage, Alaska 99504, (907) 274-0548

ARIZONA: Russell O. Bloyer, Executive Director, State Board of Directors for Community Colleges of Arizona, 1937 West Jefferson, Phoenix, Arizona 85009, (602) 255-4037

ARKANSAS: Tom Spencer, Associate Director for Community Colleges, Department of Higher Education, 1301 West Seventh Street, Little Rock, Arkansas 72201, (501) 371-1441

CALIFORNIA: Gerald Hayward, Chancellor, California Community Colleges, 1238 S. Street, Sacramento, California 95814, (916) 322-4005

COLORADO: Robert Dalteri, Chief Executive Officer, State Board for Community Colleges and Occupational Education, Second Floor, Centennial Building, 1313 Sherman Street, Denver, Colorado 80203, (303) 866-3072

CONNECTICUT: Searle F. Charles, Executive Director, Board of Trustees of Regional Community Colleges, 61 Woodland Street, Hartford, Connecticut 06105, (203) 566-8760

Lewis Hyde, Executive Director, Board of Trustees for State Technical Colleges, 61 Woodland Avenue, Hartford, Connecticut 06105, (203) 566-3976

DELAWARE: John Kotula, President, Delaware Technical and Community Colleges, Box 897, Dover, Delaware 19901, (302) 678-4621

FLORIDA: Lee G. Henderson, Director, Division of Community Colleges, Florida State Department of Education, 310 Collins Building, Tallahassee, Florida 32301, (904) 488-1721

GEORGIA: Haskin R. Pounds, Assistant Vice Chancellor, University System of Georgia, Board of Regents, 244 Washington Street, S.W., Atlanta, Georgia 30334, (404) 656-2213

HAWAII: Dewey H. Kim, Chancellor for Community Colleges, University of Hawaii, 2327 Dole Street, Honolulu, Hawaii 96822, (808) 948-7313

IDAHO: Milton Small, Executive Director for Higher Education, 650 West State Street, LBJ Building, Room 307, Boise, Idaho 83702, (208) 384-2270

ILLINOIS: David Pierce, Executive Director, Illinois Community College Board, 3085 Stevenson Drive, Springfield, Illinois 62703, (217) 786-6000

INDIANA: George B. Weathersby, Commissioner, Indiana Commission for Higher Education, 143 West Market Street, Indianapolis, Indiana 46204, (317) 633-6474

IOWA: William M. Baley, Associate State Superintendent, Area Schools, Grimes State Office Building--(203), Des Moines, Iowa 50319, (515) 281-3124

KANSAS: Sam Newland, Director of Postsecondary Administration, State Department of Education, 120 East Tenth Street, Topeka, Kansas 66612, (913) 296-3047

KENTUCKY: Charles Wethington, Vice President, Community College System, 102 Breckinridge Hall, University of Kentucky, Lexington, Kentucky 40506, (606) 258-8607

LOUISIANA: Fair C. King, Career Education Coordinator, P. O. Box 44064, Department of Education, Baton Rouge, Louisiana 70304, (504) 342-3473

MAINE: Wayne H. Ross, Director, Department of Educational and Cultural Services, Augusta, Maine 04333, (207) 289-2621

MARYLAND: Brent M. Johnson, Executive Director, State Board for Community Colleges, Jeffrey Building, 16 Francis Street, Annapolis, Maryland 21401, (301) 269-2881

MASSACHUSETTS: Dr. Grace Healy, Board of Education, Ashburton Place, McCormick State Office Building, Room 619, Boston, Massachusetts 02108, (617) 727-7785

MICHIGAN: James H. Folkening, Community College Services Unit, Higher Education Management Services, P. O. Box 30008, Lansing, Michigan 48909, (517) 373-3360

MINNESOTA: Phillip C. Helland, Chancellor, Minnesota Community College System, 301 Capital Square, 550 Cedar, St. Paul, Minnesota 55101, (612) 296-3356

MISSISSIPPI: George V. Moody, Director, Division of Junior Colleges, State Department of Education--Box 771, Jackson, Mississippi 39205, (601) 354-6962

MISSOURI: Linda Atkins, Director of Academic Affairs, Department of Higher Education, 600 Monroe Avenue, Jefferson City, Missouri 65101, (314) 751-2361

MONTANA: William J. Lannan, Coordinator of Community Colleges, 33 S. Last Chance Gulch, Helena, Montana 59601, (406) 449-3024

NEBRASKA: William Fuller, Executive Director, Coordinating Committee for Postsecondary Education, Box 95005, Lincoln, Nebraska 68509, (402) 471-2847

NEVADA: Robert M. Bersi, Chancellor, University of Nevada Community College System, 405 Marsh Avenue, Reno, Nevada 89502, (702) 784-4901

NEW HAMPSHIRE: Charles H. Green, Director, Postsecondary Division, State Department of Education, 163 Loudon Road, Concord, New Hampshire 03301, (602) 271-2722

NEW JERSEY: Carolyn Prager, Director, Community College Unit, Department of Higher Education, 225 W. State Street, Trenton, New Jersey 08625, (609) 292-4470

NEW MEXICO: William C. Witter, Assistant Executive Secretary, Board of Educational Finance, 1068 Cerrillos Road, Santa Fe, New Mexico 87503, (505) 827-2115

NEW YORK: Cornelius Robbins, Associate Chancellor for Community Colleges, State University of New York, University Plaza, Albany, New York 12246, (518) 473-1849

NORTH CAROLINA: Larry J. Blake, President, State Department of Community Colleges, 194 Education Building, Raleigh, North Carolina 27611, (919) 733-7051

NORTH DAKOTA: Kenneth E. Raschke, Commissioner, State Board of Higher Education, Bismarck, North Dakota 58501, (701) 224-2960

OHIO: Max J. Lerner, Vice Chancellor for Two-Year Colleges, Ohio Board of Regents, 30 East Broad Street, Columbus, Ohio 43215, (614) 466-5810

OKLAHOMA: Joe A. Leone, Chancellor, State System of Higher Education, 500 Education Building, Oklahoma City, Oklahoma 73105, (405) 521-2444

OREGON: Robert E. Hamill, Associate Superintendent for Community Colleges, Oregon Board of Education, 700 Pringle Parkway, Salem, Oregon 97310, (503) 378-3549

PENNSYLVANIA: Charles A. Gilmore, Division of Postsecondary Education, Department of Education, 5th Floor, 33 Market Street, Harrisburg, Pennsylvania 17126, (717) 783-6779

RHODE ISLAND: Edward J. Liston, President, Community College of Rhode Island, 400 East Avenue, Warwick, Rhode Island 02886, (401) 825-2188

SOUTH CAROLINA: G. William Dudley, Jr., Executive Director, State Board for Technical and Comprehensive Education, Rutledge Building, 1429 Senate Street, Columbia, South Carolina 29201, (803) 758-6919

SOUTH DAKOTA: Gordon Foster, Associate Commissioner for Academic Affairs, Board of Regents, State Capitol, Pierre, South Dakota 57501, (605) 224-3455

TENNESSEE: Charles Fancher, State Board of Regents, State University--Community College Division, 1161 Murfreesboro Road, Nashville, Tennessee 37217, (615) 741-4821

TEXAS: David T. Kelly, Assistant Commissioner of Higher Education, Coordinating Board/Texas College and University System, P. O. Box 12788, Capitol Station, Austin, Texas 78711, (512) 475-3413

UTAH: Don A. Carpenter, Assistant Director for Academic Affairs, Utah State Board of Regents, 807 East South Temple, Salt Lake City, Utah 84102, (801) 533-5617

VERMONT: Lloyd Kelly, Director of Adult Education Services, State Department of Education, 120 State Street, Montpelier, Vermont 05602, (802) 828-3135

VIRGINIA: James Hinson, Jr., Chancellor, Virginia Community College System, P. O. Box 1558, Richmond, Virginia 23212, (804) 225-2118

WASHINGTON: John N. Terrey, Executive Director, State Board for Community College Education, 319 Seventh Avenue FF-11, Olympia, Washington 98504, (206) 753-7412

WEST VIRGINIA: Donald W. Kinzy, Community College Director, West Virginia Board of Regents, 50 Kanawha Boulevard East, Charleston, West Virginia 25301, (304) 348-2101

WISCONSIN: Robert Sorenson, Director, Board of Vocational, Technical, and Adult Education, 4802 Sheboygan Avenue, Madison, Wisconsin 53702, (608) 266-1770

WYOMING: Russell A. Hansen, Executive Secretary, Community College Commission, 1720 Carey Avenue, Cheyenne, Wyoming 82001, (307) 777-7764

APPENDIX B

MEMBERS OF THE JURY WHO CRITIQUED THE QUESTIONNAIRE

## APPENDIX B

## Members of Jury Who Critiqued Questionnaire

Dr. Larry J. Blake, President  
State Department of Community Colleges  
194 Education Building  
Raleigh, North Carolina 27611

Dr. G. William Dudley, Jr.  
Executive Director  
State Board for Technical and Comprehensive Education  
Rutledge Building, 1429 Senate Street  
Columbia, South Carolina 29201

Dr. Charles Fancher  
State Board of Regents  
State University--Community College Division  
1161 Murfreesboro Road  
Nashville, Tennessee 37217

Dr. James Hinson, Jr., Chancellor  
Virginia Community College System  
P. O. Box 1558  
Richmond, Virginia 23212

**APPENDIX C**

QUESTIONNAIRE WHICH WAS SENT TO THE CHIEF ADMINISTRATIVE OFFICERS OF THE  
PUBLIC TWO-YEAR POSTSECONDARY EDUCATIONAL SYSTEMS IN THE UNITED STATES

## APPENDIX C

ARTICULATION STUDY TO TRANSFER CREDITS FOR COURSES  
FROM PUBLIC TWO-YEAR TO FOUR-YEAR INSTITUTIONS

THE UNIVERSITY OF NORTH CAROLINA AT GREENSBORO, GREENSBORO, NORTH CAROLINA

1. NAME(S) OF TWO-YEAR POSTSECONDARY STATE-SUPPORTED SYSTEM(S) OR COMPREHENSIVE SYSTEM IF IT INCLUDES MORE THAN TWO-YEAR INSTITUTIONS:
- 

2. NUMBER OF TWO-YEAR INSTITUTIONS IN THE SYSTEM BY TYPE:

COMMUNITY COLLEGES	TECHNICAL COLLEGES	VOCATIONAL TECHNICAL INSTITUTES	AREA VOCATIONAL SCHOOLS	OTHER (SPECIFY)
--------------------	--------------------	---------------------------------	-------------------------	-----------------

3. GOVERNED AT THE STATE LEVEL BY: (CHECK ALL THAT APPLY)

DEPARTMENT OF HIGHER EDUCATION	DEPARTMENT OF PUBLIC SECONDARY EDUCATION	A SEPARATE BOARD	OTHER (SPECIFY)
--------------------------------	--	------------------	-----------------

GIVE COMPLETE NAME(S) OF GOVERNING BOARD(S)

---

4. HOW MANY, IF ANY, PUBLIC UPPER-LEVEL COLLEGES AND UNIVERSITIES (ENROLLING ONLY JUNIORS, SENIORS, AND/OR GRADUATE STUDENTS) ARE THERE IN YOUR STATE? \_\_\_\_\_ (NUMBER)
5. DOES YOUR STATE HAVE A MASTER PLAN FOR POSTSECONDARY EDUCATION? YES \_\_\_ NO \_\_\_ BEING PREPARED \_\_\_
6. HAS THERE BEEN A LEGISLATIVE MANDATE TO TWO-YEAR AND FOUR-YEAR POSTSECONDARY INSTITUTIONS TO FIND WAYS TO IMPROVE ARTICULATION AND THE TRANSFER OF CREDITS? YES \_\_\_ NO \_\_\_
7. DOES YOUR STATE HAVE ONE OR MORE FORMAL HIGHER EDUCATION ARTICULATION PLAN(S)? YES \_\_\_ NO \_\_\_ (IF YES, PLEASE SEND ME A COPY(IES) OR TELL ME HOW I CAN GET A COPY(IES).)
8. IF YOUR ANSWER TO NO. 7 ABOVE IS NO, DO YOU HAVE AN INFORMAL HIGHER EDUCATION ARTICULATION PLAN? YES \_\_\_ NO \_\_\_ (IF YES, PLEASE DESCRIBE BELOW OR ATTACH ADDITIONAL SHEETS.)
- 
- 

9. IF YOUR ANSWER TO NO. 7 ABOVE IS YES, HAS ANY FORMAL STUDY OR EVALUATION OF THE PLAN BEEN CONDUCTED? YES \_\_\_ NO \_\_\_ (IF YES, PLEASE SEND ME A COPY OR TELL ME HOW I CAN GET A COPY.)

10. PLEASE RESPOND TO THE FOLLOWING SPECIFIC ITEMS RELATIVE TO YOUR ARTICULATION PLAN:

A. CHECK ONE OR MORE

- IT IS AN INSTITUTION ARTICULATION PLAN
- IT IS A PROGRAM ARTICULATION PLAN
- IT IS A COURSE ARTICULATION PLAN

PLEASE EXPLAIN IF MORE THAN ONE PLAN IS CHECKED

---



---

B. CHECK ONE BLOCK AT THE END OF EACH OF THE FOLLOWING STATEMENTS:

THE PLAN HAS A CLEAR POLICY STATEMENT CONCERNING TRANSFER CREDIT TOWARD BACHELOR'S DEGREES FOR

	YES	NO
COURSES TRANSFERRED FROM A THIRD INSTITUTION	<input type="checkbox"/>	<input type="checkbox"/>
COLLEGE LEVEL EXAMINATION PLACEMENT (CLEP)	<input type="checkbox"/>	<input type="checkbox"/>
ADVANCED PLACEMENT	<input type="checkbox"/>	<input type="checkbox"/>
UNITED STATES ARMED FORCES INSTITUTE	<input type="checkbox"/>	<input type="checkbox"/>
COURSES TAKEN THROUGH INDEPENDENT STUDY, RADIO, TV, AND/OR COMPUTER	<input type="checkbox"/>	<input type="checkbox"/>

PLEASE INDICATE ON THE SPACE PROVIDED THE NUMBER FROM THE RATING SCALE WHICH DESCRIBES YOUR RESPONSE TO ITEMS (C) THROUGH (N).

RATING SCALE: ALWAYS-5 USUALLY-4 SOMETIMES-3 RARELY-2 NEVER-1

- \_\_\_ C. IT PROVIDES FOR TRANSFER BY STUDENTS WHO HAVE EARNED AN ASSOCIATE OF ARTS DEGREE
- \_\_\_ D. IT PROVIDES FOR TRANSFER BY STUDENTS WHO HAVE EARNED AN ASSOCIATE OF APPLIED SCIENCE DEGREE AND LESS THAN A DEGREE
- \_\_\_ E. IT PROVIDES FOR THE TRANSFER OF ALL COURSES EITHER AS REQUIRED OR ELECTIVE CREDIT PROVIDED THE FOUR-YEAR INSTITUTION OFFERS THE SAME COURSE OR ITS EQUIVALENT
- \_\_\_ F. IT PROVIDES FOR THE TRANSFER OF CREDITS FOR COURSES WITH GRADES OF D
- \_\_\_ G. IT PROVIDES ASSURANCE THAT STUDENTS WHO FOLLOW THE PLAN WILL BE ACCEPTED AT THE FOUR-YEAR INSTITUTION
- \_\_\_ H. IT PROVIDES A WAY FOR STUDENTS TO TRANSFER CREDITS FOR COURSES TAKEN BEFORE MAKING A DECISION TO TRANSFER
- \_\_\_ I. IT PROVIDES FOR EFFICIENCY OF TIME FOR STUDENTS IN THAT THEY CAN FINISH A FOUR-YEAR PROGRAM IN FOUR YEARS
- \_\_\_ J. IT PROVIDES FOR PUBLISHED CRITERIA AND PREREQUISITES FOR ADMISSION TO ANY PROGRAMS WHICH HAVE LIMITED ACCESS DUE TO SPACE OR FISCAL LIMITATIONS SO THAT TRANSFER STUDENTS HAVE THE SAME OPPORTUNITY FOR ADMISSION AS STUDENTS WHO TAKE THEIR LOWER DIVISION WORK AT THE FOUR-YEAR INSTITUTION
- \_\_\_ K. IT PROVIDES FOR AN EVALUATION BY ADMINISTRATORS AT BOTH THE TWO-YEAR AND FOUR-YEAR INSTITUTIONS
- \_\_\_ L. IT PROVIDES FOR COOPERATIVE PLANNING BY FACULTIES AND ADMINISTRATORS AT THE TWO-YEAR AND FOUR-YEAR INSTITUTIONS
- \_\_\_ M. IT PROVIDES FOR PROCEDURES FOR MODIFICATION OF THE PLAN
- \_\_\_ N. IT WORKS WELL IN PROVIDING A SMOOTH TRANSITION FOR TWO-YEAR STUDENTS TO FOUR-YEAR INSTITUTIONS

11. ADDITIONAL COMMENTS:

---



---



---

(CONTINUE ON BACK IF NECESSARY)

THANK YOU VERY MUCH FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE AND FOR THE DOCUMENTS REQUESTED OR INFORMATION ON HOW I MIGHT OBTAIN THEM. PLEASE RETURN TO:

FRANCES K. ANDREWS  
 ADMINISTRATIVE ASSISTANT TO THE PRESIDENT  
 CENTRAL CAROLINA TECHNICAL COLLEGE  
 1105 KELLY DRIVE  
 SANFORD, NC 27330

## APPENDIX D

LETTER TO THE JURY OF FOUR CHIEF ADMINISTRATIVE OFFICERS  
OF PUBLIC TWO-YEAR POSTSECONDARY EDUCATIONAL SYSTEMS CONCERNING  
A CRITIQUE OF THE QUESTIONNAIRE

LETTER TO THE CHIEF ADMINISTRATIVE OFFICERS OF PUBLIC TWO-YEAR  
POSTSECONDARY EDUCATIONAL SYSTEMS CONCERNING THE ENCLOSED  
QUESTIONNAIRE AND REQUESTING COPIES OF ARTICULATION PLANS

LETTER TO THE CHIEF ADMINISTRATIVE OFFICERS OF PUBLIC TWO-YEAR  
POSTSECONDARY EDUCATIONAL SYSTEMS WHO HAD NOT RETURNED THE  
QUESTIONNAIRE ENCLOSING A SECOND COPY OF THE QUESTIONNAIRE AND  
REQUESTING A RESPONSE

# Central Carolina Technical College

126

DEPARTMENT OF COMMUNITY COLLEGES

PHONE (919) 775-5401

1105 KELLY DRIVE

SANFORD, NORTH CAROLINA 27330

February 2, 1983

## APPENDIX D

Dear

Problems concerning articulation and the transfer of credits continue to impede the progress of students who wish to transfer from two-year schools to four-year schools in pursuit of a baccalaureate; and they are the subject of the research required for my Doctorate in Education, which I am pursuing at the University of North Carolina at Greensboro.

My dissertation will culminate in the development of an articulation model, i.e., a plan or design, to transfer credits from public two-year postsecondary institutions to public four-year postsecondary institutions. As a basis for my study, I need to assemble some data about two-year postsecondary institutions in the United States. I also wish to examine any contracts, agreements, models, plans, etc., concerning articulation and the transfer of credits which exist between two-year and four-year institutions.

I have designed a questionnaire which I plan to send to all the chief administrative officers of the two-year institutions in all fifty states; and I need to have it evaluated in terms of the nature of the survey instrument, its completeness, and the clarity of it and the cover letter. Please indicate any items on the questionnaire which are unclear or ambiguous and provide alternatives where feasible.

I know you are extremely busy, but I would be so very grateful for your help. I am enclosing a stamped, addressed envelope for your response. If it is more convenient for you, please call me collect with your suggestions (919-258-3654).

Sincerely yours,

Frances K. Andrews  
Administrative Assistant  
to the President

FKA/jed

Enclosures

# Central Carolina Technical College

127

DEPARTMENT OF COMMUNITY COLLEGES

PHONE (919) 775-5401

1105 KELLY DRIVE

SANFORD, NORTH CAROLINA 27330

March 9, 1983

## APPENDIX D

Dear

Problems concerning articulation and the transfer of credits continue to impede the progress of students who wish to transfer from two-year schools to four-year schools in pursuit of a baccalaureate; and they are the subject of the research required for my Doctorate in Education, which I am pursuing at the University of North Carolina at Greensboro. I have sought the help of Dr. Larry Blake, president of the North Carolina Community College System; and he has suggested that I write to you for some information on your system of two-year postsecondary education.

My dissertation will culminate in the development of an articulation model, i.e., a plan or design, to transfer credits from public two-year postsecondary institutions to public four-year postsecondary institutions. As a basis for my study, I need to assemble some data about two-year postsecondary institutions in the United States. I also wish to examine any contracts, agreements, models, plans, etc., concerning articulation and the transfer of credits which exist between two-year and four-year institutions.

Would you be good enough to answer the questions on the enclosed form which concern the two-year postsecondary schools in your state, the number, the type, how they are governed, and several questions concerning your articulation plan. If you have a formal or informal articulation plan, I would like to examine the model, the contract, the agreement, or any document which explains the plan. I will return it, purchase it, borrow it through the interlibrary loan, or handle it in whatever manner is satisfactory.

Thank you very much for your assistance. Hopefully, my completed dissertation will add to the body of knowledge concerning articulation between two-year and four-year public postsecondary institutions and will be used by others working on this perplexing and difficult problem. A stamped, self-addressed envelope is enclosed. I am working toward a May deadline, and I would appreciate your response within two weeks if that is possible.

Sincerely yours,

Frances K. Andrews  
Administrative Assistant to the President

FKA/jed

Enclosures

# Central Carolina Technical College

128

DEPARTMENT OF COMMUNITY COLLEGES

PHONE (919) 775-5401

1105 KELLY DRIVE

SANFORD, NORTH CAROLINA 27330

APPENDIX D

April 1, 1983

Dear

Recently, a questionnaire was mailed to the chief administrative officers of all two-year public postsecondary schools in the United States requesting an assessment of the effectiveness of their articulation plans and a description of their systems. Your completed questionnaire has not been received; and in the event it did not reach you, another one and a copy of the original, cover letter are enclosed for your use.

While the initial response has been excellent, we would like very much to include your response in the final analysis. We would also like to study your state's articulation procedures to assist us in developing an articulation model for North Carolina. If you are interested in having a copy of my final report, I will be glad to furnish one for you.

Your reply would be greatly appreciated.

Sincerely,

Frances K. Andrews  
Administrative Assistant  
to the President

FKA/jed

Enclosures