An exploratory study was conducted in North Carolina to examine the impact on teacher education programs of improved academic preparation for undergraduate teacher education majors. This report describes one such approach—the requirement that in addition to general college and teacher preparation courses, undergraduate education students complete a second major or academic concentration in a basic academic discipline in the arts and sciences. Focus group interviews with deans, teacher education program heads, education faculty, and arts and science faculty were conducted on each of 15 campuses in the University of North Carolina system. In addition, telephone interviews were conducted with students who were affected by the requirements. The findings paint a portrait of mixed positive and negative impacts of this policy, and suggest the second major requirement exemplifies the debate between those who support strong liberal arts backgrounds and those who support strong skill and methods training in the preparation of teachers. Appendixes provide focus group questions and a survey of student perceptions regarding the impact of the second major requirement on teacher education programs. (LL)
IMPLEMENTATION OF THE SECOND MAJOR REQUIREMENT FOR TEACHER EDUCATION MAJORS

School of Education
The University of North Carolina at Chapel Hill
IMPLEMENTATION OF THE SECOND MAJOR REQUIREMENT FOR TEACHER EDUCATION MAJORS

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EXECUTIVE SUMMARY

North Carolina’s education agenda is currently addressing key issues in teacher preparation reform. One such issue is the academic preparation of teachers. This study examines the impact on teacher education programs across the state of one approach to improving academic preparation, the second major for undergraduate education majors.

The second major is a coherent course of study in a basic academic discipline. It consists of 24 to 27 credit hours, 6 of which may include general studies courses. The total hours required for the education degree, including the second major, may not exceed 128 credit hours. The requirement applies to those education degrees (i.e., elementary education, special education, middle grades education, business education, physical education, industrial arts education, and health education) that previously did not include concentrated, in-depth study in an arts and sciences discipline.

Focus group interviews with deans, teacher education program heads, education faculty and arts and sciences faculty were conducted on each of the fifteen campuses in the UNC system. In addition, telephone interviews were conducted with students who were affected by the requirement. Three primary research questions were asked:

1. How has the second major requirement impacted the course of studies in teacher education programs?
2. How has the second major requirement impacted linkages between schools of education and the colleges of arts and sciences?
3. How has the second major requirement contributed to the quality of the graduates of these programs?
The impacts of the second major on the course of studies in teacher education programs were varied. For some programs there was little impact. For a number of others, however, there were reductions in the number of courses and course hours in teacher preparation, reductions or the elimination of electives, and limited room to add new courses or topics to the education program.

The policy did not seem to significantly affect linkages between schools of education and the colleges of arts and sciences. However, it did affect arts and sciences departments by increasing enrollment and thereby taxing the faculty and resources to accommodate second major students.

The third question could not be answered accurately, because of the newness of the policy and influences of other policies on the quality of students (e.g., the 2.5 minimum grade point average for entrance into teacher preparation programs). However, the majority of students and faculty reported favorable effects of the second major on students' academic and professional careers. They also expressed concern over the effects of limiting core education course work in favor of second major requirements.

Of the principles underlying the teacher reform in North Carolina, three are considered for evidence of the effectiveness of the second major mandate:

- **Make stronger standards without increasing the length of study.** Nearly all students reported difficulty in completing the education degree in four years, partly due to the increase in credit hour requirements for the second major.

- **Establish a substantive field of study in arts and sciences.** Respondents' attitudes were mixed on this issue. A number of arts and sciences faculty did not consider the credit hour requirement to comprise a substantive field of study. Other faculty and students believed the arts and science concentration to be personally and professionally rewarding.

- **Improve and strengthen the education core curriculum.** Many education faculty worried that their education core had been seriously compromised by cuts in credit hours and course requirements to accommodate the second major. They expressed concern that their graduates were going into the field unprepared.

The report concludes by stating that the second major requirement exemplifies the debate between those who support strong liberal arts backgrounds and those who support strong skill and methods training in the preparation of teachers. Although education faculty agreed with the idea that a second major would provide valuable experiences to students, they were concerned that teacher preparation had been jeopardized by a decrease in the amount of pedagogy students received. Students' responses to the second major were also mixed. The positive and negative effects observed in this study reflect the compromise made in the implementation of the second major policy—increasing subject knowledge in the arts and sciences, improving education course offerings, and limiting teacher training to four years. There is a need to modify the policy to minimized the negative effects that result from the compromise, while maintaining the advantages the policy provides.
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IMPLEMENTATION OF THE SECOND MAJOR REQUIREMENT FOR TEACHER EDUCATION MAJORS

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North Carolina, like other states, has been involved in reforms in the preparation of teachers in conjunction with its reforms of public school education. This report describes one such reform—the requirement that in addition to their general college and teacher preparation courses, undergraduate education students preparing to be teachers complete a “second major” or academic concentration in a basic academic discipline in arts and sciences.

HISTORY OF THE SECOND MAJOR STUDY

In 1985, the North Carolina General Assembly mandated the University of North Carolina Board of Governors to study “ways to upgrade teacher preparation programs to make the course of study more rigorous and more effective.” In response to this mandate, the Board of Governors established the Task Force on the Preparation of Teachers.

The Task Force studied a variety of proposals from state, regional, and national organizations for reform and restructuring of teacher preparation programs. Consequently, the Task Force generated a set of guiding principles which led to the recommendation of the second major requirement: (a) stronger standards, not longer periods of study; (b) greater emphasis must be placed in the teacher education curriculum on the arts, sciences, and humanities; and (c) the professional education core curriculum requires improvement and strengthening to assure that all teachers have sound training in child development, in effective methods of teaching, and a full understanding of the operations of schools (Task Force on Teacher Preparation, 1986).

In its final report, The Education of North Carolina’s Teachers, the Task Force included 39 recommendations that were subsequently adopted by both the Board of Governors and the General Assembly.

The second major requirement is the first of the 39 recommendations:

That all undergraduate teacher education students in early childhood education, elementary education, middle grades education, special education, and all other education degree programs also complete a second major in one of the basic academic disciplines or an interdisciplinary major. (p. 47)

Specifically, the recommendation requires the following education degree programs to include a second major in a basic academic discipline: elementary education, special education, middle grades education, business education, physical

In 1992, the North Carolina General Assembly established a new Teacher Training Task Force to “review the progress made toward implementing the 39 objectives outlined in the original task force report, ... and in particular, to evaluate the impact of the second major requirement” on teacher education programs (House Bill 1357).

The Task Force asked the North Carolina Educational Policy Research Center to examine “the second major, its impact on the course of studies of education programs, whether or not it has contributed to the quality of graduates of these programs, and if it has strengthened linkages between schools of education and other campus programs” (Teacher Training Task Force, office communication, December 9, 1992). Given this charge, the study was framed by three overarching questions:

1. How have the courses of study in teacher education programs been impacted by the second major requirement?
2. How has the second major requirement impacted linkages between schools of education and the colleges of arts and sciences?
3. How has the second major requirement contributed to the quality of the graduates of these programs?

**RESEARCH METHODOLOGY**

The results of a previous study of North Carolina state policies on teacher preparation and conversations with deans and department chairs indicated that there was considerable variation in the impact of the second major requirement on teacher education programs. In order to conduct a study of the requirement and its impact, it was necessary to employ a research strategy that would illuminate these variations and explore relevant issues and themes that might not be detected by surveys or other highly structured research methods. It was determined that the descriptive, open-ended research format afforded by multiple focus groups would provide the best means of accomplishing this end.

The research staff of the Policy Research Center conducted a two-hour focus group at each of the fifteen University of North Carolina institutions offering teacher preparation and certification programs. Deans or education division heads at the schools of education were asked to assemble a group of representatives having a rich knowledge of the second major requirement from both the school of education and the college of arts and sciences. Membership in each focus group usually included the dean of the school of education and/or the director of teacher education, two to three education faculty, two to three arts and sciences faculty, and others deemed appropriate by the dean. (The focus group questions are in Appendix A.)

To prepare for the focus groups, a document analysis of the course of studies was conducted for each of the education programs at the fifteen UNC institutions. During the focus groups, it was discovered that a number of changes in the teacher preparation programs had been made by the universities to better meet the requirement of the second major and to accommodate new policy initiatives and state competencies.

Additionally, teacher education students and/or recent graduates impacted by the second major requirement were surveyed. Deans at ten institutions responded to a request to recommend five students for the study. Securing accurate addresses and telephone numbers in order to contact the graduates proved to be problematic. As a result, twenty-four individuals were interviewed. (See Appendix B for the student survey.) Of
these, fifteen were elementary education majors, two middle school majors, four special education majors, and one each whose major was in physical education, industrial education, and agricultural education. Thirteen of those interviewed were currently teaching, eight were still in school, one was looking for a teaching position, one was in a non-related field, and one was working in a childcare center.

**DESCRIPTION OF THE SECOND MAJOR REQUIREMENT**

The following section reports on the criteria governing the second major, development of second major options across campuses, the resulting course of studies for education majors across universities, and a description of the most frequently selected second major choices reported by program areas.

**Criteria Governing the Second Major**

Once the second major requirement was approved by the Board of Governors, implementation guidelines were developed and the criteria were sent to universities by UNC General Administration. The criteria governing a second major were:

- The second major is a coherent course of study in a basic academic discipline comparable to, but not identical with, the course of study for a major in that discipline.

- The second major requires a minimum of 24 credit hours in the discipline. It may exclude some of the cognate requirements of the discipline.

- Up to six credit hours taken in fulfillment of general studies requirements may also be counted toward the second major.

- The total hours required for the education degree, including the second major, may not exceed 128 credit hours. (University of North Carolina General Administration, memo, April 1993)

Second majors can be developed from among the following basic academic disciplines: Area Studies, Biological Sciences, Fine and Applied Arts, Foreign Languages, Letters, Mathematics, Physical Sciences, Psychology, Social Sciences, and Interdisciplinary Studies. (See Appendices C and D.) For a second major to be approved by General Administration, the university must already offer a major in that basic academic discipline.

**Development of Second Major Options**

In the initial phase of implementation, there was considerable confusion regarding the term "second major," which caused problems in arts and sciences departments, registrars' offices, and schools of education. Registrars and arts and sciences faculty interpreted the term to mean a degree-bearing course of study identical to an arts and sciences major. Therefore arts and sciences chairs first submitted or recommended a 48-hour to 60-hour program of study for the second major. Clarification was necessary to reduce the hour load to a 24- to 27-hour "coherent course of study" comprised of 100, 200, and 300 level courses. Since the second major is not equal to a true major, universities now internally use terminology that more closely reflects the actual program course of study. Terms such as "academic concentration," "second concentration," and "disciplinary focus area" are used to refer to second majors.

Second major offerings vary considerably across campuses. Universities consistently reported wanting to develop additional interdisciplinary second major offerings for students, but
were prohibited from doing so because there was not a pre-existing interdisciplinary major on their campus. Majors in some disciplines were offered at constituent institutions, but some arts and sciences faculty chose not to develop a second major for education because they did not believe that students could receive an adequate grounding in the discipline in 24 credit hours. Finally, some subject areas that had been academic concentrations (e.g., health for physical education majors) were not available for a second major because the subject was not an approved arts and sciences major.

Second Majors by Specialty Areas

Both faculty and students were asked what they perceived to be the most frequently selected second majors. Psychology was the most frequently selected second major for elementary, special education, physical education, and business education majors. Middle grades education students, on the other hand, often selected second majors in subjects that were compatible with middle grades certification. No clear patterns in selection of second majors could be determined from the responses regarding other education majors.

When students were asked why they chose a particular subject for a second major, most respondents stated that their choice was based on personal interest. "Numbers have always intrigued me," or "I've always enjoyed history," were recurrent responses. The next most frequently cited reason was it would help them as teachers, which was often indicated by those choosing psychology. Finally, three interviewed mentioned that a second major would help them find jobs outside of education; and two cited lack of choices. Said one student, "No one subject was better than another, it seemed the best choice of the limited ones available." Some respondents cited combinations of these reasons.

Faculty reported some students having difficulty aligning a second major with their education degree program and career goals. For example, faculty asserted that industrial arts students could benefit more directly from a second major in a technical field in applied sciences (e.g., engineering), which is not offered as a second major option. Faculty further stated that some second major options were inappropriate for education majors (i.e., an elementary education major seeking a mathematics second major, doing content...
work in advanced algebra and trigonometry at the expense of more appropriate math courses for teaching young children).

Faculty also reported that students often selected second majors based on the facility of scheduling classes, the level of difficulty of the courses, or the extent to which courses could also count for six hours of general college credit. Students would have rather selected a second major based on personal interest, or relevance to what they would be teaching in the future.

**Impacts of the Second Major Requirement**

Focus group participants were eager to discuss the second major requirement and provide information relevant to its implementation and effects. The findings reported here are based on the fifteen focus group discussions, and where appropriate, the student telephone interviews.

**Impact of the Second Major Requirement on Teacher Education Programs**

The most significant finding regarding the impact of the second major requirement on teacher education programs was the remarkable variety with which it impacted institutions and specific teacher preparation programs. Institutions differed not only in the teacher education programs they offered but also in their philosophy regarding the importance of pedagogy. This was reflected in the number and type of education courses required of majors and the sophistication with which particular programs had been developed. Some institutions required many hours in education courses, while others required relatively few. Some universities had developed nationally renowned programs while others were very local in nature. The second major requirement and its criteria and guidelines, however, treated all institutions and programs in the same way. Because of the variation in the field, the impacts of the policy were quite varied.

For some programs at some universities, the second major requirement made no impact. However, in order to accommodate the additional course work of the second major requirement, most education faculty reported eliminating, collapsing, and/or combining courses primarily from the teaching area major curriculum. Courses were often "collapsed" by reducing credit hours yet keeping course content the same. In other instances, schools of education combined courses by eliminating some content and substituting content from another course. Universities reported reducing 3-hour courses to 2-hour courses in order to keep education program offerings intact, but with less in-depth coverage. Additionally, as 3-hour courses became 2-hour courses, faculty had to increase the number of courses that they taught in order to retain their full-time status. These kinds of changes were considered to be problematic and detrimental to the quality of the teacher education programs affected.

Physical, vocational, health, agricultural, and industrial education programs reported the most negative effects. Faculty reported elimination of important skills and methods courses to accommodate second major course requirements. For example, health is a recommended component of physical education curricula because physical education teachers are generally expected to teach health in the public schools. In the past, physical education majors routinely secured health as an additional certification endorsement. Yet, in physical education programs, health methods on most campuses were either eliminated or reduced (as were coaching and skills courses) in order to accommodate the second major requirement. Graduates of these programs no longer have the dual certification sought by school districts and are, therefore, less competitive for teaching positions.
Many middle school faculty reported that the quality of their programs were weakened, and in one case eliminated, by the new requirement. Prior to the requirement, middle grades graduates could be certified in two of four subject areas: mathematics, language arts, social studies, or science. Now, however, faculty report many students receive certification in only one subject area, due to the additional requirement of the second major. Faculty assert the second major could benefit middle grades graduates if it were interdisciplinary. Because a second major is not consistent with certification requirements, many students are staying an additional semester or year to acquire sufficient course work for a second subject certification. Others are leaving middle school programs for other degrees. This was a particular concern at minority institutions.

Demands on public schools are increasing; North Carolina and other states seek teachers with increased competencies in multiculturalism, technology, and special education, as well as training in counseling, conflict resolution, and family life issues. Faculty perceive the second major requirement as an impediment to the inclusion of these kinds of course offerings in the education core curriculum, because there is no longer any flexibility to add new courses to the program or even substitute new courses or topics for existing ones.

Most universities reported that due to the second major, education majors had few or no electives remaining anywhere in their program of studies. Faculty were seriously concerned that with the elimination of electives, education majors were the only students on campus with no leeway in their program of studies to explore liberal arts disciplines. Further, the lack of flexibility seriously affected students' ability to graduate in four years. Several respondents indicated that students needed to declare their education major as entering freshmen, know what they needed, and be able to take courses in the proper sequence in order to graduate in four years. The schedule was very tight and resulted in many students attending summer school or an additional semester in order to complete the program. Working students, those entering education after their freshman year, and transfer students could seldom complete the program in four years.

Impact of the Second Major Requirement on Arts and Sciences Programs and Faculty

The development of the second major was most often accomplished using existing university committees. The work of the committees on the development and implementation of the second major sometimes resulted in greater interaction among departments across campus and schools of education, but did not change fundamental relationships between the two groups.

The requirement caused noticeably increased enrollments in psychology, English, and history. Arts and sciences departments enjoyed the additional enrollment and recognition, but often did not have faculty and resources to accommodate more and larger course sections. In general, arts and sciences faculty found education students indistinguishable from other students, often acknowledging that they were as good as, or better than, their regular majors.

Arts and sciences departments, at both small and large institutions, often had technical difficulty providing courses that education students needed to fulfill the requirements of their second major. In particular, smaller institutions had difficulty offering enough classes or scheduling classes often enough for particular student populations (e.g., evening students). Education students faced problems scheduling two different, highly sequenced course programs (the education program and the second major program). Institutions often had to devise alternative strategies and course substitutions to accommodate scheduling difficulties and course closeouts.
In some cases, faculty reported that education students were at a disadvantage in upper level arts and sciences courses because prerequisites to those courses had not been required in the second major prescribed program. However, other faculty reported that while the prescribed second major course work did not always list the prerequisites, students were required to take these courses prior to enrolling in arts and sciences courses. This further increased the total number of courses education students were required to take.

Impacts of the Second Major Requirement on Teacher Education Students

Full implementation of this requirement did not begin until the fall of 1989. The class of 1993 was the first graduating class affected by this policy. With only one graduation year from which to draw data, it is too soon to tell what impact the second major requirement has had, or will have, on the quality of future teachers. In addition, other policy initiatives aimed at improving the quality of students entering the teaching profession were underway concurrent with the second major requirement. These included the following requirements for acceptance into teacher education programs: (a) the 2.5 minimum grade point average which began in 1984; and (b) the increase in the minimum entrance score requirement of the communication skills and general knowledge scores on the NTE. These policies prohibit isolating the second major requirement as the cause for general changes in teacher quality, however, the data gathered from the student survey and the focus groups provide some preliminary evidence of specific impacts that may be attributed to the second major.

Overall, students interviewed had a favorable opinion of the second major requirement. Seventeen students/graduates characterized their opinion as good; five said they had a bad impression of the second major, while two were indifferent. Those who had a good general opinion of the second major commented frequently that "more education can't hurt you." Other positive responses were: "Concentrated knowledge is important for educators." "My second major helped broaden my views and made me more open-minded." Those who were critical of the second major felt there was not enough "relevance" to their career goals, and that they were "short-changed" on methodology courses that would have been beneficial. Said one graduate, "I think it was more a hindrance than helpful."

Of the 13 who are currently teaching, 3 said the second major had no effect on their teaching ability, and 1 indicated a negative impact: "It caused the elimination of some courses that would have been more beneficial or relevant." Nine respondents believed the second major had a positive impact on their teaching ability. "My second major helped me to better understand children's development and behavior." "I couldn't teach without it," said another. "I only had the equivalent of general education otherwise." Five found the second major to be personally, but not professionally, beneficial. Others found the second major both personally and professionally profitable: "I am so grateful that someone told me to take a second major."

Faculty considered the relevance and compatibility of second majors to teaching to be important to students and felt some students had difficulty finding a compatible second major. This was particularly true for students in elementary, special, middle grades, physical, and health education. Many of these students chose psychology, English, and history, but faculty felt other second majors would have benefited these majors more. For instance, health education was not approved as a second major on any campus, yet, with increasing societal pressures on public schools to provide current health information to students, health education has increasing relevance and importance to teacher preparation programs.
Those students concerned with their marketability must decide whether to: (a) stay additional semesters to get needed courses; (b) transfer out of education and into an arts and sciences discipline and obtain certification through an alternative route; or (c) transfer to a private or out-of-state university. Often, students having finished all their general studies and education core courses, find themselves staying additional semesters solely to complete the requirement of the second major. Faculty were concerned that such a financial burden on students and/or their families was without any clear benefit to their long-range teaching goals.

In contrast, the second major provided useful career options for many graduates. Faculty reported some education students targeted their second major for post-graduate study, or found themselves equally marketable in careers outside of education. These faculty felt a broadened liberal arts background added to the educational experience of these students. Graduates became "subject area specialists" at the schools in which they taught and felt this had increased their professionalism.

Finally, a few faculty noted the NTE for middle grades education assesses knowledge of broad interdisciplinary subjects causing North Carolina graduates to be at a disadvantage. As a consequence of the single disciplinary nature of the second major requirement and its incompatibility with the NTE, these faculty are concerned their graduates may not score as well.

Additional Findings

In spite of the logistical difficulties, the majority of faculty agreed with the value of a broad liberal arts education for teachers.

Faculty viewed the second major as an attempt to provide a solid liberal arts background to education majors. For the most part, faculties from arts and sciences and education supported a strong liberal arts background for education majors, but many questioned the effectiveness of the second major requirement in its current form as the means of accomplishing this end. Some arts and sciences faculty were concerned that the low credit hour requirements for the second major weakened its legitimacy; education faculty were particularly concerned that the hours taken away from the education core curriculum, to accommodate the second major, had seriously compromised the professional preparation of their students. They cited research indicating the need for a broader, multidisciplinary approach to teaching while the second major prepares teachers more narrowly in a single academic discipline.

The intent of the policy is not clear.

Focus group participants found the intent of the second major requirement unclear for two reasons. First, there was confusion in the initial stages of implementation of the policy because of its name, "second major." This was viewed as being synonymous with a degree or with an existing arts and sciences major. This misunderstanding was clarified to a degree by UNC General Administration which suggested the terminology "academic concentration" for the requirement. However, the expression "second major" continues to be used and the confusion regarding its technical meaning still can be found.

A second area of confusion is somewhat more problematic. The Task Force on the Preparation of Teachers described the intent to have a well educated teaching force and hoped to achieve that end through requiring an academic concentration in the arts and sciences. This infers that the intent of the second major is to improve the quality of teacher education graduates in the same broad manner as the policy of requiring a 2.5 GPA to enter a teacher preparation program. However, in public discourse the policy is described as one that
will produce better teachers. Education faculty argue that there needs to be a much stronger linkage between the second major and teaching.

Faculty thought the policy suggested that education is not a legitimate academic major.

Education faculty were concerned that the requirement reflected a belief by policy makers that education was not a rigorous or legitimate academic discipline and/or knowledge about teaching had little effect on the quality of classroom instruction. They pointed out that education majors, like arts and sciences majors, are required to take two years of traditional liberal arts courses in their general college requirements, but then, unlike arts and sciences majors, must pursue both a major in their chosen field of education and a significant number of hours in another discipline. They feel this sends a negative statement to students about the academic validity of education as a professional discipline. They question why arts and sciences majors have a broad enough liberal arts background to proceed with their major requirements when education majors, having completed the same general college requirements, must take additional courses in arts and sciences in order to receive their baccalaureate degrees.

The mandate did not take into account the unique nature or quality of existing teacher education programs.

Focus group participants felt that their individual universities and programs were unique, but the “top-down” nature of the mandate allowed no room for individual differences. They believed the mandate was based on an assumption that all education programs were similar in quality and composition within schools and across the state, and therefore would be impacted similarly. Instead, faculty felt some education programs were improved while others were seriously weakened as a result of the second major requirement.

A number of students are moving out of education programs at state colleges and universities as a result of this requirement.

Faculty reported some students leaving their education degree programs. Some students changed their major to arts and sciences, completed their degrees at the state university, and then sought teacher certification at private institutions. Others left the state university and enrolled in a private institution to seek the kind of degree program they could no longer get from the state institution, or to avoid the second major requirement. In particular this occurred for physical education students, seeking a concentration in health, for students in middle school programs, and for students seeking jobs in other states where the second major is not required.

FOCUS GROUP RECOMMENDATIONS

Upon the conclusion of each of the focus groups, members were asked what recommendations they would like to make to the Teacher Training Task Force regarding the second major requirement. The following represent the most often cited recommendations from deans, directors of teacher education programs, and faculties from arts and sciences and education.

1. Allow flexibility in developing inter-disciplinary arts and sciences second majors at institutions that do not currently offer them.

Some universities are authorized to offer the interdisciplinary major but others are not. Schools that do offer such majors argue that the broader knowledge acquired from an interdisciplinary second major is much more germane to what teachers are required to do in school. The majority of universities expressed the importance of designing interdisciplinary majors, especially for elementary and middle school programs.
2. **Allow universities to develop second majors that are more relevant and attuned to the education major.**

Under the current guidelines, a university may only develop a second major from existing majors in arts and sciences. However, faculty would like the flexibility to create a rigorous program of studies in subjects not included in arts and sciences that would be more compatible with some education majors. For some programs this might mean developing a second major in a discipline for which an arts and sciences major does not exist, or developing a substantive major in another discipline outside the College of Arts and Sciences such as agriculture, health, sports medicine, engineering, etc.

Faculty also suggested linking the second major to additional certification. Education majors often questioned the utility of additional credits to fulfill a second major requirement. The 24-credit hour requirement does not fulfill certification requirements. Additional teacher preparation courses are often required. To gain certification, students have to take more courses and consequently spend more time in school.

3. **Keep the second major requirement with modifications.**

Many universities were accepting of the second major requirement, but offered suggestions to enhance its impact. Some faculty felt the second major could be improved by reducing the number of credit hours. By lowering the 24-27 credit hour requirement for the second major to 12-15 hours, as in an academic minor, schools of education could restore critical skills and method courses, while maintaining the benefits of an additional academic discipline. This would also allow schools to up-date courses as needed on issues facing educators, such as technology, multi-cultural education, technological innovations, conflict resolution, violence and special needs populations.

Universities recommended that additional resources (laboratory equipment, faculty, library) and technical assistance be provided to develop and implement the second major requirement more effectively. Some arts and sciences departments found the influx of additional students from education to be more than they could absorb given their resources, and they indicated additional resources would facilitate further implementation.

Only three universities expressed the desire for the total elimination of the second major requirement due to the negative impact it has had on the quality of their education degree programs. These faculty believed the requirement had weakened the education core curriculum, and that the second major was not germane to what teachers are required to do in school. Education majors would be better served, in their opinion, by greater breadth and depth in a contemporary education curriculum which equips them to meet the increasing demands placed on schools.

4. **Keep the four-year education degree program.**

Given the fact that so many education majors were finding it impossible to complete graduation in a four-year time frame, a few universities suggested that perhaps it was time to consider a five-year teacher preparation program to accommodate a quality teacher preparation program with a strong liberal arts preparation. However, a majority of the universities were adamant against extending the four-year teacher preparation program into a five-year program. They were especially concerned about the costs to students of the additional year of study.
SUMMARY

The findings paint a portrait of mixed positive and negative impacts of this policy. To understand the findings more clearly this section summarizes the results in two ways: (a) responses to the research questions; and (b) the principles underlying the second major requirement.

The Research Questions

What has been the impact of the second major requirement on the course of studies in teacher education programs?

There were three major impacts on the course of studies in teacher education programs. Institutions reported: (a) reduction in the number of courses and course hours in teacher preparation; (b) reduction and elimination of electives; and (c) limited room to add new courses or topics to the education program. The cuts in education courses were viewed as mildly problematic in some programs and as devastating in others. Many education faculty, regardless of the cuts they experienced, believed some important content for teachers was no longer being offered. They worried about their students being adequately prepared, about sustaining the quality and reputations of their teacher preparation programs, and about maintaining their accreditation status.

The introduction of the second major has reduced the course of study so much that there is almost no room for exploration or change in an education student’s four-year program. Planning the baccalaureate so that a student may graduate in the regularly allotted eight semesters is very difficult. Most of the institutions participating in this study reported that students were not able to complete an undergraduate degree in education in four years without attending summer school, and some had to attend school a fifth year or longer to complete their degree.

How has the second major requirement impacted linkages between schools of education and the colleges of arts and sciences?

Implementation of the policy did not seem to consistently affect pre-existing strong or weak relationships between education and arts and sciences, although anecdotal stories of new relationships and stormy conflicts were reported. Instead, the policy had strong impacts on the most often selected disciplines for second majors. The influx of students into classes in arts and sciences caused overloads, faculty and other resource shortages, and problems for registrars, advisors, faculty, and students. However, for some, the increase was a “blessed burden” as their courses filled to capacity and beyond. Further, many arts and sciences faculty developed a greater appreciation for education students because of their academic ability and motivation.

How has the second major requirement contributed to the quality of the graduates of these programs?

It is too soon to determine the effects of the policy on graduates. This will be a very difficult question to answer at any time because a number of policies designed to improve the quality of education graduates were implemented at approximately the same time. It will also be difficult to answer because the intent of the policy is vague (i.e., that teachers will be well educated, Task Force on the Preparation of Teachers, 1986) and not directed to a specific outcome.

However, the majority of students reported a favorable impact on their teaching ability and overall professionalism. Faculty affirmed the second major requirement was beneficial to students, but were concerned that coursework constraints would result in less qualified graduates.
Possible Outcomes of the Second Major Requirement

Another way to summarize the outcomes of the study is to consider the principles guiding the Task Force on the Preparation of Teachers outlined in the final report (1986, pp. 46-47). Of the principles, three are appropriate for consideration of the effectiveness of the second major mandate: (a) stronger standards without increasing the length of study; (b) a substantive field of study in arts and sciences, and (c) an improved and strengthened education core curriculum. In addition, other outcomes anticipated by the Task Force are included.

Stronger standards without increasing the length of study

Nearly all campuses reported that due, in part, to the additional number of credit hours prescribed by the new arts and sciences second concentrations, students are taking longer to graduate. This is true despite the fact that the number of credit hours in the education core have been reduced. Clearly this principle is not being upheld across the state and in many programs. It is perhaps the greatest area of concern because of the vigorous attempts by state policy makers to retain a four year teacher education program.

A substantive field of study in arts and sciences

The attitude of arts and sciences faculty regarding the second major requirement was mixed. Some were supportive, some were ambivalent, and some viewed the concept so negatively that they would not allow a “second major” in their discipline. Many faculty, both in arts and sciences and in education, did not consider 24-27 hours in a discipline to be a substantive field of study. Conversely, a number of students and faculty found the concentration in a single arts and sciences discipline to be both personally and professionally rewarding.

An improved and strengthened education core curriculum

Many education faculty worried that their education core had been seriously compromised by cuts in credit hours and course content to accommodate the second major. The courses described by the original Task Force as most important to teacher education (history and philosophy of education, computer and technology applications, parent counseling and classroom behavior management, and cultural diversity) were often the very courses education faculty first cut because of the need to meet basic competency requirements. Faculty at many schools of education feared further cutbacks and were concerned about their inability to fit new courses designed to meet emerging needs into their programs.

Other outcomes anticipated by the Task Force

Other possible outcomes of the second major anticipated by the Task Force on the Preparation of Teachers (such as increased flexibility of the teacher workforce, increased employment options for graduates, easier routes to certification for elementary and secondary students) have occurred in some instances but not in others. In general, physical education and middle grades students were reported to be less competitive in the marketplace and less flexible as teachers in the workforce. These students generally had to stay additional semesters in order to obtain additional or dual endorsements. If they did not, they lost valuable certification endorsements that would provide them with more career options. Students in other areas described instances of greater graduate school and career options, both in and out of education, as a result of the second major.
CONCLUSIONS

Implementation of the second major requirement in North Carolina illustrates the philosophical conflict between those who support strong liberal arts backgrounds and those who support strong skill and methods training in the preservice preparation of teachers. Progress in this area of reform will need to include efforts to achieve greater consensus among key players regarding the preparation of teachers.

The policy itself suggests teachers should have an in-depth educational experience in an arts and sciences discipline. With the general college requirements, the addition of 24 to 27 hours in the degree program of education majors led, in most instances, to reductions in the amount of pedagogy that students received. Where this happened, education faculty were almost unanimous in their opinion that the preparation of their students to be teachers had been jeopardized. It was not that education faculty found fault with the inclusion of the second major; indeed, most supported the idea. It was that they believed critical skills and methods necessary for their graduates to be successful, marketable teachers were no longer being provided.

The differences of opinion that surfaced in this study suggest there is a need to engage in activities that would narrow the gap in beliefs and practice among policy makers and those implementing policy. Some of the differences could probably be resolved with modest adjustments in the policy to take into account the variation in requirements in special subject teaching areas.

The implementation of the second major policy with its problems and successes reflects the compromises made in the policy.

The policy sought to increase subject knowledge in the arts and sciences, to improve education course offerings, and to limit the teacher preservice training to four years. In practice, students did receive more instruction in the arts and sciences, education course offerings were reduced with unknown effects, and a number of students were unable to finish their teacher preparation training in four regular academic calendar years. Arts and sciences faculty assert that education students are not actually completing a major in arts and sciences, and education faculty are concerned that students are not receiving a comprehensive education major. The policy is a compromise between traditional teacher preparation at the undergraduate level and several five-year teacher preparation recommendations currently being proposed (Holmes Group, 1986; Carnegie Forum, 1986). The positive and negative effects observed in this study reflect the compromise. There is a need to modify the policy to minimize the negative effects that result from the compromise while, at the same time, maintaining the advantages that the policy provides.

AFTERWARD

As described in the methodology section, this was an exploratory study which provided insights and information from the deans, faculties, and students from all of the University of North Carolina teacher preparation programs. From a policy perspective the results suggest a number of collaborative efforts to modify the policy and make it more effective. From a research perspective the results pose a number of questions that warrant further, in-depth study.
REFERENCES


Appendix A

Focus Group Questions
Name of University/Date

30 Minutes

QUESTION A: Describe the second major at your institution
5 minutes 1. What is the second major called at your institution?
5 minutes 2. How does the second major compare to a similar major in arts and sciences?
   - types of courses/course levels?
   - number of courses required?
   - prerequisites (waived)?
5 minutes 3. What kinds of criteria did you use to select the courses for the second major?
5 minutes 4. Describe the process a typical student might go through to select a second major. Who advises students during this process?
5 minutes 5. What have you found to be the most popular second major in the school of education? Why?
5 minutes 5. What have you found to be the most problematic second major? Why?

40 Minutes

QUESTION B: What has been the impact of the second major requirement on the course of studies in teacher education programs?
10 minutes 1. What has been the impact of the second major on the education core? (Extensive study in one or more disciplines for depth in the chosen teaching area.)
10 minutes 2. What has been the impact of the second major on the professional core? (Professional education studies which provide the student with the generally accepted core of knowledge in the theory and practice of teaching.)
5 minutes 3. What has been the impact on the total program requirement?
   - electives
   - total hours
   - graduation rate
10 minutes 4. For Name of University, discuss the impact specifically on (as appropriate):
   (1) early childhood education
   (2) middle grades education
   (3) special education
   (4) physical education
   (5) health education
   (6) business education
   (7) marketing education
   (8) industrial education
5 minutes 5. Describe any problems your institution has experienced implementing the second major requirement.

35 Minutes

QUESTION C: What has been the impact of the second major requirement on the relationship between schools of education and arts and sciences?
10 minutes 1. Who was involved in planning and developing the second major at your institution (i.e., committee of selected arts and sciences faculty and education faculty, committee of representatives from each arts and sciences department and education department, etc.)
10 minutes 2. What process did arts and sciences and education go through to develop the second major? How did you decide what a second major was? How did you decide what courses would comprise the second major?
5 minutes 3. Was there an impact of the second major on the arts and sciences program?
   - student enrollment overloads?
   - revised curriculum?
10 minutes 4. How has the second major affected the relationship between the School of Education and the College of Arts and Sciences at your institution, if at all?

10 Minutes

QUESTION D: Has the second major requirement contributed to the quality of the graduates of these programs? If so, How?

10 Minutes

QUESTION E: What would you suggest should be done to improve the second major requirement?
APPENDIX B

Survey of Students

Survey of Student Perceptions Regarding the Impact of the Second Major Requirement on Teacher Education Programs

September 1993

Student NAME: ________________________________

"Hello, my name is ____________________________ I am calling for the North Carolina Educational Policy Research Center which has been commissioned by the Teacher Training Task Force to study the impact of the second major requirement on teacher education programs. We are currently gathering input from recent graduates North Carolina teacher education programs concerning the impact addition of the second major requirement on your preparation for the teaching profession.

You have been specially recommended by ** dean **, Dean of the School of Education at *University* as a someone able to provide valuable feedback for this study.

Do you have a few minutes to answer a some questions about your undergraduate experiences in your education major?

IF NO, "When would be a more convenient time for me to call back?"

Date and Time to call back: ________________________________

IF YES: "First let me get some background information from you."

Background Information

1. The records show that you are a 1993 graduate of *University*. Is that correct?

____ YES ____ NO

(If NO, provide correct information)

2. What was your major in education?

____ Elementary education __________ Agricultural education

____ Middle education __________ Business education

____ Intermediate education __________ Physical education

____ Special education __________ Industrial education

____ Health education __________ Other (specify) __________

3. What was the academic concentration or second major which you selected? (See attached list)

4. Are you currently teaching? ________________________________

____ YES TEACHING?

In what content area?: ________________________________

At what grade level?: ________________________________

____ NOT TEACHING. Where employed? ________________________________
Survey Questions

"NEXT I WOULD LIKE TO ASK YOU A FEW QUESTIONS ABOUT YOUR ACTUAL EXPERIENCE WITH THE SECOND MAJOR REQUIREMENT as an education major"

1. Why did you select *SECOND MAJOR* as your second major?

2. What kind of help did arts and sciences faculty provide for you in planning the courses and sequence of courses for your second major requirement? Please Explain:

3. Did the second major requirement pose any significant hardship in completing graduation requirements in the four year time frame? _____ NO _____ YES

   If YES, Please Explain what you think might have caused those hardships (e.g., scheduling conflicts, meeting pre-requisite requirements, required summer school to graduate on time, etc.)?

4. How do you think the second major has impacted your overall teaching ability?

5. What is your general opinion about the second major requirement?

   _____ Good? _____ Bad? _____ Indifferent?

6. Are there any changes that you think could improve the second major program? Please specify.

*****************************************************************************

Thank you very much for taking time to answer these questions. The information you have provided will be given close attention by the Task Force as it considers ways in which teacher training in North Carolina can be enhanced.

Would you like us to send you the summary of our findings? (If yes, verify address from attached sheet.)
Introducing the Center

The North Carolina Educational Policy Research Center was established in 1991 through a contract to the School of Education at the University of North Carolina at Chapel Hill from the State Board of Education. The mission of the Center is to strengthen the information base for educational policy decisions in North Carolina to enhance outcomes of schooling for children. The Center seeks to accomplish this mission by:

- conducting policy research and analyses;
- preparing research reports examining broad policy issues, policy briefs providing concise information about specific issues, and quarterly newsletters;
- disseminating research-based information on educational policy issues to North Carolina policymakers, educators and community leaders;
- providing a forum for the discussion of educational policy issues; and,
- training future educational leaders in the conduct and use of policy research.