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An Analysis of the Impacts of the Illinois Board of Higher Education's Admission Requirements on Selected High Schools in East Central Illinois

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An Analysis of the Impacts of the Illinois Board of
Higher Education's Admission Requirements on
Selected High Schools in East Central Illinois

(TITLE)

BY

Stephen C. Selle

Field Experience

~~THESIS~~

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

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IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
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An Analysis of the
Impacts of the Illinois Board of
Higher Education's Admission Requirements
on Selected High Schools in East Central Illinois

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ABSTRACT

The Illinois Board of Higher Education in 1985 instituted mandatory subject admission requirements for all state universities beginning in the year 1990. Subsequent legislative action by the Illinois General Assembly has moved these requirements back to 1993. This field experience investigated the possible impacts of these requirements on rural schools of under 500 students in east central Illinois. A cover letter explaining the purpose of the study and a two page questionnaire were mailed to twenty-one schools. Sixteen schools in the counties of Vermillion, Ford, Iroquois, Kankakee, and Will responded and were the focus of the study. Enrollment patterns in college preparatory classes and vocational classes before and after the implementation of the 1990 IBHE requirements were analyzed. The study also determined changes implemented by schools since the inception of the 1990 IBHE requirements in the areas of curriculum additions and deletions, staff additions and deletions, scheduling and graduation requirements. The study identified methods of maintaining a flexible curriculum to meet the needs of all students. Results of the study indicated that in the majority of the schools surveyed a significant amount of growth has taken place, since the enactment of the 1990 IBHE requirements, in the number of college-preparatory courses offered and in the enrollment of students in upper level mathematics and science courses. There has also been a

larger number of students enrolled in social studies and foreign language classes in the schools surveyed since the enactment of the 1990 admission requirements. The study also determined that during this same period of time the majority of the schools surveyed experienced significant enrollment declines in vocational subjects, and the majority of courses dropped from curriculums of these schools have been vocational subjects. The greatest decreases in enrollments of the schools surveyed in this study have been in the vocational areas of industrial arts and home economics. Twenty-five percent of the schools surveyed have cut staff within the last three years with most of the programs eliminated being in the vocational areas. The majority of the schools surveyed have instituted some type of scheduling change since the enactment of the 1990 IBHE requirements that has allowed students to enroll in additional academic subjects during the school day. The study determined that over two-thirds of the schools surveyed have increased graduation requirements since the enactment of the 1990 IBHE requirements. Finally, the study determined that among those schools surveyed the most common method of maintaining curricular offerings is to alternate course offerings on an every-other year basis, especially in the upper level science and vocational subject areas.

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Chapter 1

Overview of the Problem

Introduction

The state of American schools and their seeming inability to meet the needs of a powerful and growing America has been echoed in a number of reports over the past decades by various critics. As far back as the 1930's and 1940's, the educational system of this country has come under attack (Passow 1984). The years of 1957 and 1983, however, seem to be two major turning point years in the history of education in America.

Following the Soviet launch of Sputnik in 1957, substantial concern existed over the loss of a competitive edge in technology in the U.S. Critics blasted the deplorable state of mathematics and science education in this country, and called for a return to basic subjects, academic discipline, and a raising of standards. Congress responded by passing the National Defense Education Act of 1958 and America seemed to be on the path toward serious educational reform (Passow 1984).

The 1960's and 70's saw American education influenced by the Civil Rights movement and the Vietnam War. The emphasis during this era of education was to create one's own curriculum with electives, options, and alternatives. By the early 1980's, critics charged that students could graduate

from high school by earning credits in courses such as Rock Poetry and Baja Whale Watching (Rothman 1988).

The second major turning point in the history of American educational thought was in 1983 when A Nation at Risk was issued by the National Commission on Excellence in Education (NCEE). This report cited a number of major concerns, but most of these seemed to center around the theme that America was in serious danger of losing its competitive edge in the area of technology, business, industry, and military superiority (Passow 1984).

The amount and cost of necessary remedial education by the nation's business and military sectors seemed to point to the fact that American education was failing to get the job done. An unacceptable level of functional illiteracy among both adults and children proved to many critics that schools needed to be reformed. Critics also pointed out that there were not enough rigorous courses required for graduation throughout the nation's school systems.

Subsequent reform reports following A Nation at Risk report called for raising standards, increasing graduation requirements, and mandating a common core curriculum for America's high schools. Several of the reports recommended that more mathematics, science, English, social studies, and foreign language be required for graduation, with fewer electives. In effect, most of the reform reports proposed a

standard college bound curriculum with fewer, or no, electives required for obtaining a high school diploma.

This reform movement of the early 1980's had a widespread impact on education in Illinois. In the area of high school curriculum, the General Assembly in 1983 passed new mandates which required all high schools in the state to establish the following minimum graduation requirements:

3 years of English

2 years of mathematics

2 years of social studies

1 year of science

1 year of either foreign language, art, music, or vocational education

Students were also required to take physical education, driver education, safety, consumer education, and health.

Even before the reform reports of the early 1980's, the Illinois Board of Higher Education was conducting studies in the late 70's as to why more and more remedial classes in mathematics and English were needed for incoming high school graduates at the state's public universities. A report from the Joint Education Committee in 1977 called for a reduction in the amount of remedial education needed at the state's public universities. In 1981, the Joint Education Committee, showing continued concern over deficiencies in basic writing skills, approved policies that were designed to improve

writing skills at all of the various levels of education (IBHE September 1983).

During 1983, the Illinois Board of Higher Education began to take a serious look at its role and response to the reform movement being generated by A Nation at Risk and the other reform reports on education. In February 1983, a special committee on economic development appointed by the IBHE recommended that higher education's role in improving economic development could be best served by emphasizing that admission and baccalaureate degree requirements should include course work in the areas of communication skills, mathematics, and the sciences (IBHE September 1983).

In response to the education reform movement and its concern over the increasing amount of scientific and technological change taking place, the IBHE began a series of intensive studies of admission requirements. First the board looked at the various existing admission requirements at both state universities and private colleges in the state. The IBHE also completed a study of admission requirements in other states around the country. These studies all seemed to indicate to the IBHE that some type of specific subject area admission requirements were needed to better prepare college bound students for work on a baccalaureate degree.

In September, 1984, the IBHE took the first step towards changing admission requirements by recommending that specific

subject requirements be put into place by the various governing boards of the state's public universities. The board gave these various governing boards approximately one year to show the IBHE just what progress toward change or actual changes in admission requirements were being considered by the state universities.

In July, 1985, the IBHE discussed the changes that were being considered or changes that had been made by the state universities' governing boards in the areas of specific subject admission requirements. The conclusions drawn at this meeting and subsequent meetings were that these governing boards had not gone far enough in subject requirements for admission, and that now requirements varied from university to university creating an air of confusion over this matter (IBHE October 1985).

On November 5, 1985, the IBHE voted to mandate specific subject requirements for all incoming freshmen students who would be entering a state university in the fall of 1990. Subsequent legislation passed by the General Assembly moved this deadline back to 1993. These changes were:

4 years of English (emphasizing written and oral communications, and literature)

3 years of social studies (emphasizing history and government)

3 years of mathematics (emphasizing introductory through advanced algebra, geometry, trigonometry, or fundamentals of computer programming)

3 years of science (emphasizing laboratory sciences)

2 years in foreign languages, art, or music (IBHE and ISBE March 1988).

This study has been designed to look at the impact that these admission requirements have had on high school curriculums in smaller high schools in the rural areas of east central Illinois. The study will analyze the effects and changes, if any, on vocational course offerings, college preparatory course offerings, graduation and credit requirements, scheduling, and staffing needs due to any curriculum changes. The administrative responses to these changes will be noted and discussed in detail.

Statement of the Problem

The smaller rural high schools in east central Illinois were faced with maintaining vocational programs in the face of declining enrollments, while at the same time offering a sufficient number of college preparatory classes to allow students to meet the IBHE mandated entrance requirements. Administrators have had to respond to the limited amount of class time that students have to schedule a vocational class as a result of state mandates for high school graduation and IBHE mandated entrance requirements. Maintaining both a vocational and college preparatory curriculum in the small rural high school to meet the needs of all students in the face of declining enrollments and declining school finances

has been a challenge for the rural school administrator.

The setting within which this field experience was carried out was the east central area of Illinois. High schools of under 500 students in the counties of Iroquois, Vermillion, Ford, Kankakee, and Will were the focus of this study. These schools are all primarily rural in nature and they are contiguous to each other; most have similar demographics and student populations that are somewhat similar to each other.

The baseline data for this field experience was obtained by analyzing enrollment figures in specific course offerings during the 1985-86 school year before the new IBHE admission requirements were enacted. These figures were compared with enrollments in the same subject areas during the school years 1986-1989 to determine if assumptions on curricular emphasis and changes were true.

The school years of 1986-87, 1987-88, and 1988-89 were surveyed and analyzed since these last three school years are those which have been impacted by the IBHE 1990 admission requirement mandate.

The writer assumed that a study of enrollments in college preparatory and vocational courses during this four year span would provide valuable data to make judgements on the effects on high school curriculums that the new IBHE requirements have made. The population studied included approximately 3,900 students in 16 schools surveyed.

The author also believed that surveying schools about changes made in course offerings, scheduling, graduation and credit requirements, staff additions or deletions, and methods of expanding high school curriculums, that were a result of the 1990 IBHE requirements, could prove to be a valuable source of information for smaller, rural schools. This information should provide a valuable exchange of ideas on how administrators have successfully dealt with these changes.

The data gathered for this field experience should be helpful in assisting administrators in smaller, rural high schools in solving the dilemma of maintaining vocational programs for the non-college bound, in the face of declining enrollments, while at the same time making sure that the curriculum included a sufficient number of upper-level courses in mathematics, science, social studies, English, and foreign language for the college bound student. The study will also provide data from schools surveyed that should assist administrators in solving the problem of scheduling enough class time for students to take elective classes in the vocational subject areas while still meeting the IBHE subject mandates for admission, as well as other state and local graduation requirement mandates.

Project Objectives

The study was designed to accomplish the following

project objectives for participating high schools:

- 1) Identify and determine administrators' reactions to impacts and problems created by the IBHE admission requirements on high school curriculums
- 2) Determine if the vocational curriculum has been reduced in high schools surveyed as a result of the 1990 IBHE requirements
- 3) Determine changes in scheduling that have resulted from the new IBHE requirements
- 4) Identify any changes in graduation and credit requirements that have resulted from the IBHE requirements
- 5) Determine if staffing requirements have changed as a result of impacts on high school curriculums by the IBHE requirements
- 6) Determine administrative responses to implementing the 1990 IBHE requirements while maintaining a high school curriculum that meets the needs of the non-college bound student
- 7) Determine action taken by administrators to solve problems created by the IBHE requirements
- 8) Determine if course enrollment patterns have changed in the last three years as a result of IBHE requirements

Limitations of the Study

1) The focus of this study was limited to 21 high schools in east central Illinois of under 500 student population. One may assume that similar results could be found in a study of schools of similar size, but the results of this study should not be generalized to all schools of similar size in rural areas of Illinois.

2) No data was able to be collected on college freshmen who completed the IBHE requirements to determine if fewer

were enrolled in remedial classes and if they had higher g.p.a.'s than those who had not completed IBHE requirements. This was due to time limitations of the study.

3) A study of ACT scores to determine if taking IBHE mandated courses increased scores on the ACT was not done due to time limitations of the study.

4) Time and resources did not permit the author of this study to determine if more high school students are enrolling in a college preparatory curriculum when, perhaps, some should be enrolling in a vocational-technical type of curriculum to prepare for careers in areas that do not require a baccalaureate degree.

Definition of Terms

The following definitions are provided so that a more accurate understanding of this study can be gained by the reader:

1) Illinois Board of Higher Education (IBHE)

requirements to mean:

4 years of English, emphasizing written and oral communications and literature

3 years of social studies, emphasizing history and government

3 years of mathematics, including introductory through advanced algebra, geometry, trigonometry or fundamentals of computer programming

3 years of science, emphasizing laboratory science

2 years of electives in either foreign language, music, or art

2) Electives - High school classes that a student voluntarily "elects" or chooses to take. These classes are not required for high school graduation.

3) Core curriculum - A basic group or sequence of high school courses considered necessary for students to complete so that they will be better prepared for college or technical training after high school graduation.

4) High school curriculum - The courses and programs of study offered in grades 9-12 that will eventually lead one to acquiring a high school diploma.

5) Core academic/College preparatory classes - Those high school courses that are primarily designed to prepare high school students for obtaining a baccalaureate degree. Subject areas would include foreign languages, mathematics (algebra, geometry, trigonometry, pre-calculus), English (literature and composition), social studies (World History, U.S. History, Economics, Civics, Sociology, Psychology).

6) Vocational - Any program of study designed to train a person for a particular occupation, business, profession, or trade. Subject areas would include vocational agriculture, industrial arts (shop), home economics, and business classes.

7) College-bound - Students who are planning on entering a four year college or university with the intent of completing requirements for a baccalaureate degree.

8) Non-college bound - Those students who plan on entering the work force, or trade/technical school or community college to complete a one- or two-year training program following high school graduation.

9) Sample - The twenty-one schools and administrator school officials who were surveyed and studied as the basis for this field experience.

10) Population - The students from rural high schools of under 500 in Illinois who were enrolled in college-preparatory and vocational courses during the school years 1985-1989.

11) Base-line year - The school year 1985-1986 that was surveyed for course enrollments in vocational and college preparatory subjects to establish base-line data that would allow the author to compare course enrollments in those subjects before the enactment of the IBHE requirements, with course enrollments in those same subject areas after the IBHE requirements were enacted.

Chapter 2

Rationale, Related Literature, and Research

Rationale

The purpose of this study is two-fold. First, the study will determine the impact of IBHE admission requirements on high school curriculums in schools of under 500 students in the east-central part of Illinois. Secondly, this study will explore the methods that administrators have used to ensure that college-bound students have had the opportunity to meet these requirements while still maintaining a curriculum that meets state and local graduation requirements, and provides opportunities for the non-college bound student.

The smaller rural high school of east central Illinois now has to offer mandated college preparatory courses that may or may not have been in existence in their curriculums prior to the IBHE actions of 1985. Administrators faced the challenge of scheduling these classes with a staff that in many small districts already had a large number of preparations. Even being able to employ mathematics and science teachers in smaller districts of east central Illinois, where salaries are not perceived as competitive, presented a real challenge to administrators in the face of these new IBHE requirements.

Most smaller schools obviously wanted to maintain vocational programs for non-college bound students, but the new mandated IBHE requirements meant that a student in a high

school with only six class periods would spend 75% of his/her available time in the mandated college-preparatory classes. Fewer college-bound students in the elective vocational classes would bring enrollments down in these sections which, in the face of a dwindling school tax base, might lead school officials and school boards to consider cutting vocational programs.

The results of this study will be shared with the high school administrators and other school personnel who participated in the study. The data from the study will either confirm or deny suspected trends in high school curriculums and will determine if there is a consensus of opinion among school personnel surveyed that the IBHE requirements have negatively or positively impacted high schools in this study.

Information on how administrators have reacted to solving any problems created by these IBHE requirements will be provided to those persons who responded to the survey. This aggregate data should serve as a resource of ideas for problem solving in this area, as many of these smaller rural high schools face similar problems as noted previously.

Related Literature

Reform movements over the last few years have almost all dealt with the issue of what should be in the high school curriculum. The Gross and Osterman Report of the 1970's indicated that the major issues confronting American

education during this time were civil rights, racism, authoritarianism, the Vietnam War, and the irrelevancy of the curriculum in our schools. During this period of time students insisted that school curricula should be determined by their own needs and interests. The idea that all students needed to know a given body of knowledge was outdated, and in its place was the idea that students should be allowed to choose which path of learning was best for them based on their unique needs (Passow 1984).

National Views on Curriculum

The philosophy on curricula noted above seemed to take a firm grasp on curriculum development in American high schools during the remainder of the 1970's and into the early 1980's. By 1983, critics such as Terrell Bell, Secretary of Education, were openly critical of the "cafeteria style curricula" in American high schools where students could pick and choose courses that would eventually lead to obtaining a high school diploma (Rothman 1988).

In 1983, A Nation at Risk, a major education reform report, was released by the National Committee on Excellence in Education (NCEE). This report received widespread publicity and eventually had a tremendous impact on education reform at the state and local levels. The main thrust of the report was that if educational practice was not reformed, the United States would become vulnerable to foreign competitors in the fields of industrial production, commercial

enterprise, and military strength. The report noted that this crisis in education, if not dealt with, would lead to a weakened American economy and national defense.

The authors of A Nation at Risk did a detailed analysis of high school curriculums and found a lack of enrollment in science and mathematics classes. At the same time, they found that industry and the military were being forced to provide a large amount of remedial training due to the low skill levels of high school graduates.

The NCEE recommended that high schools set higher graduation requirements, and that colleges and universities set higher subject requirements for admission to degree programs. In effect, the commission was calling for a mandated common core curriculum that emphasized more mathematics, science, and foreign languages. The commission called for the establishment of the so-called "new basics" in high school curriculums across the country. These "new basics" included course work required for graduation in the following subject areas: English, mathematics, social studies, science, computer science, and at least two years of a foreign language (Passow 1984).

Following the Nation at Risk report, other outspoken critics and reformers advanced ideas on what the focus should be in high school curriculums. Most of these individuals agreed that high school graduation requirements must require more academic course work and expect students to take more of

these courses to earn a high school diploma.

The National Science Board (NSB) Commission on Precollege Education in Mathematics, Science, and Technology (1983) recommended that state governments require the following for high school graduation: 3 years of mathematics and 3 years of science, including at least one semester of computer science. The NSB Commission also called on the federal government to establish admission requirements for college that would include 4 years of science and 4 years of mathematics.

Boyer (1983), in his report on high schools, proposed a core of common learning to be required for graduation that included:

- 1) Language, 5 units, emphasizing grammar, writing, literature, speech, and foreign language.
- 2) History, 2 units, emphasizing U.S. history, western civilization, and non-western studies.
- 3) Civics, 1 unit.
- 4) Science, 2 units, emphasizing physical and biological sciences.
- 5) Mathematics, 2 units.
- 6) One-half unit each of technology, health, work seminar, and an independent project during the senior year.

Sizer (1988) still believes, as he did when he authored the book, Horace's Compromise, that high schools should do away with electives and concentrate on English, mathematics, science, social studies, humanities, and the arts. He firmly

believes that high school curriculums should be simplified and educators should then concentrate on doing a better job with teaching the essential courses. He feels that the most important vocational training is a sound general education where basic educational skills are taught.

Goodlad (1983), another noted educational leader and reformer, in his book, A Place Called School, also calls for a core curriculum for high schools. Goodlad's idea is to establish what he calls the "five fingers of knowledge" which each high school student would be required to master. These fingers of knowledge would include:

- 1) 18% required coursework in literature and language
- 2) 18% required coursework in mathematics and sciences
- 3) 15% required coursework in social studies, arts, society, and vocations
- 4) 10% required coursework in physical education
- 5) 10% required coursework would be in electives

Goodlad's plan for high school curriculums would call for about two-third's of the required coursework to be "common" for all students. The remaining one-third of a student's credits towards graduation would be from a limited selection of electives. He warns, however, against specific mandated subject requirements for high school graduation and for university admissions. Instead, he feels schools should provide for better and greater balance and commonness of

study in his five fingers of knowledge (Goodlad 1983).

The reactions of the various states to these reform reports were very similar: high school graduation requirements were stiffened and the so called "new basics", outlined in A Nation at Risk, or variations of these, were established as required coursework for a high school diploma.

The New York State Board of Regents put together an Action Plan that increased requirements for a high school diploma by mandating coursework in English, science, mathematics, and social studies. Critics of this plan voiced the concerns that only college-bound students would be able to meet these requirements, and that the dropout rate would soar (Passow 1984).

In California, Honig (1985) reports that the Hughes-Hart Educational Reform Act was passed by the state legislature in 1983. Graduation requirements were increased and students were now required to enroll in more rigorous instructional programs, with more emphasis on academics and less on vocational programs.

Proponents and supporters of the Hughes-Hart reform act make the claim that vocational education is important only to reinforce skills taught in regular programs. They claim, as does Honig (1985), that vocational education is not a substitute for stronger academic study. Honig (1985) further states that a strong concentration of academic coursework in

English, science, and mathematics is the best type of "vocational" education to prepare our youth for the world of work.

The state of Illinois was also eventually affected by the spirit of educational reform of the early 1980's. As early as 1981, the State Board of Education (SBE) began a comprehensive review of state education mandates. The purpose of this study was to determine which course requirements could or should be changed.

State Views on Curriculum

A definite climate of concern over educational reform began to be evidenced in Illinois in the wake of A Nation at Risk. In the spring of 1984, Speaker of the House, Michael Madigan, conducted an invitational statewide conference on educational issues. Area meetings were held across the state during the fall and winter of 1984-85 to solicit comments and suggestions on improving the Illinois educational system (State Board of Education 1985).

In January of 1985, the Illinois Commission on the Improvement of Elementary and Secondary Education, which had solicited reform recommendations from individuals and organizations across the state for almost a year and a half, issued its final report, Excellence in the Making.

In 1985, the state legislature, after studying the above mentioned reports and recommendations, took action on the

education reform issue and passed Senate Bill 730 and House Bill 1070. These bills, together referred to as the Education Package of 1985, made sweeping changes in the state's educational system.

Even before this, the Illinois General Assembly, in the 1983 spring legislative session, had passed new mandates for the high school curriculum which specified the number of years to be completed in specific subject areas in order for a student to obtain a high school diploma (IBHE September 1983).

The new mandated graduation requirements which took affect in the 1984-85 school year required 16 units of credit that were to include:

- 1) 3 years of language arts
- 2) 2 years of mathematics, one of which may be related to computer technology
- 3) 1 year of science
- 4) 2 years of social studies, including 1 year of U.S. history, or a combination of U.S. history and American government
- 5) 1 year of either music, art, foreign language, or vocational education

Existing requirements that were maintained included:

- 6) 1 semester of health education
- 7) 9 weeks, 50 minutes a day or the equivalent, of consumer education for grades 10-12
- 8) 30 clock hours of classroom instruction in driver education and safety education

- 9) Each student must pass exams on the Declaration of Independence, Constitution of the U.S. and Illinois, and must know proper use and display of the flag

Most of the reform reports of the 1980's proposed the standard college-bound program with very few if any electives, very little "curricular differentiation", more of a common curriculum that was to be taken by all students (Passow 1984).

Criticism of Recent Curricular Trends

As noted, a number of states have responded to the reform movement in the area of mandating curriculum by stiffening graduation requirements and placing more emphasis on the academic subject areas of English, mathematics, science, and social studies.

There is a criticism of this promotion of the college-bound curriculum in our nation's high schools. Clark (1985) feels that educational leaders and policymakers need to study in more detail just what the consequences and impacts are when graduation requirements are increased. He feels it may be very wrong to push the comprehensive high school in this direction. Instead, he feels reformers should look more towards creating specialized schools that could share special programs with other schools.

Clark (1985) advocates greater variety in types of school units that currently operate within and outside of the comprehensive public high school. He argues against rigidity and structural uniformity in mandating graduation

requirements because the end result is boredom and alienation among a student body that already suffers too much from these enemies of education

The Grant Foundation Commission on Youth (1988) strongly criticizes the idea that a college-bound curriculum is the best for all students. This commission believes that this type of a curriculum may result in less learning, especially for those students who learn with hands-on activities or for those who work at their own pace.

The Grant Commission claims that while vocational education classes today do not necessarily prepare students for a specific job, these classes provide a hands-on learning approach that is very effective for acquiring skills and general abilities that allow the student to be successful in a wide range of activities.

The Grant Commission's (1988) conclusions were that American high schools were shortchanging the non-college bound youth of their nation which comprise about 50 percent of the high school age population. The commission called on educational leaders to make high schools better centers of "flexible learning" in order to prevent students from dropping out.

Other critics of current reform logic in the area of curriculum argue along the same lines as the Grant Commission that a "hands-on" type of practical learning should be

emphasized just as much as a "pure-thought" type of learning. Resnick and Barryman (1988) claim that current education reform logic is flawed and actually runs contrary to the realities of what workers will face when they are on the job.

These researchers argue that students must be educated with a curriculum that emphasizes the use of tools and hands-on learning, along with learning the rules of thought and general and theoretical principles. They advocate that just as much emphasis should be placed on practical types of learning, apprenticeships, alternative schools combining work and service experience with classroom learning, as well as all the support that is currently being given to "test-driven" academic programs (Lewis 1988).

These educators point out that all of the recent research at the federal level is towards the interests of the college-bound student. New research in the field of vocational education needs to be undertaken that looks at the connections of classroom instruction as it relates to what the workplace demands to determine in what direction our curriculum needs to be moving and responding.

Over the past few years, the national leadership has ignored half of the students in our high schools who are not college bound. The belief that there is one best education system for all, emphasizing academics, has been promoted by leaders in the Department of Education according to Resnick and Barryman (1988).

When one looks at the views of former Education Department Secretaries, Bell and Bennett, on curriculums and what high schools should be teaching, one can see why Resnick and Barryman make such claims about what the national leadership has been promoting. Bell, who has served as U.S. Commissioner of Education under Presidents Nixon and Ford and as Secretary of Education from 1981-1985 under President Reagan, has outlined his plan for what should be in the American school curriculum in his book, The Thirteenth Man: A Reagan Cabinet Memoir. Bell's number one requirement of a school's curriculum is that it should emphasize the mastery of the English language. Bell (1988) calls for a high school curriculum that requires four years of English that concentrate on the learning areas of reading, comprehension, and writing. These four years of English should include classical literature, other options for students with different interests, frequent writing emphasizing grammar and word choice, and exercises to further develop the spoken language. Bell's English curriculum would also require a minimum number of books to be read before a student could advance to the next grade.

In the area of mathematics, Bell would require a minimum of three years for high school graduation. Mathematics at the secondary level should be adapted to college- and non-college bound students. Bell would also require three

years of science for high school graduation to combat what he calls scientific illiteracy. The only other area besides English, where Bell's subject requirement for high school graduation would be four years, is social studies. In his words, "no subjects are more crucial to informed citizenship than the social studies," (Bell 1988). As one can note, a strong academic core curriculum is a must in the eyes of former Secretary Bell.

Former Education Secretary Bennett, in his "James Madison High School, a Curriculum for High School Students", has also proposed a core curriculum that would stiffen content and strengthen course requirements for high school graduation. Bennett's proposal stresses acquisition of language skills and a shared body of knowledge; about three-fourths of a student's time would be spent in required academic coursework.

Bennett's requirements for a high school diploma include:

- 4 years of English
- 3 years of mathematics
- 3 years of science
- 3 years of social studies
- 2 years of a foreign language
- 1 year of art and music

He believes that all students should be exposed to such a curriculum and that low achievers will respond if schools raise their expectations (Rothman 1988).

Bennett's "James Madison" proposal follows very broadly the recommendations outlined in A Nation at Risk (1983). He firmly believes that too many students are earning credits in non-academic classes, and, as a result, are not getting the necessary basics for a good solid education. Bennett also believes that content and quality are just as important as the number of courses required. Bennett's proposal is not without its critics. Tuttle of the American Vocational Association claims that Bennett's curriculum fails to meet the needs of 80 percent of the high school students who never earn a college diploma. Cawelti, President of the Association for Supervision and Curriculum Development, is critical of Bennett's curriculum because it allows no room for interdisciplinary instruction or other innovations and does not provide enough instruction for social issues, such as AIDS prevention, etc.

Research on the IBHE Entrance Requirements

Previous Illinois Curricular Initiatives

In this spirit of educational reform, the Illinois Board of Higher Education actually began a move towards increasing admission requirements for public universities as early as 1977. It was in that year that the IBHE conducted a study of the number and the cost of remedial classes at the state's community colleges and public universities. The study indicated that a large amount of time and money was being

spent on remedial education at these institutions (IBHE September 1983).

In September 1978, a Joint Education Committee consisting of members of the IBHE and the Illinois State Board of Education met and adopted policies designed to reduce the amount of remedial education in colleges. Resolutions 1-5, adopted by the committee in September of 1978, included:

- 1) school systems must provide opportunities for all students to develop the necessary skills in reading, writing, and computation that are sufficient to allow them to enter college
- 2) the State Board should assist local districts in early identification of problems in skill development to allow correction of these problems
- 3) universities should reduce remedial programs, with the goal of phasing out remedial education at this level within five years
- 4) community colleges should increase their role in responding to the remedial needs of post-secondary students, while universities decrease their role in this area
- 5) the state board, the IBHE, and state universities should further study the causes behind the increase in the need for remedial education and take steps to correct the situation (IBHE September 1983)

In 1981, the Joint Education Committee addressed a second major concern--deficiencies in basic writing skills noted among post-secondary students. Once again this committee approved four resolutions designed to focus attention on the improvement of basic writing skills. These

resolutions included:

- 1) teacher education programs should place greater emphasis on preparation for the teaching of writing skills
- 2) the state board should encourage and assist districts, service regions, and universities in improving the teaching of writing skills
- 3) writing skills within the curriculums of schools need to be improved
- 4) the dissemination of results on research in the teaching of writing skills needs to be made available for school districts (IBHE September 1983)

IBHE Initiatives 1983

During 1983, with the spirit of reform running high as a result of the publication of A Nation at Risk, the IBHE began taking steps that would eventually lead to the establishment of specific subject requirements for entrance to the state's university system. In February of 1983, a Special Committee on Economic Development of the IBHE reported that the most effective way to improve the effectiveness of higher education's role in economic development would be to develop admission requirements that would include more course work in communication skills, mathematics, and science (IBHE September 1983).

During the following month in March of 1983, the Joint Education Committee issued the following statement:

"An immediate and special goal of education in Illinois should be to increase the emphasis on mathematics, the sciences, and communication skills at all levels of education in order to

improve the preparation of individuals for work, citizenship, and social well-being in a world of increasing scientific and technological change (IBHE September 1983)."

The IBHE had drawn the conclusion by this time that admission and degree requirements at public universities should include specific subjects. The next logical step was to study existing admission requirements of the state's public universities to determine what subjects, if any, were required for entrance at the various state universities.

The results of the study indicated that:

- 1) eight of ten universities specified which subjects all students should complete in high school to be eligible for admission
- 2) five of the eight either strongly recommended, encouraged, or urged students to complete certain subjects in high school
- 3) only the University of Illinois specified subjects to be completed as a minimum requirement (these included 3 years of English, 1 year of algebra, and 1 year of geometry)
- 4) Illinois State University specified 3 years of English and 1 year of algebra, only if test scores were not acceptable

This same study also showed that four universities were in the process of considering changes in their admission requirements. Three of the four that reported, indicated that they were considering specific subject requirements for incoming freshmen (IBHE September 1983).

The IBHE staff comment on these studies previously mentioned, seems to show that staff members early on were

convinced of the following:

- 1) ACT and SAT test score requirements still do not cause students to choose those subjects that best prepare them for a baccalaureate degree
- 2) specifying subjects is not enough; the actual content of the courses required is also important
- 3) specifying subjects would help ensure that access and choice are not lost because of inappropriate course selection at the high school level
- 4) specifying a college prep program is comparable to the State Board's designation of fundamental areas of learning
- 5) the IBHE's statutory powers have given it the responsibility and right to establish minimum admission standards (IBHE September 1983)

The IBHE staff also agreed at this time that admission requirements for students at community colleges in baccalaureate degree transfer programs should be the same as those for students being admitted to public universities. Also, a major staff argument on establishing specific subject admission requirements was the idea that high school students needed to keep their options open, and the best way to do this was to complete college preparatory subjects that would prepare students for admission to all public universities and to all baccalaureate degree programs.

The IBHE staff took the position that general education requirements at universities in the subject discipline areas, suggest that a student maintain a continuous course of study in the discipline through high school to be better prepared

for work in the subject area at the university or college level. The staff identified the common elements of general education at the various public universities to be four years of study in:

- 1) English
- 2) social studies
- 3) mathematics
- 4) natural science

Two years of study in a foreign language should also be included since it is required for some baccalaureate degree programs (IBHE September 1983).

The IBHE staff further recommended that specific subject area content include the following in each subject:

- 1) English - written and oral communication
- 2) social studies - history and government
- 3) mathematics - introductory through advanced algebra, geometry, trigonometry, and fundamentals of computer programming
- 4) sciences - biology, chemistry, and physics

All of these recommendations by the Illinois Board of Higher Education were reviewed by the Joint Education Committee and the State Board of Education. The IBHE statement of recommended subjects to help students better prepare for work towards a baccalaureate degree was distributed to public and private schools in early 1984 to assist students in their subject selection for the 1984-85 school year. The IBHE was already moving closer to the concept of mandatory specific subject admission requirements, but still favored the idea of allowing various public

universities to set their own requirements (IBHE September 1983)

The recommendations outlined above were discussed and acted on at the September, October, and November 1983 IBHE meetings. A number of questions and concerns about these specific course recommendations were voiced at these meetings by members of the IBHE. Among these questions and concerns were the following:

- 1) Is it appropriate to require a college preparatory program of all students?
- 2) Will access to universities be restricted?
- 3) Are the number of years required too excessive?

The IBHE staff responded to each of these concerns by replying that this curriculum is only intended for those students who plan on pursuing a baccalaureate degree; it is not for all students. Implementation of these admissions requirements will allow enough lead time for high school students to take these subjects, and other post-secondary options will still be available to those who do not meet these requirements. The number of years required in each subject area is reasonable and necessary because of the various university general education requirements (IBHE September 1983).

Additional concerns that the IBHE staff did not respond to at this time included:

- 1) English requirement should also emphasize literature and the classics, as well as written and oral communications.
- 2) Social studies requirement should include course work in other social sciences, and not just history and government.
- 3) Would the new requirements cause an exporting of students to other states?
- 4) If a student already has the knowledge needed in a subject area, why should they have to take four years of the subject?
- 5) Not all schools would be able to offer the college preparatory curriculum that is being recommended.
- 6) The IBHE should be realistic about the small number of new math and science teachers available to teach this curriculum.
- 7) How will the IBHE effectively communicate these recommendations to the high schools? (IBHE September 1983)

Still more questions and concerns were brought up at the November, 1983, IBHE meeting. Minutes of this meeting indicate that Dr. Roberts of the Faculty Advisory Committee argued that more data was needed on the implications of enacting these new admission requirements. He was concerned over the potential costs to schools and the availability of teachers, especially in the areas of mathematics and science. Dr. Roberts favored the commissioning of feasibility studies that would provide information on the fiscal and programmatic consequences of establishing new admission requirements (IBHE November 1983).

Dr. Roberts also called for the establishment of a

timetable for implementation of these new admission requirements to allow time for high schools and universities to adjust to these changes. The IBHE took action at this meeting to establish such a timetable. The first step in the process of implementing these new admission requirements was the IBHE resolution request of public universities to begin an internal review of their subject requirements for admission. Universities were to report back to the IBHE on July 1, 1984, about changes in admission requirements that they had made, or the progress they had made, in making changes in admission requirements (IBHE September 1983).

The next step in the timetable was the establishment of a July 1 deadline for all changes in admission requirements to be submitted by the state university governing boards. The IBHE would then review and approve changes for each university as a part of its minimum admission requirements.

IBHE Initiatives 1984

The September, 1984, IBHE meeting saw a lively amount of discussion on the following topics:

- 1) comparison of other states with Illinois' subject requirements for a high school diploma
- 2) the new proposed admission requirements submitted by the various state universities
- 3) a study of private college admission requirements in the state of Illinois

During the spring and summer of 1984, the IBHE staff conducted a nationwide study of high school subject

requirements for a high school diploma and discovered that 29 states exceeded the Illinois graduation requirement of 3 years of language arts, and 13 states exceeded the Illinois requirement of 2 years to social studies for a high school diploma. It was also determined that only 5 states exceeded Illinois' 2 year mathematics requirement, but 25 states exceeded the 1 year science requirement that is mandated in Illinois (IBHE September 1984).

This study, along with other factors that will be mentioned, seemed to further convince the IBHE staff and board members that they were moving in the right direction with their recommendations of establishing specific subject requirements for admission to universities. The IBHE staff, in particular, seemed to be further convinced that, with high school graduation requirements around the country being raised to a level which in many instances was just below their recommendations for university admissions, they were definitely in line with their proposed requirements.

At this meeting, the various state university admission requirement proposed changes were discussed in detail. A comparison of the proposed subject requirements showed that some universities were requiring only three years of English, while others were requiring three and one-half years, and still others were requiring four years of English without a foreign language, and only three years of English with a foreign language (IBHE September 1984).

In the area of social studies, all but two of the universities were proposing a two year requirement. Illinois State and the University of Illinois at Urbana-Champaign were proposing no subject requirement in this area, unless, at the U of I, a student was applying for a specific college.

The mathematics requirement was a minimum of two years being proposed by all the state universities, but specific subjects that would be acceptable varied from algebra, to geometry, to advanced math, to "college preparatory" mathematics, to anything other than pre-algebra or basic mathematics.

In the area of science, two universities proposed a one year requirement while all the rest proposed a requirement of two years. Some of the universities would accept natural sciences, some physical, some laboratory sciences, and some a combination of physical, natural, or laboratory.

Finally, in the area of foreign language, none of the state universities proposed a minimum number of years to be completed in the study of a foreign language as a condition of admission (IBHE September 1984).

The IBHE staff and a majority of the board members, after discussing the various and different proposed admission requirements, were concerned whether the universities had gone far enough. Chancellor Shaw (1984) from Southern Illinois University felt that little more was being required

than what was mandated in the 1983 amendments to the Illinois school code. Dr. Huther (1984) of the IBHE staff was very concerned that the various new admission requirements being proposed by the different state universities would cause confusion among high school students. He felt that students would be guided better if all institutions had similar requirements.

A study of private college admission requirements conducted by IBHE staff was also discussed at the September meeting. This study seemed to further confirm the idea that specific subject area requirements to prepare high school students for a baccalaureate degree was a concept endorsed and promoted by private colleges and universities. Sixty-one private institutions were polled, forty-eight responded, and half of these had specific subject admission requirements in English, social studies, mathematics, and science. In addition to these requirements, nearly one-fourth had specific foreign language requirements for admission.

The following concerns were voiced at the September, 1984, IBHE meeting:

- 1) Admission requirements proposed by universities differed little from 1984 diploma requirements, and were actually lower than diploma requirements in other states.
- 2) University proposed admission requirements did not require students to take anything beyond the minimum required for a diploma.

- 3) Four years of a subject taken in some high schools differed greatly from four years of the same subject in other high schools.
- 4) "We should not so heavily load the freight relative to the college-bound, the temptation is to forget the non-college bound and move resources from one area to another with disastrous consequences" (Lazerson 1984).

The IBHE met again in November of 1984 and at this meeting additional concerns over the impacts of the IBHE proposed requirements were discussed, responses to concerns brought out at the September meeting were discussed, and finally the IBHE unanimously approved a resolution on recommended changes in admission requirements for all state universities.

First of all, additional concerns over the proposed IBHE admission requirements that were discussed included:

- 1) The groups affected most by these requirements, according to board member Mr. Penny, would be the small high schools and low income and minority districts. There was a serious need to find additional sources of revenue for these districts so they could meet requirements.
- 2) The Faculty Advisory Committee addressed the IBHE on these specific issues of concern:
 - a) willingness of state legislature to provide financial support for the secondary school system in its efforts to provide a specific college prep curriculum
 - b) maintaining access for those who have traditionally been deprived of adequate preparation for college admission
 - c) increased financial support at the secondary level should not be at the expense of maintaining quality higher education in the state of Illinois

- 3) Mr. Bogle, representing the UPI, favored deferring action on the IBHE recommended requirements until additional data could be gathered on the following specific questions and concerns:
 - a) Which districts already offer a wide range of college-prep courses?
 - b) Which districts could provide the mandated courses with a re-allocation of resources?
 - c) What would be the impact on the non-college curriculum if resources were re-allocated?
 - d) Which districts could not offer required courses under current funding conditions?
 - e) Would the new requirements increase quality through exclusion?
 - f) With no new resources for high schools, would there be a significant decrease in the number of students in public universities?
- 4) The non-traditional student, minority students, and older students would be excluded from admission to state universities with these new requirements.
- 5) The time frame for implementing these requirements was too short.
- 6) New requirements will create a need for more money, and these reforms cannot be accomplished at the existing funding level (IBHE November 1984).

The IBHE staff addressed some of these concerns at the November meeting by arguing that, by increasing subject requirements, the IBHE would be addressing its own concern over the quality of education in the state, with the specific need to increase the emphasis on mathematics, science, and communications within high school curricula (IBHE November 1984).

The IBHE staff also called for a fall 1990 implementation date for its proposed admission requirements to allow a new generation of high school students to complete the proposed required high school subject pattern.

The staff proposed that universities provide for provisional admittance so that non-traditional adult students, as well as students who do not have the proposed subject requirements, would be allowed access to their institution.

The IBHE staff proposed at this meeting that instead of 4 years of English, mathematics, social studies, and science, and 2 years of foreign language, that all state universities adopt the following uniform admission requirements:

- 1) 4 years of English, emphasizing oral and written communication, and literature
- 2) 3 years of mathematics, emphasizing introduction to algebra through advanced algebra, geometry, trigonometry, and computer programming
- 3) 3 years of science, emphasizing laboratory science
- 4) 3 years of social studies, emphasizing history and government
- 5) 2 years of foreign language, or music, or art

The staff felt that these requirements would exceed the existing high school diploma requirements and better prepare students for baccalaureate degree programs (IBHE November 1984).

At this meeting, Dr. Shaw addressed additional concerns and argued that the rationale for increasing the admission

requirements to the levels recommended by the IBHE staff includes the facts that research from the College Board and American College Testing shows that increased time on task has resulted in higher college entrance exam test scores. The conclusion drawn from this is that increased study in college preparatory classes will obviously improve a student's preparation for college which should lead to that student being better prepared to complete a baccalaureate degree program (IBHE November 1984).

Dr. Shaw also pointed to studies in Kentucky and Ohio where admission course requirements were increased, that showed more high school students were enrolled in classes designated as college prep. At Ohio State University, specific course requirements were established for the 1984 freshmen class, such that students not meeting these requirements would need to take courses to make up course deficiencies with no credit earned. The result was that 52 percent of the freshmen met the requirements in 1984; in 1982 only 34 percent would have met the requirements under the same standards. Shaw's conclusions from these studies are that Illinois students will respond to what the IBHE says they will need to be prepared for college (IBHE November 1984).

At the conclusion of the November 1984 IBHE meeting, Mr. Campbell moved that the board approve the resolution to

recommend that all public universities consider for adoption the high school subject pattern noted earlier of:

- 4 years of English
- 3 years of mathematics
- 3 years of social studies
- 3 years of science
- 2 years of foreign language, art, or music

The board unanimously approved this motion and strongly urged public universities to adopt this subject pattern as their minimum requirements for admission as they prepared their final reports to the IBHE before the July 1, 1985, deadline.

IBHE Initiatives 1985

The next significant discussion and action by the IBHE over the proposed admission requirements took place in September of 1985. At this meeting, the IBHE reviewed the various July 1st reports from the state universities concerning their new admission requirements, expressed its concerns, and further reaffirmed its position and rationale on establishing specific and uniform subject admission requirements. The board also noted recent reform legislation and appropriations passed by the state legislature which seemed to be addressing some concerns that had been brought up at earlier meetings.

Upon reviewing the July 1, 1985, reports from the various universities around the state, the IBHE staff voiced concerns to the board over the many differences that existed

in total units required for admission, as well as differences in units of specific subjects required for admission. It was noted that only Southern Illinois University at Carbondale had established minimum admission requirements to take effect in 1990, similar to those proposed by the IBHE. All the other state universities had fewer subject and units required for admission (IBHE September 1985).

The IBHE staff and board members agreed that the variety of requirements now in place at the different state universities would detract from clearly communicating to students the course preparation in high school that is necessary to be successful in pursuing a baccalaureate degree.

The staff and board members reaffirmed the position of requiring 15 units of course work in English, social studies, mathematics, science, and foreign language, art, or music. The rationale for a uniform set of requirements included the following arguments:

- 1) It will communicate expectations more effectively.
- 2) It will benefit community colleges as they establish their subject pattern for admission to baccalaureate transfer programs.
- 3) Ohio State University increased admission requirements to proposed IBHE level in 1983 and the effect has been a reduction in the number of students requiring remedial education.
- 4) Fifteen units, versus the 10 to 13 units being required by most universities, will provide the student with greater exposure to more advanced work in his or her high school subjects (IBHE September 1985).

The final conclusion was that a common set of course requirements would eliminate confusion, better prepare students, and allow them to keep their options open as to which university they would attend.

The new reform legislation and increased appropriations enacted by the Illinois General Assembly were discussed at the September meeting, and the IBHE staff and members agreed that actions taken here seemed to show that schools would be able to make minimum subject requirements available to their students. Concerns about leaving enough room for vocational education to be taken by college-bound students was addressed by the General Assembly in the following ways:

- 1) Relaxing the physical education requirement, if an 11th or 12th grade student needs a course for college admission
- 2) Health--a mandated requirement was to be scheduled for students out of physical education time
- 3) A consumer education proficiency test was offered in lieu of taking the class to allow more time to schedule an academic subject (IBHE September 1985).

At the conclusion of the September 1985 meeting the IBHE staff put together a report based on the findings and conclusions noted at the September meeting. The report reaffirmed the earlier position of the IBHE on a uniform set of admission requirements for all state universities, and recommended that the board discuss these at its next meeting and take action on approving these so that a fall of 1990

implementation date could go into effect (IBHE September 1985).

The November, 1985, meeting of the IBHE proved to be truly a forum of discussion as the board discussed what the implications of the proposed new admission requirements would be on public universities and on high schools in the state. The board also responded to a wide variety of concerns and objections to these proposed admission requirements. Finally, after much discussion, the IBHE voted 13 to 1 to approve these new uniform admission requirements to take effect in the fall of 1990.

Before discussing all the details of this meeting, it should be noted that the IBHE staff during September and October of 1985 met to discuss its September 1985 report, Minimum Preparation and Admission Requirements for Baccalaureate Degree Programs, with representatives from the following groups:

- 1) State Board of Education
- 2) Illinois Principals Association
- 3) Illinois Association of School Administrators
- 4) Illinois Association of School Boards
- 5) Illinois Community College Board
- 6) All community college districts
- 7) Illinois Association of Collegiate registrars and Admission Officers
- 8) Illinois Association of Personalized Learning Programs
- 9) Board of Higher Education's Faculty Advisory Committee and Student Advisory Committee

The IBHE staff also received correspondence from school districts, students, and other interested parties that were shared with members of the Board of Higher Education (IBHE November 1985).

The IBHE staff and board members discussed the input and correspondence from these various groups at the November meeting and determined that implications on public universities of enacting the IBHE uniform admission requirements would include:

- 1) the development of policies and procedures for provisional admissions, to make sure that the IBHE'S priority of access for educationally disadvantaged students is met
- 2) the eventual development of learner outcomes that specify skills and knowledge necessary for preparation for baccalaureate degree work
- 3) working with school districts to ensure that subjects offered adequately prepared students for baccalaureate degree programs (IBHE November 1985)

The staff and board, after much discussion, also determined that these new admission requirements would have the following implications for school districts:

- 1) Subjects identified as preparatory must be available for students.
- 2) Teachers and other resources must be provided for these subjects, if they are not now in existence.
- 3) Schools must identify high school subjects that will meet the minimum admission requirements.
- 4) There will be an immediate need to advise students who will be 9th graders in the fall of 1986 of these requirements.
- 5) New course requirements will require 75% of available time in schools with a six-period day, and 62% of available time in schools with a seven-period day. This will mean more detailed and careful advising of students to ensure that

they meet the new IBHE requirements, as well as district requirements for graduation (IBHE November 1985).

As one can see, the implications of enacting these new requirements could have a great impact on high schools in the areas of curriculum, staffing, and scheduling. This field study will address these issues in Chapters 4 and 5.

The largest amount of time at the November meeting was spent discussing and responding to the objections and concerns of various groups to the enactment of these new admission requirements. The following objections and IBHE staff response to the objections were presented and discussed by the board:

- 1) Requirements are too restrictive and don't allow enough choice.

Response - Unrestricted choice has led to declining test scores and more remedial education.

- 2) Requirements will force early decisions, "late bloomers" will have opportunities reduced.

Response - Provisional admission policies will permit access.

- 3) Vocational education is necessary for college-bound students.

Response - Primary concern for college-bound should be academic subject preparation.

- 4) Enrollments in vocational education will be reduced.

Response - This is not likely to happen. Students will track into vocational, general, or college preparation curriculums.

- 5) Requirements will have a negative effect on minority students.

Response - IBHE priority is to improve academic preparation of minority students.

- 6) There is no need to set requirements since students already take these subjects.

Response - New requirements will force middle-range students to take more preparatory subjects.

- 7) Some students cannot handle 3 years of mathematics.

Response - Proposed requirements are intended to prepare students for meeting general education requirements of a baccalaureate degree.

- 8) Small schools will not be able to offer required subjects.

Response - Education reform legislation and related appropriations will meet these challenges.

- 9) Specifying subjects for admission is not consistent with the State Board's approach of establishing learner outcomes.

Response - IBHE will set up a Joint Task Force on Admission Requirements and Learning Outcomes to identify learning that should occur in each subject area (IBHE November 1985).

Following this discussion of objections and staff responses, the board discussed additional concerns voiced first by Mr. Penny, student advisory committee chairman. Mr. Penny's concerns were that these new admission requirements would be difficult to be met by inner city students, non-traditional older students, as well as students from smaller high schools (IBHE November 1985).

Ms. Kreichelt, representing the Illinois Vocational Association, discussed at length the concerns of the IVA over

the enactment of these new admissions requirements. These concerns included:

- 1) Requirements adversely affect students and vocational programs by not allowing students to take a series of vocational subjects in one or more program areas.
- 2) Requirements force early career decisions on 9th graders.
- 3) An overwhelming majority of jobs do not require a college education.
- 4) Requirements cause a loss of enrollment in vocational classes.
- 5) With fewer vocational classes, the high school dropout rate will increase (IBHE November 1985).

Dr. Rendondo, IBHE board member, responded to some of these concerns by pointing out that there seemed to be a misunderstanding that the general public perceives the IBHE requirements as mandated graduation requirements, which they are not. He also argued that students take mostly required classes during their first two years of high school and could elect to take either vocational or college preparatory classes their last two years.

Dr. Rendondo and other members further pointed out that letters sent by concerned citizens were poorly constructed and had a large number of grammatical, punctuation, and spelling errors. This, in the opinion of many board members, further underscored the need for these requirements (IBHE November 1985).

The final few minutes of discussion, before the vote to

enact these requirements, centered around the concerns that the IBHE was taking away from each community college and university their right to set admission standards. Other board members were not sure that the IBHE was allowing enough time for elementary and secondary schools to make necessary changes that would allow students to meet these new requirements (IBHE November 1985).

Mr. Browder, chairman, commented that "once these admission requirements are enacted, they will undoubtedly continue to be reviewed and modified over the years as experience dictates", (IBHE November 1985).

On November 5, 1985, the Illinois Board of Higher Education ended almost two years of debate by voting 13 to 1 to establish the aforementioned minimum admission requirements that would take affect in the fall of 1990 for all freshmen entering community colleges or state universities with the intent of completing a baccalaureate degree (IBHE November 1985).

Recent Developments

In February of 1989, the IBHE, meeting in Chicago, considered a staff recommendation to make the 1993 course requirements advisory rather than mandatory. IBHE staff members felt that universities should not be forced to admit only freshmen meeting these requirements because most of the institutions have enacted specific course work requirements.

Prior to this meeting, Governor James Thompson stated openly that the 1993 state-wide admission requirements should remain in place and not be watered down.

The final vote on the 1993 requirements at this meeting resulted in the IBHE re-affirming its earlier position to mandate the subject entrance requirements of all incoming freshman students at state universities in the fall of 1993 (Daily Journal February 1989).

Uniqueness of the Study

This field study will analyze the impacts that these 1990 IBHE admission requirements have had on high school curriculums in smaller rural schools. This study will determine if those implications and concerns noted by the IBHE in its discussions of the impacts of these requirements have, in fact, become real problems that school administrators have had to deal with.

This study will determine if, in the schools surveyed, more academic subjects have, in fact, been added to high school curriculums while fewer vocational subjects have been offered since the IBHE 1990 admission requirements were enacted.

This study will analyze scheduling changes and options used by schools to allow students to take additional classes. The study will also determine what methods are used by smaller schools to offer upper-level college preparatory

classes, and still offer vocational classes in the face of declining enrollment.

This study will determine any increases in graduation requirements that can be attributed in part to the new 1990 IBHE admission requirements. Both credit and subject requirement changes will be noted among those schools surveyed.

The study will also note trends in subject enrollments of college preparatory subjects and vocational subjects over the last four years to determine if any conclusions can be drawn as a result of the impact of these 1990 IBHE admission requirements.

Chapter 3

Design of the Study

General Design of the Study

The author felt that a comparison of enrollment figures of classes identified as college preparatory with classes identified as vocational during the last four years would provide data that would show the possible effects of the 1990 IBHE requirements on the curriculums of high schools surveyed. The author expected to see an increase in enrollments of college preparatory subjects and a decrease in the enrollments of vocational classes.

The independent variable in this study was the new IBHE 1990 course requirements. The dependent variables were what districts have done in response to curriculum changes, and how students have responded to these new requirements.

Selected class enrollments of the 1985-86 school year and 1986-87 school year were used as baseline data with which to compare enrollment patterns during the school years 1986-87, 1987-88, and 1988-89. These years were chosen since the 1990 IBHE requirements went into effect with the freshmen class entering high school in the fall of 1986. This would be the first class required to enroll in the IBHE mandated subject pattern for entrance to the state university system. Enrollment data from the last three school years should indicate if more students were enrolled in an academic core curriculum and fewer were enrolled in

vocational classes.

The study identified new courses added to high school curriculums as a result of the 1990 IBHE entrance requirements. Any additional sections of college preparatory subjects added within the last three school years was determined and noted in an attempt to identify a pattern towards a more academic as opposed to a more vocational curriculum in high schools surveyed.

The study identified the courses dropped from high school curriculums within the last three school years to determine if fewer vocational classes were being offered among the rural high schools surveyed. Enrollment and course offering data from the Illinois State Board of Education comparing academic subject enrollments and course offerings with vocational subject enrollments and course offerings was also analyzed. Data from rural schools surveyed by the Department of Research and Statistics through the 1986-87 census of course offerings and enrollments was compared with data from the 1976-77 and 1981-82 censuses to determine if more students were enrolled in academic core curriculum courses and fewer were enrolled in vocational subject areas. This data would also indicate if more academic courses were being offered while at the same time fewer vocational subjects were being offered.

The study identified changes in scheduling that have been instituted by schools surveyed that have allowed

students to take additional subjects while in high school. Further, the study also determined if any changes in graduation requirements related to the IBHE 1990 entrance requirements have been instituted by schools surveyed. Data was collected on any specific course and/or credit requirement changes that have been enacted within the last three years. Additionally, the study identified any staff changes that have been made within the last three years that have resulted from changes in curriculum.

Also, the study explored the various methods used by the high schools surveyed to maintain as broad and as flexible a curriculum as possible given constraints on time, scheduling, and staff availability. Finally, the study surveyed the opinions of administrators and other school personnel on whether the IBHE 1990 requirements had negatively or positively impacted the curriculum of their high school.

Sample and Population

The population of this study included those students from rural high schools of under 500 in Illinois who were enrolled in college-preparatory and vocational courses during the school years 1985-1989. The sample student population of schools surveyed during these four years was 3,901 and included 16 rural schools in East Central Illinois. The average mean enrollment of these schools was 253 students.

The sample surveyed in this study were high schools of under 500 in enrollment that are contiguous to each other, located in the following counties:

- 1) Vermillion
- 2) Iroquois
- 3) Ford
- 4) Kankakee
- 5) Will

Twenty-one surveys were mailed out to these districts in January of 1989; fourteen schools responded by a February 15th return deadline. A follow-up phone call to those high schools not responding resulted in two additional surveys being returned. A final count by March 1, 1989, showed that sixteen of the twenty-one high schools surveyed had responded.

High schools responding to the survey included those in Table 1:

Table 1

High Schools Responding to Survey and Average Enrollment Size

School and County	Size
<u>Vermillion County</u>	
Hoopeston-East Lynn	432
<u>Iroquois County</u>	
Crescent-Iroquois	85
Sheldon	87

Table 1--continued

School and County	Size
Cissna Park	112
Milford	176
Iroquois West	246
Central of Clifton	428
<u>Kankakee County</u>	
Grant Park	161
Manteno	258
Momence	394
St. Anne	395
<u>Ford County</u>	
Melvin-Sibley	75
Ford Central	135
Paxton	305
<u>Will County</u>	
Reed-Custer	343
Peotone	414

The high schools that did not respond included those in Table 2.

Table 2

High Schools Not Responding to Survey

School	County
Watseka	Iroquois
Donovan	Iroquois
Buckley-Loda	Iroquois
Gibson City	Ford
Tri-Point	Ford

Throughout the study, enrollment data from the years 1987-88 and 1988-89 was compared with the data from the baseline years of 1985-86 and 1986-87. Supplemental data on enrollments and course offerings from the 1986-87 census of course offerings and enrollments was compared with data from previous censuses of 1976-77 and 1981-82. The population of this census included 99 percent of the 719 public high schools in the state of Illinois. The sample included data from 311 rural high schools in the state with enrollments below 499 students. This data should reflect changes that have resulted in course offerings and enrollments over the last three to five years in the rural schools that may, in part, be a result of the 1990 IBHE mandated entrance requirements.

These patterns in course enrollments dealt with a comparison of college-preparatory subjects and vocational subjects. Data from the surveys also included total high school enrollment for each year surveyed to determine if increases or decreases in course enrollments were possible due, in part, to higher or lower overall class enrollments. One could surmise that if total school enrollment decreased, while a specific subject area enrollment increased that obviously a higher proportion of students were enrolled in that area.

The freshmen class entering high schools in the fall of 1986 were the first groups to be affected by the 1990 IBHE entrance requirements. Thus the school years of 1986-1989, in which enrollments and course offerings were studied, were those during which students were advised to follow the IBHE subject pattern requirements.

Data Collection and Instrumentation

The study collected data from sixteen schools who responded to a cover letter (see Appendix A) and a two-page survey (see Appendix B). The cover letter explained the purposes of the survey and promised aggregate data back from the study to each school that responded. The schools surveyed were all in the same geographical area, contiguous to each other, under 500 in student population, and mostly rural in nature, drawing a significant amount of their population from communities of under 4,500 in size or rural

areas. These schools were chosen for the following reasons:

- 1) districts were familiar to the author of the study
- 2) districts contiguous to others may offer cooperative programs for curriculum expansion
- 3) districts of this size were identified during IBHE discussions as those that could possibly be impacted the most by mandating specific subject entrance requirements

The survey developed by the author collected data from high schools in nine major areas. Data on course enrollments in college-preparatory and vocational courses was collected for the school years 1985-1989. The 1985-86 school year and 1986-87 school year were used to collect baseline data with which to compare the 1987-1989 school years.

The 1985-86 enrollment figures for advanced math, Biology I, physics, English IV, foreign language, business courses, industrial arts, home economics, and career center programs were obtained for specific comparison data. The author felt that enrollment figures in the upper level college preparatory classes of advanced math, physics, and English IV, all traditional senior level classes, would be beneficial in determining what enrollments were in these classes before all the publicity concerning the enactment of the IBHE requirements was brought to the attention of college-bound students. Subsequent enrollment data in these courses during the years 1986-1989 could show a pattern of increased interest in these classes due in part to an increased awareness by students of the importance of upper level

college-preparatory classes brought on by the 1990 IBHE requirements.

The author also felt that it was necessary to obtain enrollment data from 1985-86 in the subject areas of Biology I and foreign languages since these classes could be taken by freshmen during the 1986-87 school year when the 1990 IBHE requirements were in place. It was important to obtain data from the 1985-86 school year in these areas since enrollment in these subjects would not have been affected by the 1990 IBHE requirements.

The enrollment figures from 1985-86 for vocational subjects and career center programs would also serve as baseline data to compare enrollments in these courses and programs before the 1990 IBHE requirements were instituted, with enrollments in these same courses and programs during the three school years after the 1990 IBHE requirements were put into place.

The enrollment figures of 1986-87 in all of the other courses surveyed can be used as baseline data with which to compare enrollments in the remaining two school years since the majority, if not all, of these courses are usually taken after the freshmen year. The only exception would be Algebra I and the author felt that this course is taken by virtually all college-bound students as a first-year introductory college preparatory mathematic class.

Enrollment data for each subject area was analyzed and

percentage increases or decreases from year to year were determined and compared with the total percentage increase or decrease in high school enrollment to determine how much enrollments in specific subjects increased or decreased in relation to the total 9-12 enrollment increases or decreases.

Patterns in subject area enrollments were noted by comparing enrollments during each year surveyed. The total number of students enrolled in college preparatory subjects during each year surveyed was compared with the total number of students enrolled in vocational classes during the same years, to determine if more students were following the college-preparatory curriculum.

The number and the subject area of college-preparatory classes that have been added to curriculums of high schools surveyed over the last three years was compared to the number and subject area of vocational classes added at these same high schools with any patterns noted by the author.

The study surveyed participating schools on the number of additional sections of college-preparatory classes that have been scheduled over the last three years as a result of increased enrollments in these subject areas.

The type of classes dropped from high school curriculums during the last three years as a result of low enrollments was determined and patterns were noted by the author.

The study identified and categorized the types of scheduling changes made by high schools within the last three

years that those completing the survey felt were a result of the impacts of the 1990 IBHE requirements.

The study analyzed changes made in graduation requirements among schools surveyed during the last three years since the 1990 IBHE requirements have been in effect. These were identified and categorized according to subjects and total credits required.

The study assessed among schools surveyed any changes made in the certified teaching staff that resulted from changes in curriculum demands. Specifically, the number of academic teachers added or dropped was compared with the number of vocational teachers added or dropped during the last three school years with patterns noted.

The study also identified and categorized the various methods administrators have utilized to maintain a maximum amount of curricular offerings in the smaller rural school, where staff limits and time limits can put limits on curriculum offerings.

The study analyzed administrator and counselor responses to the question:

"Do you feel that the Illinois Board of Higher Education college entrance requirements have negatively or positively affected your high school curriculum?"

Conclusions were drawn from the various responses to this question.

The author of this study also obtained and analyzed

information from the Illinois State Board of Education's Department of Research and Statistics. The Illinois Secondary School Course Offerings Reports of 1982 and additional materials from the 1986 Census of Course Offerings provided data useful in this study. Enrollment and course offering patterns in academic versus vocational courses over the last five years was obtained from these reports.

The author felt that if the course offerings statistics and enrollment statistics of rural schools during the 1981-82 and 1986-87 censuses were studied and analyzed a possible pattern of curriculum change could be noted showing that more students in rural schools are now taking college-preparatory subjects and fewer are taking vocational subjects.

The study collected specific data on schools under 200 from these census reports on the percent of school enrollments in academic core curriculum courses in 1981-82 as compared to 1976-77. This data could confirm a suspected pattern of increased enrollment in college-preparatory courses by students in rural schools.

The study also looked at the conclusions and implications drawn by state board researchers on any patterns of course offerings and enrollments over the last five years.

Data Analysis

Aggregate numbers and descriptive statistics from 16 of the 21 schools responding were processed by analyzing and comparing data from questions #1 through #10.

Information on new courses added within the last three years was analyzed by determining:

- 1) the number of schools that added no new courses
- 2) of the schools adding courses, the number of academic college-preparatory courses added as compared to the number of non-college preparatory courses added
- 3) the number of schools which added specific classes to meet 1990 IBHE requirements
- 4) the number of classes added in each of these subject areas: English, mathematics, science, social studies, foreign language, fine arts, vocational courses

The data on additional sections of college-preparatory classes added within the last three years was analyzed by determining the number of schools that added sections and the specific subject areas in which these sections were added.

The responses to question #3 on listing any courses dropped or not offered within the last three years were analyzed by determining:

- 1) number of schools that dropped no courses
- 2) of schools that dropped courses, the number of vocational and non-college preparatory classes dropped as compared to the number of college preparatory classes dropped
- 3) the number of schools which dropped classes as a result of the 1990 IBHE requirements
- 4) the specific subject area of classes that have been dropped by schools

The responses to the enrollment figures listed by schools in questions #4 and #5 of the survey were analyzed and compared in the following ways:

- 1) Subject area enrollments for each year surveyed were determined as a percentage increase or decrease and compared with the total percentage increase or decrease in 9-12 enrollment to determine how much enrollments in specific subjects increased or decreased in relation to the total enrollment increases or decreases of the high school surveyed.
- 2) Yearly enrollments of the college preparatory subjects in question #4 were totaled for each of the years 1986-87, 1987-88, and 1988-89 and compared with yearly enrollments during the same schools years in the vocational subject areas surveyed in question #5. The percentage of students enrolled in college preparatory courses was compared to the percentage of students enrolled in vocational subjects. The number of schools showing a percentage increase in college preparatory enrollments was compared with those showing a percentage increase in vocational subject enrollments; schools showing no significant change (less than 5%) in enrollment patterns were also noted.

Aggregate numbers from 13 out of the 16 districts responding were used to determine the results in this section. These 13 districts provided complete enrollment data on the years surveyed; three districts provided only partial enrollment data and consequently this could not be used in this study.

Data on changes in scheduling instituted by high schools within the last three school years was analyzed by first determining how many schools of the sixteen responding have made changes. Next, the author categorized the changes according to the type of scheduling changes made, and determined how many schools have made this change. These included:

- 1) adding a period
- 2) allowing P.E. exemptions to take a class
- 3) lifting limits on the number of classes a student can take
- 4) other

Information on changes made in graduation requirements was analyzed by determining how many schools of the sixteen responding have changed their graduation requirements since the enactment of the 1990 IBHE requirements. The author categorized the changes according to new subject requirements and new total credits needed to graduate.

The study determined which subject areas of the new graduation requirements enacted were those most commonly increased by schools surveyed. The average increase in the number of credits needed to graduate was determined. The study also compared the total number of credits needed to graduate among the schools surveyed.

The information obtained on the number of staff additions or deletions due to changes in curricular patterns was analyzed by determining:

- 1) the number of schools that added staff
- 2) the number of schools that deleted staff
- 3) the number of schools that saw no change in staff
- 4) the subject areas where staff was added
- 5) the subject areas where staff was deleted

The data on the unique methods of allowing for an expanded and flexible curriculum in the high schools surveyed was assessed by determining how many schools have instituted methods in this area. The study determined the types of methods used to maintain a more flexible and expanded curriculum and categorized these in the following areas:

- 1) combining classes with low enrollments
- 2) offering certain classes every other year
- 3) co-oping classes with other school systems
- 4) other unique methods

In response to the question, "Do you feel that the IBHE requirements have negatively or positively affected your high school district?", the author determined the number of positive responses, the number of negative responses, and the number of neutral responses. Positive and negative comments were assessed and the common themes echoed by respondents in each of these areas was noted.

The data from the Illinois Secondary School Offerings Reports of 1976-77, 1981-82, and 1986-87 were analyzed by using only research and statistics from the rural school category. The author determined the percent of school enrollments in academic subjects and the percent of school enrollments in vocational subjects during the years of 1976-77, 1982-83, when there were no IBHE requirements. These figures were compared with the secondary school course offering reports of 1986-87 to determine if a larger

percentage of students were enrolled in academic subjects, and if a smaller percentage of students were enrolled in vocational courses.

The study also analyzed the research and statistics on rural schools in the area of course offerings. The number of courses offered in academic and vocational areas during the years 1976-77 and 1981-82 were compared with the number of academic and vocational course offerings during the 1986-87 school year. The author determined if the number of academic course offerings had increased, while at the same time the number of vocational offerings had decreased indicating a pattern of increased enrollment in college-preparatory subjects.

Conclusions and implications drawn by IBHE researchers in regards to enrollment and course offering patterns during the 1986-87 school year as compared with earlier figures from the 1981-82 and 1976-77 censuses of course offerings and enrollments was analyzed by the author. Data indicating a pattern of change in the curriculums of rural high schools over the last five years was studied to determine if a larger percentage of students were enrolled in academic subjects versus vocational subjects.

Chapter 4

Results of the Study

New Courses Added to Curriculum

The responses received in this area revealed that only three of the sixteen schools, or only 19%, have added no new courses to their curriculums in the last three years. In contrast to this, 11 out of the 16 schools, or 69%, have added an academic college-preparatory course or courses to their curriculums. Only 13% of the schools surveyed, two out of sixteen, have added non-college preparatory courses, while at the same time have added no college-preparatory courses. Forty-four percent of the schools surveyed have added vocational courses to curriculums in the last three years.

Almost one-third of the schools surveyed, 31%, indicated the addition of courses as a result of the 1990 IBHE requirements. Table 3 indicates from the schools surveyed the total number of new courses added in a specific subject area, and the total number of schools that added courses in these subject areas.

Table 3

Course Additions

Subject Areas	Number of New Courses Added	Number of High Schools Adding Courses
English	5	4

Table 3--continued

Subject Areas	Number of New Courses Added	Number of High Schools Adding Courses
Mathematics		
College prep	5	5
Non-College prep	3	2
Science	5	4
Social Studies	8	6
Foreign Language	4	4
Fine Arts (Art, Music)	4	3
Vocational Courses	11	7
Computer Courses	5	3

Additional Sections of Academic Courses Added

The data collected from high schools surveyed indicated that 63%, or 10 out of 16 schools, added no additional sections of college preparatory classes in the last three years. There were 6 of 16 schools, or 38% of those surveyed, indicating the adding of sections of college preparatory subjects within the last three years.

Six schools added sections in college preparatory science, English, and social studies. Three schools have added sections of college preparatory mathematics, while one school has added sections of a foreign language.

Courses Dropped from Curriculums

The author surveyed responding schools on the number and subject area of courses that have been dropped from high school curriculums within the last three years. The data here indicated that 44% of the schools responding had dropped no courses from their curriculums. Fifty-six percent of the schools responding indicated that they have dropped courses within the last three years. This data is in contrast with 81% of the schools surveyed that have added courses to curriculums within the last three years.

The total number of vocational and non-college preparatory courses dropped by schools surveyed was 36 compared to only 7 college preparatory courses dropped by schools during the last three years.

None of the schools surveyed indicated that they had dropped courses as a result of the 1990 IBHE requirements.

Table 4 indicates the total number of courses dropped in each subject area from the schools surveyed.

Table 4

Courses Dropped

Subject Areas	Number of Courses Dropped
Industrial Arts	12
Fine Arts (Art, Music)	3

Table 4--continued

Subject Areas	Number of Courses Dropped
Business Classes	6
Home Economics	6
Social Studies	3
Mathematics (Non-College prep)	3
English (Theater Arts, Drama, Journalism)	5
Science (General Science, Physical Science)	4

Enrollment Patterns

The author collected enrollment data on college-prep and non-college prep subjects from the 16 schools surveyed. This enrollment data spanned the last four school years and was collected to determine if suspected patterns of increased enrollment in college-preparatory subjects and decreased enrollments in vocational subjects could be confirmed. Two tables were developed to show percentage increases or decreases in specific subject areas for schools that experienced enrollment declines (Table 5), and for schools that experienced enrollment increases (Table 6).

A summary of results from Table 5 shows that the subject areas that showed the greatest amount of percentage increases

in enrollments over the last two to three years included:

- Advanced Mathematics
- Chemistry
- Biology II
- Physics
- Foreign Language

Those subjects showing the greatest amount of percentage decreases in enrollments over the last two to three years included:

- Industrial Arts
- Home Economics
- Social Studies
- English IV

A summary of results from Table 6 shows that subject areas that experienced the greatest amount of percentage increases in enrollments over the last two to three years included:

- Geometry
- Algebra II
- Advanced Mathematics
- Physics
- Foreign Language
- Social Studies

Those subjects showing the greatest amount of percentage decreases in enrollments over the last two to three years included:

- Industrial Arts
- Home Economics
- Career Center Programs

In Table 7, the author compared the average total enrollments of college preparatory classes and vocational classes during the 1987-88 and 1988-89 school years with enrollments during the 1986-87 school year to determine

percentage increases and decreases for each of the 13 schools that responded with complete information on enrollment numbers. Total high school enrollment was also averaged for the 1987-88 and 1988-89 school years and compared with the 1986-87 enrollment numbers to determine if the schools studied experienced a percentage increase or decrease.

Table 5

Enrollment Patterns: Schools Experiencing Enrollment Declines

Subject area enrollments of schools that experienced a decline in total enrollment. Numbers in each column preceding the number in parenthesis indicates the number of schools that experienced a percentage increase or decrease when enrollment figures were compared with base-line data. The number in parenthesis corresponds to the following school years:

(1) 1985-1987, (2) 1987-1988, (3) 1988-1989

Course Title	Less Than 5% Increase	5% to a 15% Increase
*Algebra I	<u>1 (3)</u>	<u>2 (3)</u>
Geometry	<u>1 (2)</u>	<u>2 (2) 1 (3)</u>
Algebra II		<u>1 (3)</u>
Adv. Math	<u>1 (3)</u>	<u>1 (2) 1 (3)</u>
Biology I	<u>2 (3)</u>	<u>1 (1) 3 (2) 1 (3)</u>
Chemistry	<u>1 (2)</u>	
Biology II	<u>1 (2) 2 (3)</u>	<u>1 (2) 1 (3)</u>
Physics	<u>2 (3)</u>	<u>1 (1)</u>

Table 5--continued

Course Title	Less Than 5% Increase	5% to a 15% Increase
English IV		<u>1 (1) 1 (2)</u>
Foreign Language	<u>1 (1) 1 (2) 3 (3)</u>	<u>3 (1) 1 (2) 2 (3)</u>
Social Studies (Other than U.S. History and Consumer Education)		<u>2 (2) 2 (3)</u>
Business Subjects	<u>1 (1) 1 (2) 1 (3)</u>	<u>1 (1) 1 (2)</u>
Industrial Arts		<u>1 (2) 1 (3)</u>
Home Economics	<u>2 (1)</u>	<u>1 (1) 2 (2) 1 (3)</u>
Career Center Programs		<u>1 (1) 1 (3)</u>

*Example. The reader should interpret the data on this line to read in Algebra I enrollments one school saw a less than 5% increase during 1988-89. Two schools saw a 5 to 15% increase in Algebra I enrollments during 1988-89.

Table 5--continued

Course Title	15% to a 30% Increase	Greater than a 30% Increase
Algebra I		<u>2 (2) 2 (3)</u>
Geometry		<u>2 (2) 2 (3)</u>
Algebra II		<u>3 (2) 3 (3)</u>
Adv. Math	<u>2 (1)</u>	<u>4 (1) 5 (2) 4 (3)</u>
Biology I	<u>1 (1)</u>	<u>2 (1) 1 (2) 1 (3)</u>
Chemistry	<u>2 (2)</u>	<u>2 (2) 3 (3)</u>
Biology II	<u>3 (2) 2 (3)</u>	<u>1 (2) 1 (3)</u>
Physics	<u>1 (1) 1 (2) 1 (3)</u>	<u>2 (1) 2 (2) 2 (3)</u>
English IV	<u>1 (1) 1 (2) 1 (3)</u>	<u>2 (1) 2 (2) 2 (3)</u>
Foreign Language	<u>1 (1) 2 (2) 1 (3)</u>	<u>1 (3)</u>
Social Studies (Other than U.S. History and Consumer Education)	<u>1 (3)</u>	
Business Subjects	<u>1 (3)</u>	<u>2 (1) 2 (2) 1 (3)</u>
Industrial Arts	<u>1 (1) 1 (3)</u>	
Home Economics	<u>1 (3)</u>	<u>1 (2)</u>
Career Center Programs	<u>1 (3)</u>	<u>1 (1) 1 (2) 3 (3)</u>

Note. (1) 1985-87, (2) 1987-88, (3) 1988-89

Table 5--continued

Course Title	Less than a 5% Decrease	5 to 15% Decrease
Algebra I	<u>1 (2)</u>	<u>2 (2) 4 (3)</u>
Geometry	<u>2 (3)</u>	<u>2 (2) 1 (3)</u>
Algebra II	<u>2 (2) 2 (3)</u>	
Adv. Math		
Biology I	<u>1 (1) 3 (2)</u>	<u>1 (1) 4 (3)</u>
Chemistry	<u>1 (3)</u>	<u>1 (2)</u>
Biology II	<u>1 (2)</u>	<u>1 (2) 1 (3)</u>
Physics		<u>1 (3)</u>
English IV	<u>1 (1) 3 (3)</u>	<u>2 (1) 3 (2)</u>
Foreign Language	<u>1 (1)</u>	<u>1 (1) 4 (2)</u>
Social Studies (Other than U.S. History and Consumer Education)	<u>2 (2) 1 (3)</u>	<u>3 (2) 3 (3)</u>
Business Subjects	<u>1 (1) 2 (2) 1 (3)</u>	<u>1 (3)</u>
Industrial Arts	<u>3 (2)</u>	<u>2 (1) 1 (3)</u>
Home Economics	<u>1 (1) 1 (2) 1 (3)</u>	<u>1 (2) 1 (3)</u>
Career Center Programs		<u>2 (1) 2 (2)</u>

Note. (1) 1985-87, (2) 1987-88, (3) 1988-89

Table 5--continued

Course Titles	More than a 15% Decrease
Algebra I	<u>2 (2) 2 (3)</u>
Geometry	<u>1 (3)</u>
Algebra II	<u>3 (2) 2 (3)</u>
Adv. Math	<u>2 (1) 2 (2) 2 (3)</u>
Biology I	<u>2 (1) 1 (2)</u>
Chemistry	<u>1 (2) 2 (3)</u>
Biology II	<u>1 (3)</u>
Physics	<u>2 (1) 3 (2) 2 (3)</u>
English IV	<u>1 (1) 1 (2) 2 (3)</u>
Foreign Language	<u>1 (1) 1 (3)</u>
Social Studies (Other than U.S. History and Consumer Education)	<u>1 (2) 1 (3)</u>
Business Subjects	<u>1 (1) 1 (2) 3 (3)</u>
Industrial Arts	<u>3 (1) 2 (2) 5 (3)</u>
Home Economics	<u>2 (1) 1 (2) 2 (3)</u>
Career Center Programs	<u>1 (2) 1 (3)</u>

Note. (1) 1985-87, (2) 1987-1988, (3) 1988-89

Table 6

Enrollment Patterns: Schools Experiencing Enrollment Increases

Subject area enrollments of schools that experienced an increase in total enrollment. Numbers in each column preceding the number in parenthesis indicates the number of schools that experienced a percentage increase or decrease when enrollment figures were compared with base-line data. The number in parenthesis corresponds to the following school years:

(1) 1985-1987, (2) 1987-1988, (3) 1988-1989

Course Title	Less than a 5% Increase	5 to 15% Increase
Algebra I	<u>1 (2)</u>	<u>1 (3)</u>
Geometry	<u>1 (2) 2 (3)</u>	
Algebra II		<u>3 (3)</u>
Adv. Math		<u>1 (1)</u>
Biology I	<u>1 (1)</u>	<u>1 (2)</u>
Chemistry		
Biology II		
Physics		
English IV		
Foreign Language		<u>2 (1)</u>
Social Studies	<u>2 (2)</u>	<u>1 (2) 2 (3)</u>
Business Subjects	<u>2 (1)</u>	<u>2 (2)</u>
Industrial Arts		<u>2 (1)</u>

Table 6--continued

Course Title	Less than a 5% Increase	5 to 15% Increase
Home Economics	<u>1 (1)</u>	
Career Center		

Table 6--continued

Course Title	15% to 30% Increase	Greater than a 30% Increase
Algebra I	<u>1 (2) 2 (3)</u>	
Geometry	<u>1 (2) 1 (3)</u>	<u>2 (2) 2 (3)</u>
Algebra II	<u>2 (2)</u>	<u>1 (2) 2 (3)</u>
Adv. Math	<u>2 (1) 2 (2) 1 (3)</u>	<u>3 (2) 4 (3)</u>
Biology I		<u>1 (1) 1 (2) 2 (3)</u>
Chemistry	<u>2 (2)</u>	<u>1 (2) 2 (3)</u>
Biology II	<u>2 (2) 1 (3)</u>	<u>1 (3)</u>
Physics	<u>1 (3)</u>	<u>1 (1) 3 (2) 3 (3)</u>
English IV	<u>1 (3)</u>	<u>1 (1) 1 (2) 1 (3)</u>
Foreign Language	<u>2 (2) 1 (3)</u>	<u>2 (1) 2 (2) 3 (3)</u>
Social Studies	<u>2 (2)</u>	<u>3 (3)</u>
Business Subjects	<u>1 (2) 2 (3)</u>	
Industrial Arts	<u>1 (2) 1 (3)</u>	<u>1 (2) 1 (3)</u>
Home Economics	<u>1 (2) 1 (3)</u>	<u>1 (1) 1 (2) 1 (3)</u>
Career Center	<u>1 (1)</u>	<u>1 (2) 1 (3)</u>

Note. (1) 1985-87, (2) 1987-1988, (3) 1988-89

Table 6--continued

Course Titles	Less than a 5% Decrease	5 to 15% Decrease
Algebra I	<u>2 (2)</u>	<u>1 (2)</u>
Geometry		<u>1 (2)</u>
Algebra II	<u>2 (2)</u>	
Adv. Math		
Biology I	<u>1 (2)</u>	<u>1 (3)</u>
Chemistry		
Biology II		<u>1 (2) 1 (3)</u>
Physics		
English IV	<u>1 (1) 1 (2) 1 (3)</u>	
Foreign Language		
Social Studies		
Business Subjects		<u>1 (1) 1 (3)</u>
Industrial Arts	<u>1 (1)</u>	<u>1 (1) 1 (2) 1 (3)</u>
Home Economics	<u>1 (2)</u>	
Career Center		<u>2 (1) 1 (2)</u>

Note. (1) 1985-1987, (2) 1987-1988, (3) 1988-1989

Table 6--continued

Course Title	More than a 15% Decrease
Algebra I	<u>1 (3)</u>
Geometry	
Algebra II	
Adv. Math	
Biology II	<u>1 (2)</u>
Chemistry	<u>1 (2) 1 (3)</u>
Biology II	<u>1 (2) 1 (3)</u>
Physics	<u>1 (2)</u>
English IV	<u>1 (1) 2 (2)</u>
Foreign Language	<u>1 (3)</u>
Social Studies	
Business Subjects	<u>2 (2) 1 (3)</u>
Industrial Arts	<u>1 (1) 1 (2) 1 (3)</u>
Home Economics	<u>1 (1) 2 (2) 2 (3)</u>
Career Center	<u>1 (1) 1 (2) 2 (3)</u>

Note. (1) 1985-1987, (2) 1987-1988, (3) 1988-1989

Table 7

Yearly Enrollment Patterns: Comparison of College Prep, and Vocational Subjects

Yearly enrollment totals; number of students enrolled in college preparatory subjects and vocational education courses as compared to total enrollment during the years indicated:

Schools	1986-87			1987-88		
	<u>*CP</u>	<u>*VE</u>	<u>*TE</u>	<u>*CP</u>	<u>*VE</u>	<u>*TE</u>
Cissna Park	151	52	106	181	41	115
Hoopeston-E. Lynn	690	244	420	709	241	425
Manteno	296	190	235	386	232	265
Reed-Custer	572	443	318	574	424	339
Milford	216	142	172	235	140	174
Central	882	717	451	799	767	418
Peotone	773	380	420	788	377	420
Iroquois-West	317	204	250	375	222	246
Momence	783	530	407	674	525	394
Sheldon	180	52	87	200	57	83
Paxton	529	439	314	565	391	295
Crescent-Iroquois	182	N/A	85	181	91	88
St. Anne	270	313	397	296	422	399

Note. *CP - College-Preparatory *TE - Total Enrollment
 *VE - Vocational Education *NC - No Change
 N/A - Not Available

Table 7--continued

Schools	1988-89			*CP	*VE	*TE
	<u>*CP</u>	<u>*VE</u>	<u>*TE</u>	<u>+Inc.</u> <u>-Dec.</u>	<u>+Inc.</u> <u>-Dec.</u>	<u>+Inc.</u> <u>-Dec.</u>
Cissna Park	178	37	114	+19%	-25%	+12%
Hoopeston-E. Lynn	758	229	450	+ 6%	- 4%	+ 4%
Manteno	358	251	275	+26%	+27%	+15%
Reed-Custer	731	491	373	+14%	+ 3%	+12%
Milford	300	121	182	+24%	- 8%	+ 3%
Central	809	685	416	- 9%	- 1%	- 8%
Peotone	757	380	402	*N.C.	*N.C.	- 2%
Iroquois-West	398	235	242	+22%	+12%	- 2%
Momence	692	484	381	-13%	- 5%	- 5%
Sheldon	215	51	91	+16%	- 4%	*N.C.
Paxton	598	331	305	+10%	-17%	- 4%
Crescent-Iroquois	175	63	83	- 2%	-30%	+ 1%
St. Anne	346	202	388	+18%	*N.C.	- 1%

Note. *CP - College-Preparatory
*VE - Vocational Education

*TE - Total Enrollment
*NC - No Change

The data from Table 7 indicates that 62% of the 13 schools surveyed experienced a significant percentage increase (at least 10%) in enrollments in college preparatory subjects. Only 8% of the schools surveyed showed a significant percentage decrease (at least 10%) in enrollments of college preparatory subjects.

The data from Table 7 also shows that only 15% of the schools surveyed experienced a significant percentage increase (at least 10%) in enrollments in vocational education classes. Sixty-two percent of the schools surveyed experienced a percentage decrease in enrollments in vocational education classes. These decreases ranged from a -1% to a -30%; 23% of the schools experiencing decreases in this subject area saw enrollments in vocational classes decline in excess of 15% in the last two years.

Scheduling Changes

The data from the sixteen schools surveyed indicated the following:

- 1) 31% of the schools have made no changes in scheduling within the last three years
- 2) 19% of the schools have added a class period to the school day within the last three years
- 3) 44% of the schools surveyed allow P.E. exemptions so that students may take another class
- 4) 19% of the schools have, within the last three years, removed restrictions on the number of classes that a student may take

Changes in Graduation Requirements

The data from schools surveyed indicates that within the last three years the following changes in requirements for a high school diploma have been instituted:

- 1) 69% have changed requirements for graduation
- 2) 63% have increased the total number of credits needed to graduate
- 3) the average credit increase is 2 units
- 4) average number of credits needed to graduate is 20.7 units
- 5) the most commonly increased subject area requirements were English, science, and social studies
- 6) none of the schools specifically indicated that these changes were a direct result of the 1990 IBHE requirements

Staff Additions and Deletions Attributed to Changes in Curricular Choices

The responses collected from the schools surveyed indicated that within the last three years:

- 1) 13% of the schools have added staff
- 2) 25% of the schools have deleted staff
- 3) 63% of the schools saw no change in staff
- 4) subject areas where staff was added included: mathematics, English, social studies, and science
- 5) subject areas where staff was deleted included: business, industrial arts, home economics, physical education, and library

Methods of Allowing for an Expanded or Flexible Curriculum

The data collected from schools surveyed indicates that,

within the last three school years, 63% of the schools have instituted some method to provide for an expanded or flexible curriculum. The most common method seems to be offering certain vocational classes and upper-level science classes every other year on a rotating basis.

Other methods included combining classes with low enrollments and co-oping classes with other school systems, allowing two schools to offer one section of a class, such as physics. Two of the schools surveyed are planning on implementing satellite classes using video hookups with a university to provide upper-level mathematics and science classes.

School Personnel Responses and Opinions on Impacts of the 1990 IBHE Requirements

In response to the question, "Do you feel that the 1990 IBHE requirements have negatively or positively affected your high school?", 38% of those persons completing the survey responded positively, while 44% indicated a negative response, and 19% recorded a neutral response to the question.

The most common reasons as to why these requirements had a positive impact on schools included:

- 1) Students are more aware of what they need to take in high school to be better prepared for college.
- 2) There is more interest in college-preparatory classes and students seem to be working harder in these classes.

The most common responses as to why these requirements had a negative impact on schools included:

- 1) Vocational programs have been hurt, with low enrollments and program cuts.
- 2) There are too many students in college-preparatory classes who shouldn't be there.
- 3) There is not enough money to offer mandated classes.

Supplemental Data: Illinois Secondary School Offerings, Reports of 1976-77, 1981-82, and 1986-87

The author of this study also obtained supplemental data from the Department of Research and Statistics of the Illinois State Board of Education on course offerings and enrollments in Illinois public high schools over the last ten years. Table 8 indicates percentage increases and decreases in core academic subject areas in rural schools of under 499 in total enrollment size for the years of 1977 and 1982.

Table 8

Percentage Increases or Decreases in Subject Area Enrollments

Subject Areas	Percentage Increase or Decrease from 1977-1982	Percentage Increase or Decrease from 1977-1987
Chemistry	+1.2% (schools under 199) +1.3% (schools between 299-499)	Data Not Yet Available
Biology	+0.1% (schools under 199) +1.3% (schools between 299-499)	Data Not Yet Available

Table 8--continued

Subject Areas	Percentage Increase or Decrease from 1977-1982	Percentage Increase or Decrease from 1977-1987
Foreign Language	-26%* (most significant enrollment loss was in rural schools of under 499)	Data Not Yet Available
Mathematics	+1.9%*	Data Not Yet Available
English	+3.0%*	Data Not Yet Available

Note. Data obtained from Special Reports on Science, Foreign Language, Mathematics, and English--Illinois State Board of Education, Research, and Statistics

* Figures reflect all public high schools in Illinois.

Since data from the 1986-87 census of course offerings and enrollments in Illinois was not yet available, no conclusions could be drawn from this information. There was no data available on vocational course offerings or enrollments in any of these reports with which the author could make comparisons with college preparatory subjects.

Conclusions Drawn by ISBE Researchers on Enrollment and Course Offering Patterns

The author was able to obtain data from the Research and Statistics Department of the Illinois State Board of Education on the most recent census of course offerings and

enrollments 1986-1987. Although this data reflects patterns of changes noted from all sizes of high schools in Illinois, the author felt that this information provided supplemental data that was appropriate for this study. Patterns of change noted in all categories of public high schools in Illinois 1977-1987:

- 1) Enrollment in core academic subjects relatively constant from 1977-1982, 10% increase since 1982.
- 2) Mathematics and science accounted for most of the increases in core subjects since 1982.
- 3) Enrollment in foreign languages has increased most sharply since 1982. Music and art show a steady decline.
- 4) Enrollment in vocational subjects has declined by 12% since 1982. Home Ec and Ag have shown steady declines since 1977.
- 5) Median number of core academic courses has remained constant, except in areas of math and science.
- 6) Larger rural high schools (200-499) offer more courses in most heavily enrolled subject areas compared to smaller rural high schools (1-199).
- 7) Doubling the school enrollment typically increases the number of course offerings by 40%.

The author gratefully acknowledges the information provided by the Illinois State Board of Education, Research, and Evaluation Department, 1986-87 Census of Secondary School Course Offerings, and Illinois public high schools surveyed.

Chapter 5

Summary, Findings, Conclusions and Recommendations

Summary

This study examined the impacts of the 1990 IBHE college entrance requirements on the curriculums of rural schools in east central Illinois. The past four school years from 1985-1989 were studied, noting curriculum, enrollment, and other changes that have taken place over the last three school years.

Curriculum Changes

The author's presumptions that more core academic (college preparatory) courses and fewer vocational courses are now in existence in the curriculums of the rural high schools surveyed proved to be true. This study found that the largest amount of curriculum expansion has taken place in the area of college preparatory courses. Over two-thirds of the schools surveyed have added college preparatory courses, and one-third added classes as a direct result of the 1990 IBHE requirements.

Less than half of the schools surveyed have added vocational courses to curriculums within the last three years. Further evidence pointing to an eroding vocational curriculum is the fact that the largest number of courses dropped in the last three years among schools surveyed were in the subject areas of industrial arts, business, and home economics.

Enrollment Changes

The results of this study in the area of enrollment patterns further confirmed the author's idea that smaller rural high schools have seen a shift towards more students in core academic (college preparatory) subjects, and fewer students in vocational subjects.

The greatest increases in enrollments during the last three years among the schools surveyed were in the subject areas of foreign language, upper level mathematics courses, and upper level science courses.

The data on vocational enrollments seemed to further confirm the author's premise that since the enactment of the 1990 IBHE requirements fewer students have been enrolling in vocational courses in the smaller rural schools. The largest decreases in vocational enrollments during the last three years among schools surveyed were in the subject areas of industrial arts and home economics.

The study identified a pattern of increased enrollments over the last two years in college preparatory courses, and decreased enrollments in vocational courses among those schools surveyed.

Other Changes and Observations

The study found only a minimal amount of change in scheduling by those schools that were surveyed, with only three schools adding a class period to the school day.

The greatest amount of change that seemed to be most common among those schools surveyed was in the area of increased graduation requirements. The majority of the rural schools are requiring more credits and more specific subjects to graduate.

Once again the data on changes in certified staff needs over the last three years among those schools surveyed, further confirmed suspected declines in vocational programs. Staff reductions were most common in vocational areas and staff additions, although limited, occurred most frequently in core academic subject areas.

Curriculum flexibility and expansion among schools surveyed was maintained most often by offering classes on an every other year basis. Satellite hookups with universities to provide video classes for students in rural areas is also becoming more common.

The author of this study also found that among school officials surveyed most of the negative comments on the impacts of the 1990 IBHE requirements were that vocational programs had suffered as a result of this mandate. The positive comments centered on the idea that students were now much more aware of what courses were necessary to prepare for college as a result of the 1990 IBHE requirements.

Findings

A detailed analysis of various changes made during the

last three school years, indicated to the author that there has been a significant impact upon rural schools as a result of the 1990 IBHE requirements.

Curriculum Changes Among Schools Surveyed

1) Sixty-nine percent of the schools have added college-preparatory courses.

2) Approximately one-third of the schools have added courses as a direct result of the 1990 IBHE requirements.

3) Forty-four percent of the schools have added vocational courses.

4) Sixty-three percent of the schools have not added sections of college-preparatory classes.

5) Thirty-eight percent of the schools have added sections of college-preparatory subjects.

6) The subject areas where sections were added included:

- a) science
- b) English
- c) social studies
- d) mathematics
- e) foreign language

7) Fifty-six percent of the schools have dropped courses, with the largest number of drops in the subject areas of industrial arts, business, and home economics.

Enrollment Changes Among Schools Surveyed

1) The greatest increases in enrollments have been in the following subject areas:

- a) upper level mathematics
- b) upper level science
- c) foreign language

2) The largest decreases in enrollments have been in the following subject areas:

- a) industrial arts
- b) home economics

3) Two-thirds of the schools experienced significant enrollment increases of at least ten percent in college-preparatory courses.

4) Two-thirds of the schools experienced significant enrollment decreases of at least ten percent in vocational courses.

Other Changes Made Among Schools Surveyed

1) Forty-four percent of the schools allow physical education exemptions so that students may take a class.

2) Only three schools have added a class period to the school day.

3) Over two-thirds of the schools have increased graduation requirements.

4) Changes in graduation requirements included:

- a) average increase of two units of credit over existing number needed to graduate in the past
- b) average median number of credits required to graduate was 20.7
- c) science and English most commonly increased subject requirements

5) Changes in staff included:

- a) Twenty-five percent of the schools have deleted staff.
- b) Fifteen percent of the schools have added staff.

- c) Staff reductions were most common in vocational areas.
- d) Staff additions were most common in core academic subject areas.

6) Most schools alternate course offerings every other year in subjects with low enrollments.

7) Modern technology is now being used to bring university sponsored courses into the high school classrooms.

8) School personnel were evenly split on whether the 1990 IBHE requirements have negatively or positively impacted schools.

Conclusions

Following an analysis of data from the rural schools surveyed on the impacts of the 1990 IBHE requirements, the author reached the following conclusions:

1) The high school curriculums in the smaller rural schools have become more core academic in nature, with fewer vocational course offerings and more college-preparatory course offerings, since the enactment of the 1990 IBHE requirements.

2) The smaller rural high schools have experienced increased enrollments in college-preparatory subjects, especially upper level mathematics, and science classes, along with foreign language courses within the last three years. This seems to indicate that students are responding to the IBHE's mandates and guidelines.

3) Most of the smaller rural high schools seem to be meeting the challenge of offering the IBHE mandated curriculum by:

- a) adding more core academic subjects
- b) utilizing the physical education exemption to allow students to take more classes
- c) offering certain college-preparatory and vocational courses, with low enrollments, on an alternating basis every other year
- d) providing satellite--video classes offered through state universities so that students may take upper-level college-preparatory courses.

4) Graduation requirements in the smaller rural high school have increased dramatically in the last three years. The author determined that none of the schools surveyed seemed to indicate that this was a direct result of the 1990 IBHE requirements.

5) The staffing reductions of certified personnel in the smaller rural high schools have been primarily in the area of vocational education indicating that vocational programs have been reduced.

Recommendations

Based upon the results of this study the following recommendations are offered:

- 1) A follow-up study of the graduating classes of 1990-93 should be conducted to determine the following:
 - a) Are fewer of these graduates being required to take remedial classes at the university level?

- b) Are ACT scores of these graduates that followed the IBHE required subject pattern higher than those of students who were not required to take these courses?
- c) Are students from small rural schools meeting the IBHE entrance requirements without being accepted on a provisional basis?

2) A follow-up study during the next three years on curricular offerings in rural schools should be conducted to determine if the pattern of fewer vocational course offerings noted in this study is continuing.

3) A follow-up study should be undertaken to determine if in fact fewer vocational course offerings in smaller rural schools is impacting drop-out rates.

4) Workshops should be conducted around the state to disseminate information among school administrators of rural schools on the various methods used to maintain a flexible curriculum that meets the needs of both the college-bound and non-college bound student. More information on the use of satellite hook-ups to provide an expanded number of courses for students should be made available to administrators and districts so that they are aware of this new resource.

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Appendix A

Cover Letter Explaining Survey

Dear Sir:

We are conducting a research project in conjunction with Eastern Illinois University on the ramifications and impacts of the Illinois Board of Higher Education college entrance requirements on high school curriculum in east central Illinois.

Please find enclosed a questionnaire which we are using to collect our data for this research. If in your opinion your guidance counselor could better answer some, or all of these questions, then please feel free to defer this questionnaire to that person.

A timely response to the questionnaire would be greatly appreciated as we would like to have these returned by February 15, 1989. Please also find enclosed a stamped, self-addressed envelope for your convenience.

A response from your school will guarantee a report of aggregate data back to your office once the research study has been completed.

If you have any questions, please feel free to contact Stephen C. Selle at Central High School, 815-694-2321. Your cooperation in this research study will be greatly appreciated.

Sincerely,

Dr. Larry Janes
Associate Professor of Educational Administration
Eastern Illinois University
Charleston, IL 61920

Stephen C. Selle
Director of Guidance
Central High School
Clifton, IL 60927

SCS:bah
Enclosures

Appendix B

Research Study Questionnaire-Survey

PLEASE RETURN by February 15, 1989 to: Stephen C. Selle
 Guidance Director
 Central High School
 Box 97
 Clifton, IL 60927

NAME _____

HIGH SCHOOL _____

ADDRESS _____

1. Please list any new courses added to your curriculum within the last three school years. Mark those changed to meet IBHE standards with an X.

2. Please list any additional sections of college prep classes added to your high school schedule within the last three school years.

3. Please list any courses dropped from your high school curriculum or not offered, within the last three school years. Mark those dropped or not offered as a result of IBHE requirements with an X.

4. Please list average enrollment figures in the following college prep classes during these school years:

	1985-1986	1986-1987	1987-1988	1988-1989
Algebra I	_____	_____	_____	_____
Geometry	_____	_____	_____	_____

4.--continued

	1985-1986	1986-1987	1987-1988	1988-1989
Algebra II	_____	_____	_____	_____
Advanced Math	_____	_____	_____	_____
Biology I	_____	_____	_____	_____
Chemistry	_____	_____	_____	_____
Biology II	_____	_____	_____	_____
Physics	_____	_____	_____	_____
English IV	_____	_____	_____	_____
Foreign Language	_____	_____	_____	_____
Social Studies (other than U.S. History and Consumer Education)	_____	_____	_____	_____
TOTAL Class Enrollment 9-12	_____	_____	_____	_____

5. Please list average total enrollments in the following vocational subject areas during these school years.

	1985-1986	1986-1987	1987-1988	1988-1989
Business Subjects (i.e. typing, accounting, shorthand, etc.)	_____	_____	_____	_____
Industrial Arts (i.e. shop, woods, mechanics, etc.)	_____	_____	_____	_____
Home Economics (i.e. foods, clothing, etc.)	_____	_____	_____	_____
Career Center Programs	_____	_____	_____	_____

* 6. Please list any changes in scheduling instituted by your school system within the last three years. (Examples - scheduling an extra class period, lifting limits on the number of classes a student may take, scheduling "early-bird" classes before start of the regular school day, allowing PE exemptions to take extra classes.)

- * 7. Please list any changes in graduation requirements instituted by your school system within the last three school years. (i.e. increased number of credits, classes, etc.)

- * 8. Please list any staff additions or deletions made in your high school during the last three school years that can be related to any changes in your curriculum.

- 9. Please list any unique methods instituted by your high school that allows for a more flexible and expanded curriculum. (Examples-offering upper level college prep classes or certain vocational classes every other year, co-oping classes with other school systems to expand your curriculum, etc.)

- 10. Do you feel that the Illinois Board of Higher Education college entrance requirements have negatively or positively affected your high school curriculum?
YES _____ NO _____ Please explain.

- * As a result of IBHE requirements.
Please use back side if more space is needed.