Spring 2-11-1987

Senate Meeting February 11, 1987

Academic Senate
Illinois State University

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ACADEMIC SENATE MINUTES

February 11, 1987

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Lotus Hershberger, Math; and James Johnson, Psychology.

2. Approval of Ph.D. in Mathematics Education Proposal

INFORMATION ITEMS: None

Committee Reports

Communications

Adjournment

Meetings of the Academic Senate are open to members of the University community. Persons attending the meetings may participate in discussion with the consent of the Senate. Persons desiring to bring items to the attention of the Senate may do so by contacting any member of the Senate.
Call to Order

Chairperson Len Schmaltz called the meeting of the Academic Senate to order at 7:05 p.m. in the Circus Room of the Bone Student Center.

Roll Call

Secretary DeLong called the roll and declared a quorum present.

Approval of the Minutes of January 28, 1987

Mr. Shulman had requested a correction on page 5, paragraph 5, to read: "Mr. Shulman suggested that there should be some uniformity in the faculty vitae. They should all be in the same format."

Mr. Morreau moved approval of the minutes of January 28, 1987 (Second, Kirchner). Motion carried on a voice vote.

Chairperson's Remarks

Mr. Schmaltz had no remarks.

Vice Chairperson's Remarks

Mr. Semlow asked to see student senators following the meeting.

Student Body President's Remarks

Mr. Bailey had no remarks.

Administrators' Remarks

President Watkins had no remarks.

Provost Strand announced that legislation had been passed concerning oral English language proficiency of all persons providing classroom instruction to students at each Regency University. The issue was one with which the university would now have to deal. The University would have to have policies and procedures in place by the start of the fall semester, and must also give a status report at the May Board of Regents meeting about how ISU plans to deal with this issue. That means that there must be input from various university constituencies before the end of the Spring semester in May. A communique will be sent to the Chair of the Senate asking that the Academic Senate at its next meeting appoint three faculty members and two students to a committee that will be asked to recommend means of implementing this legislation. He wanted to alert faculty and students involved in the process of bringing names to the Senate that this topic would be coming up at the next meeting.
The following meeting of the Senate is not until March 25th because of Spring break, and that would be too late to get started on this matter. The committee would consist of nine members: three faculty and two students selected by the Academic Senate; one department chair; one dean; and two ex-officio members: Dean Richard Koshel, Graduate School; and Dr. Ed Anderson as Provost representative. He hoped that the Senate would vote on the members for this committee at the February 25th meeting.

Mr. Gamsky had no remarks.

Mr. Harden had no remarks.

**ACTION ITEMS**

**Appointments to Council for Teacher Education**

XVII-46 Mr. Semlow moved approval of the Rules Committee recommendation for Provost appointments to the Council for Teacher Education: Lotus Hershberger, Mathematics, and James Johnson, Psychology (Second, Belknap). Motion carried on a voice vote.

**Approval of Ph.D. in Mathematics Education Proposal**

Ms. Mills yielded the floor to the chair of the Budget Committee, David Ramsey. Mr. Ramsey stated that his cover letter with the attached changes would summarize the changes. New pages included 16-31 which would be substituted for pages 16-29 in the original proposal.

XVIII-47 Mr. Spence moved approval of the proposal for a Ph.D. in Mathematics Education (Second, Mills). Motion carried on a voice vote.

**INFORMATION ITEMS**

None.

**COMMITTEE REPORTS**

Academic Affairs Committee - Ms. Mills directed the attention of the Senate to two issues that would be coming up in the near future. The first was the proposed revisions to the admissions standards for ISU. The Academic Standards Committee had been working on this for the past two years, following guidelines set forth by the Illinois Board of Higher Education pertaining to course specific requirements for admission standards. This will be an information item at the February 25, 1987 meeting. The second issue pertains to the university studies program. A steering committee and subcommittee is assessing courses in university studies program.

"Every department that has a course in the University Studies program has a faculty representative on the sub-committee."
Administrative Affairs Committee - Mr. Borg announced that his committee would hold a short meeting following Senate adjournment.

Budget Committee - no report.

Faculty Affairs Committee - Mr. Sessions announced a committee meeting next Monday, February 16, 1987, at 9:00 a.m. in Hovey Hall 301.

Rules Committee - no report.

Student Affairs Committee - no report.

COMMUNICATIONS

Letter received from Dr. Gary C. Ramseyer, Chairperson, Athletic Council:

Dear Dr. Schmaltz:

I would like to inform you and other members of the Academic Senate of a motion that was passed unanimously by the Athletic Council at its most recent meeting on January 21, 1987. The motion is in regard to the racial slur that occurred on the talk show conducted by radio station WJBC following the ISU/Indiana basketball game on December 27, 1986. The Athletic Council felt that it was the appropriate University body to deal with this matter since the remark was perpetrated against a student-athlete. Moreover, the Council felt strongly that it must take a public stand against this slur. To remain silent on this issue is tantamount to saying that we really don't care enough to speak out against such racial incidents. I would greatly appreciate your reading this letter and motion to the entire assembly of the Academic Senate.

The statement of the motion follows:

"The Athletic Council strongly supports the public stands of Dr. Frederick and Coach Donewald against racism and joins them in publicly condemning the racial slur that occurred on WJBC following the ISU/Indiana University basketball game. Prejudice based on race, religion, sex, or handicap has no place on the ISU campus or in the Normal/Bloomington community. No member of the ISU community should ignore or tolerate any form of prejudice directed against ISU faculty, staff, or students, or against any member of this community."

Thank you for your consideration.

Sincerely,

Gary C. Ramseyer
Chairperson, Athletic Council

Mr. Watkins moved to adjourn the meeting (Second, Borg). Motion carried on a voice vote. Meeting of the Academic Senate adjourned at 7:22 p.m.

FOR THE ACADEMIC SENATE

DOUGLAS A. DELONG, SECRETARY
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February 3, 1987

TO: Academic Senate

FROM: Budget Committee

RE: Budget Revisions of the Ph.D. in Mathematics Education Proposal

Please substitute the attached pages for pages 16 through 29 in the original proposal. Revisions occur only on pages 16, 17, and 24 through 30. The major changes are:

1. The request for funds has been increased by $28,800. This increase reflects up-to-date estimates of faculty and graduate assistants' salaries ($16,500) and additional funding requests for student help ($1,800), equipment and instructional materials ($2,400), library support ($2,000), contractual ($1,000), and other support services, commodities, printing, etc. ($5,100).

2. Tables IV-3, IV-4 and IV-5 have been revised and notes added.

3. The narrative has been revised to justify the additional funds requested.

The Budget Committee finds that the funds requested are reasonable and adequate to support the program.
16. LOCUS OF ACADEMIC CONTROL OF PROGRAM

The Department of Mathematics will exercise academic responsibility for the program in matters such as curricular modifications, faculty assignments, student evaluations, and so forth. No exceptions to applicable college or university academic policies, admission standards, graduation requirements, and so on, are requested or anticipated.

17. ENROLLMENT AND CREDIT HOUR PROJECTIONS

Table IV-3 presents the enrollment and credit hour projections for the proposed doctoral program in mathematics education. The projections are constructed on a base of 10 full-time students in the first year and 8 full-time and 4 half-time students thereafter.

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NOTE: The data in Lines 01 and 02 reflect 10 full-time students in the first year of the program and 8 full-time and 4 half-time students thereafter. It is expected that each full-time student will generate 30 credit hours each year. Thus the 12 students (which are the equivalent of 10 full-time students) will generate 300 credit hours during the year. In Line 03 the base is the number of credit hours currently generated by existing courses needed to support the proposed curriculum. The increments in Lines 03 and 04 are determined by an expectation that in the first year 210 hours will be taken in existing courses, 60 hours in new courses, and 30 hours in courses outside the department. In subsequent years we anticipate that 120 hours will be in existing courses, 120 hours in new courses, and 60 hours in courses outside the department.

18. SUPPORT OF OTHER UNIVERSITY PROGRAMS

Ties that exist between mathematics education, mathematical sciences, and areas of professional education and psychology ensure that the proposed program will have positive effects on several other campus programs. Implementation of the proposed program should have the effect of increasing enrollments in the Research Methodology and Statistics courses of the Department of Educational Administration and Foundations. Likewise, increased enrollments should be anticipated in each of the suggested cognate areas.

A reciprocal effect upon the proposed program from other university programs is anticipated. Additional course offerings in mathematics education will increase current opportunities to take coursework in mathematics education for master's level students in the Mathematics Department and for graduate students in other departments. We anticipate that students with general interests in curriculum and in special education will be especially interested in graduate mathematics education coursework as part of their degree programs.

19. STUDENT CHARACTERISTICS

It is most likely that the initial group of students will come from Illinois and the surrounding states. As the program gains national stature, students will come from throughout the United States. It is expected that women will be well represented in the group of students and special efforts will be made to recruit and retain minority students.
STATEWIDE NEEDS AND PRIORITIES

20. EXTANT PH. D. PROGRAMS IN MATHEMATICS EDUCATION IN ILLINOIS

There are currently five institutions of higher education in Illinois offering a Ph. D. or Ed. D. in mathematics education or a Ph. D. in a related field that allows a specialization in mathematics education. Three are state supported schools: Northern Illinois University, Southern Illinois University, and the University of Illinois at Urbana. The other two are private institutions: the University of Chicago and Northwestern University.

The program at Northern Illinois University, like that proposed at Illinois State University, is housed in the mathematics department. Northern Illinois University's program does not permit the specialization in elementary mathematics (K-9) nor does it allow an emphasis in K-12 mathematics without a mathematics requirement that goes beyond the needs of program participants. The mathematics requirement at Northern Illinois University impedes students' abilities to take coursework in disciplines allied with mathematics education, and impedes their ability to participate in courses that focus upon issues of mathematical pedagogy, curriculum, and teacher education. Northern Illinois University currently does not have any students in its Ph. D. program in mathematics education. Conversations with faculty in the mathematics education group at NIU have indicated that many students have inquired about the program, but they have not enrolled due to the requirements in pure mathematics courses.

The programs at Southern Illinois University and the University of Illinois at Urbana are housed in their respective Colleges of Education. Neither program requires a mathematics component in students' programs of study. The coursework in these programs consists, for the most part, of classes in curriculum and instruction with little work in mathematics education. Both programs attract students whose major interests are in curriculum, but who do not wish to specialize in mathematics education as such. Enrollment in both of these programs is low. Conversations with faculty and prospective doctoral students have indicated that the minimal work in mathematics education compared to the amount of work required in general education areas has led students seriously interested in mathematics education to look elsewhere.

Of the five institutions named above, the University of Chicago's program is the closest to the program proposed at Illinois State University. In the recent past, it has averaged one to two graduates per year, with five students currently in the program. The University of Chicago program, housed in their School of Education, has strong mathematics and professional education components. It also allows students to specialize in elementary school mathematics. Most of the recent work at The University of Chicago has been in the area of curriculum development. Also, the University of Chicago has but two faculty members in mathematics education compared to 12 at ISU.

Northwestern University's program is housed in its College of Education. While this
program has a strong mathematics component, its major emphasis is in the psychology of mathematics learning. Its graduates have tended to work in areas of learning theory or artificial intelligence, as distinct from research areas that are more directly related to the mathematics education needs of public school mathematics programs. This program also has few students. Students with a strong interest in the psychology of mathematics learning are choosing to pursue degrees in psychology rather than mathematics education or they are choosing to attend institutions with a larger mathematics education faculty than is currently at Northwestern.

The proposed Ph. D. program at Illinois State University will be unlike any that currently exist in Illinois in three important ways. First, the curriculum at ISU, in particular the three program options, will allow the student to select the amount and type of mathematics content courses appropriate for a student's career aspirations. Students choosing the elementary education option (Option A) will exit the program with a mathematics background appropriate for educating teachers of mathematics at grades K-9. Since Option A focuses on mathematics teacher education at grades K-9, students in this program will not have to enroll in mathematics courses at a level far above that which they would need to be an effective mathematics educator for teachers of grades K-9. Students interested in a K-9 mathematics teacher education emphasis would certainly select ISU rather than Northern Illinois University where the mathematics content requirements go far beyond the needs of the students. Similarly, students selecting Option B (mathematics teacher education for grades K-12) and Option C (mathematics teacher education for grades 9-12) will have the opportunity to take an appropriate amount of mathematics needed to be effective at these levels. The proposed program is the only one in Illinois, housed in a Department of Mathematics, which will allow specialization across the K-12 range and still have a significant, but appropriate, requirement in mathematics. At the University of Illinois and Southern Illinois University, students are not required to take a number of advanced mathematics content courses as part of the respective Ph. D. programs. Students interested in secondary mathematics education would choose ISU rather than the University of Illinois or Southern Illinois University. Also, the excessive mathematics content requirements at Northern Illinois University make the proposed program at ISU far more attractive for secondary mathematics teacher educators than the program at NIU. The opportunity to select a program option that reflects the mathematics content needs of students with respect to the teacher education levels at which they will be working should make the program at ISU far more attractive than the programs at Northern Illinois University, Southern Illinois University, and the University of Illinois.

A second important difference of the program at ISU and others in the state is the emphasis and interest that is given to teacher education at ISU. The background, experience, and research interests of most of the mathematics education faculty at ISU are related directly to teaching mathematics and teacher education in mathematics. As the demand for qualified teachers of mathematics continues to grow, the need for Ph. D. graduates who have emphasized teaching and teacher education will be much greater than the need for students who have emphasized curriculum development or
psychology, as in the programs at the University of Chicago or Northwestern.

The third important difference between the proposed program and others in the state lies in the difference between the faculty at ISU and the faculties at the other institutions. As mentioned earlier, the mathematics education group in the mathematics department at ISU is the largest such group in the United States (12 faculty members). None of the state institutions in Illinois that offer a doctoral degree in mathematics education have more than 4 faculty members in mathematics education, with most having but 2. Also, the mathematics education group at ISU is among the most active in the United States. The brief vitae given later in this document indicate the quantity and quality of the activities of the mathematics education faculty at ISU. Also, the faculty listed later in this document are only those who are directly related to mathematics education. ISU is one of the few schools in the United States where the mathematics education faculty are in the mathematics department. In Illinois, only ISU and NIU have both the mathematics and mathematics education faculty in the same department. This fact together with the fact that excellent working relationships exist between the pure and applied mathematicians and the mathematics educators further contribute to the overall quality of instruction students will receive in the Ph. D. program at ISU.

21. STUDENT DEMAND FOR THE PROGRAM

There is good reason to believe that student demand for the program will be high. Also, we have received several formal inquiries concerning the proposed program (see Appendix A). First, as indicated earlier, there are few institutions where a person interested in mathematics teacher education can obtain a Ph. D. in Mathematics Education. And second, there appears to be a high positive correlation between the number of mathematics education faculty and the number of doctoral students in the Ph. D. program. The only other doctoral program in mathematics education in the United States that has a comparable number of mathematics education faculty (10) is The University of Georgia. They have approximately 15 full-time doctoral students in their program. There is reason to believe that a large active faculty in mathematics education, such as the faculty at Illinois State University, will attract a large number of doctoral students.

It is also reasonable to expect that the enrollment in the Doctor of Arts program that currently exists will always be lower than the enrollment in the proposed Ph. D. program. The purpose of the D. A. program is to prepare students to be outstanding teachers of mathematics content courses primarily at community colleges. Most of the students pursuing the D. A. degree are currently employed at community or small colleges and are not required to complete this degree to stay in their present position. Rather, the D. A. degree at best might provide a salary increment. Therefore, most students interested in the D. A. program are interested in the program for personal reasons and not because the degree is required for entry into their profession (teaching mathematics at the community or small college level). On the other hand, people
Interested in careers as mathematics educators in colleges or universities need the Ph. D. degree to enter the profession. Therefore, we expect the enrollment in the Ph. D. program to be greater than the enrollment in the D. A. program.

22. DEMAND FOR THE PROGRAM GRADUATES

Graduates of undergraduate, M. S., and D. A. programs in Illinois State University's Department of Mathematics have always been in demand. This is reflective of the high regard given the Department's programs and faculty by members of the professional community. The strong demand for the University's graduates from the Mathematics Department is also reflective of the Department's commitment to high quality teaching, research, and comprehensive mathematics education.

The likelihood of future demand for graduates of the proposed program can be documented in the growth in school mathematics programs and the increased demand for teachers of undergraduate mathematics and mathematics education courses. As stated earlier in the proposal, undergraduate demands for mathematics have increased at Illinois state universities by over 81 percent during the past five years. Similar changes have been realized at the community college and secondary school levels. While overall student population has dropped in several suburban high schools in the Chicago area, their overall demand for mathematics has increased. This pattern, combined with increased college entrance requirements in mathematics, will continue the demand for qualified teachers and, thus, teachers of teachers of mathematics.

Data from the National Research Council and other sources indicate that demand will be at least twice the supply in the foreseeable future. That is, the annual demand will be at least twice the best expected supply. To meet this need, it is expected that the number of undergraduate mathematics education majors will increase and the demand for the retraining of teachers currently certified in other disciplines will grow. Evidence of the need for more trainers of mathematics teachers reflects the increasing shortages of qualified mathematics teachers. In the spring of 1985, Illinois colleges and universities opened nine positions in mathematics education. Nationally, there were approximately 40 advertisements for mathematics teacher educators in the Chronicle of Higher Education in 1982-83; 70 advertisements in 1983-84; 100 advertisements in 1984-85, and over 125 advertisements in 1985-86. Graduates of the proposed program would have met the requirements of these advertised positions. Also, a survey of three of the leading mathematics education doctoral programs in the United States shows that the number of mathematics education doctoral students is growing, but the number of students graduating who are candidates for the advertised positions is still far below the national need as documented by the number of advertised positions. In the last 3 years, The University of Georgia has graduated 15 students, The University of Wisconsin, 20 students, and Indiana University, 12 students. Although most of these students are candidates for the advertised positions, some at each institution were foreign students who left the country and others were ones who returned, after taking a leave of absence, to a college or university. Thus, there is a
clear need for mathematics teacher education specialists in colleges and universities in Illinois and throughout the country.

FACULTY AND STAFF

23. PRINCIPAL FACULTY

The strength of Illinois State University in mathematics education is well known throughout the nation (see attached letters of support for the proposed program). The mathematics education faculty in the Department of Mathematics is the largest body of mathematics educators at one institution in the United States. The productivity of the faculty is a mark of its capability to staff the proposed Ph. D. program. The experience of the faculty in the proposed areas of special emphasis is evident from the brief vitae given below. Greater detail on faculty vitae are given in the appendix. The research and grant activities of the mathematics education faculty mark it as one of the most active in the United States and demonstrate the capabilities of the faculty to direct doctoral research.

Members of the mathematics education faculty have been, and continue to be, active in national research organizations and national professional organizations.

A sample of faculty activity: Two faculty have been members of the Research Advisory Committee of the National Council of Teachers of Mathematics, one faculty has served on the editorial board of the Journal for Research in Mathematics Education, one faculty is currently an officer in the Special Interest Group for Research in Mathematics Education of the American Educational Research Association, one faculty is on the advisory board of Learning magazine, and one faculty is currently President of the National Council of Teachers of Mathematics. Presentations at national and international professional meetings and presentations at national and international research meetings are too numerous to cite.

The mathematics education and mathematics faculty in the Department are noted as good teachers at both the undergraduate and graduate levels. All of the members of the mathematics education faculty have experience in teaching at precollege levels and in working with teachers in teacher education. Moreover, the department has provided outstanding service and leadership in mathematics education to the state, the region, and the nation. (see page 31 for more detailed vita)

LYNN BROWN (Ph. D., University of Iowa); specialist in secondary mathematics education, problem solving, and logic in the teaching of mathematics; joined the ISU faculty in 1960; presenter at numerous regional, state and national conferences; project associate in an NSF curriculum research and development project aimed at developing training material for secondary teachers.

RANDALL CHARLES (Ph. D., Indiana University); specialist in elementary mathematics
education, research and curriculum development on the teaching and learning of problem solving, teaching strategies for mathematics, and research in mathematics education; joined the ISU faculty in 1982; author of numerous articles and books for teachers; member of the Research Advisory Committee of the NCTM.

JOHN DOSSEY (Ph. D., University of Illinois); specialist in collegiate mathematics education, teaching strategies, and concept learning; joined the ISU faculty in 1967; author of numerous articles; author of books for teachers and students; recipient of numerous awards for his contributions to mathematics education; President-Elect of the National Council of Teachers of Mathematics.

LOTUS HERSHBERGER (Ph. D., Florida State University); specialist in secondary and collegiate mathematics education, diagnosis and remediation, and the teaching and learning of algebra; joined the ISU faculty in 1970; coordinator of a diagnostic and remedial laboratory; speaker at regional, state, and national conferences.

PHARES O’DAFFER (Ph. D., University of Illinois); specialist in elementary mathematics education, curriculum studies, and geometry; joined the ISU staff in 1968; speaker at numerous regional, state, and national conferences; chair of the editorial panel for The Arithmetic Teacher; author of numerous books and articles.

KENNETH RETZER (Ph. D., University of Illinois); specialist in secondary mathematics education, teaching strategies, and logic; joined the ISU faculty in 1959; project director of an NSF sponsored project concerned with developing innovative training material for secondary teachers of mathematics.

THOMAS SHILGALIS (Ph. D., University of Illinois); specialist in secondary mathematics education, curriculum content, mathematics contests, and geometry; joined the ISU faculty in 1967; director of the Annual Illinois Mathematics Contest; author of numerous articles.

ALBA THOMPSON (Ed. D., University of Georgia); specialist in secondary mathematics education, teacher education, teachers' conceptions of mathematics, and research in mathematics education; joined the ISU faculty in 1985; teacher in gifted education projects; actively involved with the Mathematics Education Special Interest Group of The American Educational Research Association.

PATRICK THOMPSON (Ed. D., University of Georgia); specialist in elementary mathematics education, child development related to mathematics, and computer applications; joined the ISU faculty in 1985; developer of innovative computer microworlds for training prospective teachers; actively involved with the Mathematics Education Special Interest Group of The American Educational Research Association.

CAROL THORNTON (Ph. D., Indiana University); specialist in elementary mathematics education, basic fact thinking strategies, and methods for teaching mathematics in
special education; joined the ISU faculty in 1974; author of several books for teachers on the teaching of basic facts and teaching children with special needs.

BENNY TUCKER (Ph. D., University of Illinois); specialist in elementary mathematics education, instructional aids for teaching mathematics, and problem solving; joined the ISU faculty in 1977; director of numerous workshops on the teaching of mathematics; author of numerous articles and books for teachers on activities for teaching mathematics.

BARBARA WILMOT (Ph. D., University of Illinois); specialist in gifted education in mathematics and mathematics anxiety; joined the ISU faculty in 1985; director of numerous workshops for students and teachers in the areas of computer applications in K-8 mathematics and teaching mathematics to the gifted.

24. ADDITIONAL FACULTY REQUIRED

Table IV-4 presents the total staff requirements for the proposed doctoral program. The new faculty and staff requested in this proposal consist of one faculty position (for 11 months) and ten graduate assistantships. The data in the table report the staff needs in terms of man-years.

**TABLE IV-4**

<table>
<thead>
<tr>
<th>Code</th>
<th>Staff Requirements</th>
<th>Past Year</th>
<th>Budget Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Faculty/Admin. (Total 02-04)</td>
<td>3.75</td>
<td>9.24</td>
<td>9.27</td>
<td>9.35</td>
<td>9.42</td>
<td>9.42</td>
</tr>
<tr>
<td>02</td>
<td>Admin./Other Prof.</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>03</td>
<td>Faculty</td>
<td>3.75</td>
<td>4.66</td>
<td>4.69</td>
<td>4.77</td>
<td>4.84</td>
<td>4.84</td>
</tr>
<tr>
<td>04</td>
<td>Grad. Asst.</td>
<td>0.00</td>
<td>4.58</td>
<td>4.58</td>
<td>4.58</td>
<td>4.58</td>
<td>4.58</td>
</tr>
<tr>
<td>05</td>
<td>Civil Service/Student Workers</td>
<td>0.00</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>06</td>
<td>Total Staff (01-05)</td>
<td>3.75</td>
<td>9.49</td>
<td>9.52</td>
<td>9.60</td>
<td>9.67</td>
<td>9.67</td>
</tr>
</tbody>
</table>
NOTE: Line 03 reflects the need for 3.75 staff year faculty (the equivalent of 5 FTE for 9 months) to teach existing courses, required to support the proposed curriculum and an increasing increment of time required to teach new courses, advise students, and to direct dissertations. Line 04 reflects the 10 doctoral assistants having 11 month appointments. Finally, Line 05 reflects the need for 10 hours of student help each week to handle the clerical tasks of the program.

The Mathematics Department intends to appoint a faculty member in mathematics education in the 1986-87 school year. The proposed program will require one additional faculty member in mathematics education to help with the increase in the number of courses to be taught and the number of students needing an advisor. This faculty member must have an extensive background in research and teacher education in mathematics education. In addition, the individual will be expected to have experience in advising doctoral-level students in mathematics education. This individual will also be expected to have public school teaching experience and experience in teaching a wide variety of graduate courses in mathematics education. Specific areas which will complement and strengthen existing faculty research programs are teacher education, teaching strategies, and research on teaching. Specific interests in the teaching and learning of problem solving or the use of technology in instruction are also highly desirable. This additional faculty member is needed in order to maintain the current high level of the Department's programs while expanding its mission to encompass the proposed Ph. D. program.

25. ADEQUACY OF CURRENT EQUIPMENT/INSTRUCTIONAL RESOURCES

Additional instructional materials, equipment, and space will be needed to expand the current programs in mathematics education to encompass the Ph. D. Program in Mathematics Education. These resources will be needed in four main areas. The first of these is additional equipment and space for observation, interaction, and research in conjunction with the Mathematics Clinic (a diagnostic-remedial program that services public school children in central Illinois with mathematics learning problems). The provision of supervised experiences in the Clinic will be an important part of the program for doctoral students. The ability to diagnose student errors and prescribe remediation is a critical need in mathematics programs at all levels.

Second, funding would be necessary for the additional microcomputer equipment to support expanded research activities on the teaching and learning of mathematics. The development and testing of microcomputer-based curricular materials involving mathematical concepts and principles require that additional microcomputers be available both for development and classroom activities. The microcomputers currently available in the department will not support this demand for word processing, research, and curriculum development by faculty members, not to mention additional graduate students. Furthermore, there is a need for the computing technology to be kept current if the research is to be of the most value.
Third, additional support will be required to maintain the level of materials available in the Mathematics Educational Material Center in Stevenson Hall 302. This Center, perhaps the best equipped mathematics facility for mathematics teacher education in the nation, will require additional support as its functions are extended to cover doctoral level demands in mathematics education. Most of these demands would be for additional reference materials and specialized research materials related to ongoing research projects of faculty and doctoral students.

Finally, the Mathematics Department will require additional office space for housing the new faculty member and the doctoral assistants enrolled in this program. At present, graduate students involved in the Department's teaching activities are housed three per office in space designed for a single individual.

26. ADEQUACY OF CURRENT LIBRARY HOLDINGS

The current library holdings and acquisition patterns for monographs, reference sources, periodicals, and serials support many of the needs of this proposed program; however, additional resources to reflect new and emerging research areas of the doctoral students and faculty will be required. There is a need for additional research journals and books that describe the latest findings in the teaching and learning of mathematics, especially the research materials in cognitive science and artificial intelligence.

27. ANTICIPATED INTERNSHIP/CLINICAL SITES

There are no internship requirements that would necessitate special off-site arrangements or costs.

28. OFF-CAMPUS SUPPORT SERVICES REQUIRED

No off-campus support services are required for the proposed program.

ACCREDITATION AND LICENSURE

29. ACCREDITING ASSOCIATIONS

There are no accrediting associations directly related to the proposed program. The proposed Ph. D. program in Mathematics Education would be regularly evaluated as part of the evaluation of collegiate programs and during regular visitations of the North Central Association. It would also be visited as part of the regular visitations of the National Council for Accreditation of Teacher Education.
30. TIMETABLE FOR ACCREDITATION ATTEMPTS

The timetable for the visitations mentioned in Section 29 would match those established for similar programs during the regular university-wide visitations by these agencies.

31. ACCREDITATION FOR OTHER DEPARTMENTAL PROGRAMS

The current undergraduate and graduate programs in the Department of Mathematics are not specifically accredited by any agency. They have received excellent evaluations from both the state, HCA, and NCATE visitation teams observing the programs in recent years. Copies of those evaluations are on file in the administrative offices.

FINANCING

32. PROGRAM RESOURCE REQUIREMENTS

<table>
<thead>
<tr>
<th>Line Code</th>
<th>Budget Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Total Resource Requirements</td>
<td>1,815.08</td>
<td>1,784.88</td>
<td>1,784.88</td>
<td>1,784.88</td>
</tr>
<tr>
<td>02</td>
<td>Total Resources Available From Federal Sources</td>
<td>14.33</td>
<td>5.20</td>
<td>5.20</td>
<td>5.20</td>
</tr>
<tr>
<td>03</td>
<td>Total Resources Available From Other Non-State Sources</td>
<td>21.07</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>04</td>
<td>Existing State Resources</td>
<td>1,504.24</td>
<td>1,779.68</td>
<td>1,779.68</td>
<td>1,779.68</td>
</tr>
<tr>
<td>05</td>
<td>State Resources Available Through Internal Allocation</td>
<td>85.04</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Table IV-5 contains information on the total resource requirements needed by the Mathematics Department for the proposed Ph.D. in Mathematics Education. The resource requirements are based on the assumption that there will be a total of 10 full-time graduate students on campus during the first year of the program (5 at the entering level and 5 having completed some of the requirements), 3 entering and 9 continuing students the second year, and 12 on-campus students each year thereafter. The support level for these students (the equivalent of 10 full-time students) is calculated at the rate of $900 per month for a total of 11 months of the year or $9900 per student per year.

In addition, the resource requirements call for the addition of one senior staff member at the full professor level at a monthly salary of $5500, or, figured on an eleven month basis, $60,500 per year.

Providing clerical assistance to the program will be student help at approximately 10 hours per week. At a pay rate of minimum wage of $3.35 per hour, a total of $1800 is needed.

Additional resources are needed to obtain computing technology for use in research on children's acquisition of mathematical skills and for curricular development by faculty and students in the program. A main focus of current research is the integration of computing technology into the mathematics curriculum in order to create a more

<table>
<thead>
<tr>
<th>Line</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>06</td>
<td>New State Resources Required (01 minus the sum of (02-05)</td>
<td>190.40</td>
</tr>
<tr>
<td>07</td>
<td>Staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Admin / Other Prof</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Faculty</td>
<td>60.50</td>
</tr>
<tr>
<td></td>
<td>Graduate Assistants</td>
<td>99.00</td>
</tr>
<tr>
<td></td>
<td>Civil Service</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Student Employees</td>
<td>1.80</td>
</tr>
<tr>
<td>08</td>
<td>Equipment and Instructional Materials</td>
<td>20.00</td>
</tr>
<tr>
<td>09</td>
<td>Library</td>
<td>2.00</td>
</tr>
<tr>
<td>10</td>
<td>Contractual</td>
<td>2.00</td>
</tr>
<tr>
<td>11</td>
<td>Other Support Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commodities</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>Printing</td>
<td>0.90</td>
</tr>
<tr>
<td></td>
<td>Telecommunications</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>Travel</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>Award and Grants</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The breakdown of the figure shown in Line 06 for the Budget Year is as follows:

The support level for these students (the equivalent of 10 full-time students) is calculated at the rate of $900 per month for a total of 11 months of the year or $9900 per student per year.

In addition, the resource requirements call for the addition of one senior staff member at the full professor level at a monthly salary of $5500, or, figured on an eleven month basis, $60,500 per year.

Providing clerical assistance to the program will be student help at approximately 10 hours per week. At a pay rate of minimum wage of $3.35 per hour, a total of $1800 is needed.

Additional resources are needed to obtain computing technology for use in research on children's acquisition of mathematical skills and for curricular development by faculty and students in the program. A main focus of current research is the integration of computing technology into the mathematics curriculum in order to create a more
An interactive learning environment. This requires immediate access to microcomputers by both faculty and students in the program and also requires current computing technology. For instance, the work in artificial intelligence requires state-of-the-art computing equipment if it is to be on the cutting edge of effective research in the learning of mathematics by children. Research in the use of video-disc technology as an effective teaching instrument requires modern equipment as well. Finally, videotaping equipment will be needed for the Mathematics Clinic. For all of this an annual expenditure of $20,000 is anticipated.

Library materials needed to fully support the program include research journals and books in cognitive science and artificial intelligence that deal directly with the learning and teaching of mathematics at an annual cost of $2000. This would allow for the additional purchase of approximately 25 new research monographs and reports and the addition of 3–4 new journals.

To support increased research requires additional computer usage. Based upon prior experience with faculty research projects using the mainframe computer $1000 in additional computer funds are needed. The purchase of software for the microcomputers needed by faculty in research projects should be $1000 annually, and thus $2000 in contractual funds are requested.

The final resource needed is $5100 in the form of other support. Based upon the current operating budget for both research and teaching, $400, $400, $50, and $1000 will be needed in the areas of commodities, printing, telecommunications, and travel respectively to support the new teaching and research staff. An additional $600, $500, $150, and $1000 will be needed for direct program support in the areas of commodities (for the Mathematics Education Materials Center and Mathematics Clinic), printing (brochures and reports), telecommunications (recruitment), and travel (travel to professional meetings for recruitment), respectively.

a. Projected Increments in Total Resource Requirements may be explained as follows:

Budget Year: During the budget year, the Program will require the addition of 1 staff member ($60,500), 10 graduate assistantships ($99,000), student help ($1800) the purchase of computing and other equipment ($20,600), the purchase of library materials ($2000), additional contractual funds ($2000), and other support ($5100) for a total of $190,400.
2nd Year - 5th Year: The adjustment to the Mathematics Department's base budget in the Budget Year contains the resources needed to continue the program at the projected rate for years 2 through 5.

b. New State Resources Required in the Budget Year

The new state resources required by the program are as detailed above. Broken down by lines, these costs are as follows:

07 Staff ($161,300) These costs cover the salary of the new senior staff member, 10 graduate assistantships, and student help.

08 Equipment ($20,000) These costs cover the acquisition of computing technology and other equipment.

09 Library ($2000) These costs cover the acquisition of research journals and books.

10 Contractual ($2,000) A total of $2000 supports the acquisition of software and computer time for research projects.

11 Other ($5100) This line supports the cost of the new faculty and staff and provides support for the clerical operation of the program.

c. Federal and Other Non-State Support

At the present time there is no source of either Federal or Non-State support for the program. It is anticipated that there will be funded grants written by departmental members which will supply some student support from time to time. However, these sources cannot be counted on for continued support for a program of an ongoing program.

**OFF-CAMPUS PROGRAMS**

33. PROGRAM COMPLIANCE WITH OFF-CAMPUS GUIDELINES

The off-campus program guidelines of the Illinois Board of Higher Education do not apply to the present proposal.
January 23, 1987

Dr. Leonard Schmaltz
Chairperson, Academic Senate
Illinois State University
Normal, Illinois 61761

Dear Dr. Schmaltz:

I would like to inform you and other members of the Academic Senate of a motion that was passed unanimously by the Athletic Council at its most recent meeting on January 21, 1987. The motion is in regard to the racial slur that occurred on the talk show conducted by radio station WJBC following the ISU/Indiana basketball game on December 27, 1986. The Athletic Council felt that it was the appropriate University body to deal with this matter since the remark was perpetrated against a student-athlete. Moreover, the Council felt strongly that it must take a public stand against this slur. To remain silent on this issue is tantamount to saying that we really don't care enough to speak out against such racial incidents. I would greatly appreciate your reading this letter and motion to the entire assembly of the Academic Senate. The statement of the motion follows:

"The Athletic Council strongly supports the public stands of Dr. Frederick and Coach Donewald against racism and joins them in publicly condemning the racial slur that occurred on WJBC following the ISU/Indiana University basketball game. Prejudice based on race, religion, sex, or handicap has no place on the ISU campus or in the Normal/Bloomington community. No member of the ISU community should ignore or tolerate any form of prejudice directed against ISU faculty, staff, or students, or against any member of this community."

Thank you for your consideration.

Sincerely,

Gary C. Ramseyer
Chairperson, Athletic Council

Normal-Bloomington, Illinois
Phone: 309/438-8651

DeGarmo Hall 435
Normal, Illinois 61761-6901
January 28, 1987

Len Schmaltz, Chair
Academic Senate

Dear Len,

The Rules Committee approves the recommendation that Lotus Hershberger and James Johnson be reappointed to the Council for Teacher Education. We therefore pass on their names for Senate confirmation.

Very truly yours,

Judith Roof

Normal-Bloomington, Illinois
Phone: 309/438-3667

Equal Opportunity/Affirmative Action University

Stevenson Hall
Normal, Illinois 61761-6901

1.30.87.1
February 3, 1987

TO: Academic Senate

FROM: Budget Committee

RE: Budget Revisions of the Ph.D. in Mathematics Education Proposal

Please substitute the attached pages for pages 16 through 29 in the original proposal. Revisions occur only on pages 16, 17, and 24 through 30. The major changes are:

1. The request for funds has been increased by $28,800. This increase reflects up-to-date estimates of faculty and graduate assistants' salaries ($16,500) and additional funding requests for student help ($1,800), equipment and instructional materials ($2,400), library support ($2,000), contractual ($1,000), and other support services, commodities, printing, etc. ($5,100).

2. Tables IV-3, IV-4 and IV-5 have been revised and notes added.

3. The narrative has been revised to justify the additional funds requested.

The Budget Committee finds that the funds requested are reasonable and adequate to support the program.
16. LOCUS OF ACADEMIC CONTROL OF PROGRAM

The Department of Mathematics will exercise academic responsibility for the program in matters such as curricular modifications, faculty assignments, student evaluations, and so forth. No exceptions to applicable college or university academic policies, admission standards, graduation requirements, and so on, are requested or anticipated.

17. ENROLLMENT AND CREDIT HOUR PROJECTIONS

Table IV-3 presents the enrollment and credit hour projections for the proposed doctoral program in mathematics education. The projections are constructed on a base of 10 full-time students in the first year and 8 full-time and 4 half-time students thereafter.

<table>
<thead>
<tr>
<th>Line Code</th>
<th>Previous Year</th>
<th>Budget Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
</tr>
</thead>
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<tr>
<td>01 Number of Program Majors (Fall Term Headcount)</td>
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<td>10</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>02 Annual Full-time Equivalent (FTE) Majors</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>03 Annual Number of Credit Hours Generated by Majors and Non-Majors in Existing Courses That Are Needed to Support The Proposed Curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Hours by Majors</td>
<td>0</td>
<td>210</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Credit Hours by Non-Majors</td>
<td>1813</td>
<td>1813</td>
<td>1813</td>
<td>1813</td>
<td>1813</td>
<td>1813</td>
</tr>
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<td>Total Credit Hours</td>
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<td>2023</td>
<td>1933</td>
<td>1933</td>
<td>1933</td>
<td>1933</td>
</tr>
<tr>
<td>04 Annual Number of Credit Hours Generated by Majors and Non-Majors in New Courses That Are Needed to Support the Proposed Curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Hours by Majors</td>
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<td>60</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Credit Hours by Non-Majors</td>
<td>0</td>
<td>9</td>
<td>12</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>0</td>
<td>69</td>
<td>132</td>
<td>135</td>
<td>135</td>
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</tbody>
</table>
NOTE: The data in Lines 01 and 02 reflect 10 full-time students in the first year of the program and 8 full-time and 4 half-time students thereafter. It is expected that each full-time student will generate 30 credit hours each year. Thus the 12 students (which are the equivalent of 10 full-time students) will generate 360 credit hours during the year. In Line 03 the base is the number of credit hours currently generated by existing courses needed to support the proposed curriculum. The increments in Lines 03 and 04 are determined by an expectation that in the first year 210 hours will be taken in existing courses, 60 hours in new courses, and 30 hours in courses outside the department. In subsequent years we anticipate that 120 hours will be in existing courses, 120 hours in new courses, and 60 hours in courses outside the department.

18. SUPPORT OF OTHER UNIVERSITY PROGRAMS

Ties that exist between mathematics education, mathematical sciences, and areas of professional education and psychology ensure that the proposed program will have positive effects on several other campus programs. Implementation of the proposed program should have the effect of increasing enrollments in the Research Methodology and Statistics courses of the Department of Educational Administration and Foundations. Likewise, increased enrollments should be anticipated in each of the suggested cognate areas.

A reciprocal effect upon the proposed program from other university programs is anticipated. Additional course offerings in mathematics education will increase current opportunities to take coursework in mathematics education for master’s level students in the Mathematics Department and for graduate students in other departments. We anticipate that students with general interests in curriculum and in special education will be especially interested in graduate mathematics education coursework as part of their degree programs.

19. STUDENT CHARACTERISTICS

It is most likely that the initial group of students will come from Illinois and the surrounding states. As the program gains national stature, students will come from throughout the United States. It is expected that women will be well represented in the group of students and special efforts will be made to recruit and retain minority students.
STATEWIDE NEEDS AND PRIORITIES

20. EXTANT PH. D. PROGRAMS IN MATHEMATICS EDUCATION IN ILLINOIS

There are currently five institutions of higher education in Illinois offering a Ph. D. or Ed. D. in mathematics education or a Ph. D. in a related field that allows a specialization in mathematics education. Three are state supported schools: Northern Illinois University, Southern Illinois University, and the University of Illinois at Urbana. The other two are private institutions: the University of Chicago and Northwestern University.

The program at Northern Illinois University, like that proposed at Illinois State University, is housed in the mathematics department. Northern Illinois University's program does not permit the specialization in elementary mathematics (K-9) nor does it allow an emphasis in K-12 mathematics without a mathematics requirement that goes beyond the needs of program participants. The mathematics requirement at Northern Illinois University impedes students' abilities to take coursework in disciplines allied with mathematics education, and impedes their ability to participate in courses that focus upon issues of mathematical pedagogy, curriculum, and teacher education. Northern Illinois University currently does not have any students in its Ph. D. program in mathematics education. Conversations with faculty in the mathematics education group at NIU have indicated that many students have inquired about the program, but they have not enrolled due to the requirements in pure mathematics courses.

The programs at Southern Illinois University and the University of Illinois at Urbana are housed in their respective Colleges of Education. Neither program requires a mathematics component in students' programs of study. The coursework in these programs consists, for the most part, of classes in curriculum and instruction with little work in mathematics education. Both programs attract students whose major interests are in curriculum, but who do not wish to specialize in mathematics education as such. Enrollment in both of these programs is low. Conversations with faculty and prospective doctoral students have indicated that the minimal work in mathematics education compared to the amount of work required in general education areas has led students seriously interested in mathematics education to look elsewhere.

Of the five institutions named above, the University of Chicago's program is the closest to the program proposed at Illinois State University. In the recent past, it has averaged one to two graduates per year, with five students currently in the program. The University of Chicago program, housed in their School of Education, has strong mathematics and professional education components. It also allows students to specialize in elementary school mathematics. Most of the recent work at The University of Chicago has been in the area of curriculum development. Also, the University of Chicago has but two faculty members in mathematics education compared to 12 at ISU.

Northwestern University's program is housed in its College of Education. While this
program has a strong mathematics component, its major emphasis is in the psychology of mathematics learning. Its graduates have tended to work in areas of learning theory or artificial intelligence, as distinct from research areas that are more directly related to the mathematics education needs of public school mathematics programs. This program also has few students. Students with a strong interest in the psychology of mathematics learning are choosing to pursue degrees in psychology rather than mathematics education or they are choosing to attend institutions with a larger mathematics education faculty than is currently at Northwestern.

The proposed Ph. D. program at Illinois State University will be unlike any that currently exist in Illinois in three important ways. First, the curriculum at ISU, in particular the three program options, will allow the student to select the amount and type of mathematics content courses appropriate for a student's career aspirations. Students choosing the elementary education option (Option A) will exit the program with a mathematics background appropriate for educating teachers of mathematics at grades K-9. Since Option A focuses on mathematics teacher education at grades K-9, students in this program will not have to enroll in mathematics courses at a level far above that which they would need to be an effective mathematics educator for teachers of grades K-9. Students interested in a K-9 mathematics teacher education emphasis would certainly select ISU rather than Northern Illinois University where the mathematics content requirements go far beyond the needs of the students. Similarly, students selecting Option B (mathematics teacher education for grades K-12) and Option C (mathematics teacher education for grades 9-12) will have the opportunity to take an appropriate amount of mathematics needed to be effective at these levels. The proposed program is the only one in Illinois, housed in a Department of Mathematics, which will allow specialization across the K-12 range and still have a significant, but appropriate, requirement in mathematics. At the University of Illinois and Southern Illinois University, students are not required to take a number of advanced mathematics content courses as part of the respective Ph. D. programs. Students interested in secondary mathematics education would choose ISU rather than the University of Illinois or Southern Illinois University. Also, the excessive mathematics content requirements at Northern Illinois University make the proposed program at ISU far more attractive for secondary mathematics teacher educators than the program at NIU. The opportunity to select a program option that reflects the mathematics content needs of students with respect to the teacher education levels at which they will be working should make the program at ISU far more attractive than the programs at Northern Illinois University, Southern Illinois University, and the University of Illinois.

A second important difference of the program at ISU and others in the state is the emphasis and interest that is given to teacher education at ISU. The background, experience, and research interests of most of the mathematics education faculty at ISU are related directly to teaching mathematics and teacher education in mathematics. As the demand for qualified teachers of mathematics continues to grow, the need for Ph. D. graduates who have emphasized teaching and teacher education will be much greater than the need for students who have emphasized curriculum development or
psychology, as in the programs at the University of Chicago or Northwestern.

The third important difference between the proposed program and others in the state lies in the difference between the faculty at ISU and the faculties at the other institutions. As mentioned earlier, the mathematics education group in the mathematics department at ISU is the largest such group in the United States (12 faculty members). None of the state institutions in Illinois that offer a doctoral degree in mathematics education have more than 4 faculty members in mathematics education, with most having but 2. Also, the mathematics education group at ISU is among the most active in the United States. The brief vitae given later in this document indicate the quantity and quality of the activities of the mathematics education faculty at ISU. Also, the faculty listed later in this document are only those who are directly related to mathematics education. ISU is one of the few schools in the United States where the mathematics education faculty are in the mathematics department. In Illinois, only ISU and NIU have both the mathematics and mathematics education faculty in the same department. This fact together with the fact that excellent working relationships exist between the pure and applied mathematicians and the mathematics educators further contribute to the overall quality of instruction students will receive in the Ph. D. program at ISU.

21. STUDENT DEMAND FOR THE PROGRAM

There is good reason to believe that student demand for the program will be high. Also, we have received several formal inquiries concerning the proposed program (see Appendix A). First, as indicated earlier, there are few institutions where a person interested in mathematics teacher education can obtain a Ph. D. in Mathematics Education. And second, there appears to be a high positive correlation between the number of mathematics education faculty and the number of doctoral students in the Ph. D. program. The only other doctoral program in mathematics education in the United States that has a comparable number of mathematics education faculty (10) is The University of Georgia. They have approximately 15 full-time doctoral students in their program. There is reason to believe that a large active faculty in mathematics education, such as the faculty at Illinois State University, will attract a large number of doctoral students.

It is also reasonable to expect that the enrollment in the Doctor of Arts program that currently exists will always be lower than the enrollment in the proposed Ph. D. program. The purpose of the D. A. program is to prepare students to be outstanding teachers of mathematics content courses primarily at community colleges. Most of the students pursuing the D. A. degree are currently employed at community or small colleges and are not required to complete this degree to stay in their present position. Rather, the D. A. degree at best might provide a salary increment. Therefore, most students interested in the D. A. program are interested in the program for personal reasons and not because the degree is required for entry into their profession (teaching mathematics at the community or small college level). On the other hand, people
interested in careers as mathematics educators in colleges or universities need the Ph. D. degree to enter the profession. Therefore, we expect the enrollment in the Ph. D. program to be greater than the enrollment in the D. A. program.

22. DEMAND FOR THE PROGRAM GRADUATES

Graduates of undergraduate, M. S., and D. A. programs in Illinois State University's Department of Mathematics have always been in demand. This is reflective of the high regard given the Department's programs and faculty by members of the professional community. The strong demand for the University's graduates from the Mathematics Department is also reflective of the Department's commitment to high quality teaching, research, and comprehensive mathematics education.

The likelihood of future demand for graduates of the proposed program can be documented in the growth in school mathematics programs and the increased demand for teachers of undergraduate mathematics and mathematics education courses. As stated earlier in the proposal, undergraduate demands for mathematics have increased at Illinois state universities by over 81 percent during the past five years. Similar changes have been realized at the community college and secondary school levels. While overall student population has dropped in several suburban high schools in the Chicago area, their overall demand for mathematics has increased. This pattern, combined with increased college entrance requirements in mathematics, will continue the demand for qualified teachers and, thus, teachers of teachers of mathematics.

Data from the National Research Council and other sources indicate that demand will be at least twice the supply in the foreseeable future. That is, the annual demand will be at least twice the best expected supply. To meet this need, it is expected that the number of undergraduate mathematics education majors will increase and the demand for the retraining of teachers currently certified in other disciplines will grow. Evidence of the need for more trainers of mathematics teachers reflects the increasing shortages of qualified mathematics teachers. In the spring of 1985, Illinois colleges and universities opened nine positions in mathematics education. Nationally, there were approximately 40 advertisements for mathematics teacher educators in the Chronicle of Higher Education in 1982-83; 70 advertisements in 1983-84; 100 advertisements in 1984-85, and over 125 advertisements in 1985-86. Graduates of the proposed program would have met the requirements of these advertised positions. Also, a survey of three of the leading mathematics education doctoral programs in the United States shows that the number of mathematics education doctoral students is growing, but the number of students graduating who are candidates for the advertised positions is still far below the national need as documented by the number of advertised positions. In the last 3 years, The University of Georgia has graduated 15 students, The University of Wisconsin, 20 students, and Indiana University, 12 students. Although most of these students are candidates for the advertised positions, some at each institution were foreign students who left the country and others were ones who returned, after taking a leave of absence, to a college or university. Thus, there is a
clear need for mathematics teacher education specialists in colleges and universities in Illinois and throughout country.

FACULTY AND STAFF

23. PRINCIPAL FACULTY

The strength of Illinois State University in mathematics education is well known throughout the nation (see attached letters of support for the proposed program). The mathematics education faculty in the Department of Mathematics is the largest body of mathematics educators at one institution in the United States. The productivity of the faculty is a mark of its capability to staff the proposed Ph. D. program. The experience of the faculty in the proposed areas of special emphasis is evident from the brief vitae given below. Greater detail on faculty vitae are given in the appendix. The research and grant activities of the mathematics education faculty mark it as one of the most active in the United States and demonstrate the capabilities of the faculty to direct doctoral research.

Members of the mathematics education faculty have been, and continue to be, active in national research organizations and national professional organizations.

A sample of faculty activity: Two faculty have been members of the Research Advisory Committee of the National Council of Teachers of Mathematics, one faculty has served on the editorial board of the Journal for Research in Mathematics Education, one faculty is currently an officer in the Special Interest Group for Research in Mathematics Education of the American Educational Research Association, one faculty is on the advisory board of Learning magazine, and one faculty is currently President of the National Council of Teachers of Mathematics. Presentations at national and international professional meetings and presentations at national and international research meetings are too numerous to cite.

The mathematics education and mathematics faculty in the Department are noted as good teachers at both the undergraduate and graduate levels. All of the members of the mathematics education faculty have experience in teaching at precollege levels and in working with teachers in teacher education. Moreover, the department has provided outstanding service and leadership in mathematics education to the state, the region, and the nation. (see page 31 for more detailed vita)

LYNN BROWN (Ph. D., University of Iowa); specialist in secondary mathematics education, problem solving, and logic in the teaching of mathematics; joined the ISU faculty in 1960; presenter at numerous regional, state and national conferences; project associate in an NSF curriculum research and development project aimed at developing training material for secondary teachers.

RANDALL CHARLES (Ph. D., Indiana University); specialist in elementary mathematics
education, research and curriculum development on the teaching and learning of problem solving, teaching strategies for mathematics, and research in mathematics education; joined the ISU faculty in 1982; author of numerous articles and books for teachers; member of the Research Advisory Committee of the NCTM.

JOHN DOSSEY (Ph. D., University of Illinois); specialist in collegiate mathematics education, teaching strategies, and concept learning; joined the ISU faculty in 1967; author of numerous articles; author of books for teachers and students; recipient of numerous awards for his contributions to mathematics education; President-Elect of the National Council of Teachers of Mathematics.

LOTUS HERSHBERGER (Ph. D., Florida State University); specialist in secondary and collegiate mathematics education, diagnosis and remediation, and the teaching and learning of algebra; joined the ISU faculty in 1970; coordinator of a diagnostic and remedial laboratory; speaker at regional, state, and national conferences.

PHARES O'DAFFER (Ph. D., University of Illinois); specialist in elementary mathematics education, curriculum studies, and geometry; joined the ISU staff in 1966; speaker at numerous regional, state, and national conferences; chair of the editorial panel for The Arithmetic Teacher; author of numerous books and articles.

KENNETH RETZER (Ph. D., University of Illinois); specialist in secondary mathematics education, teaching strategies, and logic; joined the ISU faculty in 1959; project director of an NSF sponsored project concerned with developing innovative training material for secondary teachers of mathematics.

THOMAS SHILGALIS (Ph. D., University of Illinois); specialist in secondary mathematics education, curriculum content, mathematics contests, and geometry; joined the ISU faculty in 1967; director of the Annual Illinois Mathematics Contest; author of numerous articles.

ALBA THOMPSON (Ed. D., University of Georgia); specialist in secondary mathematics education, teacher education, teachers' conceptions of mathematics, and research in mathematics education; joined the ISU faculty in 1985; teacher in gifted education projects; actively involved with the Mathematics Education Special Interest Group of The American Educational Research Association.

PATRICK THOMPSON (Ed. D., University of Georgia); specialist in elementary mathematics education, child development related to mathematics, and computer applications; joined the ISU faculty in 1985; developer of innovative computer microworlds for training prospective teachers; actively involved with the Mathematics Education Special Interest Group of The American Educational Research Association.

CAROL THORNTON (Ph. D., Indiana University); specialist in elementary mathematics education, basic fact thinking strategies, and methods for teaching mathematics in
special education; joined the ISU faculty in 1974; author of several books for teachers on the teaching of basic facts and teaching children with special needs.

BENNY TUCKER (Ph.D., University of Illinois); specialist in elementary mathematics education, instructional aids for teaching mathematics, and problem solving; joined the ISU faculty in 1977; director of numerous workshops on the teaching of mathematics; author of numerous articles and books for teachers on activities for teaching mathematics.

BARBARA WILMOT (Ph.D., University of Illinois); specialist in gifted education in mathematics and mathematics anxiety; joined the ISU faculty in 1985; director of numerous workshops for students and teachers in the areas of computer applications in K-8 mathematics and teaching mathematics to the gifted.

24. ADDITIONAL FACULTY REQUIRED

Table IV-4 presents the total staff requirements for the proposed doctoral program. The new faculty and staff requested in this proposal consist of one faculty position (for 11 months) and ten graduate assistantships. The data in the table report the staff needs in terms of man-years.

<table>
<thead>
<tr>
<th>Code</th>
<th>Line</th>
<th>Staff Requirements</th>
<th>Past</th>
<th>Budget</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td></td>
<td>Faculty / Admin. (Total 02-04)</td>
<td>3.75</td>
<td>9.24</td>
<td>9.27</td>
<td>9.35</td>
<td>9.42</td>
<td>9.42</td>
</tr>
<tr>
<td>02</td>
<td></td>
<td>Admin./Other Prof.</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>03</td>
<td></td>
<td>Faculty</td>
<td>3.75</td>
<td>4.66</td>
<td>4.69</td>
<td>4.77</td>
<td>4.84</td>
<td>4.84</td>
</tr>
<tr>
<td>04</td>
<td></td>
<td>Grad. Asst.</td>
<td>0.00</td>
<td>4.58</td>
<td>4.58</td>
<td>4.58</td>
<td>4.58</td>
<td>4.58</td>
</tr>
<tr>
<td>05</td>
<td></td>
<td>Civil Service/ Student Workers</td>
<td>0.00</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>06</td>
<td></td>
<td>Total Staff (01-05)</td>
<td>3.75</td>
<td>9.49</td>
<td>9.52</td>
<td>9.60</td>
<td>9.67</td>
<td>9.67</td>
</tr>
</tbody>
</table>
NOTE: Line 03 reflects the need for 3.75 staff year faculty (the equivalent of 5 FTE for 9 months) to teach existing courses required to support the proposed curriculum and an increasing increment of time required to teach new courses, advise students, and to direct dissertations. Line 04 reflects the 10 doctoral assistants having 11 month appointments. Finally Line 05 reflects the need for 10 hours of student help each week to handle the clerical tasks of the program.

The Mathematics Department intends to appoint a faculty member in mathematics education in the 1986-87 school year. The proposed program will require one additional faculty member in mathematics education to help with the increase in the number of courses to be taught and the number of students needing an advisor. This faculty member must have an extensive background in research and teacher education in mathematics education. In addition, the individual will be expected to have experience in advising doctoral-level students in mathematics education. This individual will also be expected to have public school teaching experience and experience in teaching a wide variety of graduate courses in mathematics education. Specific areas which will complement and strengthen existing faculty research programs are teacher education, teaching strategies, and research on teaching. Specific interests in the teaching and learning of problem solving or the use of technology in instruction are also highly desirable. This additional faculty member is needed in order to maintain the current high level of the Department's programs while expanding its mission to encompass the proposed Ph.D. program.

25. ADEQUACY OF CURRENT EQUIPMENT/INSTRUCTIONAL RESOURCES

Additional instructional materials, equipment, and space will be needed to expand the current programs in mathematics education to encompass the Ph.D. Program in Mathematics Education. These resources will be needed in four main areas. The first of these is additional equipment and space for observation, interaction, and research in conjunction with the Mathematics Clinic (a diagnostic-remedial program that services public school children in central Illinois with mathematics learning problems). The provision of supervised experiences in the Clinic will be an important part of the program for doctoral students. The ability to diagnose student errors and prescribe remediation is a critical need in mathematics programs at all levels.

Second, funding would be necessary for the additional microcomputer equipment to support expanded research activities on the teaching and learning of mathematics. The development and testing of microcomputer-based curricular materials involving mathematical concepts and principles require that additional microcomputers be available both for development and classroom activities. The microcomputers currently available in the department will not support this demand for wordprocessing, research, and curriculum development by faculty members, not to mention additional graduate students. Furthermore, there is a need for the computing technology to be kept current if the research is to be of the most value.
Third, additional support will be required to maintain the level of materials available in the Mathematics Educational Material Center in Stevenson Hall 302. This Center, perhaps the best equipped mathematics facility for mathematics teacher education in the nation, will require additional support as its functions are extended to cover doctoral level demands in mathematics education. Most of these demands would be for additional reference materials and specialized research materials related to ongoing research projects of faculty and doctoral students.

Finally, the Mathematics Department will require additional office space for housing the new faculty member and the doctoral assistants enrolled in this program. At present, graduate students involved in the Department’s teaching activities are housed three per office in space designed for a single individual.

26. ADEQUACY OF CURRENT LIBRARY HOLDINGS

The current library holdings and acquisition patterns for monographs, reference sources, periodicals, and serials support many of the needs of this proposed program; however, additional resources to reflect new and emerging research areas of the doctoral students and faculty will be required. There is a need for additional research journals and books that describe the latest findings in the teaching and learning of mathematics, especially the research materials in cognitive science and artificial intelligence.

27. ANTICIPATED INTERNSHIP/CLINICAL SITES

There are no internship requirements that would necessitate special off-site arrangements or costs.

28. OFF-CAMPUS SUPPORT SERVICES REQUIRED

No off-campus support services are required for the proposed program.

ACCREDITATION AND LICENSURE

29. ACCREDITING ASSOCIATIONS

There are no accrediting associations directly related to the proposed program. The proposed Ph. D. program in Mathematics Education would be regularly evaluated as part of the evaluation of collegiate programs and during regular visitations of the North Central Association. It would also be visited as part of the regular visitations of the National Council for Accreditation of Teacher Education.
30. TIMETABLE FOR ACCREDITATION ATTEMPTS

The timetable for the visitations mentioned in Section 29 would match those established for similar programs during the regular university-wide visitations by these agencies.

31. ACCREDITATION FOR OTHER DEPARTMENTAL PROGRAMS

The current undergraduate and graduate programs in the Department of Mathematics are not specifically accredited by any agency. They have received excellent evaluations from both the state, NCA, and NCATE visitation teams observing the programs in recent years. Copies of those evaluations are on file in the administrative offices.

FINANCING

32. PROGRAM RESOURCE REQUIREMENTS

Table IV-5
Total Resource Requirements for the New Program Request

<table>
<thead>
<tr>
<th>Line Code</th>
<th>Budget Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Total Resource Requirements</td>
<td>1,815.08</td>
<td>1,784.88</td>
<td>1,784.88</td>
<td>1,784.88</td>
</tr>
<tr>
<td>02</td>
<td>Total Resources Available From Federal Sources</td>
<td>14.33</td>
<td>5.20</td>
<td>5.20</td>
<td>5.20</td>
</tr>
<tr>
<td>03</td>
<td>Total Resources Available From Other Non-State Sources</td>
<td>21.07</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>04</td>
<td>Existing State Resources</td>
<td>1,504.24</td>
<td>1,779.68</td>
<td>1,779.68</td>
<td>1,779.68</td>
</tr>
<tr>
<td>05</td>
<td>State Resources Available Through Internal Allocation</td>
<td>85.04</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Table IV-5 contains information on the total resource requirements needed by the Mathematics Department for the proposed Ph. D. in Mathematics Education. The resource requirements are based on the assumption that there will be a total of 10 full-time graduate students on campus during the first year of the program (5 at the entering level and 5 having completed some of the requirements), 3 entering and 9 continuing students the second year, and 12 on-campus students each year thereafter. The support level for these students (the equivalent of 10 full-time students) is calculated at the rate of $900 per month for a total of 11 months of the year or $9900 per student per year.

In addition, the resource requirements call for the addition of one senior staff member at the full professor level at a monthly salary of $5500, or, figured on an eleven month basis, $60,500 per year.

Providing clerical assistance to the program will be student help at approximately 10 hours per week. At a pay rate of minimum wage of $3.35 per hour, a total of $1800 is needed.

Additional resources are needed to obtain computing technology for use in research on children's acquisition of mathematical skills and for curricular development by faculty and students in the program. A main focus of current research is the integration of computing technology into the mathematics curriculum in order to create a more
interactive learning environment. This requires immediate access to microcomputers by both faculty and students in the program and also requires current computing technology. For instance, the work in artificial intelligence requires state-of-the-art computing equipment if it is to be on the cutting edge of effective research in the learning of mathematics by children. Research in the use of video-disc technology as an effective teaching instrument requires modern equipment as well. Finally, videotaping equipment will be needed for the Mathematics Clinic. For all of this an annual expenditure of $20,000 is anticipated.

Library materials needed to fully support the program include research journals and books in cognitive science and artificial intelligence that deal directly with the learning and teaching of mathematics at an annual cost of $2000. This would allow for the additional purchase of approximately 25 new research monographs and reports and the addition of 3 – 4 new journals.

To support increased research requires additional computer usage. Based upon prior experience with faculty research projects using the mainframe computer $1000 in additional computer funds are needed. The purchase of software for the microcomputers needed by faculty in research projects should be $1000 annually, and thus $2000 in contractual funds are requested.

The final resource needed is $5100 in the form of other support. Based upon the current operating budget for both research and teaching, $400, $400, $50, and $1000 will be needed in the areas of commodities, printing, telecommunications, and travel respectively to support the new teaching and research staff. An additional $600, $500, $150, and $1000 will be needed for direct program support in the areas of commodities (for the Mathematics Education Materials Center and Mathematics Clinic), printing (brochures and reports), telecommunications (recruitment), and travel (travel to professional meetings for recruitment), respectively.

a. Projected Increments in Total Resource Requirements may be explained as follows:

Budget Year: During the budget year, the Program will require the addition of 1 staff member ($60,500), 10 graduate assistantships ($99,000), student help ($1800), the purchase of computing and other equipment ($20,000), the purchase of library materials ($2000), additional contractual funds ($2000), and other support ($5100) for a total of $190,400.
2nd Year – 5th Year: The adjustment to the Mathematics Department's base budget in the Budget Year contains the resources needed to continue the program at the projected rate for years 2 through 5.

b. New State Resources Required in the Budget Year

The new state resources required by the program are as detailed above. Broken down by lines, these costs are as follows:

07 Staff ($161,300)
These costs cover the salary of the new senior staff member, 10 graduate assistantships, and student help.

08 Equipment ($20,000)
These costs cover the acquisition of computing technology and other equipment.

09 Library ($2000)
These costs cover the acquisition of research journals and books.

10 Contractual ($2,000)
A total of $2000 supports the acquisition of software and computer time for research projects.

11 Other ($5100)
This line supports the cost of the new faculty and staff and provides support for the clerical operation of the program.

c. Federal and Other Non-State Support

At the present time there is no source of either Federal or Non-State support for the program. It is anticipated that there will be funded grants written by departmental members which will supply some student support from time to time. However, these sources cannot be counted on for continued support for a program of an ongoing program.

OFF-CAMPUS PROGRAMS

33. PROGRAM COMPLIANCE WITH OFF-CAMPUS GUIDELINES

The off-campus program guidelines of the Illinois Board of Higher Education do not apply to the present proposal.
FACULTY VITAE
November 10, 1986

To: Members of the Academic Senate

From: Dixie Mills
Academic Affairs Committee

In February, 1984, the Academic Senate approved a report on "The Baccalaureate Degree at Illinois State University", prepared by a subcommittee of the University Curriculum Committee. A section of that document is attached for your information. Among other characteristics, the report included a statement that undergraduate degrees at Illinois State University should require no more than 124 hours of coursework (p. 18). The report further stipulated, however, that departments should have an opportunity to present a rationale for an exception to the 124-hour limitation, and that such a rationale should be presented through the regular curricular channels at the university (p. 20).

The Music Department has prepared such a rationale for the Bachelor of Music Education degree. Over the past two years, the department has studied its degree requirements and compared the ISU program to highly-regarded programs at other universities. As a result, the department is requesting permission to retain the current requirement of 127/130 credit hours for graduation. The attached document presents the rationale for the department's request. Curriculum committees at the department, college and university level have approved the request. The Academic Affairs committee unanimously concurred with the department's request last week.

The credit hour requirement for the Bachelor of Music Education degree will be an information item on the agenda of the November 19th Senate meeting.
Report of the University Curriculum Committee-Committee to Study the Baccalaureate

Approved by Academic Senate February, 1984

Members:
Donna Brink Fox
James Johnson
Dixie Mills
Keith Stearns
Edna Vanderbeck
Richard Dammers
IV. Recommendations:

1. Undergraduate degrees offered at Illinois State University, including the Bachelor of Arts, Bachelor of Science, Bachelor of Science in Education, Bachelor of Fine Arts, Bachelor of Music, and Bachelor of Music Education, should not require more than 124 hours of coursework.

Rationale: All undergraduate degrees should be attainable within a four-year time period. Many students take more than 124 semester hours for their baccalaureate degrees. Often this is a matter of student choice, such as a change in major or a wish to take additional electives. The goal of this recommendation is not to prevent a student from choosing additional semester hours of study but to prevent the requirements for graduation from making the attainment of a baccalaureate degree in a four-year time period unlikely. A program requiring 124 semester hours exceeds the minimum graduation requirements by four semester hours, allows students a choice of classes for the most part within University Studies, permits electives only above and beyond graduation requirements, and may demand that a student follow major requirements upon entrance in the freshman year. If program requirements exceed 124 semester hours, even a well organized student may experience difficulty in attaining a baccalaureate degree in four years.

Ideally, most baccalaureate degree programs will permit flexibility for students to choose electives or concentrations outside the major.

Through the existing collegiate curricular procedures, a College may elect to develop standards which differ from but are not in excess of the published standards in IV. 1, 2, 3, and 4.

2. The major for the B.A., B.S., and B.S. in Education degrees should not require more than 55 semester hours in the major department. This limit does not apply to the B.F.A., the B.M., and the B.M.E., which are described in section II.

Rationale: The long-standing guideline of a 55 semester hour maximum in the major should be retained. In the past, this maximum was applied to the comprehensive major; if the term comprehensive is deleted as proposed (Recommendation 5), then this guideline would apply to all majors. It is understood that, in general, majors would not exceed 55 semester hours in the major department.

3. The major should not mandate more than 76 semester hours, excluding University Studies hours.

Rationale: The 76 semester hour limit should be seen not as an ideal but as a maximum to be approached only in rare cases. A department or college is obligated to make a very strong case for mandating 60 semester hours or more. The 76 semester hour limit
includes courses in the major department and courses outside the major department but required by the major. As the number of hours mandated by the major approaches 76, the flexibility in a student's program drops considerably.

4. The major and any University requirements should mandate no more than 24 semester hours (including English 101 - Language and Composition I) in the University Studies program.

Rationale: The University Studies program, described in section III.A., is designed to be rigorous by designating eight areas of study that must be completed and to be flexible by allowing a choice of courses within each area. The requirement of specific courses in University Studies in order to enhance the major course of study must be balanced against the need for flexibility in a student's planning. To this end at least one-half of the University Studies program should remain undesignated by the major and open to student choice.

The necessity or desirability of a student meeting the requirement(s) for certification, licensure, or registration may significantly reduce the flexibility within a particular program. Careful attention must be given to extensive mandating of courses in University Studies by the major department so that the student's opportunity to register for electives will not be eliminated.

5. The use of the term "Comprehensive" should be examined rigorously in Academic Program Reviews and should be eliminated if the term "Comprehensive" does not appear to serve a meaningful purpose any longer.

Rationale: With the elimination of the requirement of the minor in teacher education programs, the original purpose of the comprehensive major as an alternative to the major/minor requirement was lost. Therefore, departments should examine the need for a "Comprehensive" major and a "regular" major during the program review process. Departments may prefer the designation of a "Major" with various "Sequences" as an alternative to the "comprehensive" and "Major" designations currently in use.

6. Concentrations of 12 to 18 semester hours should, if possible, be offered to students who wish to use their elective hours to study a discipline without taking the requirements for a major or minor course of study. Departments could be creative in suggesting concentrations with a variety of emphases. Students who elect a major course of study that mandates a relatively small number of hours (for example, those in the range of 27 -36) should be strongly urged to select a concentration from another department. Such recommendations could be a part of the advising process and could also be included in catalog copy.

Rationale: Students who complete the baccalaureate with only the University Studies component (48 semester hours) and the major area of study component (36-55 semester hours) can have as many as 36
hours of electives. Some students choose a second major; some
choose a minor and electives. An additional option would be
provided by concentrations of 12 to 18 semester hours. Students
whose majors leave them with a relatively large number of elective
hours may benefit from some advice that will provide structure and
focus to their selection of courses. Such counseling could also be
used to direct them toward concentrations that will complement or
strengthen mastery of their major area of study. Some possible
areas for concentrations include communications, fine arts, applied
computer sciences, business administration, among others.

7. Programs not conforming to these guidelines will be scrutinized
during the regularly scheduled Academic Program Review process.
Departments will have the opportunity to present a rationale for
such exceptions differing from the guidelines listed above.
Department chairs should be alerted well in advance of the Academic
Program Review that a course of study will be given detailed
scrutiny; with sufficient time to make careful decisions,
departments may examine a course of study and either modify its
requirements or develop a complete, persuasive document explaining
to the academic community the need for an exception to these
guidelines.

If a department wishes to secure authorization of a course of study
differing from these guidelines or for course requirements which
exceed these guidelines, it should present such a rationale
through the regular curriculum channels of the University. The
regular curriculum channels include the Department Curriculum
Committee, the College Curriculum Committee, Council of Teacher
Education if necessary, University Curriculum Committee, Dean of
Instruction and Academic Senate.

Rationale: Individual circumstances do have an impact on degree
programs. Adjustments in program requirements may cause
far-reaching consequences. As a result, careful and deliberate
study of proposed changes in program requirements is essential in
curriculum planning and development. Nevertheless, it is important
that a program exceeding these guidelines on semester hour
requirements be scrutinized thoroughly. The Academic Program Review
process is the appropriate avenue for the conduct of this study.
Each college examines its programs on a five year cycle (see
Appendix C) and works in conjunction with the Associate Provost and
Dean of Instruction in planning for the future of each program.
This process of deliberate academic planning provides the
opportunity for the careful study of programs which do not meet the
guidelines above.

There is no implicit or explicit guarantee that, after the review
process, courses of study will conform to the guidelines herein.
However, it is understood that if programs or courses of study are
to exceed the limits stated in IV. 1, 2, or 3, they must be based on
a convincing rationale preferably drawn from curricular patterns at
leading universities in the United States in the discipline
involved.
BACHELOR OF MUSIC EDUCATION PROGRAM

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COLLEGE SUMMARY

At the University Curriculum Committee meeting on September 26, the issue of reducing the hours required for the Bachelor of Music Education Degree will be discussed. We would like to request your support in seeking an exemption to the 124-hour limit. With the full support of departmental and college curriculum committees, we submit the following rationale and hope that you will give serious consideration to the exceptional conditions that warrant this request.

The Bachelor of Music Education degree, unlike the liberal arts degree with a music major, is universally considered a professional degree, a distinction that implies a thorough preparation in the many diverse aspects of basic musicianship and performance. Guidelines for the varied areas of competency required for music education graduates are clearly defined by our major accrediting agency, the National Association of Schools of Music. As a professional degree program, we feel that the BME is distinct from other undergraduate education programs in the University and as such should qualify for an exception to the 124-hour policy.

With the present 127-130 hour program requirement, there are no electives to be eliminated. Reductions would have to be made in the content area which currently stands at 57-60 hours, a total which already falls below the minimal requirements set down by NASM. The curricular structure called for by NASM is 120-132 semester hours: 50% in credits in musicianship and performance; 30% to 35% in general studies; and 15% to 20% in professional education. At present, our program percentages are: 46% for music, 36% for general studies, and 17% for professional education.
In number of hours required in music (57-60), we already rank substantially below similar institutions. The Bachelor of Music Education program at the University of Illinois, for example, requires 79 hours in music with 13 hours of electives to provide additional experience in performance and musicianship. The same program at Northern Illinois University requires 68-70 hours in this area. It should be noted that the BME programs at both these institutions exceed 124 hours despite the fact that their students have fewer general studies hours required.

Outside consultants, who recently reviewed our music programs, were unanimous and frank in concluding that our present requirements in music are barely adequate to meet the professional competencies set down by NASM. The comments of these highly regarded educators, highlighted in the attached reports, leave little doubt that a reduction to 124 hours would place ISU graduates at a severe disadvantage when competing with other graduates. A reduction in music hours also counters the growing national concern for more subject content in teacher training. The adverse effects of such reductions were recently demonstrated when the Program Review identified a weakness in the conducting skills of our graduates. This problem was easily traced to an action taken several years ago when we reduced the number of required hours in the area of conducting.

In an attempt to resolve this problem while keeping the music requirements intact, numerous alternatives have been explored: 1) including art history and music history within general studies requirements; 2) substituting similar art and music methods for 4 hours of C&I 200.02 and 200.04 as professional education requirements; 3) substituting Psychology 112, Child and Adolescent Development for C&I 210. (Catalog descriptive copy is almost identical for these two courses.) At present these do not appear to be viable alternatives. In view of this, the department and
college respectfully request an exception to maintain our present program requirements. In summary, our justification is as follows:

1. The BME is a professional degree—a specialized degree—an exception to the 124 rule should not be precedent-setting.
2. Program Review and follow-up studies confirmed that further reduction of music education credits would place ISU graduates at a severe disadvantage in comparison to graduates of other programs.
3. Consultants Glidden and Hoffer strongly recommend no reductions in music requirements.
4. BME programs at the University of Illinois and Northern Illinois University, which exceed 124 hours, have more music requirements.
5. ISU's reputation in teacher training has been considerable. It should not be jeopardized now.
6. Because 80% of the jobs for beginning music teachers require teaching at the elementary, junior high, and high school levels, beginning music teachers are required to have an unusually broad preparation.
The Music Department requests an exemption for its Bachelor of Music Education degree from the policy of a maximum of 124 hours required for all baccalaureate degrees at Illinois State University for a variety of reasons. Catalogs of other comparable institutions in the mid-west have been examined; the two most obvious facts which became evident are that 1) ISU requires the lowest total number of hours for a baccalaureate degree and certification in K-12 music education and 2) ISU requires the lowest number of hours in the major field. Two highly-esteemed persons, both are professors at major state universities and both are widely-experienced as consultants, were brought to the campus for several days of observations and conversations. Dr. Charles Hoffer teaches at the University of Florida; he taught for almost twenty years at Indiana University, and was supervisor of music in the public schools in the St. Louis area. He has recently been elected national President of the Music Educators National Conference, an organization of 55,000 music teachers at all levels, pre-school through graduate school. Dr. Robert Glidden is the Dean of the School of Music at Florida State University; prior to that he was Dean of the College of Music at Bowling Green State University (Ohio). He is the national president of Pi Kappa Lambda, the honor society in music and was recently elected national president of the National Association of Schools of Music, an organization of some 500 schools and departments of music in American colleges and universities. Copies of their reports are attached.

The BME degree at Illinois State University is a professional rather than a liberal arts degree. Students choose it specifically because they want a degree program which leads to certification to teach music in Illinois and because it provides strong emphasis in the major field. Even so, the number of hours required in music in the BME degree at ISU is less than at almost any comparable school in the mid-west and is less than is recommended as a minimum by the National Association of Schools of Music. In none of the sequences available is there even one hour of elective available. Obviously any reduction in the total number of hours would necessitate a reduction in the number of hours in the major field. ISU might find it difficult to compete with its sister institutions for excellent, professionally-oriented students if the BME degree were weakened by reducing the number of hours required in music. ISU might also find it more difficult to place its graduates in teaching jobs if their preparation in their major field were substantially weakened.

The education of musicians is unique because:

1. music is the only subject area in the university which presupposes many years of private study prior to matriculation and requires that each applicant demonstrate proficiency to gain admission. Many students begin the study of music at age five or six; virtually no one who wishes to make a career in music can begin studying music as a college freshman.

2. music students constitute a special population in the university. They are generally more talented and have higher average ACT scores than the university population as a whole and therefore can, and do, enroll for more than 15 or 16 hours each semester. (Eight semesters of 16 hours each yields 128 hours).

3. music is a profession; society in general, and school officials in particular, expect considerable expertise from people with baccalaureate degrees in music. A first-year instrumental music teacher must have mastered the fingerings, the correct embouchures, and the basics of good tone production on all instruments. This knowledge cannot be deferred to graduate study. Increasingly often, school music jobs involve the
teaching of vocal as well as instrumental music, thus requiring even broader preparation in music for prospective teachers. ISU graduates in music have enjoyed a placement rate very near 100 percent. A deterioration in the preparation in the major field may erode this enviable placement rate.

The National Association of Schools of Music states the following about the education of musicians:

"Musicians share common professional needs; for example, each to some extent must be a performer, a listener, an historian, a composer, a theorist, and a teacher. For this reason, certain subject matter areas and learning processes are common to all baccalaureate degree programs in music."

"Basic musicianship is developed in studies that prepare the student to function in a variety of musical roles, both primary and supportive. All undergraduate curricula should therefore provide the following:

1. A conceptual understanding for such musical properties as rhythm, melody, harmony, timbre, texture, and form, and opportunities for developing a comprehensive grasp of their interrelationships as they form a basis for listening, composing, and performing.

2. Repeated opportunities for enacting in a variety of ways the roles of listener, performer, composer, and scholar, by responding to, interpreting, creating, analyzing, and evaluating music.

3. A repertory for study that includes various cultures and historical periods.

"Studies in other areas of human achievement (i.e., natural and physical sciences, social sciences and communication, as well as in other areas of the arts and humanities) are important in the education of musicians. The musician must be equipped to function and interact with the total society, to adapt to changes in society, and to fulfill a role as a public advocate for music."

Many universities, including the University of Illinois and the University of Michigan, permit six to eight hours of music history courses to count toward the requirement in general education. The Music Department, and the National Association of Schools of Music strongly support a large component of general education courses in every degree program. The Music Department also respects the inviolability of the general education requirements at ISU.

For the reasons stated above, and for others which become evident from reading the attached materials, the Music Department, respectfully requests consideration of its request for an exemption for its Bachelor of Music Education degree from the policy of a maximum of 124 hours for all baccalaureate degrees at Illinois State University.
STATEMENT ON BACHELOR OF MUSIC EDUCATION DEGREE

The Bachelor of Music degree is the "initial professional collegiate degree in music. Its primary emphasis is on the development of the skills, concepts, and sensitivity essential to the professional life of a musician" (NASM, 1984, p. 50). In the role of music educator, the professional musician functions as a "practitioner who exhibits not only technical competence but also broad knowledge of music and music literature, sensitivity in musical style, and an insight into the role of music in the life of all people." An essential criterion for the awarding of the Bachelor of Music degree is the evidence of these characteristics and of their continuing development.

Therefore, a mutually exclusive distinction is made between the Bachelor of Arts degree which is a liberal arts degree with a music major and the Bachelor of Music or Music Education degree which is a professionally oriented degree.

The education of the student in music education requires that individuals be prepared in breadth of studies (hence, the University Studies component) as well as in depth (hence, professional and content-specific education). (Tables 1-6 show the current Illinois State University requirements.)

The Music Educators National Conference, regarded as the professional organization for music educators, recommends that all preservice music teachers "engage in a substantial amount of study outside music in such broad areas as natural science, social science, and the arts and humanities" (MENC, 1972, p. 9). This recommendation is underscored by the National Association of Schools of Music in their most recent publication of guidelines for accreditation (1984, p. 45). At Illinois State University, music education students acquire 48 hours in University Studies which represent the breadth of experience suggested by the two agencies.
The Bachelor of Music Education degree prepares students for teaching in the public schools. Therefore, the student who elects a career in teaching must develop competencies in professional education as well as breadth in general studies. This component is fulfilled by the requirements of the College of Education for teacher certification. Professional education courses, offered by the College of Education, do include the "philosophical and social foundations of education, psychology of education, special education, history of education, etc." (NASM, p. 58). At Illinois State University, the professional education sequence consists of 22 hours (8 of which are student teaching) for the Special K-12 teaching certificate. The goal of the professional education sequence is to provide broad principles upon which educational practice is founded.

Finally, it is essential that music educators acquire competency in basic musicianship and performance. A student may choose one of four sequences in the pursuit of the BME degree: choral-general-vocal (57 hrs.), choral-general-keyboard (59 hrs.), instrumental-band (60 hrs.), or instrumental-orchestra (60 hrs.). Specific competencies in musicianship and performance have been delineated by the MENC (1972) and NASM (1984). Tables 7-10 are descriptions of music education competencies with a listing of those courses whose goals include the development of these competencies.

It may be observed that the student musician takes a substantial block of music theory/history courses (24 hrs.). In 1972, the MENC recommended that a sequential program "in comprehensive musicianship become the basis of training for all undergraduate musicians, replacing fragmented courses in theory, ear training, history, and literature" (p. 8). A major goal of education is to lead students to see relationships among various areas of instruction. Comprehensive musicianship provides a forum for such integration.
The Program Review noted that major universities in the Midwest typically require 127 or more hours for the BME degree (or its equivalent). It was also observed by Dr. A. Peter Costanza (music education division chairman, The Ohio State University), a member of the MENC ad hoc committee on music teacher education, that most universities require 128-132 semester hours for the BME degree (personal correspondence, 1985). It is evident that major institutions of higher learning give credence to the fact that a BME degree is more specialized than a liberal arts degree, necessitating in-depth preparation in musicianship and professional education, while maintaining a general studies component.

Of the total number of hours required for a BME degree, MENC recommends a distribution of basic musicianship (50%), general studies (30-35%), and professional education (15-20%). Within the currently required 127-130 hour program, basic musicianship accounts for 44.9-46.1%, general studies for 36.9-40.1%, and professional education for 16.9-17.3%.

The MENC report emphasizes that it is impossible to develop all these qualities and competencies in a four- or five-year period, and priorities must be established. Of major importance during the preservice period are those qualities and competencies necessary to insure a successful first year of teaching; other qualities and competencies must be realized (or acquired) by a continuous process of self-evaluation and study. The good music teacher discovers many opportunities, both formal and informal, for improving his performance as a musician and teacher, and this process never ceases.

At a recent meeting conducted by representatives of the Illinois State Board of Education, it was pointed out that teacher education programs exist, in part, as a response to an assessed need by the community, public schools,
and university personnel working in conjunction with one another. The course requirements by respective teacher education sequences are not determined by administrative or faculty whim. Rather, requirements are set, modified, and/or updated according to the exigencies of the public school teaching situation. A direct example of this felt need is the effect of HB 150 and PL 94-142 which addresses the special education students in our schools. As a result, it is now necessary to include instruction in special education within our methods courses in order to meet the needs of all students in a more informed and educated manner.

The music education program is one whose teaching certificate is a K-12 certificate. The entitlement program certifies that our graduates are adequately prepared to teach choral/general music from kindergarten through the senior year of high school or to teach instrumental music from fourth or fifth grade (the grades in which band and orchestra are introduced) through the senior year of high school. Even minimal preparation for those tasks is a monumental one. Furthermore, as our students enter the teaching world, many school districts are hiring only those individuals who, at the outset, are able to teach not only the choral/general K-12 program, but also the instrumental program as well. This is an entry expectation on the part of hiring personnel.

Music is a discipline where skills of listening, analyzing, evaluating, and performing (vocal and instrumental) are developed and refined. Students are constantly in the process of Bloom's higher order of evaluation, analysis, and synthesis. These skills require time to develop. The current program offers a minimum amount of time for that development.

With our current 127-130 credit-hour program, we are still below the requirements for baccalaureate degree programs in similar institutions. Our courses are down to the bare bones limit. Outside consultants, as requested in the Program Review, have indicated that our music education program is barely
meeting the entry requirements for a public school music educator. We cannot compromise the program still further by a universally preset maximum of 124 hours.

Determination of hour requirements for the MME degree must include consideration of competencies required by NASM, NCATE, and the State Teacher Certification Board; of the overall well-being of the students we serve; and of the integrity of the degree itself. To that end the following recommendations are offered:

1) Permit PSY 112 (Child and Adolescent Development), 3 credit hours, to substitute for C&I 210 (Child Growth and Development) 3 credit hours;

2) Permit MUS 261 (Instrumental Techniques), MUS 262 (Music Education K-8), and/or MUS 264 (Music Education 7-12) to substitute for four hours of C&I 200.02 and C&I 200.04 as part of the professional education requirements.

These changes, involving 7 credit hours, will enable the Music Education program to conform to the 124 hour maximum mandated by the Board of Regents.

If these two recommendations are not feasible, then the faculty of the Department of Music respectfully petitions an exemption to the 124 hour rule and requests that the BME degree be maintained at its current 127-130 hour requirement.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>127</td>
<td>Foreign Language Diction 2</td>
</tr>
<tr>
<td>167</td>
<td>Basic Conducting 2</td>
</tr>
<tr>
<td>262</td>
<td>Music Education K-8 4</td>
</tr>
<tr>
<td>264</td>
<td>Music Education, Cho 7-12 4</td>
</tr>
<tr>
<td></td>
<td>Major Ensemble 7</td>
</tr>
<tr>
<td>Piano</td>
<td>2 semesters 4</td>
</tr>
<tr>
<td>Voice</td>
<td>5 semesters 10</td>
</tr>
<tr>
<td>101</td>
<td>Music Theory/History 6</td>
</tr>
<tr>
<td>102</td>
<td>6</td>
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<td>203</td>
<td>6</td>
</tr>
<tr>
<td>204</td>
<td>6</td>
</tr>
<tr>
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<td>57 Hours</td>
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Table 1

<table>
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<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>101</td>
<td>Music Theory/History 24</td>
</tr>
<tr>
<td>240</td>
<td>Accompanying (2 sem) 2</td>
</tr>
<tr>
<td>167</td>
<td>Basic Conducting 2</td>
</tr>
<tr>
<td>262</td>
<td>Music Ed K-8 4</td>
</tr>
<tr>
<td>264</td>
<td>Music Ed 7-12 4</td>
</tr>
<tr>
<td>330</td>
<td>Piano Pedagogy 2</td>
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<td></td>
<td>Major Ensemble 7</td>
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<tr>
<td>Piano</td>
<td>5 semesters 10</td>
</tr>
<tr>
<td>Voice</td>
<td>2 semesters 4</td>
</tr>
<tr>
<td></td>
<td>59 Hours</td>
</tr>
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Table 2
### Table 3

**Music Requirements for Bachelor of Music Education Degree: Instrumental-Band Sequence**

<table>
<thead>
<tr>
<th>Music 101, etc.</th>
<th>Music Theory/History</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 111</td>
<td>Gr Brass</td>
<td>2</td>
</tr>
<tr>
<td>113</td>
<td>Gr Strings</td>
<td>2</td>
</tr>
<tr>
<td>115</td>
<td>Gr Woodwinds</td>
<td>2</td>
</tr>
<tr>
<td>117</td>
<td>Gr Percussion</td>
<td>1</td>
</tr>
<tr>
<td>161</td>
<td>Marching Band Tech.</td>
<td>2</td>
</tr>
<tr>
<td>167</td>
<td>Basic Conducting</td>
<td>2</td>
</tr>
<tr>
<td>261</td>
<td>Instrumental Tech (Mus Ed)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Major ensemble</td>
<td>7</td>
</tr>
</tbody>
</table>

*Major applied instrument (7 sem.)*

14

60 Hours

### Table 4

**Music Requirements for Bachelor of Music Education Degree: Instrumental-Orchestra Sequence**

<table>
<thead>
<tr>
<th>Music 101, etc.</th>
<th>Music Theory/History</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 111</td>
<td>Gr Brass</td>
<td>2</td>
</tr>
<tr>
<td>113</td>
<td>Gr Strings</td>
<td>2</td>
</tr>
<tr>
<td>115</td>
<td>Gr Woodwinds</td>
<td>2</td>
</tr>
<tr>
<td>117</td>
<td>Gr Percussion</td>
<td>1</td>
</tr>
<tr>
<td>330</td>
<td>String Pedagogy</td>
<td>2</td>
</tr>
<tr>
<td>167</td>
<td>Basic Conducting</td>
<td>2</td>
</tr>
<tr>
<td>261</td>
<td>Instrumental Tech (Mus Ed)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Major ensemble</td>
<td>7</td>
</tr>
</tbody>
</table>

*Major Applied Instrument (7 sem.)*

14

60 hours
Table 5

General Education and University Studies Requirements (48 Hours)

| Language arts | 8 |
| Science/math | 8 |
| Social science | 6 (Including Amer. Hist/Government) |
| HPER | 3 |

Additional hours in the above and psychology (except ed psych) to total 42 hours

University Studies Requirements — 42 hours met by gen ed req.

Psych 111 General Psych 3

one additional 3-hour course

Pass piano proficiency prior to admission to BME program

Table 6

Professional Education Requirements for Teacher Education (22 Hours)

| Psych 215 | Educational Psychology 3 |
| or C & I 210 | Child Growth & Development 3 |
| C & I 200 | Education Core 8 |
| EAF 231 | Intro to Phil of Ed 3 |
| or EAF 228 | Social Foundations 3 |
| or EAF 235 | Historical Foundations 3 |
| Student Tchg. 399 | 8 |

Prerequisite for Psych 215, C & I 210

Psych 111 General Psychology 3

Both Psych 215 and C & I 210 include clinical experiences
Table 7

Competencies Common to All Professional Baccalaureate Degrees in Music

A. Performance skill in at least one major area
   Required: applied music during each semester except that in which they student teach

   Ensemble experience throughout the baccalaureate degree program
   Required: 7 semesters of ensemble experience

Conducting skills
   Required: MUS 167, Basic Conducting; MUS 261, Instr. Tech.; MUS 264, Music Ed 7-12

   Experience in secondary performance areas
   Required: MUS 126, Group Voice; MUS 122, Group Piano; MUS 111, 113, 115, 117, Group Instruments

B. Analysis

   Knowledge of music history and theory
   Required: MUS 101, 102, 203, 204, Music History and Theory

C. Composition

   Compositional and improvisational skills
   Required: MUS 101, 102, 203, 204, Music History and Theory

D. Repertory

   All music students must be exposed to a large and varied body of music through attendance at recitals, concerts, etc.
   Required: attendance at 13 recitals per semester
Table 8

Teaching Competencies required of Music Educators

Required: Education Core 200; MUS 261, Instrumental Techniques; MUS 262, Music Education K-8; MUS 264, Music Education 7-12; Student Teaching 399; PSY 215, Educational Psychology or C & I 210, Child Growth and Development; EAF 231, Introduction to Philosophy of Education or EAF 228, Social Foundations, or EAF 235, Historical Foundations

Table 9

Essential Competencies: Vocal/Choral or General Specialization

A. Performance ability on keyboard and fretted instruments sufficient to employ these instruments as teaching tools

   Required: MUS 122, Group Piano or applied lessons; MUS 262, Music Education K-8; MUS 330, Piano Pedagogy

B. Ability to transpose and improvise accompaniments

   Required: MUS 262, Music Education K-8

C. Sufficient vocal skill to assure effective use of the voice in demonstrations

   Required: MUS 126, Group Voice or applied lessons; (Vocal Pedagogy)

D. Experience in solo vocal performance

   Required: MUS 126, Group Voice or applied lessons; MUS 262, Music Education K-8; MUS 264, Music Education 7-12

E. Performance experiences with wind, string, and percussion instruments

   Required: MUS 262, Music Education K-8

F. Laboratory experiences in accompanying

   Required: MUS 240, Accompanying
### Table 10
**Essential Competencies: Instrumental Specialization**

<table>
<thead>
<tr>
<th>A. Knowledge of and performance ability on wind, string, and percussion instruments sufficient to teach beginning students effectively in heterogeneous or homogeneous groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required: MUS 111, Group Brass; MUS 113, Group Strings, MUS 115, Group Woodwinds; MUS 117, Group Percussion; MUS 261, Instrumental Techniques; MUS 330, String Pedagogy</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>B. Experiences in solo instrumental performance, as well as in both small and large instrumental ensembles</th>
</tr>
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<tbody>
<tr>
<td>Required: applied lessons; MUS 111, 113, 115, 117; MUS 261, Instrumental Techniques; Major ensemble</td>
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<tr>
<th>C. Experiences in the use of the singing voice in class or ensemble</th>
</tr>
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<tbody>
<tr>
<td>Required: MUS 101, 102, 203, 204, Music Theory and History</td>
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</table>

<table>
<thead>
<tr>
<th>D. Laboratory experiences in teaching beginning instrumental students — individually, in small groups, and in larger classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required: MUS 261, Instrumental Techniques; MUS 161, Marching Band Techniques; Student Teaching; MUS 330, String Pedagogy</td>
</tr>
</tbody>
</table>
Table 11

Psychology and C & I Course Proposal

C & I 210 Course description  3 Hrs.  Child Growth & Development

Physical, social, emotional and mental development of the child from conception through adolescence; methods of studying children and their behavior

PSY 111 required. Not for credit if had PSY 112.

PSY 215  3 Hrs.  Educational Psychology

Application of psychology to education covering human learning in school setting; evaluation and measurement of learning outcomes, developmental factors and learning, and social factors of learning.

PSY 111 required. Designed for prospective high school teachers.

PSY 112  3 Hrs.  Child and Adolescent Development

Physical, social, emotional and mental development of the child from conception through adolescence

PSY 111 required. Not for credit if had C & I 210

Propose to Council of Teacher Education that PSY 112 be allowed to fulfill teacher education requirement as well as serve for University Studies.

The three major music methods courses (261, 262, 264) include examination of respective stages of child development and their application to the teaching of music in the schools.

COURSES WITH CLINICAL EXPERIENCES

Music 262  Mus Ed K-8  25 hours
Music 264  Music Ed 7-12  25 hours
Music 261  Instr Tech  25 hours
Music 111, 113, 115, 117  10 hours each
Music 161  10 hours
Education Core 200

PSY 215
C&I 210

There are sufficient hours of clinical experiences in the methods courses that PSY 112 without clinical experience would not adversely affect the required 100 hours.
Department Summary

1. The BME is a professional rather than a liberal arts degree.

2. Program Review and consultant reports indicate that the amount of music courses currently required is less than at comparable mid-west institutions and is minimal at best.

3. Consultants Glidden and Hoffer confirm the report by consultant Elizabeth Green, which was devoted solely to the conducting problem, that an additional course in conducting should be added.

4. The education of prospective music teachers is unique because:
   a. music is the only subject area in the university which presupposes many years of private study prior to matriculation;
   b. music students constitute a special population in the university;
   c. music teachers, particularly those who are entering the profession, usually must take jobs which require teaching at the elementary, junior high school level and thus require unusually broad preparation.
INTRODUCTION

During the course of my brief visit to the Illinois State University campus I met with President Watkins and Provost Strand, with Dean Bolen of Fine Arts and Dean Dunifon of Education, and with Messrs. Chinn and Chizmar of the Provost's Office. Most of the time was spent with music and music education faculty members and students. I appreciate the courtesy and hospitality that were extended to me, particularly by Arthur Corra, Marge Kelly, and Bob Allan.

This report is rather direct in tone, and I trust that it will be accepted as a sincere effort to advise with regard to a difficult curricular situation.
I. Bachelor of Music Education Degree Program

A. Definition of the Problem

Any knowledgeable observer would consider the curriculum for the Bachelor of Music Education degree at Illinois State University to be deficient in music and music education course content, either by comparison with BME programs at leading institutions or simply in consideration of the skills and knowledge a young person needs to begin a career as a school music teacher. The problem is caused by a combination of the following restrictions:

1. An unrealistic cap of 124 credit hours as the maximum that may be required of a student pursuing the baccalaureate degree at ISU;

2. A rigid interpretation of what constitutes "general education" for all baccalaureate students at ISU; and

3. Some degree of duplication in content between the professional education sequence in the College of Education and course work in music education in the Department of Music.

With regard to the above, in comparing the Illinois State BME program with the one I administer at Florida State University:

1. Maximum of 124 credit hours required at ISU -- 142-143 required at FSU.

2. General education (University Studies program) requirement of 48 hours at ISU -- 40 hours at FSU. The FSU liberal studies requirement is 49 hours, but 9 hours of music course work may be applied toward 12 hours of requirements in humanities and fine arts.

3. Professional education requirement of 22 hours at ISU -- "Education Collateral" of 10 hours at FSU. Much professional education content at FSU is taught through the professional music education sequence, which is counted as music content because it is taught in music education courses in the School of Music.

The result of these differences is that music content at ISU is 57-60 credit hours, at FSU 91-93 credit hours. It is not an overgeneralization to state that the FSU program is much more typical than that at ISU. I have called persons familiar with music education curriculum requirements at some of the leading institutions (for music and/or music education) in the Midwest to inquire about the number of credits required for a baccalaureate degree in music education, and the number of semester hours required in general education exclusive of music courses. The following is a summary of my findings:
The comparison may be dramatized by pointing out that Illinois State requires 21 fewer semester hours in music and professional education than the average of some of the best music education programs surrounding it, or by stating that Illinois State requires approximately one full semester less work in the professional field than the lowest requirement (University of Wisconsin) among that group. (A list of the persons contacted at these institutions is attached.) In other words, Illinois State graduates in music education are not prepared to compete for teaching positions, or in initial job performance, with graduates from leading institutions in its region. If that is the case, ISU will not compete successfully for good students in this field in the future. That would be unfortunate for an institution which has a long-standing reputation of quality in the preparation of teachers.

It seems to an outside observer that the BME program at ISU is caught in an unfortunate squeeze caused by two factors: a Board of Regents restriction on the number of credits for a degree, any rationale for which seems both unwise and unnecessary, and a University that may be suffering from a bit of an identity crisis. To the first point, one wonders why, in a free market economy, a governing board finds it necessary to impose a limit on the number of credits that may be required for a degree. If the credit requirements are excessive and the quality of the program not convincing, students will select other schools. If requirements are heavy but quality obviously high, students will not mind -- they will select a program that will prepare them adequately. If, however, the program is inadequate they will not select it even if only 100 credits are required. What is so "right" about 120 or 124 hours for a baccalaureate degree? Why not 128 (16 hours x 8 semesters)? One rationale presented by ISU administrators with whom we spoke was based on the fact that students elect five 3-hour courses each term. However, music students, and probably most other in the University, certainly have many other requirements besides 3-hour courses. If it were found that students averaged 14 credits/term, would then the "right" maximum be 112 credits for a degree?

To the second point, the perception of the University's mission and the students it serves, it seems to this observer that thought should be given to the consideration of professional programs and their needs, as well as to quality and content of liberal education. If I am not mistaken, this institution is one whose background is primarily as a professional school with the primary purpose of preparing people for the teaching profession. What is the right mix of liberal education and professional education? And why is it presumed there is no "liberating influence" in professional course work? Illinois State
University is not a small liberal arts college, most of whose graduates will go on to further education or training before entering a business or professional field. A number of its graduates are going directly into a professional career, and while it is certainly to be admitted that they cannot be prepared to know everything as they begin those careers, there are certain minimal requirements that cannot be neglected in their undergraduate preparation if they are to succeed. With an untouchable general education requirement of 48 hours and a limit on the total credits that can be required, the result is an undernourished professional content in the degree. Some flexibility must be arranged in one or both if this program is not to be reduced to something considerably less than mediocre.

The University should recognize that programs in the College of Fine Arts which bear professional degree titles (Bachelor of Music, Bachelor of Music Education, or Bachelor of Fine Arts) are offered by "professional schools" of music, art or theatre. One ISU administrator commented, in reference to the Music Department, that "this is not a conservatory." Indeed not. But music is a professional school, or should be so considered, by virtue of the fact that it offers primarily professional degrees, the BM and BME. Perhaps the University as a whole would be well served if its arts programs were recognized by title as professional schools: School of Music, School of Art, etc., within the College of Fine Arts. Those programs should then be given more autonomy in establishing their curricula.

Those professional areas that are not presently accommodated in the ISU program will be outlined in the next section of this report.

B. Professional Course Content Presently Lacking

The following are areas that are not presently included in the requirements for the degree Bachelor of Music Education at Illinois State University. While it would be an exaggeration to suggest that all of the following are required in all baccalaureate curricula in music education across the nation, it can be shown that most of these experiences are required in most such programs.

1. Chamber music. One of the most valuable and efficient means by which young people learn to express themselves musically is through one-on-a-part ensemble performance, coached rather than conducted. The experience is valuable because it forces interpretive decisions and musical communication that are taken care of by a conductor in a large group. Furthermore, accountability in one-on-a-part groups is a very different matter from large ensembles. Chamber music experiences are difficult to arrange, however, because of both scheduling and space problems. They require a great deal of faculty commitment and student cooperation, but they remain, at least to this observer, the most effective means of teaching musicianship. There is no such requirement in the BME curriculum at ISU at the present time, and although theoretically such experiences are possible, without such a requirement there is not a large enough number of students enrolling at any given time for there to be an effective program in chamber music. This is a serious deficiency which
would require approximately 2 additional credit hours to accommodate.

2. Advanced analysis or a longer sequence of basic musicianship course work. At the present time BME students at Illinois State University have completed their work in music theory, history, and aural skills by the end of the sophomore year. Because most music students in most institutions begin with very little previous experience in theoretical and historical instruction in the field, it is necessary to "start from scratch" when they enter the university as freshmen. Furthermore, there are critical skills to be developed, most specifically ear training and sight singing, and all of this must be done at the same time. To try to accomplish all of that in two years is not practicable. ISU's approach through an integrated course is an excellent one, but music education students do not have the opportunity because of the limited credits required in their curriculum to take any advanced work in analysis. That is the place where most music education students in most programs learn to analyze scores to prepare for teaching and conducting. Such an addition would require an additional 2 or 3 credit hours in the curriculum.

3. Additional study in secondary instruments or vocal pedagogy. The amount of time provided for instrumental music education students at ISU to learn secondary instruments is not sufficient to accomplish that task. It is presumed, of course, that most students will do a great deal of extra work in this area on their own, but the structure of the courses must be such that all of the instruments can be covered in only a few weeks each. Imagine a student who has never held a cello learning enough about that instrument in three weeks to teach beginners. The same would be true for oboe or for percussion or any other instrument one would name. Young people are expected to go into the schools and teach these very technical skills, but most of them are simply not prepared to do that. Although not the highest form of intellectual activity, knowledge of instrumental performance techniques and beginners' problems with those techniques is critical to the beginning instrumental music teacher -- he/she will fail without it. For choral or general music teachers, the parallel problem is with vocal pedagogy. While instrumentalists need additional time for study of secondary instruments, those who will be general music teachers or who will be secondary choral teachers need to learn how the voice functions, what young students can do and what they cannot do, and how to teach them at a young age correct vocal production. There is at the present time no provision for that in the ISU music education curriculum. To accommodate these needs, an additional 2-4 credit hours would be required in the curriculum.

4. Advanced conducting. Because of the limited credits in the professional field, Illinois State BME students have no advanced or specialized conducting instruction. They are required to have one general conducting course, but that does not provide
specific instruction for instrumental or choral, nor does it provide laboratory experience. To correct this deficiency would probably require an additional 2 credit hours in the curriculum.

5. Orientation to music education. While such a course would be less common than all of the above in music education curricula across the nation, it has been the generally agreed philosophy in music education circles for approximately 15 years that students need to have an opportunity for observation of music education in a variety of settings, and for some philosophy of the field, early in their collegiate careers. Part of the purpose of this is for advising, and part of it is to establish the base for higher motivation and dedication to professional preparation throughout their degree program. This is less essential than the above, but it would require an additional 2 credit hours to add such a course.

6. A more varied ensemble experience. Present requirements call for large ensemble experience throughout the degree program or at least to the time of the student-teaching semester. It is presumed that wind-percussion students will participate in the marching and concert bands, string students in the orchestra, and singers and perhaps pianists in choral groups. However, those who will teach instrumental music in the schools today need to be prepared with the techniques for teaching jazz ensembles, and there is also a parallel in the choral field. It is true that these experiences are electives and are probably elected by many students already, but in many respects it should be the attitude that students not be allowed to graduate in music education without some experience in these musical genre. To accommodate that addition would probably require at least 2 additional credit hours.

To accommodate all of these additions to the curriculum may not be possible at Illinois State University. The total of the above "needs" translates to 12-15 credit hours. However, the number of deficiencies cited serves to illustrate the undernourishment of BME curricula at Illinois State University. The following section of this report will deal with some proposed solutions to the problem.

C. Some Proposed Solutions

The following suggestions may be only partial solutions, but any relief in any one of these areas would be of assistance. Cooperation from all quarters which would afford some flexibility in each of the following three suggestions would provide the opportunity for the reestablishment of a music education degree program of quality.

1. Professional education sequence. It has been proposed by the music education faculty that the second and fourth courses in the professional education sequence (CSE 200.02 and 200.04) be eliminated as requirements and that the content of those courses be incorporated into music methods courses (MUS 261, 262, and 264). It is believed that much of the present content of 200.02 and 200.04 is already covered in the
professional music education courses, and this would gain 4 credit hours for the BME curriculum. Further, it is proposed that Psychology 112 serve in lieu of C & I 210 in the professional music education sequence because Psychology 112 would also count toward the Group 5 requirement. This would gain 3 credit hours for the BME curriculum. Together, these proposals, if approved, would gain 7 critically needed hours for music education.

2. Music history for general studies credit. It is standard practice across the nation that course work in music history be counted for general studies credit. Because music history is taught integrally with music theory, literature, and skills at Illinois State University, this may not be an acceptable arrangement. However, if music education students were allowed to count the advanced music history courses toward general education, they would be adding additional music content to their curriculum and that would be very desirable. Those courses (MUS 253, 254, 255, 256, 257, or 258) would certainly stand up with present general education requirements in the humanities area for academic rigor, and their content would be a valuable addition for music education students. Another alternative would be to restructure the present basic musicianship program so that music history is afforded a separate credit, and accepting that credit in lieu of 6 hours of Group 2 requirement. Provision for this consideration is given in IV.7. (page 70) of the report of the University Curriculum Committee on "The Baccalaureate Degree at Illinois State University."

3. Some relief from the 124 credit hour maximum for the degree program. While it seems generally believed by administration on the ISU campus that 124 hours is a ruling by the Board of Regents that is not to be questioned, one wonders if the Board would be so adamant if presented with facts about other curricula at other institutions for this same major. The rationale for such a limit seems extremely weak considering the consequences.

II. Bachelor of Arts Degree in Music

While I did not understand it to be part of my charge when I visited Illinois State University on October 22-23, I was asked to make some comments about the rationale for a Bachelor of Arts degree program in music. Time did not allow for a thorough study or discussion of the matter, but I am pleased to comment about that degree as viewed by the National Association of Schools of Music and by most universities across the nation.

The Bachelor of Arts in music is considered to be a "generalist's degree" as compared with the professional Bachelor of Music degree. In order to maintain some understanding about the difference between the two degrees, NASM has insisted that BM degree programs contain at least 65% music content, whereas BA degree programs in music may not require more than 35-40% music content. While the BM degree is intended for those persons who will pursue music as a profession, the BA is intended for those who wish to concentrate or emphasize music studies in their baccalaureate program, but whose career
CONTACTS RE BME DEGREE REQUIREMENTS:

Bowling Green State University
Professor Patrick Tallarico
Chairman, Music Education
College of Musical Arts
419/372-2181

University of Illinois
Professor Robert Bays
Director, School of Music
217/333-2620

University of Iowa
Professor Steve Hedden
Head, Music Education
School of Music
319/353-3825

Northwestern University
Ms. Nancy Rieck
Coordinator of Student Information Services
School of Music
312/491-7575

University of Wisconsin-Madison
Professor Robert Petzold
Head, Music Education
School of Music
608/263-1918
pursuits will not be in the field of music per se. BA graduates at Florida State University have gone on to study law, medicine, business-related fields, etc., and many BA students combine music with another major (English, communications, journalism, business, sociology, etc.).

The curriculum for the Bachelor of Arts degree, then, should insure a solid academic framework in the discipline, but a minimal level of performance and other skills as compared with that expected in the BM program. Most BA curricula require much the same course work in the freshman and sophomore years in such fields as music theory, literature, and history, as that required for the BM, but little in the way of advanced analysis or performance skills.

In institutions where a professional school of music grants the Bachelor of Music degree, often the Bachelor of Arts in music is granted by a College of Arts and Sciences. Such is the case at Florida State University, although all advising for BA in music students is done by music faculty members. In cases where the Bachelor of Music degree is offered, the BA in music is not expensive. Usually, no courses are required of the BA that are not required for the BM, although one or two courses (such as general fine arts or aesthetics courses) that may be electives for BM students might be required for BA students.
The visit to Bloomington/Normal and Illinois State University was an enjoyable one for me. A consultant always learns from such activity. It also provided an opportunity to make new acquaintances and renew contacts with others whom I have known and respected over the years.

During the two days I was at Illinois State University I was impressed with the professional attitude that prevailed among the members of the faculty of the Department of Music and with their desire to maintain a strong Bachelor of Music Education (BME) program. Their concerns about the education they are able to provide the students are deeply felt and seem devoid of a sense of self-preservation or "empire building." I was also impressed with the cooperative spirit that prevailed among the administrators with whom I met. The attitudes of both faculty and administrators increase the probabilities for arriving at a reasonable and equitable solution to any problems that exist or might arise in the future with regard to the BME degree program.

There is, of course, currently a situation facing the Department of Music and its BME degree program that is properly causing its faculty much concern: the restriction in the total number of credit hours allowed in the BME curriculum. At first glance, the idea of making all baccalaureate degrees nearly identical in total number of
credit hours is an attractive one. However, when examined carefully, it poses a serious threat to the quality and integrity of the BME degree.

The Bachelor of Music Education Degree

The BME degree is, as its name implies, a professional degree in that it is designed to prepare students for a particular type of work requiring much specialized knowledge and skill. Any professional degree program must be measured according to the extent to which it actually prepares its graduates to undertake their respective professional activities. If the degree does not do this, it has failed in its main reason for existence.

The BME degree at every American institution of higher education is a combination of three areas: music, education, and general studies. Squeezing the needs of each of these areas into a four-year baccalaureate curriculum inevitably involves a certain amount of give-and-take. If some acceptable accommodation cannot be achieved among them, either the degree program must be extended beyond the usual four years or one or two areas must be weakened. In a sense, the situation becomes one in which decisions must be made in terms of doing the least damage to the integrity of the degree.

Each area merits further exploration in this report.

Music. The present BME degree program at Illinois State University is barely adequate in its preparation in music. Its requirements in music theory, history, applied study, and ensemble are at or near the minimum found in most credible BME degree programs and the minimum standards recommended by the National Association of
Schools of Music (NASM), the accrediting body for music in higher education. The music methods courses are at the "bare bones" level with more content to cover than time permits. Class instrument instruction for the BME instrumental majors is actually below the minimum, with additional semesters of study in brass, woodwind, and string instruments sorely needed. The present one semester of instruction in conducting is definitely not sufficient to prepare future teachers adequately. The study of conducting necessarily includes learning score reading, baton techniques, listening skills, analytical skills, and rehearsal procedures, and then synthesizing all these areas and putting them into practice by actually rehearsing live performers. While at Illinois State University, I had the opportunity to talk with several students who are planning to do student teaching next semester. They were unanimous in pointing out the amount of conducting as the major weakness in the present program.

In summary, it is clear that no significant reductions can be made in the present number of music courses in the BME degree without reducing the quality of preparation of the graduates, which would put them at a disadvantage when seeking employment because they would have less preparation than graduates of comparable BME programs.

Education. The 22 hours of education required in the present BME program is slightly larger than required at the University of Florida, but such an amount is not untypical. It was not possible for me to conduct a careful examination of the content of all these courses. However, some of the course syllabi for the 200-level core courses were studied. The 200.02 and 200.04 courses appear to contain content and field experiences that are presently duplicated
to some extent in the music methods courses. It appears also that whatever is not now included in the music methods courses could rather easily be incorporated into them. The students interviewed reported that they did not find the 200-level core education courses as useful as the others they took in music and education. (None of these students had yet taken the "Philosophy of Education" course, so they could not comment on it.) Although not desirable, if reductions must be made in the total number of credit hours in the BME degree, a modest reduction could be made in the professional education area without major damage to the preparation of the students.

General studies. At 48 semester credit hours Illinois State University is significantly in excess of the general or "university" studies required for the Bachelor of Music Education degree at most universities in the United States. The total also exceeds the 42 hours suggested by the State of Illinois for teacher certification. The difficulty in fulfilling the requirement by BME candidates is further compounded by the exclusion of any courses in a student's major area, something that is done in BME degree programs in many of the country's finest universities. Such rigidity is difficult to understand, especially when one considers the blanket exclusion from the requirement for students who have completed an associate degree at an Illinois community college. The inclusion of six credit hours from the major (i.e. music history) in meeting the 48-hour general studies requirement would relieve the pressures on professional baccalaureate degrees significantly.

The 124-credit hour ceiling. The most frequent solution to the three-part requirements for BME candidates is to allow a modest
increase in the total number of credit hours in the program. For example, Indiana University and Florida State University, two of the stronger programs in the United States, require 144 semester credit hours; almost all BME programs in the U.S. that seek to make their graduates competitive in the job market exceed 130 semester credit hours. Such programs do not seem excessive or unfair, as long as candidates are not misled regarding the nature and requirements of the program.

Because of the requirements in the areas of music, education, and general studies that have been discussed here, it is clear that a mandatory 124-credit hour ceiling is not a reasonable one for this professional degree program. With the sizable university studies requirement pushing from one side and the restriction of 124-credit hours exerting pressure from the other, the music and education portions of the BME degree program are being squeezed in an academic vise. It is difficult to imagine how anyone -- the Department of Music, the College of Education, the BME degree candidates, or Illinois State University -- will benefit from this situation.

**Recommendations**

1. The Department of Music should undertake an effort to correct the weaknesses in its present BME degree program. First, it should add another semester of conducting. Second, it should give serious attention to adding an "Introduction to Music Education" course in the freshman or sophomore year. Such a course gives BME candidates an earlier association with their chosen field of study, and it helps distribute better the large amount of material that is being included in the present methods
courses. It also contributes to building a better professional understanding on the part of the candidates of the total music education program. Third, serious thought should be given to increasing the amount of group lesson instruction for the instrumental majors. One two-credit hour course is not sufficient to prepare future instrumental teachers, for example, to play and teach flute, oboe, clarinet, saxophone, and bassoon after only three weeks of study on each instrument. The amount of study by choral/general majors in their secondary area (voice for the pianists and piano for the singers) should also be increased.

2. The Department of Music should work, with others when possible and alone if necessary, to seek relief from the 124-credit hour ceiling for the BME degree and/or the 48-hour requirement in university studies. It should not permit its program to be weakened and fall behind comparable programs without making that fact known. Most university faculty members and administrators will not knowingly weaken a viable and successful program. The Department of Music has an obligation to present its views fully and vigorously so that uninformed decisions are avoided in this matter.

3. If no relief is possible in the program ceiling or the number of hours required in general studies, then a reduction in the number of professional education courses required for the degree should be pursued. The most likely courses that could be deleted from the program are 200.02 and 200.04 in the core requirement. The content of these courses can be incorporated into the music methods courses. For example, both music methods and education core courses deal with the teaching of special populations.
of students and involve some micro teaching. The coverage of most such topics in the music methods courses is more meaningful to BME degree candidates because it is more specific to their subject matter area. Because of the strong relationship between the music education and professional education courses, the music methods courses could be listed under both the College of Education and the Department of Music.

4. The Department of Music should examine the possibility of offering a five-year degree program in music education that culminates in certification and a Master of Music Education degree. Such a program should be one alternative available for music education students; it should not be the only program available because it might discourage some students from enrolling at Illinois State University. The five-year program does have some advantages. For one, it provides the candidates with a stronger preparation for teaching music, and it allows them to earn a higher salary when they are employed. It could also help the Department of Music to develop enrollment in its masters degree program.

5. If the "worst case scenario" comes to pass and recommendations 2 and 3 cannot be achieved, three to six credit hours in music will need to be eliminated from the present BME degree program. Although no reductions can be made without some damage to the preparation of the students, these areas might be considered for reduction:

   a) the seventh semester of applied study (save two credit hours),
   b) the amount of credit awarded for group lessons (save two or three credit hours), and
   c) the seventh semester of performing organizations (save one credit hour).
BME degree -- 8

Reductions in the requirements in these areas will inevitably produce graduates who are less educated, less prepared professionally, and less able to compete for jobs with graduates of other universities.

I hope that my efforts as consultant have been useful to Illinois State University and the present and future students who pursue the Bachelor of Music Education degree there.

October 9, 1985

Charles R. Hoffer
V. GENERAL STANDARDS FOR GRADUATION FROM CURRICULUM LEADING TO BACCALAUREATE DEGREES IN MUSIC

A. Basic Musicianship

Musicians share common professional needs; for example, each to some extent must be a performer, a listener, an historian, a composer, a theorist, and a teacher. For this reason, certain subject matter areas and learning processes are common to all baccalaureate degree programs in music. The precise format and details of the curricula utilized to achieve this breadth of skills and understandings are best determined by the individual institution in ways that are commensurate with its unique goals and resources.

Basic musicianship is developed in studies that prepare the student to function in a variety of musical roles, both primary and supportive. All undergraduate curricula should therefore provide the following:

1. A conceptual understanding for such musical properties as rhythm, melody, harmony, timbre, texture, and form, and opportunities for developing a comprehensive grasp of their interrelationships as they form a basis for listening, composing, and performing.
2. Repeated opportunities for enacting in a variety of ways the roles of listener, performer, composer, and scholar, by responding to, interpreting, creating, analyzing, and evaluating music.
3. A repertory for study that includes various cultures and historical periods.

The competencies suggested by these components might be developed in the traditional course sequence of sight-singing, ear training, harmony, keyboard harmony, counterpoint, orchestration, conducting, and music literature, or in studies combining concepts and skills in varying degrees of integration.

B. General Studies

Studies in other areas of human achievement are important in the education of musicians. Students should have opportunities for study in natural and physical sciences, social sciences and communications, as well as in other areas of the arts and humanities. Since the musician must be equipped to function and interact with the total society, to adapt to changes in the society, and to fulfill a role as a public advocate for music, individuals should be encouraged to select offerings that will be significant throughout their lives. Curricular patterns must be flexible in order to accommodate the career options of students, and institutions are encouraged to experiment with innovative ideas in curricular design.

Some music courses, if conceived and taught in relation to other realms of human experience, may be appropriately included in the category of general studies. Some music history or music literature courses or courses in acoustics or esthetics, may meet this criterion. Conversely, many areas of inquiry from general education are directly supportive of various specializations in music. Language study is essential to the student maturing in voice performance or music history; computer science may be important to the musician majoring in music theory or composition; biology and human physiology may have direct application for the student in music therapy, and various types of historical studies apply directly to such music specializations as music history or sacred music. The selection of courses in general studies appropriate to each particular area of music concentration is best determined by the faculty and students of each individual institution.

C. Residence

No degree shall be granted by a member school of the Association unless the student has fulfilled the established residence policy of the institution.

D. Credits

1. In lecture-discussion courses requiring outside preparation, one hour of credit shall be given for one period of recitation (50 minutes) plus two hours of preparation each week of the term. In laboratory courses where outside preparation is required, one hour of credit shall be given for two 50-minute recitation periods per week.
2. It is recommended that one credit hour be given for each three hours per week of practice, plus the necessary individual instruction, with a maximum of six credits per term allowed for the major subject in music performance. It is understood that the credit is not earned unless the final examination is satisfactorily passed. Students should be required to have a minimum of one hour (60 minutes) of individual instruction per week, or a comparable equivalent arrangement of individual and/or small group instruction, in the principal performing area.
3. In order to earn one hour of credit during a summer session, the student must attend approximately the same number of class sessions and make the same amount of preparation as he would by attending a one hour per week course for one term during the regular academic year. It is usual academic practice to allow a student to earn one hour of credit for each week of the summer session.
VII. COMPETENCIES COMMON TO ALL PROFESSIONAL BACCALAUREATE DEGREES IN MUSIC

A. Performance

1. Skill in at least one major area of performance must be progressively developed to the highest level appropriate to the particular music concentration. Essential competencies and experiences are:
   a. performance of a cross-section of the music from all styles represented in the complete repertory of the particular performance medium.
   b. the development of technical skills adequate to meet the needs of artistic self-expression.
   c. the ability to read at sight.
   d. participation in solo and ensemble performance.

2. Students must have ensemble experience throughout the baccalaureate degree program. The ensembles should be varied both in size and nature, and should be chosen from those appropriate to the area of specialization.

3. Students shall acquire conducting and rehearsal skills adequate to exhibit understanding of musical interpretation.

4. Students should have experiences in secondary performance areas. In all cases, functional piano is appropriate and should be encouraged.

B. Analysis

1. Students must have a functional knowledge of the language and grammar of music.

2. Students must develop an understanding of the common elements of music—rhythm, melody, harmony, timbre, texture, dynamics, form—and their interaction, and the ability to employ this understanding in both aural and visual analysis.

3. Students must be able to place compositions in historical and stylistic perspective.

4. Students should be able to form and defend evaluative judgments about music.

C. Composition

1. Students must develop compositional skills through imitation of traditional musical styles, experiences in original composition, experimenting with various sound sources and/or manipulating the common elements in non-traditional ways.

2. Students should develop improvisational skills of a type and level appropriate to the particular music concentration.

D. Repertory

1. All music students must be exposed to a large and varied body of music through attendance at recitals, concerts, operas and other performances.

2. Students should have opportunities through both performance and academic study to deal with music of various historical periods, cultural sources, and media. Students should have experience with Western concert music, contemporary "pop" music, music of non-Western cultures, folk music of Europe and America, and Western art music since 1950. The balance appropriate for a particular degree program is best determined by the faculty and students involved, but each institution has the responsibility of ensuring comprehensiveness of music repertory in the total curriculum.

VIII. COMPETENCIES, STANDARDS, GUIDELINES, AND RECOMMENDATIONS FOR SPECIFIC BACCALAUREATE DEGREES IN MUSIC

The Bachelor of Music degree is the initial professional collegiate degree in music. Its primary emphasis is on development of the skills, concepts, and sensitivity essential to the professional life of a musician. In any of the roles as performer, composer, scholar or teacher, the professional musician must function as a practitioner who exhibits not only technical competence but also broad knowledge of music and music literature, sensitivity in musical style, and an insight into the role of music in the life of man. Evidence of these characteristics and their continuing development is an essential criterion for awarding the Bachelor of Music degree.

While admission to a program leading to the degree will be subject to broad institutional admission policies, the emphasis should be on evidence that the candidate possesses exceptional talent, well-developed musician ship, artistic sensibilities, and above all, a strong sense of commitment. Students should be evaluated and screened periodically during the degree years.

Some provision should be made for independent study, defined as learning activities with a minimum of guidance but with appropriate evaluation of completion.

The standards, guidelines and recommendations that follow seek to ensure a commonality of goals. Individual institutions and their faculty members should be encouraged to experiment with curricular patterns and modes. Experimentation might lead to major programs of study not specifically included below, such as early keyboard, wind, or string instruments; to interdisciplinary courses; or to other areas of exploration which appear in response to a changing society. Innovation in method and course organization is encouraged.

For all Bachelor of Music degrees except those in music education, music therapy, and certain combined curricula, it is expected that, regardless of the specific distribution, at least 65% of a typical 120-128 semester hour degree program be in music courses.
1. **Baccalaureate Degree in Music Education**

   Some of the titles for degree programs designed for teacher education in music are the following: Bachelor of Music Education, Bachelor of Music in Music Education, Bachelor of Science in Music Education, and Bachelor of Arts in Music Education.

2. **Curricular Structure.** Music education degree programs typically comprise 120–132 semester hours (180–198 quarter hours), of which studies in music, including basic musicianship and performance, should comprise at least 50%; general studies, 30% to 35%; and professional education, 15% to 20%. Professional education is defined as those courses normally offered by the education unit which deal with philosophical and social foundations of education, educational psychology, special education, history of education, etc. Although student teachers must be supervised by qualified music personnel from the institution and coordinating schools, student teaching is counted as professional education.

   Music education methods courses, such as elementary and secondary methods and supplementary instruments, which are primarily music in content, may be counted under the music component.

3. **General Studies.** Competence in basic musicianship shall be emphasized in all music education degrees. In addition to the common core of musicianship and general studies, the musician electing a career in teaching must develop competencies in professional education and in specific areas of musicianship. The professional education component should be dealt with in a practical context, relating the learning of educational principles to the student's day-by-day musical experiences. Students should be provided opportunities for various types of teaching and observation experiences throughout the period of undergraduate study. They should be prepared to relate their understanding of musical styles and principles of all types of music, including "pop" and folk music. Attention should be given to breadth in general studies, to attitudes relating to human, personal considerations, and to social, economic, and cultural components that give individual communities their identity. In addition to the major performing medium, optional sub-areas of concentration for the musician-teacher might be conducting, composition, analysis, or other areas related to the teaching specialization.

4. **Essential Competencies, Desirable Personal Qualities, and Recommended Procedures:**

   a. **Personal Qualities.** Desirable characteristics of the prospective music teacher are:

   1) the potential to inspire others and to excite the imagination of students, engendering a respect and desire for music and musical experiences:
2) the ability and desire continually to seek, evaluate, and use new ideas and developments that are relevant to music teaching;

3) the ability to maintain positive relationships with individuals of various social and ethnic groups and be empathetic with students and colleagues of differing backgrounds.

b. Music Competencies. In addition to those basic competencies outlined for all musicians, the following are essential for all prospective music teachers:

1) Conducting. The prospective music teacher must be a competent conductor, able to create accurate and musically expressive performances, with various types of performing groups and in general classroom situations. It is important that instruction in conducting include score reading and the integration of analysis, style, performance practices and baton techniques. Laboratory experiences that give the student opportunities to apply rehearsal techniques and procedures are essential.

2) Composing and Arranging. The prospective music teacher should be able to compose, arrange and adapt music from a variety of sources to meet the needs and ability levels of school performing groups and classroom situations.

3) Performing. In addition to the performance skills required for all musicians, functional ability in piano and performance skills on fretted instruments appropriate to the student’s future teaching needs are essential.

4) Essential competencies and experiences for the vocal/choral or general music teaching specialization are:
   a. performance ability on keyboard and fretted instruments sufficient to employ these instruments as teaching tools;
   b. ability to transpose and improvise accompaniments;
   c. sufficient vocal skill to assure effective use of the voice in demonstrations;
   d. experience in solo vocal performance;
   e. performance experiences with wind, string, and percussion instruments;
   f. laboratory experiences in accompanying.

5) Essential competencies and experiences for the instrumental music teaching specialization are:
   a. knowledge of and performance ability on wind, string, and percussion instruments sufficient to teach beginning students effectively in heterogeneous or homogeneous groups;
   b. experiences in solo instrumental performance, as well as in both small and large instrumental ensembles;
   c. experiences in the use of the singing voice in class or ensemble;
   d. laboratory experience in teaching beginning instrumental students—individually, in small groups, and in larger classes.

c. Teaching Competencies. The musician-teacher should understand the total contemporary educational program—including relationships among the arts—in order to apply his music competencies in teaching situations, and further to integrate music instruction into the total process of education. Essential competencies are as follows:

1) an understanding of child growth and development and the identification and understanding of the principles of learning as they relate to music;

2) an understanding of philosophical and social foundations underlying music in education and the ability to express a rationale for personal attitudes and beliefs;

3) ability to assess aptitudes, experiential backgrounds and interests of individuals and groups of students, and to devise learning experiences to meet assessed needs;

4) knowledge of current methods and materials available in all fields and levels of music education;

5) an understanding of evaluative techniques and ability to apply them in assessing both the musical progress of students and the objectives and procedures of the curriculum;

6) an awareness of the developmental process involved in becoming a successful teacher, and a further awareness of the need for continuing study and self-evaluation.

d. Professional procedures. In order to implement programs to achieve the competencies identified in the foregoing sections, the following procedures are recommended:

1) Music education methods courses should be taught by faculty who have had successful experience teaching music in elementary and secondary schools and who maintain close contact with such schools.

2) Institutions should encourage observation and teaching experiences prior to formal admission to the teacher education program. Ideally, such opportunities should be provided in actual school situations. These activities, as well as continuing laboratory experiences, must be supervised by qualified music personnel from the institution and the cooperating schools.

3) Institutions should establish specific evaluative procedures to assess students’ progress and achievement. The program of evaluation should include an initial assessment of student potential for admis-
sion to the program, periodic assessment to determine progress throughout the program, and further assessment after graduation.

4) Institutions should provide opportunities for advanced undergraduate study in such areas as conducting, composition, and analysis.

K. Five-Year Program in Music Education

1. Five-Year Program Leading to Two Baccalaureate Degrees
   a. Satisfying the requirements for two differing degree programs, such as:
      1) The Bachelor of Music degree, typically comprising one-third general education and two-thirds music, or
      2) The Bachelor of Arts (music major) degree, typically comprising one-third general education, one-third music, and one-third electives; and
      3) The Music Education degree.
   b. The dual degree program must be considered as an integral plan, not merely the superimposition of one curriculum upon another. Ideally, the integrated program would result in the awarding of the two degrees only at the end of the five-year period. The total hours of credit for the two degrees will approximate 150–165.

2. Post-Baccalaureate Studies. The requirement or encouragement of periodic collegiate study by teachers in service is established practice in many states and localities. In recent years certain states have moved to withhold final certification until completion of an additional year's study (30 semester credits). The inherent purpose is to remedy shortcomings and develop new specialization interests discovered on the job.

   Such requirements may be satisfied by pursuit of a master’s degree for which the individual is qualified; or a more structured course of study may be developed which might properly include subjects at either the graduate or the undergraduate level. The latter plan calls for one or more courses in the following fields as prescribed by the local institution:

   Music theory
   Music history-literature
   Principal performing field
   Secondary performing field(s)
   Philosophy, organization, or supervision of music education
   Related academic fields
   Related areas in professional education
### Instrumental Music

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>Mus 99</td>
<td>Recital</td>
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<tr>
<td>Mus 101 &amp; 102</td>
<td>Theory</td>
<td>7</td>
</tr>
<tr>
<td>Mus 103 &amp; 104</td>
<td>Aural Skills</td>
<td>2</td>
</tr>
<tr>
<td>Mus 121 &amp; 122</td>
<td>Introduction to Listening</td>
<td>7</td>
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<tr>
<td>Mus 201 &amp; 202</td>
<td>Theory</td>
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<tr>
<td>Mus 203 &amp; 204</td>
<td>Aural Skills</td>
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<tr>
<td>Mus 321 &amp; 322</td>
<td>History and Literature</td>
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<tr>
<td>Mus 140</td>
<td>Piano (Secondary)</td>
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<tr>
<td>Mus 170</td>
<td>Instrumental Techniques (Flute, Clarinet, Saxophone)</td>
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<tr>
<td>Mus 171</td>
<td>Instrumental Techniques Brass</td>
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</tr>
<tr>
<td>Mus 172</td>
<td>Instrumental Techniques Percussion</td>
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<tr>
<td>Mus 173</td>
<td>Instrumental Techniques Double Reeds</td>
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<tr>
<td>Mus 179</td>
<td>Instrumental Techniques Strings</td>
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<tr>
<td>Mus 175</td>
<td>Introduction to Music Education (Field Experience)</td>
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<tr>
<td>or Mus 305</td>
<td>Orchestration</td>
<td>2</td>
</tr>
<tr>
<td>or Mus 306</td>
<td>Wind &amp; Percussion Scoring</td>
<td>2</td>
</tr>
<tr>
<td>Mus 360</td>
<td>Conducting</td>
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<tr>
<td>or Mus 361</td>
<td>Conducting II (Inst.)</td>
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<tr>
<td>Mus 362</td>
<td>Conducting II (Choral)</td>
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<tr>
<td>Mus 370</td>
<td>Elem. Mus Methods</td>
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<td>Mus 371</td>
<td>Clinical Experiences Elementary</td>
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<td>Mus 372</td>
<td>Jr. &amp; Sr. High School Methods</td>
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<tr>
<td>Mus 373</td>
<td>Clinical Experiences - Secondary</td>
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<tr>
<td>or Mus 394</td>
<td>University Chorus</td>
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<tr>
<td>Mus 144</td>
<td>Voice; Secondary</td>
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**Electives from Theory/Composition or History/Literature** 2-3

**Applied Music** 14

**Ensembles** 7-8

1 (Elect 4-5 hours from Marching or Concert Band or Orchestra plus 2 other ensemble credits)

### Education

#### Student Teaching

<table>
<thead>
<tr>
<th>Level</th>
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#### General Studies

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<td>English</td>
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<td>Communications</td>
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<td>Math</td>
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<td>Group 3</td>
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<td>Group 4</td>
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**Humanities**

**Science**

**Social Science**

**Special**

**General Education** 37

**Professional Education** 34

**Music** 68-70

**General Education** 139-141
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<tr>
<td>Professional Education</td>
<td>20</td>
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<td>Music</td>
<td>79</td>
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<tr>
<td>Electives (some or all of which may be music)</td>
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<tr>
<td></td>
<td>137</td>
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</tbody>
</table>

1. General Education

2. Electives (general and/or major field)

3. Basic Musicianship
   Applied
   Theory, Sight-singing, Ear training
   History and Literature
   Ensembles

4. Education
   History/Philosophy of Education
   Child Growth & Development

5. Music Education
   one of: Choral, Comprehensive, Elem. - General,
   Instrumental, Jazz, Education, Piano
   Pedagogy, Strings

6. Education Practice
   Introduction to Teaching
   Techniques of Teaching
   Pre-Clinical Experiences
   Student Teaching

33 (the 8 hours of music history and literature are counted as part of the 33.)

13 (4 hours of music ensembles are strongly recommended by advisement.)

40

15

8-16 (only 8 hours may apply toward graduation)
RE: Overview of the Conducting Department, School of Music, Music Ed. emphasis

COMMENT:

During these two days I have seen video tapes of several of the conducting classes and have talked privately with certain graduate students as well as the conducting faculty. I find the work to be of very good standard quality for first semester instruction in this field of endeavor.

BUT, one semester is not enough.

This whole experience has left me with an agonizing sympathy for the dedicated teachers who are frantically trying to do the impossible -- namely, to turn any student into a conductor in one semester.

The art of Conducting is the synthesis of everything the student has learned. Conducting is where he turns all of his knowledge into action. It is a gigantic step that just does NOT arrive at a functional state in one semester.

The public school instrumental music teacher quickly realizes that every class, from morning to night, requires him to do some conducting. Conducting is the most-constantly-used activity he engages in when he steps into the teaching profession. Therefore, from a practical standpoint, the conducting class should be given the same priority schedulewise as the instruction on the student's major instrument. His instrumental performance coupled with his ability to conduct well are his means for earning his living.

THE RECOMMENDATION:

That every effort be made to give the Music Education Instrumental students a required second semester of Conducting so that they can embark on their teaching careers adequately and confidently prepared.

ONE SEMESTER IS NOT ENOUGH!

(This statement is supported by the material given on page 2.)

FURTHER COMMENT --- SOME SUGGESTIONS:

In many schools, each department is a law unto itself. In some schools marvelous things happen when departments begin to cooperate with each other -- all in the interest of the student himself.

FOR EXAMPLE: The second year of Theory could take much of what it teaches and gear it to the conductor's needs in score study, thus making it immediately functional for the student.

ANOTHER EXAMPLE: The large ensembles (Band, Orchestra, Chorus) could set aside just 10 minutes a week of rehearsal time to be used by those conducting students who have proved themselves ready for the experience of conducting a first rate organization. Each student, individually, is assigned his date and given his score to prepare well in advance. While he is working up front, the regular conductor has a chance to circulate around the back of his organization and observe what the various players are doing. He will be a more knowledgeable conductor for having done so. -- The players in the ensemble generally look forward to seeing their classmates perform. CAUTION: Only conductors should be given this opportunity who have the musicianship, technique and confidence to do a decent job. Do not waste the time of the rehearsal teaching them what to do after they are on the podium.
THE CONDUCTING SKILLS

SCORE READING:
The instrumental students are accustomed to reading one line of music at a time. Suddenly, in the conducting class, they are confronted with a page of from 10 to 30 lines which they have to read simultaneously.

In addition certain of these lines are devoted to the transposing instruments which means that the notes written in the score are NOT the notes sounded when those instruments play them.

The transposing instruments are all clarinets (three possible transpositions); the French horns (nine possible transpositions); the cornets and trumpets (six possible transpositions) and the saxophones in B-flat and E-flat in several octaves.

The C (viola clef) has to be mastered, as well as the C and tenor clefs for certain editions in the trombones.

ONE SEMESTER IS NOT ENOUGH.

MANUAL TECHNIQUE:

Here the elementary stage is the time-beating in 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 beats per measure. Each has its own distinctive pattern, universally recognized. In addition the "lopsided" patterns, where some beats are only half as long as the surrounding beats, have to be dealt with for handling the 20th century music.

The most time-consuming thing of all is the development that takes place in the brain itself. The student now has to establish independent action, independent control, of each hand. The technique of the right hand differs from that of the left hand. Each has its own "language" to speak. The development of this independence is a matter of brain development, and this takes time. You cannot make a flower grow faster by grabbing hold of the blossom and pulling. Growth has its own natural laws.

SUMMARY:

All of the things mentioned above have to work instantly and simultaneously in the conducting process. The conductor is performing himself as he also controls the 50-100 musicians by his skilled gestures, his impulse of will, and his musical knowledge.

There is nothing worse in music than a conductor who knows less than he needs to know, has less skill in his hands than he needs for his job of leadership, and whose mind has not been trained to work at the lightenlike speed needed to pursue his craft.

Our students must not be cheated of their chance to make a success of their careers. The young people today are paying a fantastic price for their education. They should be adequately prepared to make an adequate living when they graduate. The practical side of their education is being too often neglected.

ONE SEMESTER OF CONDUCTING IS NOT ENOUGH.
CONDUCTING CLASSES

REQUIRED OF ALL MUSIC EDUCATION STUDENTS; OPEN TO OTHER STUDENTS
OFFERED: 1 YEAR, THREE CLASSES/PER WEEK, REQUIRED. (35 students/class.)

A third semester was added, open to seniors and grad students. Meeting
twice a week. Usually about 20 students in the class.

Still later we added Private Lessons (one semester) for Masters and above.

Students used THE MODERN CONDUCTOR AS THE BASIC TEXT. Lectures preceded
the reading assignments in the textbook. The readings reviewed the
lectures.

Set-up: First semester, choral and instrumental met together.

Some singing of easy materials for all.

Instrumentalists brought their secondary instruments for the first two
weeks. We used grade school books -- short pieces, many students could
conduct each class. No preparations required. Piano conductor score.

Everybody happy, lots of times up, secondary instrument techniques
reviewed after the summer. No nervousness for the conductors -- so easy!

Third week: Junior high orchestra materials were read. When needed, students
began to bring their major instruments. Scores assigned and home study
preceded class performance. Sometimes went into the fourth week.

Thereafter, book of Mozart-Gluck scores was purchased, major instruments used.
Up to this point all scores had been furnished.

GOAL for this semester: Manual Technique -- understanding of and acquiring
some ease with the actual conducting process.

During the semester, lectures preceded book assignments. Drill sheets were
passed out to be filled in at home; corrected in class; graded recorded.

Written tests were given several times a semester -- testing actual knowledge
of how to perform the gestures; the summations of gestures (interpretative);
application to score excerpts; most of it book material.

At the end of the semester, each student was assigned a certain excerpt from
a standard work. He prepared it on his own and conducted it at the Final
Exam. Each student had a different excerpt. All played in the class
orchestra for the final. A final WRITTEN was also given at the last
regular classroom meeting.

Second semester: Choral people went to a choral specialist for choral conducti
Instrumentalists now were formed into groups of 6 or 7. Each group was
assigned a major symphony to prepare. They chose their own sections to do,
and the entire symphony was performed -- or whatever the work was. Always
had several movements. Band scores were also played during the semester.

In addition to the written and performance final, each had to write an
example of Psychological Conducting and perform it without rehearsal. Two
copies were made, one for the instructor, one for the student's music
stand. The examples were sung by the class, watching ONLY the conductor's
gestures. Obviously the pitch was static. This was the final test of
the student's absolute manual control -- of his hands and of his performers.

Written tests now included material from the language charts and music terms
from the appendix of the textbook.

NOTE: ALL CLASSES FOR THE FIRST SIX WEEKS OF THE FIRST SEMESTER STARTED
WITH THE CLASS FORMING A HUGE CIRCLE (everyone in the "front row") FOR
MAYBE 10 MINUTES OF THE PHYSICAL EXERCISES SUCH AS GIVEN IN THE OUTLINE
IN YESTERDAY'S LECTURE.
**Goals to be met:**

Manual Training in good technique.

Brain development -- a constant; growing as the manual skill grows.

**Beginning class:** training Left and Right hands independently -- thus requiring the right side of the brain to keep pace with the development of the left side.

1. Time-beating in Three and Four: changing from one hand to the other every 1 or 2 measures.

2. Adding to the change of meter:
   (a) a different number of measures in each hand as they alternate in the time-beating pattern.
   (b) next, adding a change from loud to soft, together with the two previous changes.
   (c) still later, change also the style, legato, staccato, tenuto, dead gesture, etc.

This will terminate in a mental development that can change four things at one time. The student in now thinking like a conductor.

**Score study development (left brain):** from fewer lines to multiple lines. Acquaintance with both band and orchestra scores. Recommended, the orchestra score first -- fewer lines, less doubling. EAR TRAINING!

**Interpretative, emotional aspect, imagination (right brain):** short excerpts that obviously have a different emotional character. Mimeograph them. Let students have the whole set and choose which one they wish to interpret. When they conduct it, does the class get the intended feeling from the conductor's performance. Does the response SHOW what was intended. EMPHASIS on THE SPIRIT OF THE MUSIC. After the conductor's performance, let the class tell (guess) what was intended.

**Stage deportment:** Dignity on the podium. No knee bends, leaning over, etc.

**IMPORTANT:**

When setting up new manual habits, move slowly. Give time for the CORRECT response to be established. Insist on "doing it right" at this stage of the game. Be SURE the student understands exactly what is readable and WHY. Then insist that he get it right, NOW. Most bad habits we see in the conductor-already-on-the-job are due to his lack of fundamental understanding as to what IS good, readable technique, and his setting up of inaccuracies in his beginning experiences with the baton.
PLAN I
All Music Ed plus all beginning conductors in the same class for one semester.
Classes meet MWF
Repertoire: Choral one day, Instrumental the other two days.

Class sizes: Large, with strings present (violins especially):
Orchestral materials will sound best.
Band materials usually lack too much instrumentation, BUT this can be remedied by a careful choice of materials.

Small class, 7-10: Here the choral music is no problem, but for the instrumental work, ensemble music usually has to be used.

The class itself becomes the performing unit. Daily conducting experience is therefore available.

SECOND SEMESTER: The choral people go to a choral section under the choral expert. Instrumentalists continue in the same class as first semester.
When it is possible, the set-up of Plan II is to be used.

PLAN II
First semester, same as Plan I.

Second semester: Class meets four days a week. The fourth day, members are assigned to a special ensemble (a sectional rehearsal, a regularly organized small ensemble as String Quartet, WW ensemble, two-piano team) which they will rehearse regularly. Time can be adjusted to fit the schedules of ensemble members and conductor.

OR: Conductor is assigned to a school group, grade, Junior High, Senior High, to observe one day a week and perhaps have a bit of conducting experience for ten minutes now and then.

PLAN III
First semester: Choral and Instrumental are separate classes entirely, each working under a specialist.

First semester is devoted to building manual technique and becoming acquainted with score study, form, etc., and ease with the transpositions.

Second semester: All students are assigned to a major organization (band, orchestra or chorus) to attend a given rehearsal, several times during the semester, and on the specified day, they are expected to conduct the organization for 10 or 15 minutes.
(Conductors of the organizations find that it spices up their large groups -- the student interest goes way up on those days since all performers are interested in seeing what their friends do with the baton and what they, themselves may have the opportunity to do in the future conducting class.

Another motivating force: the physical exercises forming the basis for building their manual technique, when practiced in the dormitory room, also "advertise" the conducting class. Students from the class have to explain the value -- the WHY? -- for their "funny" exercises.
The Music Department Curriculum Committee supports the request for an exemption from the 124 semester hour maximum for the Bachelor of Music Education degree at Illinois State University.

The committee is unanimous in its support for these reasons: 1) This is a professional degree program which entitles kindergarten through grade twelve certification. 2) The National Association of Schools of Music recommends a more comprehensive preparation of degree candidates than the projected ISU-BME semester hour total will allow. 3) The ISU-BME degree must remain competitive with equivalent degree programs offered by sister institutions in this state who do adhere to NASM accrediting guidelines. For example, the University of Illinois requires 145 hours and Northern Illinois requires 139-141 hours for their BME degree. 4) Last year the national presidents of the National Association of Schools of Music and the Music Educators National Convention were brought to this campus specifically to review our BME degree program. In their program review report both gentlemen stated that the 128-130 semester hours now required are too few and that most universities offering the BME degree require considerably more.

Based on the recommendation of the program review, we recommend in the following order:

1) Add advanced conducting course for 2 hours credit.
2) Exchange CI210 for Psych 112 and add the advanced conducting course.
3) Exchange CI210 for Psych 112.
4) Maintain current BME requirements.

Fred Omer
David Collier
Tella Marie DeBose
Bernard Eichen
John Ferrell
Kevin Hibbard
Bonnie Pomfret
John Rehm
Illi
nois State University
Office of the Dean
College of Fine Arts

TO: The University Curriculum Committee
FROM: The College of Fine Arts Curriculum Committee
RE: The Music Department's request that it be exempt from the 124-semester-hour maximum for the Bachelor of Music Education Degree at Illinois State University
DATE: September 25, 1986

Last year Charles Hoffer and Robert Glidden from the National Association of Schools of Music and the Music Educators National Conference were on the campus of Illinois State to review and evaluate the BME. They indicated a need for better preparation in conducting for the BME student.

In view of this, the Music Department Curriculum Committee has recommended that 1) an advanced course in conducting for two hours' credit be added to the existing requirement, or that 2) C&I 210 be exchanged for Psychology 112 and the advanced conducting course added, or 3) an exchange of C&I 210 for Psychology 112, or that 4) at the very least, the current BME requirements be maintained.

For the department to adhere to the 124-semester-hour maximum would pre-empt any of the above suggestions. As stated by the Music Department Curriculum Committee, the 124-semester-hour maximum would place the BME at ISU below NASM accrediting guidelines. At the University of Illinois, for example, the BME requirement is 137 hours.

A comprehensive education to teach music from kindergarten through high school will be severely restricted by the 124-semester-hour maximum. Therefore, the College of Fine Arts Curriculum Committee supports the request of the Department of Music for an exemption from the 124-semester-hour maximum for the BME degree.

Aris Chavez, Chair, College Curric. Committee
Susan Appel, Art Department
Dennis French, Art Department
Harvey Rovine, Theatre Department
Peter Schuetz, Music Department
John Sipes, Theatre Department