This statewide analysis of Missouri public school superintendents and college admissions officers explored their perceptions of changes since the release of the Report of the President's Commission on Excellence in Education, "A Nation at Risk." In the spring of 1985, the Missouri Legislature adopted a far-reaching omnibus bill addressing 13 broad areas of educational reform. The statute called for a strengthening of standards at all levels of education and provided for the initiation of numerous programs to assist teachers and administrators in the field. In an attempt to measure educational reform in the State of Missouri, a questionnaire designed around the 38 recommendations made by the Commission pertaining to public education was sent to the 544 superintendents in the State. Results, based on a 60 percent response rate, indicate that Missouri has undertaken significant legislative reforms which are now reaching students in the classroom. A list of the major reform initiatives contained in the Excellence in Education Act is included, along with a brief explanation of each item. (JD)
PERCEPTIONS OF FEDERALLY RECOMMENDED
REFORM INITIATIVES

by Michael W. Graham, Ph.D.
and
Max L. Ruhl, Ed.D.

Southwest Educational Research Association

January 1990
ABSTRACT

A statewide analysis of Missouri public school Superintendents and College Admissions officers, exploring their perceptions of changes since release of the President's Commission Report, "A Nation at Risk". The survey, representing the report's 38 recommendations revealed significant educational reform at the "grassroots" level in Missouri.
INTRODUCTION

Missouri was quick to respond to the report of the President's Commission. In the spring of 1985, the Missouri Legislature adopted a far-reaching omnibus bill addressing 13 broad areas of educational reform. The statute called for the strengthening of standards at all levels of education and provided for initiation of numerous programs to assist teachers and administrators in the field. Five advisory committees were eventually established to oversee development of the reforms. A list of the major reform initiatives contained in the Excellence in Education Act follows, along with a brief explanation of each item.

Pupil Testing Program: The Missouri Department of Elementary and Secondary Education (DESE) was required to identify key skills in English, Reading, Language Arts, Math, Social Studies, Civics, and Science. These were published in a document called the Core Competencies and Key Skills. These performance objectives are measured at virtually all grade levels, annually, during the first two weeks of April by the Missouri Mastery and Achievement Tests (MMAT). The MMAT is a Criterion Referenced Test developed by the Missouri Testing and Evaluation Service at the University of Missouri-Columbia. It was field tested twice in April of 1986 and was equated to two nationally normed standardized achievement tests, the Iowa Test of Basic Skills (ITBS), and the Test of Achievement and Proficiency (TAP).
Discipline Policy: Each of Missouri's 545 local school districts was required to develop and make available to school patrons a discipline code outlining both infractions and the penalties for infractions. The statute implied that districts acting in accord with their published discipline code would be immune from court challenge.

Incentives For School Excellence: A program offering both matching grants and match-free grants to encourage exemplary and innovative programs designed to improve schools and instruction, grades pre-K-12. These are offered in amounts ranging from 5,000 to 50,000 dollars. The matching funds grants are awarded on the basis of a sliding scale reverse correlated to school wealth. Districts with a low level of per-pupil expenditure may receive a 90% state match, while districts with greater wealth may receive a 70% match from state funds. Funded programs have included, among others, writing projects, teacher aides, business-education partnerships, school improvements councils, programs to improve pupil attendance, school volunteer projects, parent participation programs, advanced placement programs, projects to foster use of advancing technologies, extended teacher contracts, etc.

Teacher-Education Scholarships: Provides non-renewable $2,000 scholarships to top college freshmen or sophomores (scoring at or above the 85th percentile on ACT, SAT, or SCAT, or ranked in the top 15% of their graduating class) who are willing to make a commitment to teacher education. The program is funded on a 50/50 basis by the state and participating state colleges and universities.
Minimum Salaries: The minimum salary provision was a four step program to bring the minimum salary in Missouri to the national average for first year teachers. Beginning in 1986-87 and concluding with the 1989-90 term the program insured that in its last year, the minimum salary paid a full-time teaching professional would be at least, $18,000.

Professional Teacher and Administrator Act: This portion of the Excellence in Education Act embodies several programs:

-Entry level testing for admission to teacher preparation programs. Each candidate for teacher preparation is now required to successfully complete an exam, the C-BASE, demonstrating proficiency in basic oral and written communications and basic math skills.

-Exit test for teaching candidates: In 1990-91 all teaching candidates will be required to take the National Teacher’s Exam. On the basis of this administration of the N.T.E. a minimum score will be established for candidates in 1991-92 and beyond. Students failing to meet that minimum will not be certificated.

-Direct and Periodic Involvement of teacher preparation faculty in the public schools: Each faculty member must develop an annual plan, detailing activities he/she will pursue which involve them very directly in the schools. These may include exchanging positions for short or extended periods of time with a public school teacher or administrator, serving on a school district professional Development Committee, joint school improvement programs, etc.
-Beginning Teacher Assistance Programs: Requires local school districts to provide a plan for the professional development of teachers without prior teaching experience. The plan is developed by the teacher in consultation with a committee of experienced teachers and with input from the teacher-training institution (the professional development committee). Some state funding is provided.

-Administrator Assessment Center: All prospective principals, superintendents, program directors, etc. are required to successfully complete a two day assessment process whereby they show evidence of knowledge of basic education processes and of the ability to apply their knowledge in simulated "real-life" situations likely to be encountered by administrators. (the NASSP's Assessment Center proven forms a model for this program and is utilized directly in a portion of the principals' assessment).

-The Leadership Academy: Offers a wide array of training and in-service programs for school leaders, including:

- The Effective Schools Workshop Series
- Executive Renewal
- Leadership Tape Library
- NASSP's Leader 1,2,3 Program
- NASSP's Springfield Skill Development Program
- Network for Women in School Administration
- Performance Based Teacher/Administrator Evaluation
- Satellite Leadership Academies (via U.S. Dept. of Education LEAD grant
- Theme Workshops
- School Law for Principals
Special Education Evaluation

Time Management

Principal and Superintendent Evaluations: A performance based evaluation program was developed for school leaders, similar to one established for teachers in 1984.

Tuition Reimbursement: Teachers and administrators may complete 3 hours of coursework at Missouri institutions annually and receive reimbursement of the cost.

The Career Ladder Program: School Districts can opt to submit a career ladder plan in Missouri. If approved, teachers at stage I can receive $1500, at stage II, $3,000, and at stage III, $5,000 in additional annual salary. The career ladder is funded by a match between the state and district based on school district wealth. The local district, if low wealth, may receive up to 90% of the program cost from state funds. Missouri is now in the third year of the Career Ladder Program. Of the states 545 districts, participation has been as follows:

Year 1 - 62 districts participating
Year 2 - 124 districts participating
Year 3 - 170 districts participating

Other Programs:

- Student Loan Program
- School Entry Age roll-back
- Foundation Formula Review
- Not-For-Profit Agency Services
- Re-assessment/Local levies
- Emergency Clause
QUESTIONNAIRE

A questionnaire was designed around the thirty-eight recommendations made by the Commission on Excellence in Education. That is, those recommendations that pertained to public education were transformed to questions and included in the survey. The survey was then sent to the 544 superintendents in Missouri. A total of 310 superintendents returned the survey in usable form, for a return rate of 60%. The purpose of this study is to measure the educational reform occurring in the state of Missouri.

PROFILE

The typical superintendent in Missouri is a 46 year old male with a specialist degree in educational administration. He has spent slightly more than ten years in the superintendency and has served his current school district for a period of between two and five years.

The typical Missouri superintendent lives in a community with less than 5,000 people and has no assistant superintendent. Student enrollments in the districts are fairly equally divided among three categories:

1/3 less than 500 students
1/3 501-1,000 students
1/3 1,001-5,000 students
TABLE 1

PROFILE

RETURN
SEX
AGE
DEGREE
EXPERIENCE
CURRENT DISTRICT
COMMUNITY SIZE
SCHOOL ENROLLMENT

ASSISTANT SUPERINTENDENT

60%
97% MALE
46 YEARS OLD
SPECIALIST
10 YEARS
2 - 5 YEARS
5,000 OR LESS
1/3 500 OR LESS
1/3 501 - 1,000
1/3 1,001 - 5,000
NONE

CREDITS FOR GRADUATION

Requiring twenty-two credits for graduation is the norm for schools in Missouri. This represents an increase of two credits since 1983. However, almost one third of Missouri schools (31%) require twenty-four credits.

The increase in credit hours is generally accounted for in math and science. Prior to "A Nation at Risk" slightly more than one half of all Missouri districts required two math credits. Since the publishing of NAR, 84% of all districts require two years with an additional 13.5% requiring three years. In the science area prior to 1983, 93% of school districts required one or two credits. After NAR, 97% require two or three credits.

English and social studies have also been affected to a certain degree. In 1983, approximately 88% of high schools required either two or three credits in English, with an additional 9% requiring four credits. Since that time English credits have been increased to three or four. Three-fourths of the schools require three credits, and an additional twenty-one per cent require four credits for graduation, a total of 96%.
The same trend to increase graduation requirements applies to social studies as well. Forty-four per cent of high schools required three credits in 1983. Currently, sixty-two per cent require three credits. Prior to NAEP, credit requirements in social studies were evenly divided between two and three (44%).

The perceived need to remain abreast with advanced technology and to become computer literate have apparently impacted secondary education. Five years ago, 95% of the respondents had no requirements concerning computer education. Today forty-nine schools require between .25 and 1.0 credit for graduation. This represents approximately 16% of Missouri schools. One Missouri district requires 2 credits for graduation.

Foreign language requirements have not dramatically increased, as 91% of the respondents report no required credits. Eight per cent of the districts require one or two credits to graduate.

TABLE 2

<table>
<thead>
<tr>
<th>CURRICULAR AREA</th>
<th>BEFORE 1983</th>
<th>SINCE 1983</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH</td>
<td>2 (50%)</td>
<td>2-3 (97.5%)</td>
</tr>
<tr>
<td>SCIENCE</td>
<td>1-2 (93%)</td>
<td>2-3 (97%)</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>2-3 (88%)</td>
<td>3-4 (96%)</td>
</tr>
<tr>
<td>SOCIAL STUDIES</td>
<td>2-3 (44%)</td>
<td>3 (62%)</td>
</tr>
<tr>
<td>COMPUTERS</td>
<td>0 (95%)</td>
<td>.25-1.0 (16%)</td>
</tr>
<tr>
<td>FOR. LANG.</td>
<td>0</td>
<td>1-2 (8%)</td>
</tr>
</tbody>
</table>

In other curricular areas, there have been relatively few increases in graduation requirements, as 85% of the districts reported none. A small percentage (3%) have increased credits in the fine arts or performing arts.
Have schools decreased credits for graduation in order to offset the increase in requirements? Nearly ninety per cent of the districts reported no decreases. Of the few that did, the reduced numbers are typically in physical education or health.

Less than one half of the respondents listed specific curricular deficiencies based on test results and/or personal observations. Of those listed, the areas of math, science, and reading headed the list of weak areas.

As expected, the standardized test cited as an addition is the Missouri Mastery Achievement Test (MMAT). To make room for the MMAT, standardized instruments have been deleted. Approximately one-fourth of schools have dropped the Iowa Test of Basic Skills (ITBS). Among other tests being deleted were SRA, CAT, Stanford, and CTBS. In addition, it was assumed that the BEST was also deleted.

TEXTBOOK ADOPTION

The majority of school districts (58%) specify a procedure for textbook adoption. Most influential in the decision-making process were faculty and building administrators. The remaining groups having influence on textbook adoption are in priority order: central office administrators, school board, students, parents, and community members.
TABLE 3

TEXTBOOK ADOPTION

GROUPS INFLUENCING DECISION

1. FACULTY
2. BUILDING ADMINISTRATORS
3. CENTRAL OFFICE
4. SCHOOL BOARD
5. STUDENTS
6. PARENTS
7. COMMUNITY MEMBERS

Textbooks and educational materials have improved over the last five years, according to the respondents. Only a small portion indicated that quality diminished, while one-third cited the quality as the same.

HOMEWORK POLICY

Nearly two-thirds (65%) of Missouri schools do not have a policy regarding homework assignments. Those responding affirmatively generally direct the policy governing the length of homework assignments. These policies were typically implemented after 1983.

USE OF TIME

Almost ninety per cent of all respondents report their school day is divided into seven class periods. A clear majority (59%) schedule classes in 50 minute periods. The second choice is 55 minute periods (18.5%).
A school year with 174 student contact days is the norm in Missouri. Fifty-nine per cent of all districts report 174 days, while an additional nineteen per cent list 175 days. Therefore, a student in Missouri typically attends school in a setting of 7 class periods of 50 minutes each for 174 days.

<table>
<thead>
<tr>
<th>CONTACT DAYS</th>
<th>NUMBER OF CLASS PERIODS</th>
<th>LENGTH OF CLASS PERIODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>174 DAYS</td>
<td>59%</td>
<td>59%</td>
</tr>
<tr>
<td>175 DAYS</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>176 DAYS</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>177 DAYS</td>
<td>3.5%</td>
<td>2%</td>
</tr>
<tr>
<td>178 DAYS</td>
<td>3.9%</td>
<td>2%</td>
</tr>
<tr>
<td>179 DAYS</td>
<td>.9%</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

The Commission recommended that the nation's schools increase the school day, the school year, or make more effective use of the available time. Missouri opted for the latter, as evidenced by teacher in-service activities. More than half the districts (55%) have provided staff development activities relating to use of classroom time. Specific topics most often mentioned are Time on Task and time management/utilization.
DISCIPLINE

Missouri's Excellence in Education Act of 1985 mandated that each school district adopt a discipline code outlining standards of conduct and consequences for failure to comply with those standards. This document is to be kept on file in the office of the superintendent. When asked if the code had resulted in improved student behavior, most districts responded negatively (60%).

ATTENDANCE

Less than one half of the respondents (40%) provide incentives for good attendance. Among the most common incentives for those who do provide such policies are awards, opting out of final exams, and pizza or other types of parties.

In contrast, an overwhelming majority (80%) provide sanctions for excessive absenteeism and tardiness. The most frequently mentioned are detention, in-school suspension, out-of-school suspension, and Saturday school.

CAREER LADDER

Almost one-third of Missouri districts (32%) provide a career ladder for their teachers. The intent of the career ladder is to reward experienced teachers for continued professional growth.
EXTENDED CONTRACTS

The number of extended contracts for teachers, that is, those exceeding nine months, has increased since 1983. Approximately one-third of the districts (32%) reported that the number of extended contracts had been increased.

TEACHER SHORTAGES

The most severe shortages appear in the teaching areas of science and special education. Forty-three per cent of the districts indicated a shortage of teachers who are certified to teach science. Special education teachers rank second in the shortage category, with forty-two per cent of the respondents indicating shortages in this area. Almost one-fifth of the districts (18.5%) show a shortage of math teachers. Only a small portion of the districts indicated that there were not enough language and computer teachers.

TABLE 5

TEACHER SHORTAGES

<table>
<thead>
<tr>
<th>Subject</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>43%</td>
</tr>
<tr>
<td>Special Ed.</td>
<td>42%</td>
</tr>
<tr>
<td>Math</td>
<td>18.5%</td>
</tr>
<tr>
<td>Language</td>
<td>5%</td>
</tr>
<tr>
<td>Computers</td>
<td>4%</td>
</tr>
</tbody>
</table>

TAX LEVY SUBMITTED

In order to meet and implement the requirements of the Excellence Act, approximately one-third (29%) of the respondents submitted a tax levy increase to the voters of their districts. Of those submitted, a majority (70%) were approved.
TABLE 6
TAX LEVY SUBMITTED

<table>
<thead>
<tr>
<th>YES</th>
<th>29%</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROVED</td>
<td>70%</td>
</tr>
</tbody>
</table>

HIGHER EDUCATION

In addition to the survey of Missouri school superintendents, Northwest Missouri State University researchers surveyed admissions officers of Missouri Colleges and Universities offering a teacher preparation program. This survey was designed to determine whether significant changes in admissions criteria had occurred over the previous five years.

Nineteen institutions of higher education responded to the survey. Half had student enrollments of fewer than 1,500 students institution wide, while four enrolled over 10,000 students. The college of education enrollments for these institutions is interesting, in that many have rather small teacher education programs. Eight have fifty or fewer students, while only three have more than 500 education majors. Two exceeded 1,500 and 2,000 students respectively. The institutions represented all geographic regions of the state and represented a rural-urban mix.

RESULTS

One of the major recommendations coming out of the "President’s Commission Report" had to do with "Standards and Expectations". The report recommended that, "Four-year colleges and universities should raise their admissions requirements and advise all potential applicants of the standards for admission in terms of specific courses
required, performance in these areas, and levels of achievement on standardized achievement tests in each of the five Basics..." The survey of Missouri admissions officers demonstrated a range of admissions criteria. The range for the ACT was from a low score of 12 for admission to a high of 21. The mean score was an 18. On the SAT, the range was from 670 – 900, and minimum criteria for grade point average ranged from 1.5 to 2.5. All but one institution required students to rank in the top 50% of the high school graduating class. One was slightly lower, expecting the student to be in the top 60% of his/her class. Several consider various combinations G.P.A. versus test scores and eight institutions reported offering an alternate test or consideration of high school performance when students fail to meet minimum admissions standards. The variety of alternative admissions routes is listed below:

TABLE 7

ALTERNATIVES FOR ADMISSIONS

-DEVRY MATH TEST
-TEST OF LOGIC AND REASONING
-WRITING, READING, AND MATH T
-(ALT. ONLY FOR G.E.D., GRADS)
-COLLEGE PLACEMENT EXAM/DIAGNOSTICS
-PSAT OR SCAT
-ENTRANCE EXAM ADMINISTERED AT THE COLLEGE
-HIGH SCHOOL RECORD

Classroom discipline is an area alluded to several times in the NAR report. Four of the colleges or universities indicated that they have a Good Conduct requirement for admission. The various policies are listed in Table 8.
TABLE 8
GOOD CONDUCT REQUIREMENT FOR ADMISSION

14 = NO CONDUCT REQUIREMENT
4 = REQUIREMENT AS FOLLOWS:

- SHOW GOOD CHARACTER AND RESPECT FOR OTHERS
- THOSE PREVIOUSLY CONVICTED OF A FELONY ARE REVIEWED ON A CASE BY CASE BASIS BY THE DEAN
- TRANSFER STUDENTS MUST BE IN "GOOD STANDING"
- DRUG OFFENDERS NOT ADMITTED

The first recommendation provided by the "President's Commission" had to do with content and the teaching of the "five new basics". The Commission specifically recommended that "all students seeking a diploma be required to...[take], (a) 4 years of English; (b) 3 years of Mathematics; (c) 3 years of Science; (d) 3 years of Social Studies; (e) one-half year of computer science." College bound students were encouraged to take "...2 years of foreign language in high school..."

In terms of specifying the course requirements in the "New Basics" as recommended in the NAR report, the institutions seemed to be divided along the lines of public versus private institutions. The public institutions tended to have fairly specific requirements, while in many cases, course requirements were not specified by the private institutions. An example would be Science where one institution required 3 units for admission, ten institutions required at least two units and the remaining seven had no science requirement. Please see table #9 below for those breakdowns.
TABLE 9
SUBJECT PREP. REQUIREMENTS FOR ADMISSION

<table>
<thead>
<tr>
<th>SCHOOLS</th>
<th>UNITS REQUIRED</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>0</td>
<td>ENGLISH</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>ENGLISH</td>
</tr>
<tr>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>MATH</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>MATH</td>
</tr>
<tr>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>SCIENCE</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>SCIENCE</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>SCIENCE</td>
</tr>
<tr>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>SOCIAL STUDIES</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>SOCIAL STUDIES</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>SOCIAL STUDIES</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>SOCIAL STUDIES</td>
</tr>
<tr>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>FOREIGN LANGUAGE</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>FOREIGN LANGUAGE</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>FOREIGN LANGUAGE</td>
</tr>
<tr>
<td></td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>0</td>
<td>COMPUTER SCIENCE</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>COMPUTER SCIENCE</td>
</tr>
</tbody>
</table>

Admissions officers were also queried regarding the issue of grade integrity, or stated in the negative, grade inflation. When asked if high school grades accurately reflect a student's ability, thirteen responded in the affirmative, while five felt they were not. Experienced admissions officers, those with three or more years in the position, were asked if transcripts have gained integrity in the past five years. Five of fourteen responding felt they had gained in integrity, while nine saw no real change.

The report of the "President's Commission" devotes one entire category of recommendations to "Teaching", that is, ways to "improve the preparation of teachers or to make teaching a more rewarding and respected profession." Several Missouri colleges and universities
have responded to a specific recommendation that, "Incentives, such as grants and loans should be made available to attract outstanding students to the teaching profession." Seven institutions reported the initiations of such programs. They include at the various institutions $1,000 scholarships for freshmen, $5,000 annual renewable teaching scholarships, a $2,000 scholarship renewable up to five years, and a full tuition scholarship good for up to 128 credit hours. Several schools also cited that $2,000 scholarships provided through Missouri's Excellence in Education Act of 1985. Just one of many reform provisions of this act, the $2,000 renewable scholarship is available to highly qualified entering freshmen who are willing to make a commitment to teacher preparation.

Under the third category of the "President's Commission" recommendations, "Time", public schools and colleges were encouraged to increase the amount of time students are actually involved in learning, what has sometimes been called academic learning time or engaged time. In the case of public schools and the state legislatures, they were asked to consider mandating "...seven hour school days, as well as a 200 to 220 day school year." Of the 19 Missouri colleges and universities reporting, only two had increased the length of their school calendars. One had increased the calendar by two days and another by ten days.

It is important to note that a number of actions have been taken to increase standards for students in teacher preparation programs of state supported Missouri institutions. Beginning in 1984, all students admitted into such programs had to achieve a minimum score of
18 on the ACT. Students are also required to achieve a passing grade on the C-Base Exam, prior to admission to teacher education programs.

And, beginning in 1991-92, all graduates will be required to successfully complete an exit exam, probably the National Teachers Exam. It seems fair to say that several components of the teacher education program in many of these institutions has been strengthened.

Students must now complete many hours of observation in public school classrooms. The length of the student teaching experience has been increased by an average of approximately three weeks, and the evaluation procedures for student teachers, gauging their success in the classroom, have also been strengthened. Many colleges of education now use a form of Missouri's Performance Based Teacher Evaluation instrument to evaluate student teachers.

Taken on balance, the results of this study indicate that Missouri has undertaken significant legislative reforms which are, in most cases, reaching all the way down to students in classrooms. The results bear watching in succeeding years.