

**TEACHER STANDARDS  
AND  
COMPENSATION**

## TEACHER STANDARDS AND COMPENSATION

### Executive Summary

This issue, teacher standards and compensation, is one of 48 policy issues identified by the Governor's Sub-Cabinet on Education and Cultural Affairs for study in the policy development process coordinated by the State Planning Agency. This issue, like others, was considered in a series of development steps and is completed in this paper. The issue was first described by team leader, Assistant Commissioner of Education Daniel Skoog. Next, an inter-departmental team was formed. Members included: Daniel Loritz, then Director of Legislative Relations and now Assistant Commissioner of Education; Mitch Rubinstein, Higher Education Coordinating Board (HECB); Gene Mammenga, State University System, and Ken Zastrow, Director of School Financial Management, Minnesota Department of Education. Additional input was gathered from Sally Martin, Office of Science and Technology, and Ron Brand, consultant, former Assistant to Commissioner of Education.

In the study, the team examined several related proposals currently under consideration nationwide. These included merit pay, performance appraisal, financial and non-monetary incentive programs, salary comparisons with other professions, career ladders, more rigorous entrance and graduation requirements for teacher education, teacher preparation and retraining, certification/re-certification standards, statewide or regional collective bargaining, and supply and demand projections. The issues are complex, and the implications and impact are substantial. The importance of the issues is underscored by the emphasis on these issues in the 1983 national reports and the existence of separate and related studies being completed by HECB, the Association of Private Colleges, University of Minnesota and State University System. The HECB study is a comprehensive examination of the issues in teacher education. Since the HECB report is due in November and was directed independently by the Legislature, the issues team decided to defer to the recommendations in the HECB study, especially in the area of teacher standards. However, the present report will briefly outline some of the background, alternatives and implications for teacher standards and compensation. This report contains no firm legislative recommendations. However, several alternatives are presented for program development and further policy level consideration at the state and local level. Many of the options would require interagency agreements, legislative action and specific budget allocations. The reader is asked to consider this policy analysis in conjunction with the HECB study to be submitted to the Legislature in January, 1985.

### Background

Teacher standards and compensation levels are, in part, influenced by several factors including the economy, teacher supply and demand, bargaining practices, certification requirements, working conditions, college of education entrance, and graduation requirements. Not surprisingly, the issue surfaces in discussions of increased requirements, for course offerings, graduation requirements, and salary negotiations. The recent excellence movement in education has rekindled interest in deliberate federal, state and local efforts to attract, train and retain high quality, productive teachers.

National Reports, most notably, A Nation at Risk, the report of the National Commission on Education and Action for Excellence, a report from the Educational Commission of the States (ECS) focused attention on teachers. The former report states that, "Salaries for the teaching profession should be increased and should be professionally competitive, market sensitive and performance based." The ECS report recommended career ladders, increased intensity and duration of academic learning, flexible certification to include "qualified outsiders", and higher college entrance requirements. Participation of teachers in planning and implementation of programs was recommended at all levels.

In Minnesota, there are several agencies concerned with the issue including: The State Board of Teaching, State Department of Education, teacher education institutions, State Board of Education, and professional associations of teachers, school boards and school administrators. The State Board of Teaching was founded in an effort to provide teacher representation in the establishment of certification rules and in determination of appeals to the process. The recent evidence for added concern for this issue is evident in the 1984 bill which directed the Higher Education Coordinating Board to study teacher education, the work statements of the Minnesota Commission on Education for Economic Growth, and the State Planning Agency issues development process.

The issue as originally accepted by the Education and Cultural Affairs Sub-Cabinet was somewhat focused. However, an analysis of the charge to the issues team reveals that other related issues were appropriately considered. The original issue statement was: "Teacher standards and compensation programs: development of a policy which includes teacher evaluation, and professional education programs." The work plan included a review of professional literature, state demographic information, enrollment projections, teacher education data, preliminary papers from other studies, and discussions with the team members and other professionals. Several alternatives were suggested, analyzed, and were accepted, rejected or postponed.

### Findings/Conclusions

This section will briefly outline some of the important facts related to the issue. Whenever possible, facts refer to Minnesota data. Other research cites national or regional trends.

#### Teacher Supply and Demand

Teacher supply and demand may affect both standards and compensation. Shortages of teachers may give rise to a weakening of certification standards. This is especially true in the areas of math and science where 30% of the current teachers (nationally) have had little or no training according to the National Science Teachers Association. Due to seniority ranking and the often general nature of science certification, secondary science teachers may be shifted from one science subject to another regardless of background. The problem is worse at the elementary level. Part of the problem is that the more highly qualified teachers often never enter the classroom (only 70%), and of those that do, about 50% of them leave by the end of their fifth year. Often these are the most able, the math and science teachers and women; all presumably responding to increased opportunities outside the teaching profession.

Supply and demand problems are exacerbated by four emerging trends. First, an increase in graduation requirements of one year of science and one year of math work require 68,000 additional teachers nationally, approximately 1,300 in Minnesota. Other areas of concern are foreign language and computer science which would require an additional 103 and 326 teachers, respectfully. Secondly, children of the baby boom, "the boomlet", will increase school enrollments beginning in 1985.

In 1992, this rise will hit the secondary level, peaking in 1995. The third factor affecting supply and demand is the age of the current teachers. The average math or science teacher is 41-43 years. By 1995, 40% of the present 200,000 math and science teachers will be retired. The "rule of 85" may hasten this trend. The fourth development is the decline in the number of students entering college preparation for a career in science, math or foreign language education. Nationally, the average college of education graduated 21 math/science teachers in 1971 and 3.5 in 1982.

While there appears to be shortages and/or potential shortages in these areas, there are other subject areas where few of those trained as teachers are placed in teaching, indicating a possible surplus. The Minnesota Institutional Teacher Association indicates 57% of the elementary, secondary, and special education teachers are placed in teaching, 32% are placed in other jobs, and 11% were still looking. Furthermore, the number of new teachers in all areas prepared in Minnesota colleges and universities has decreased steadily in the past decade, down approximately 65%. Production of new teachers, the age of current teachers, increased course requirements, and enrollment growth provide a volatile context for considering teacher standards and compensation programs.

### Teacher Standards

Teacher standards are influenced by ability, training, staff development, retraining, and performance appraisal programs. In Minnesota, there are extensive efforts underway in the areas of effective schools, in-service education, and curriculum updates. This direction is consistent with research findings. For example, a National Science Teachers Association survey indicated that 16% of the physics and chemistry teachers had upgraded their skill through workshops or courses in the previous three years, 5% for math teachers. Furthermore, the 1981 survey indicated that 40% had not attended a course since they began teaching, an average of 16 years earlier. Most districts encourage continuing education through incentives built into the salary schedule. The HECB study will examine factors, such as ability and performance of Minnesota freshmen who indicate an intention to become teachers. Nationally, the data suggests that those entering completing teacher education are, statistically, of lower ability than those completing other majors. Further, those that enter the profession have performed at a lower level on ability and achievement indicators.

### Performance Appraisal/Evaluation

Performance appraisal programs are largely a local district matter. Nationally, a few state level programs have emerged in the past two years. These have been linked to other incentive programs based on merit or performance. Of the 63 reports reviewed in the present study, virtually all of

them recommended some form of performance evaluation system as a strategy to focus efforts, clarify goals, and improve teacher and student productivity. In addition, the research suggests that clear goals, evaluated by peers and an instructional leader are integral to any incentive program.

Numerous models exist. Implementation is affected by administrative leadership, skill and training, technical assistance, compatibility with organizational culture, teacher involvement in planning and carrying out the program, training of evaluators, opportunities for appeals.

### Teacher Compensation

Teacher compensation was studied. The data indicates that the average teacher salaries in Minnesota were ranked 12th nationally. The Carnegie Foundation report, The Condition of Teaching, indicates that beginning salaries for teachers are lower than any other professional group. In 1981-82, the average teacher's starting salary was 32% less than those starting in the field of math/statistics and 37% less than computer science. Further, the effects of low pay are magnified over a teaching career.

Factors cited in the research which affect teacher retention, job satisfaction, and difficulty attracting qualified people include low prestige, limited professional options, and adverse working conditions. Historically, teaching offered job security, altruistic satisfactions, and upward mobility to the population emerging from immigrant or blue collar status, especially restricted opportunities for women during the depression and the readjustment following World War II. Tremendous social changes have affected these conditions. Lower competitive pay has lead some to recommend bonuses and/or other differential pay schemes which would place market place valuation on the teachers with special or needed skills.

### Public School/Private Sector Programs

Another trend seen in the literature was public and private sector partnerships to enhance career development opportunities for teachers. Several examples of this are seen in Minnesota involving Honeywell and Minneapolis schools, Rosemount and Control Data, Rosemount and Tandy-Radio Shack, Robbinsdale and 3M. Legislation to provide tax incentives has been introduced in Congress, but has failed.

### Performance Based Incentives

Although performance-based incentive programs have received a great deal of attention, a recent review of these programs by the National Institute of Education concluded that "Research on merit pay plans has turned up no convincing evidence that the plans have a significant impact on teacher performance." The report goes on to suggest further research following the development of clear performance review procedures and the establishment of measurable criteria. It may be that there is little evidence because the criteria were vague. Merit pay proposals are one of many incentive programs which may use financial or non-monetary rewards for excellence. Nationally

only 4% of the school districts compensate employees on the basis of performance. Merit or performance-based incentives are more likely to succeed when there is high trust between teachers and management, clear objective guidelines and increased compensation is tied directly and clearly to performance.

Other incentives which offer to make teaching more attractive and reward performance include compensation plans (merit pay and bonuses), career options (including career ladders), enhanced and varied professional responsibilities (including master teacher plans), non-monetary recognition, improved working conditions. A recent report thoroughly analyzes the potential of these programs to attract, retain and motivate teachers.\*

### Alternative Options

The issues team considered several alternatives. Some of these are described as follows:

1. The State Board of Teaching could be asked to develop or adopt an examination of teacher competency. The Board could work with HECB, the Minnesota Department of Education, the University of Minnesota, and the State University System. The examination could be modeled on the National Teachers Exam, and focus primarily on content areas or specific skills related to licensure. Legislative action would probably be necessary to accomplish this task. Such tests have been implemented as part of the certification or re-certification plans for about half of the states. The exam would provide an objective standard for minimum competencies. It is possible to anticipate some opposition from the collective bargaining units. The public would probably support this as a part of the certification criteria.
2. The state teacher training institutions could be directed to modify the minimum graduation requirements to include greater emphasis on subject matter content. Certification requirements could be altered to require a four-year degree with a full major and minor plus one year of internship led by a master or mentor teacher. This fifth year internship could focus on supervision and learning instructional techniques. The four-year program would provide an opportunity for greater emphasis upon content and specific skills relevant to higher level thinking. Opposition for this option may come from teacher education centers which may view this as a change in role. Minorities may view the increased requirements as an additional barrier to entering the profession. Those districts that are currently experiencing a shortage of teachers in some areas may note the increased requirements further slowing the graduation of those needed to meet the supply/demand needs. The fiscal impact would include the increased costs for the fifth year internship, which would probably be shared by the district, state, and student. It is very difficult to estimate these costs. Further study and clarification of these ideas should continue following the publication of the HECB report in January, 1985.

\*See appendix for reference.

3. The HECB could be asked to study further the entrance requirements and graduation requirements for state teacher education programs. Statewide there are no uniform standards at this time. The study could include information on the background, performance, and abilities of those entering the profession. The potential for more uniform graduation requirements could be explored. Ways to attract students to teaching could be explored further including bonuses, scholarships, or loan forgiveness programs linked to a commitment to teaching for several years. (Similar to the program used to attract physicians to rural communities.)
4. The state could recommend to local districts that they develop career ladder plans which include provisions for master/mentor teachers. The career ladder programs should provide pay incentives tied to additional work. This differential staffing should be aimed at building team work between teachers and administration. The Minnesota Department of Education should be directed to develop model programs for districts of different sizes to consider. The Minnesota Department of Education could be provided staff to provide training and technical assistance to districts which choose to develop a plan. Funds would be made available to schools based upon staff size and acceptance of a plan for implementation submitted to the Minnesota Department of Education. Guidelines for applications should be developed by the Minnesota Department of Education with consultation by an advisory committee which includes teachers and administrators. Support for this proposal will come from teachers and the public. Opposition may come from the teachers' collective bargaining units. Many will see it as a form of merit pay; others will view it as differential staffing with increased salary for new responsibilities. With the master/mentor teacher, it is important to keep a good teacher in the classroom as often as possible given the changing role. Cost estimates based upon projections calculated for Tennessee with 46,000 teachers compared to Minnesota's 41,000, was \$112 million annually; \$50 million the first year. Variations on the career ladder idea have been passed or are under discussion in 15 states. Among them are: California, Florida, Idaho, North Carolina, Kansas, Alaska, Tennessee, Oklahoma, and New Jersey. A policy issue is whether or not the state should have a uniform program, or encourage and support local efforts. Legislative action would be required to provide state level technical assistance, special funds for participating schools, or funding for a full statewide program.
5. The Legislature could authorize means for businesses to actively pursue collaborative or partnership relationships with school districts and/or individual teachers. Provisions could be made to encourage exchange programs, adjunct faculty positions, shared contracts, staff development, and summer employment programs. Special consideration could be given to development of shared contracts in courseware development and telecommunications. A review of the issues surrounding copyright and ownership of materials created by teachers for instructional purposes may provide opportunities for additional compensation as materials find a market. Programs in this area may introduce entrepreneurial spirit into a system which is dominated by seniority and reward based upon non-performance criteria. Opposition could come from school

administrators and school boards who want to own, supervise, and control the teacher's work and products derived from the work. Support could come from the business community which may see this as an area of potential development independent of tax financing.

6. The State Department of Education could develop an improved means to monitor teacher supply and demand trends. The Minnesota Department of Education and State Board of Teaching could explore the development of a method to provide provisional licensure to non-certified individuals with special expertise and needed background experience. Guidelines for this licensure would have to be developed carefully in consultation with teachers and school administrators. Teacher unions may be concerned about the impact of this on the bargaining unit. They would be concerned that those entering teaching through these means have adequate training in pedagogy and be part of the bargaining unit. The support for this may come from those who want to teach, and those that see this as a means to respond to the impending shortages of teachers in some subject areas. This is complicated by the fact that where the shortages occur in rural areas there are few private people to take advantage of the flexibility anyway. Legislative action may be required to direct the State Board of Teaching and Department of Education. There is little or no fiscal impact foreseen.
7. The Legislature could direct the Minnesota Department of Education to develop additional means to promote increased career mobility of teachers. Compensation to districts that receive a transferring career teacher would remove a disincentive that keeps teachers in one place. The program could be piloted for two years to study the fiscal and programmatic impact.
8. School districts could be encouraged to develop a means by which teachers could write, market and sell courseware, curriculum, video-cassettes and/or other instructional materials or services to other districts and the education market in general. Ownership and copyright issues would need to be clarified. This may not be a matter of state policy. However, leadership from the Minnesota Department of Education and the Department of Energy and Economic Development could foster a climate for successful local negotiations. School boards and administrators may have difficulty with this option due to a need to control, supervise and benefit from the labor of the teacher. Teachers may support it as an additional opportunity to increase their compensation. The business community may view it as an unfair competitive advantage, not unlike that enjoyed by the prison industries. However, the small business benefits may make this worth exploring. There would be no legislative nor fiscal implications.
9. The Minnesota Department of Education could be directed to develop materials, training programs and models for teacher performance review and evaluation programs. Goal-setting, clinical supervision, staff development and a means for teacher involvement in management decisions. This may be included in the Management Assistance Center Services, or special programs for instructional effectiveness focused upon this area including policy development, planning, and technical assistance. There would be

little opposition to this initiative. The cost for a program would be approximately \$400,000, much of which would go directly to school districts based upon a formula and grant application criteria. Some funds would be used to provide consultants and additional Minnesota Department of Education staff.

### Recommendations

The reader should consider these alternatives in conjunction with the report from HECB. The issues team recommends that the executive branch pursue the career ladder, Option 4 above, and the school-business, public-private ideas contained in Options 5 and 9 described previously.

### Conclusion

This paper has included a brief review of research data relevant to the issue and has presented, for further discussion, several policy alternatives. Some of these await further study by HECB; others should receive full consideration during the 1985 Legislative Session.

### References

Research reports and policy analysis papers cited are available from the team leader, including the document Teacher Incentives: A Tool for Effective Management, by Cresap, McCormick and Paget and published by the National Association of Elementary, Secondary and School Administrators (NAESP, NAESP, and AASA), 1984, 1904 Association Drive, Reston, Virginia 22091.

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