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Allan M. Mohrman, Jr., Susan Albers Mohrman and Allan R. Odden

Teacher compensation structures have remained relatively constant for the past many decades. In most districts, teachers are paid according to a fixed schedule that provides salary increases for education units and degrees, and years of teaching experience. This structure has the advantage of being predictable and stable, and has become the accepted norm. It also has had considerable impact on behavior. Teachers routinely use their summers and evenings to acquire continuing education units to boost their pay, and enroll in advanced degree programs to do the same. Institutions have also shaped their offerings and modes of operation to take advantage of this demand. We have become a country filled with summer and advanced degree programs that maximize the ability of the teachers to attend and attain higher levels of education and salary.

Since teachers see themselves generally as being fairly treated by compensation practices (disregarding, for the moment, dissatisfaction with actual dollar amounts) and since these practices encourage increased education and its provision, one can argue that they are successful. However, the connection between the content of the increased education of teachers and the needs of their schools and their students is quite loose. Furthermore, there is no guarantee that more units result in more skill and knowledge. This lack of connection between educational units and school requirements has caused some to question the way we pay teachers (e.g. Knight, 1993).

In recent years, there have been a few failed attempts to reform teacher pay practices. One failure of the 1980s was the attempt to graft merit pay mechanisms onto the teacher pay structure. While touted by the 1983 Nation At Risk report, merit pay was tried by a few states and districts but failed in nearly every instance. A second failure was the tepid adoption of career ladder programs, which were created to alter the flat career structure of teaching and had been designed, at least hopefully, to avoid the pitfalls of merit pay. But while somewhat less controversial than merit pay, career ladder plans have fallen short of their promise (Frieberg & Knight, 1991; Schlechty, 1989).

One of the major reasons these attempts at compensation failed is that they treated

compensation as a set of practices that were relatively independent of the larger educational context. Of course, this is not the case. Teachers and institutions of higher education have a large stake in current pay practices and the norms of the teaching profession are contrary to the notion of merit pay, for instance. Any fundamental change in compensation practice will require equally fundamental change in the nature of education systems. One could say that any change in compensation practice awaits a systemic reform of education as a whole.

Recently there has been an emergence of a systemic reform approach to education improvement (Smith & O'Day, 1991). This reform movement eventually will drive the rethinking of teacher compensation by changing the context in which it is practiced. If compensation reform is not addressed, established compensation norms and practices will impede and perhaps stop reform. Briefly, systemic reform includes expectations that all students will perform at high levels, high quality curriculum standards coupled (e.g., National Council of Teachers of Mathematics, 1989) with new and revised instructional materials, new forms of performance assessment linked to the curriculum standards (Resnick, 1993), substantially expanded professional staff development along with dramatically revised pre-service teacher training (Little, 1993), and restructured management, governance,and school finance policy (Mohrman & Wohlstetter, forthcoming; Odden, 1994).

The systemic educational reform strategy requires that teachers develop a new array of professional knowledge and skills to teach a thinking oriented curriculum (Cohen, McLaughlin, & Talbert, 1993). Likewise, system reform requires a dramatic change in the organization and management of schools. Finally, systemic reform focuses attention on school performance. This article describes a potential compensation structure that is consistent with these changes and that is an example of the kinds of compensation practices they require. Our purpose is to spur systemic thinking about the role of compensation by offering a concrete proposal. We begin with a discussion of how organization and compensation theory and practice suggest the compensation practices that are appropriate for these systemic changes.

ORGANIZATION AND COMPENSATION: THEORY AND PRACTICE

One of the strongest lessons taught in recent treatments of compensation theory and practice is the importance of matching pay practices to the strategic needs of the organizations (Lawler, 1990; Lawler & Jenkins, 1992; Schuster & Zingheim, 1992). This includes matching compensation practices to the organizing approaches that organizations adopt to support their strategic directions. It

also includes creating pay practices that enhance the core competencies on which the organization is basing its strategy. In this section we develop the general nature of compensation practices that are suggested by the strategic initiatives of systemic school reform.

Systemic school reform has the following strategic elements:

1. A focus on school performance and student outcomes
2. A focus on new curricula and the professional skills that they require.
3. A restructuring of the way schools are managed and organized.

Each of these strategic elements suggests needed compensation elements:

1. Focussing on results is a central aspect of systemic reform. It reminds educators and educational organizations what needs to be achieved, what is important to society. Focussing on desired results allows for and encourages changes in curriculum and organizations but it can also encourage continuing curricular and organizational change in the quest for even better outcome performance. Student outcomes are complex results of individual differences, and educational experiences. Student educational experiences are a function of the overall organizational capabilities of the schools they attend. By focussing on the overall outcomes of all the school's students we can work on establishing the organizational capabilities that allow maximizing outcomes through linking individual differences with educational experiences.

Compensation practices can focus attention on results by tying them to rewards. Keep in mind that the focus is on school performance in terms of results and not individual performance. Appropriate rewards would be based on school results. One purpose of this article is to sketch how such a practice might work.

2. Research [see, for example, entire issue of Educational Evaluation and Policy Analysis, 12(3), 1990] shows that while there is strong, positive local teacher response to new ambitious curriculum frameworks, teachers generally lack the knowledge and skills to implement this new curriculum well. This curriculum requires deeper and more conceptual understandings of curricula content, an array of new pedagogical strategies that focus on concept development and problem solving and are tailored to the developmental needs of each individual child, and a set of new assessment strategies that identify both what students know as well as what they can do. Indeed, many teachers must engage in a "paradigm shift," if you will, from what and how they are now

teaching, to an entirely different mode of pedagogy. Not only will this require generally new knowledge and skills, but also the specifics of this new expertise will vary substantially by school context (Cohen, McLaughlin & Talbert, 1993).

Creating this new professional expertise will require substantial investment of time and energy in professional development on the part of teachers, and substantial investment of funds to support such professional development by education organizations and systems. While enhancement of professional expertise could be reward enough for many to engage in this process, a change in the compensation structure to stimulate this engagement and reward those who develop and use such new knowledge could also be warranted. Such a compensation structure could link the new funds likely to be invested in the nation's K-12 education system over the decade (National Center for Education Statistics, 1993) to a compensation system that allocates dollars directly for the expertise needed to effectively teach the new curriculum and increase student achievement. One purpose of this article is to sketch how such a compensation structure could be designed.

3. There is a substantial knowledge base on how to design decentralized management systems, including changes in compensation, despite conventional wisdom to the contrary. Past problems with decentralized management in education have largely been caused by incomplete design and poor implementation. Wohlstetter and Odden (1992) found that few site-based managed (SBM) districts made the necessary organizational changes required for effective decentralized management. Further, they found that SBM districts made little if any change in the reward system to support new kinds of roles and contributions by teachers and administrators, and to tie pay to the new kinds of performance required in and by schools.

Although it is not yet the prevailing management style, various forms of decentralized management have been employed in parts of the private sector for the past 25 years. Almost 80% of the largest thousand firms in the United States have implemented some aspects of an emerging paradigm of management designed to move decisions down to the levels at which products are made and services are delivered, and to increase the involvement of employees in the success of the organization (Lawler, Mohrman & Ledford, 1992). Most of these firms report that they are adopting high involvement management practices in order to increase quality, productivity and service. In short, they are adopting these practices because their environment, similar to that for schools, is demanding a greatly increased level of performance in increasingly difficult conditions.

Strategies for creating high involvement management are diverse. They include the use of quality circles, worker surveys, job enlargement, total quality management, and the use of self-managing work teams or mini-business units. Many organizations have introduced high involvement practices in new units; others have embarked on major organizational transformations of established units. Large organizations are especially likely to employ techniques to counteract the negative effects of size by creating units that are given authority and held accountable for a defined set of products or services for a defined population.

High involvement management exists when appropriate decisions, control of resources, and management of organizational functions are moved as close as possible to the people doing the work in order to be as responsive as possible to local requirements and to result in a workforce highly committed to the accomplishment of organizational goals. This form of management is especially appropriate when work is complex and is not broken down into a pre specified set of steps. It also is appropriate when work is interdependent, is best done in teams or groups, and thus requires that the people who are interdependent with one another have the authority and competence to make decisions about how they will do the work. Finally, it is appropriate for work performed in a changing environment or when there is considerable uncertainty in the day to day tasks. All three criteria apply strongly to the educational process that constitutes the work of schools (Mohrman, Lawler & Mohrman, 1992).

According to Lawler (1986), for high involvement management to work, four resources need to be decentralized to the people providing the service: information, knowledge and skills, power, and rewards. The decentralization of all four of these resources constitutes a systemic change in the way the organization functions. High involvement is best fostered when all four are decentralized and is impeded if any of the resources are kept centralized. Information about organizational goals, objectives and levels of performance, and about the key parameters of the work processes is required in order for the workforce to make good decisions that foster organizational goals and high performance. High levels of knowledge and skills are required for employees to optimally enact their new roles in such a way as to achieve high performance and continually improve outcomes. Power is required in order for a well-informed, competent workforce to have the authority to make decisions about the optimal application of resources and optimal processes to be used. Finally, rewards help align the interests of employees with organizational objectives.

In education, the high involvement framework has been useful in distinguishing more from

less effective SBM programs; the more power, knowledge, information and rewards are part of SBM, the better such new organization and management strategies work (Odden & Odden, 1994; Robertson, Wohlstetter & Mohrman, forthcoming; Wohlstetter, Smyer, & Mohrman, 1994)

Compensation systems that are appropriate for high involvement management have two major attributes: 1) they foster individual development of a broader capacity to contribute to organizational performance; and 2) they tie the fate of the employee to organizational and/or sub-unit (group) performance. These translate into two critical structures of a high involvement compensation system: 1) skill based pay (SBP) and 2) group-based performance rewards, both of which have been advocated by educators (Cornett & Gaines, 1992; Odden & Conley, 1992; Wohlstetter & Odden, 1992). These are essentially the same approaches to compensation suggested by the other two strategic elements of systemic school reform: 1) the focus on new curricula and professional skills and 2) the focus on school results, respectively.

APPLICABILITY TO EDUCATION

Many questions exist about the applicability of these high involvement pay practices in the public school setting. On the face of it, schools apparently differ from private sector, for-profit organizations in a number of ways. Until recently, key education outcomes have not been clearly defined or measured. Teachers rarely have control over the school resources and conditions linked to greater student learning, and may not have the expertise to teach an analytic oriented curriculum. Many believe teachers are not motivated by higher pay (Johnson, 1986). Clearly, public schools are not able to generate profit, nor are public school teachers able through excellent performance to generate increased revenues. Thus, schools cannot as readily motivate teachers solely through compensation nor fund performance bonuses through improved student achievement.

The ultimate outcome for schools is student achievement efficiently achieved, not profit. The challenge facing schools is to motivate teachers and administrators to enact their jobs in a manner that leads to significantly higher student achievement (Odden, 1994), sometimes without a commensurate increase in expenditures. This task does not differ significantly from the task facing employees in many other organizations. Improving organizational performance (student achievement) may be a powerful motivator for the development of more productive educational processes as it is in other kinds of organizations, as might be sharing the costs savings that are produced in those efforts.

Nevertheless, the outcome variable in schools is problematic. While various types of economic performance in private sector organizations are relatively straightforward concepts to understand and measure, in most states student achievement is subject to a number of different interpretations and valued differently by various constituencies. Furthermore, it is generally true that few states have developed good measures of student achievement related to conceptual learning and problem-solving. Performance based rewards will be difficult to implement when good measures of student achievement are not available and/or if various stakeholders do not accept their validity. A great deal of attention is being focused on outcome assessment in the educational community (Resnick, 1993). The California CLAS program and the Kentucky KIRIS system, morever, are examples of new student assessment systems that have addressed the student outcome measurement issue and should be useful bases for use in compensation structures.

Public schools also differ from private sector organizations in their governance structure. Elected school boards and school site councils are part of the tradition of community control of schools. In site-based management, other stakeholders in addition to teachers such as parents and the community obtain more influence in decisions and policies in schools. Teachers may thus feel constrained in what they can do to improve educational performance and efficiency, and not feel that they have control over the factors that determine levels of performance and consequently their financial outcomes. Thus, site-based management must be implemented in a way to develop the skills and norms that teachers need to work effectively with the other stakeholders, and to allow teachers to make the key decisions on instruction.

Another norm that has been resilient in most public schools is the concept of teachers as autonomous, independent actors. This is most graphically illustrated in the one teacher per classroom model that is predominant in the U.S. Especially in secondary schools, this organizational model breaks apart teachers whose work is interdependent in the sense that they are influencing the educational experience of the same students (Rosenholtz, 1989). In addition, it works against teamwork and against collegial influence (Rosenholtz, 1989). In this sense schools and teachers are merely an extreme version of the traditional one person-one job model of organizational design in the private sector that has led to job descriptions and merit review processes that try to separate the work of each person. The high involvement model has changed this assumption in many private sector organizations, often with great difficulty. For schools as well, the redesign of work into interdependent teams will constitute fundamental change and has been shown to improve school performance (Rosenholtz, 1989). And as stated above, research has found the high involvement

framework associated with more advanced and better working SBM efforts in education.

Finally, the public and its elected officials determine the amount of revenues that will be available to schools. Clearly, the use of performance based rewards is contingent on the willingness of the legislature (and the public) to budget such monies. Indeed, the historical track record in education for sustaining performance based components of teacher pay is not good (Murnane & Cohen, 1986). Thus, teachers might reasonably be skeptical that legislatures or local school boards will sustain funding for this pay component. Teachers would need some guarantee that this portion of compensation would not be subject to political vagaries.

Systemic reform seeks to address many of the above issues. Systemic reform not only seeks to create a much higher level of system outcomes, but also to establish new cultural norms in the public school system including the following, which match the strategic elements of systemic reform set forth earlier (see for example, Adams, 1993):

- A results orientation, including clear performance standards, regular measurement, and rewards depending on their achievement.

- An emphasis on teaching all students to high standards, with increased provision of ongoing professional development for teachers to continually improve their skills.

- Change in professional practice that includes greater participation in the management of the school and increased teamwork between teachers and with other stakeholders in determining how best to improve school performance.

In other organizational settings, high involvement management and new approaches to compensation --skill-based pay and group-based performance rewards --have been successful in reinforcing these new kinds of norms. In the remainder of this article, we discuss these two primary components of the new approach to compensation and apply them to education. The applications that we describe are meant to be suggestive only. They are meant to spur the rethinking of teacher compensation by offering some possible scenarios.

SKILL-BASED PAY

Skill-based pay refers to pay that reflects actual skills in which a person can demonstrate competence. A person is paid for these skills whether or not they actively use these skills in the particular tasks they are doing at any one time. Progression through salary levels is based on the knowledge and skills in which the employee becomes proficient through time. The underlying assumption is that as employees become proficient and knowledgeable in more aspects of the work, they increase in value to the organization because they can be used more flexibly, better understand how the organization functions, and can contribute in more ways to the performance of the organization. Pay increases follow the employee's on-the-job demonstration of mastery of blocks of new skills. A skill block is a set of skills acquired to do a collection of tasks, duties, and/or responsibilities that represents an organizationally-valued package upon which to base pay decisions (Jenkins, Ledford, Gupta & Doty, 1992).

Skill-based pay (SBP) is generally used in conjunction with organizational and work design that emphasizes the creation of organizational units with accountability for outcomes and for performing "whole" tasks. The particular configuration of skill blocks depends on the way in which work is designed, the way in which the product or service of a unit is defined, and the combination of tasks and skills necessary for the unit to perform its function. Thus, there is no cookie-cutter approach: different organizations delivering similar services or producing the same products may design work differently and therefore define skill blocks differently, depending on such issues as size of the organization, product and client mix, variety of services, and so forth. The work design and the skill blocks are developed by the managers and employees who are together working to create a high-performing system (Jenkins, et al., 1992).

If individuals have demonstrated competence in a particular skill block, they receive the salary increment attached to it. They then generally are required to use that expertise for at least some significant time period, but they also continue to receive that salary increment if at times they do not work on tasks that require such expertise. Furthermore, as individuals move through the skill progression, they usually work on a combination of tasks that utilize many or most of the skill blocks they have mastered.

Organizations using SBP tend to have developed an average of ten skill blocks that comprise the set of tasks that are required in the work team (Jenkins, et al., 1992). Although most plans give employees the option of learning all ten blocks, in practice employees choose to master a sub-set of the skill blocks. Key design issues include the pay increment that accrues to different

skill blocks, the length of time that is allocated to the employee for development and mastery of the skill block, the process that is used for certification in the skill block, and the requirements for and practices to support skill retention and recertification.

As mentioned earlier, most organizations that are adopting skill-based pay are doing so for business performance reasons as well as to provide growth and development opportunities that promote the attraction and retention of a highly skilled and satisfied workforce. Furthermore, Jenkins, et al., (1992) found that organizations using skill-based pay tend to be those that are moving most vigorously to a high involvement work design that utilizes many participative practices and decentralizes decision-making. The same study found that companies that use skill-based pay report increased flexibility, productivity, and performance. They also report increased teamwork and employee motivation.

A key issue is the impact of skill-based pay on overall compensation costs. The Jenkins et al. (1992) study found that the typical skill-based pay plan pegged entry level salaries slightly above average for the relevant market, and experienced an average overall pay at approximately the 75th percentile. Employees mastering all skill blocks could achieve even higher levels relative to the market. Over two-thirds of the companies in the study reported that despite the relatively high labor costs per employee, total compensation costs were reduced because of increased flexibility and versatility of the workforce.

Skill-based pay was initially used in manufacturing settings in companies like TRW, General Mills, the GM Saturn plant, and Eaton. Recently, it has been applied in non-manufacturing settings in service companies such as Shenandoah Life, Crown Plaza, Dayton-Hudson, and in technology service and management components of ATT, Northern Telecom, and Polaroid.

Beginning pay is a critical decision in determining the caliber of entry level employees that will be attracted. High involvement organizations trade off two key concerns. First, because the model of compensation advancement specifies that salaries are raised as skills and knowledge are increased, these organizations would like to keep beginning pay moderate when compared to market, while holding out the structure of the skill-based system and its advancement potential as the allure for high-achieving individuals (Gupta, Ledford, Jenkins & Doty, 1992). On the other hand, high involvement organizations often demand more of their employees and need a more

competent employee population. Therefore, they want to ensure that the entry level salary is adequate to attract such employees. In general, potential employees will consider both the entry salary and the career-long income advancement opportunities. They make comparisons with other employment opportunities or careers. Thus, high involvement organizations make base pay structure decisions (including beginning pay) based on the labor market that they see themselves in (e.g., local or national) and where in that labor market they want to be positioned in terms of the caliber of employee they want to attract.

Skill-Based Pay in Education

Skill-based pay is particularly appropriate in settings in which we want to motivate people to acquire new skill packages so that they can contribute more flexibly and broadly to the school's purpose. This is especially appropriate in emerging educational practices such as the ambitious curriculum standards that are part of systemic reform, school based management, and "houses" within schools where we are asking educators to perform a much wider set of roles. The skill-based pay approach complements a high involvement management style and it works best when such a style of management is used. It is very compatible with the style of management associated with school-based management and shared decisionmaking.

Skill-based pay plans must fit and reinforce the local organizational and instructional arrangements. By providing for site-based management, local control, and focusing on results, systemic reform is creating a situation where schools will differ from one another in their specific organizational and instructional designs. Skill-based pay plans will therefore also need to differ from school to school. Different schools will need to specify different sets of skill blocks to fit their instructional and organizational design. On the other hand, the specification of these skill blocks and the skills that comprise them cannot be completely idiosyncratic. Some basic commonalities among skill areas must be kept across schools so that teachers can have a reasonable ability to move between schools. A workable balance needs to be created between system-wide legal mandates regarding teacher compensation and local site variation. The system could mandate and provide skill-based certification in core areas, very similar to state or professional curriculum frameworks. These common skill areas would then constitute the "skeleton" upon which personnel in local schools could build customized skill blocks by defining and measuring additional skills.

Skill-based pay encourages educational careers formed by acquiring additional blocks of skills. By acquiring additional skill blocks individuals will not only accrue larger base salaries but also increase the number and kinds of roles they can perform in the organization. As they acquire the skills and begin to perform new roles they in essence will be moving through a career in the school. Each career move, i.e.. the acquisition of a skill block and the opportunity to perform the tasks and roles that go along with it, brings with it increased stature and value to the organization, as well as a larger salary. While we traditionally tend to think of careers as moving hierarchically up the organization, skill based careers can move by acquiring skills in three directions or combinations thereof: depth skills, breadth skills and vertical skills.

Depth skills. Depth skills refer to skills reflecting additional levels of expertise in a particular functional or disciplinary area. For teachers depth skills would signify increasing competence at teaching itself or in the subject area taught. The current practice is essentially using educational units, certificates, and degrees as indicators that the teacher has achieved certain skill and knowledge levels. The knowledge and skills represented by these surrogates are likely to be uneven in quality and general in nature and certainly not specific to school needs. SBP will require a more specific and focused mechanism for measuring depth of skills and knowledge.

We would encourage states and districts to link depth skills quite closely to the content knowledge and pedagogical skills required to teach ambitious new curriculum frameworks to all students. Indeed, an important element of the systemic reform agenda is to link teacher training and compensation to the knowledge and skills required by the states' new curriculum frameworks (Smith & O'Day, 1991). Designing the depth skill blocks with this objective in mind seems to be appropriate.

The specific nature of depth skills required would vary by education level: elementary, middle and high school. Nevertheless some form of depth skills would be appropriate for each level. Indeed, elementary teachers in Korea, for example, are required for certification to have depth knowledge and skills in one of seven identified content areas and schools hire teachers with the full mix of depth skills. By adding depth skill blocks for all level of schools, the education system could signal that in-depth knowledge of such areas as mathematics and science is important for elementary as well as middle and secondary school teachers.

Depth skill blocks would entail both content knowledge and pedagogical expertise that

would be greater than that required for initial licensing. Further, if Board Certification from the National Board for Professional Teaching Standards would represent a recognition of substantially advanced knowledge and skills, the depth skill blocks could serve as a bridge between the knowledge and skills teachers would need to earn their initial license and the knowledge and skills characteristic of an accomplished, expert teacher at a high enough (or "deep" enough) level to earn National Board certification.

Breadth skills. Breadth skills refer to educational skills that are relatively separate from one another in that they do not build on each other as depth skills do. For instance, many "house" concepts in new schools require teachers to act as guidance counselors to students as well as teachers. Such a role, if done properly, must be done by someone who has mastered a set of counseling skills that are in addition to teaching skills. A skill based pay approach would encourage the acquisition of such skills by attaching a pay increment to a counseling skill block. There are several possibilities for breadth skill blocks:

- content knowledge and pedagogical skills in different subject areas, especially for schools stressing multi-disciplinary approaches, or simply for schools to have teachers qualified in more than one content area
- staff development skills
- curriculum development/modification skills
- instructional materials evaluation skills
- student counseling skills
- school improvement planning and implementation skills, such as for
  - non graded primary schools and
  - houses within middle or high schools

Again, specific skill blocks would only be used if they supported the organizational arrangements and core educational purposes of the particular school. Some skill sets that are important in schools may best be considered as separate jobs and paid for as such, such as coaching and yearbook advising if they are considered to be extracurricular.

Vertical or management skills. These skills are traditionally associated with hierarchical roles performing management functions. Site based management often includes attempts to have staff assume more of the administrative and management roles traditionally

performed by principals. These roles are accompanied by blocks of skills that staff must have if they are to play them. There are several possible vertical skill blocks:

- Administrative skills: scheduling, budgeting, record keeping, etc.
- Personnel management skills: assessment, selection, etc.
- Leadership skills: team management and leadership, project management, leading meetings, etc.

The overall system. Figure 1 shows how a partial set of skill blocks might be arranged along these three dimensions. The left matrix combines the depth and breadth dimensions. In this example there are four different breadth categories. For instance, B_1 might refer to chemistry teaching skills, B_2 might stand for mathematics teaching skills, B_3 might stand for student counseling skills, and B_4 might refer to school improvement planning skills. In the cases of B_1 and B_2 there are three levels of depth (e.g., B_{11}, B_{12}, B_{13}) that can be achieved, such as novice teacher, accomplished teacher and master teacher. Since Board Certification by the National Board for Professional Teaching Standards includes both technical and breadth skills, it could be an advanced skill block covering both. The management skill blocks, M_1-M_3, belong in a separate dimension and are not to be thought of as increasing in depth. They might be administrative skills, leadership skills, and personnel management skills.

Figure 1 about here

In the example in Figure 1, B_{11} or B_{21} might be beginning skill blocks. However, no school should be willing to allow teachers to remain at such a meager skill level. Schools practicing team approaches to education must demand that all educators attain a higher level of value for the school by increasing their flexibility, general level of excellence, and leadership capabilities. Therefore, all teachers should be required to attain additional skill blocks. Increasing breadth will lead to flexibility while increasing depth will result in greater content and pedagogical expertise. Adding management skills will increase the self management capabilities of the teaching staff. On the other hand, the school may need only a certain number

of people skilled in particular content areas or management areas. Thus it may want to limit the directions and numbers of skill blocks that people can obtain. Finally, there may be natural sequences underlying skill block acquisition. For instance, the depth dimension has an obvious sequence, but it may be that the school determines that educators acquire a range of breadth skills so they get a good overview of school functions before they acquire management skill blocks.

The dollar values of the skill blocks will vary. Some will be more important and more difficult to achieve than others. In some cases, certain skills may impact the performance of the school as measured by student achievement more than others. The salary increments associated with the acquisition of the various skill blocks should generally correlate with their value to the school. In this sense, the skill based pay system will become an incentive for people to follow careers that match the skills needed for performance of the school. Educators should have the opportunity to significantly increase their salaries. At minimum they should be able through skill block progression to match the potential salary growth they presently can expect. As a rule of thumb this probably means the ability to at least double their salaries through skill progression.

Mechanisms must be established that ensure a fit between the skill mix needed by the school and the skill repertoires sought by its educators. For example, each teacher might need to enter into a negotiating process with, say, a school level skill acquisition steering committee. Each teacher would specify their personal career desires. In turn, the steering committee would need to specify the skill mix needed and desired for optimal performance by the school. In this way teachers could plan their careers interactively with their colleagues and the school's educator group as a whole could plan and have some control over the skill mix available so that organizational and instructional designs could be carried out. Skill blocks should be designed so that their acquisition represents a significant accomplishment. Schools might want to specify the minimum amount of time necessary to acquire and solidify skill blocks, before teachers could turn to the next skill block in their career progression.

Since skills serve both personal and organizational purposes, the cost of acquiring them might be shared by both. At the present time many teachers bear the cost of additional education in order to move to different columns of the salary schedule based on education units. Many skill blocks will require considerable schooling, such as a counseling or content

area skill blocks. These same skill blocks will also contain considerable locally unique skills as well. For instance, counseling may require considerable knowledge about community resources and the skills to deal with them. These skills and knowledge will best be acquired by cross training and experience in the school setting. Since skill blocks are directly related to the needs of the school, a strong argument could be made for having the school bear the cost of skill acquisition. It should be noted that in the private sector most training is supported and paid for by the organization.

Creating a Skill Based Pay Plan.

To be consistent with the philosophy of school based management and the intent of systemic reform, the specifics of any skill based pay plan will have to be dependent on the organizational choices made at the local school level. Thus we can only describe SBP in general and provide particulars as **examples**. The specifics will have to be worked out on a setting by setting basis. We also discuss some general parameters that can guide and delimit local design efforts to assure that locally designed SBP plans will conform to statewide intents, laws, and agreements.

Creating a SBP system requires a number of steps.

1. There must be agreement on how the school is to be organized and operated.
2. Important bundles of tasks that must be performed will have to be identified.
3. The bundles of skills and knowledge necessary to do those tasks, the skill blocks, must be delineated.
4. Methods for ascertaining whether or not a person has those necessary skills and knowledge must be devised.
5. Value must be attached to the skill blocks by assigning a dollar amount increment in base pay that each bundle of skills and knowledge is worth.
6. Training and learning opportunities and mechanisms must be established for teachers to acquire these skill blocks. Mechanisms for periodic recertification of skill blocks must also be established.
7. The entire system must be depicted and communicated so that it is well understood by all employees.

<u>An example</u>. The first three steps in creating a SBP system can be illustrated with

the example of an ungraded primary school, a currently popular education reform. The ungraded primary school's purpose is to meet each youngster's needs in learning the kinds of skills that have been traditionally associated with the kindergarten through the third grades. This requires flexibility and breadth of staff. Teachers plan and sometimes work in teams to provide a full spectrum of pedagogical techniques and personal interventions for the children as they are indicated by the needs and styles of the individual children.

In order to carry out such a school design a number of tasks and roles have to be performed:

- Teaching the content of the primary grades.
- Diagnosing and dealing with the various learning problems and disabilities that children of this age can have.
- Recognizing and dealing with the variety of emotional problems that students of this age can have and that can hamper their learning.
- Planning instructional strategies for individuals and groups of students at different ages.
- Developing appropriate curricula.
- Understanding and using emerging instructional technologies aimed at this age group.
- Working together to plan appropriate educational experiences and intervention strategies for groups and individuals.

These roles translate directly into skill blocks. An entry level teacher will tend to have general knowledge of the traditional curriculum and techniques for teaching this age group. This will include some understanding of the developmental and learning issues of the age group. This basic set of skills will probably allow the entering teacher to perform many of the straightforward teaching tasks required, but under supervision. This could be the entering skill block. If entering teachers do not have these fundamental skills and knowledge, they will be on probation until they acquire them.

The curriculum and the pedagogical strategies of the school will eventually evolve to a particular set of practices that work well with its student population. While these are always changing and continually improving, it is important to the school that everyone understand and be able to expertly practice the entirety of its educational package. This set of skills and

knowledge may be packaged into one or two skill blocks of increasing depth. They could include increasing content knowledge about the curriculum as well as increasing skill and repertoire in various instructional strategies, such as one on one tutoring, instructional grouping techniques, use of computer based technologies, etc. It can be required that everyone acquire these skill blocks over the first two to three years in the school.

Certain breadth skill blocks will be needed. One could consist of counseling skills, and another of recognizing and dealing with learning problems. A third might be for understanding and skills in current instructional technologies, mainly including computers and the new wave of electronic technologies that promise to increase the efficiency and effectiveness of education. This skill block might include skills necessary for programming, creating and adapting educational experiences that can be available with this technology, helping other teachers be users, and integrating them into the overall curriculum and with other pedagogical practices. Over time many of the skills associated with this skill block may migrate to the skill blocks for delivering the fundamental educational offerings of the school. New technological skills will replace them in this skill block. Certification in this skill block would therefore need to be periodically updated. Essentially this skill block acts as an incentive to progress.

The final skill block, a vertical one, might include the skills required for instructional leadership. It would include such things as knowing how to plan and create curricula and pedagogical strategies, as well as the skills of leading others through the planning and creation processes. Three other sets of skills could be added to this block or become a block of their own. These are administrative skills that are necessary for the successful carrying out of educational plans, such as scheduling and resource acquisition; skills for feedback to and development of other teachers; and skills in school finance, budget development and budget monitoring. In the first years of a skill based pay plan, these types of skills might be assumed to be held by the principal. As school-based management takes hold and matures, however, these skills can be organized into skill blocks that teachers begin to acquire. Over time this could mean that components of the job of principal are gradually subsumed within these managerial skill blocks potentially possessed by several of the faculty and school staff become to a great extent a self-managing unit, perhaps in conjunction with a governance council.

Attaining proficiency in each skill block should be expected to take a year or more. Each will require a combination of on-the-job experience and training by others in the school

and possibly some formal external education. The cost of acquiring skill blocks in terms of time, money, and school resources will make it reasonable to require that no more than one skill block may be added per year by an educator. The total number of skill blocks available to a teacher will depend on the organizational and instructional design of the school. Somewhere around ten skill blocks might be the expected number that would be attained by a teacher over a ten to twenty year span.

All skill blocks would be dynamic in character. A big part of systemic reform is that schools should embark on a long term improvement process during which they will continually improve their performance in terms of student outcomes. In order to do this we can expect that schools will have to periodically redesign themselves organizationally and instructionally. Whenever such redesigns occur it will necessitate correlative changes in the skill blocks needed to support them. When changes to skill blocks are made, teachers should be given ample opportunity and time to pick up new skills without threatening their income due to the fact that an old skill block is no longer needed by the school.

Measuring, assessing, and reviewing skills. Each skill block will probably have a combination of formal, standardized ways of measuring accomplishment, such as those provided by various professional groups, and a locally determined component. In every case the ultimate arbiters of whether or not a skill block has been attained or retained are the other professionals in the local setting. Local standards must be as systematically laid out as possible but there will always be room for judgment. There will be a pressure to certify a colleague's skill block because of the monetary implications for him or her. There must be a countervailing pressure that makes it in the self interest of local professionals to be as accurate as they can in the certification process. Partially this can be controlled by state and district guidelines and regulations that delimit the standards that can be used, but ultimately local professionals must see it in their own interests and the interests of the school to make certification of skills as accurate as possible. If people feel that their own interests are tied to the performance of their team and school as a whole and if they feel that the skills of others are important to such performance, then they will take care to make sure their colleagues have the necessary skills. Pay for school performance is proposed precisely to make the school's performance, which is in the best interest of students and taxpayers, to be in the best interest of its teachers as well.

Since none of the skill blocks can be considered static and since people can lose skills

with inactivity, there must be periodic reassessment of skill blocks. If a person is determined to have lost skills from a skill block, then s/he can be put on probation for a reasonable period of time to give time to reacquire the skills before a second reassessment. While on probation a teacher might retain salary, or perhaps 80% of it, for the skill block in question. This situation should be avoided by making sure that everyone periodically uses their skills. Otherwise the school is not benefiting from the presence of the skills.

Potential use of national and state standards. There are a number of current and planned efforts both nation-wide and at the state levels to develop standardized measures of teacher attainment of knowledge and skills. For instance, the prominent effort by the National Board for Professional Teaching Standards to develop a national certification procedure to measure advanced attainment of what a top quality teacher can do focuses on teaching skills and knowledge, but also includes breadth skills. However, National Board certification will not be aimed at the basic licensing of teachers. It is expected that it will take several years for teachers to reach skill attainment great enough for board certification. The Educational Testing Service is also working to establish a beginning teacher assessment, known as PRAXIS, that includes tests of content knowledge and pedagogical expertise. Many similar efforts are planned at state levels, especially to assess skills and knowledge for basic licensing decisions.

These various national and state efforts to provide skill and knowledge based assessment tools can potentially be very useful at the local level in measuring skill block attainment, but they cannot be the entire story. Depending on local school designs and philosophies, these tools will have to be augmented by local approaches to measurement. In general, however, the following might be a model upon which one could build local level skill based pay systems.

Provisional Teacher. This would be the lowest pay category. It would provide a way for people to enter the teaching profession without the traditional training. The incumbent in such a position would not be able to pass any skill and knowledge assessment but would be expected to reach a basic licensing level in a set period of time.

Novice Teacher. This title would go to those who had attained the basic skill level associated with state licensing, as measured perhaps by a state performance-based licensure system or the

approved ETS PRAXIS tests.

Teacher. An advanced level of professional skill attainment in the areas of curriculum and pedagogy measures for which may be developed at the state or local level.

Expert Teacher. A title reserved for those who have passed National Board certification.

More specific measures of skill attainment will probably not be available for several years. Nevertheless there will be development of tests of content knowledge that could be used to partially determine skill block attainment. For instance, in secondary schools subject area teachers could progress through a pair of successively deeper knowledge blocks: basic subject area competence and advanced subject area competence. To support flexibility and teaming horizontally, secondary teachers could also be measured for knowledge competence in other, probably related, fields. For example, a mathematics teacher might show competence in the novice skill block for a science teacher. Similar tests could be developed for elementary and primary school teachers. Also content tests can be developed for knowledge of teaching strategies, such as knowledge about one on one tutoring or knowledge about grouping strategies. Actual pedagogical skills have been shown to be related to content knowledge but there will not be a one to one correspondence. Therefore, tests of knowledge will have to be coupled with locally developed assessments of skills in these more specific areas.

Local judgments. Some kind of mechanism must be established for measuring skill attainment in the absence of standard measures. These will have to be done locally. The state, districts, and local higher education will need to help individual schools establish their local procedures and monitor the procedures set up by the schools. Each school should describe as completely as possible the skills contained in each skill block and behaviorally describe what the presence of that skill would look like. Demonstrations can then be designed for some of the skills in which teachers exhibit their skills in a controlled or natural setting. These skills will be observed and rated by an assessment committee appropriate for the skill block and could include university experts and other teachers, perhaps from other schools, or districts. In any case, final judgment of skill level should be the result of group consensus based on the behavioral descriptions.

Surrogate Indicators. During the start-up, if measurement of skill is not possible at

the local level and there are no acceptable standardized measures, it may be necessary to use surrogates. Surrogates may be such things as courses taken, experience, recommendations and assessments from previous colleagues. These also can be used for new hires to tentatively award skill blocks until there is the opportunity to apply actual skill measures. The aim should be to eliminate surrogate measures as quickly as possible.

Administrators. While the proposed SBP system was written for teachers, many of the notions and specific skills could apply to principals and other site administrators as well. Particular skill blocks would depend on the management role that emerged in the restructured school. Under depth skills, for example, a new skill block could relate to the broader policy environment of education within a state and to the changing demographic and employment context to which the school must adopt.

If, the long term vision of systemic reform together with school-based management envisions schools as being in more direct relationships with the state rather than the district, a set of skills focusing on these connections would be appropriate. On the other hand, if the vision views the principal as a unit manager in a local system, now called a district, this skill block would include competencies needed to function as a leader with more system wide/district responsibilities.

We should note that skill based pay is just emerging as a compensation strategy for administrators and managers in the private sector; while a sound development, only a very few companies have applied this new notion of compensation to organizational or system leaders. Polaroid is a company that has begun to plow this new field. Thus, the knowledge base for how to extend skill-based pay to administrators is somewhat limited. Nevertheless, the above appear to be reasonable manners in which a state or district could incorporate administrators at the school site into a new compensation structure.

Pricing skill blocks. Within general state guidelines, each school is liable to have its own unique set of skill blocks. Nevertheless, there needs to be some mechanism that allows equity especially within districts and perhaps across the state. To do this, the state or district could supply teacher salary ranges, lowest and highest, based on budget and market (and perhaps local supplements). As a start, the difference between the two ends of the range could be divided into as many parts as there are skill blocks. Adjustments could be made to

these values when it is clear that some skill blocks should be worth more than others.

Another approach would be to link some skill blocks and their salary increment to a longer work year as well. For example, one possibility would be to require an additional week or two of work for some breadth skill areas. The salary increment could be set at a level somewhat above the market price for the skill and a condition attached to receiving that increment would be a lengthened work year on a permanent basis. This notion has some practical aspect to it because many breadth activities, such as curriculum and staff development, now are conducted outside the normal school day or year. Further, many teachers engage in these activities now without any additional compensation; they work longer for no extra pay. This approach would reinforce the need to consider teaching as a full time profession and thus facilitate pegging beginning salaries to other full time salaries

We want to note again that extra pay for more teaching (e.g., summer session) would need to be conceived as a pay increment unrelated to the above strategy to lengthen the school year. And we would not want the overall notion of a skills based pay structure to falter on a new idea for how to lengthen the school year. Our rationale for suggesting the above option is to identify one mechanism for linking pay increments to both skills *and* longer formal work years, thus providing extra salary for the many teachers who now engage in those activities and work more than nine months but do not earn any extra salary for doing so.

Transitioning to Skill-Based Pay

As skill-based pay phases in there will be a period in which existing teachers can not demonstrate expertise in skill blocks necessary to retain the level of salary they had obtained under to old system. Existing salaries can be "grandfathered" for some reasonable amount of time, depending on the number of skill blocks they must attain, to provide time to learn the skills and successfully test for them.

Starting Pay. Starting pay is simply a way of allowing an educator to enter the base pay system whose primary logic is one of skill-based progression. There are four issues: 1) what will be the entry level pay for an inexperienced (licensed/certificated novice or emergency) teacher; 2) what system will be employed for allowing an experienced educator to enter the system at a location other than entry level pay; 3) what, if any, attributes other than possession

of skill blocks warrants adjustment to starting pay, knowing that adjustments will be reflected throughout the tenure of the educator; and 4) how is the pay structure adjusted up (or down) as appropriate through time. It is assumed that state credentialing of teachers also will become based on exhibition by the prospective teacher of skills and knowledge, not just the possession of a degree.

Entry-level pay. The attraction and retention of teachers who can thrive in the increased demands of school reforms requires that teacher pay be market competitive (Odden & Conley, 1992). To attract highly competent college graduates, the entry level pay for a credentialed teacher with a Bachelor's degree could be pegged at the larger of the entry level salaries requiring bachelor's degrees in a state or regional labor market, or the average beginning salary for individuals with a liberal arts degree. The premise is that once hired, the skill-based progression will enable high-achieving teachers the opportunity within the first five years of teaching to move well into the top half of distribution of salaries for college graduates with equivalent years of work experience.

The education system needs to seriously consider viewing teaching as a full time job, and thus compare a beginning teacher salary to the beginning salaries of other jobs that more formally cover a 12 month period. While teachers are in the classroom for less than eight hours a day and teach only 180 working days a year, fully engaged professional teachers put in hours much longer than that, easily working a full eight hour day if not longer and working considerable periods during the summer. Anecdotal evidence from the states, districts and schools participating in the National Alliance for Restructuring, a project of the National Center on Education and the Economy, implies that high quality teaching as envisioned by systemic school reform can not be accomplished within a six hour day and nine month school year.

For new teachers, requirements for such greater time could be made a condition of entry into the profession, especially if the beginning salary is set at a level competitive with other 12 month jobs. The extra time for teachers would be spent largely on professional development, instructional materials development, and management tasks, not necessarily teaching students for longer time periods.

There must also be provision for teachers who enter teaching from non-traditional backgrounds, who may lack the teaching credential. A special provisional status can be created

for these individuals, based on surrogates for the elements of the entry level skill blocks that they possess or do not possess, such as: a bachelor's degree without a certificate; substantial completion of coursework pursuant to a credential; other work experience. Entry level salary will be lower than that for the entry level credentialed teacher, with the actual salary being dependent upon the actual qualifications of the provisional teacher. The teacher entering through a non-traditional route might be given two years to attain a credential, at which time the entry level pay for the first skill block will be attained, along with any other skill blocks that the provisional teacher has been able to demonstrate.

Experience adjustments to starting pay. New teachers to a school may be given credit for experience if it qualifies them to enter the skill based structure at a location other than its starting point. Because years of experience as a teacher do not in and of themselves move a person through skill-blocks, they should not in and of themselves be assumed to be indicators of attainment of skills and capabilities. Rather, new teachers to a school should have to demonstrate competency on-the-job. However, a school may not be able to attract experienced teachers with valuable competencies if the teachers must start at the lowest skill block. Consequently, a two-step process could be used for giving provisional status to a new teacher who is entering the middle of the skill progression:

Step 1: Evaluate previous experience to ascertain whether such experience likely included required skills and competencies that receive credit within the SBP plan. Evaluation would include self-descriptions of experience as well as archival and interview data from the previously employing district(s), school or organization.

Step 2: If it is ascertained that the new teacher to the school has likely demonstrated capability in all or most of the elements of a skill block, credit could be given in the form of a provisional salary that gives the new teacher a salary that assumes that skill block. The provisional salary would stay with the teacher for the first year of employment, during which time certification would be required by on-the-job demonstration of the complete set of skills of the skill block(s) for which credit was given. If, at the end of the first year, such demonstration had not been fulfilled, the salary of the teacher would be adjusted downward, and the teacher would have the same opportunities as other teachers in the school to acquire and demonstrate these and other capabilities to move through the skill block progression. Demonstration of skills is an important regulator of teachers moving from school to school. On the one hand it makes the

practice possible, but on the other it makes the process of transfer somewhat formidable. This is not necessarily a disadvantage, since team-based organizations rely on continuity and thus it is important for people to have an incentive to remain with a school.

Other adjustments to base pay. There may be qualifications, other than the competencies and skills required for skill blocks, that warrant adjustments to entry pay. Adjustments to entry pay should be made within the logic of the skill-based pay system. For example, advanced subject matter or educational degrees should be acknowledged only to the extent that they indicate competencies that are included in skill blocks. A subject matter M.A. or Ph.D. might indicate potential depth or breadth in skill blocks. An entry level individual with such a degree could be given partial and provisional credit toward the accomplishment of a skill block with one year to demonstrate on-the-job attainment of the entire set of competencies within the block.

Previous employment experience other than teaching might also be valued. Because the skill based pay system does not reward years of experience per se, it would be incongruent to reward non-teaching experience with a pay increment that did not relate to the valued competencies, especially if that pay increment remained with the individual indefinitely in a manner that was not contingent on demonstration of increasing command of the skill blocks of the school. However, it would be possible to provide an entry teacher with considerable relevant work experience with a provisional bump to the second or third skill level, that would be removed if the entering teacher were unable to complete that many skill levels within, for example, a two-year period. The philosophy here is that that experience is only of value to the school district if it can be translated into command over the valued skill blocks through a skill development and certification process.

Adjustments to the entire pay structure. Adjustments should be based on periodic (perhaps bi-annual) movements, i.e., in the wage market for college graduates in a state. Although some attention should be given to cost of living, it is presumed that the key factor in retention of employees is equity compared to the market, and that cost of living will be reflected in the market movement. Also reflected in market movement will be the general prosperity of a particular state or local labor market, a factor which will directly determine how much money is available to the public schools.

REWARDS FOR SCHOOL PERFORMANCE

High involvement organizations frequently link some variable portion of compensation to organizational performance through group-based performance awards (Lawler, 1992). The group that is rewarded is a performing unit that produces or delivers a measurable product or service. It can be as large as a corporation or as small as a work team. The group ideally should constitute a complete enterprise or performing unit. This means that the performing unit should include within it the resources, people, and technologies used to convert the unit's inputs into outputs. The group's work should be relatively independent of the work of other enterprise groups, but the work of individuals within the group will tend to be interdependent. Group performance rewards promote teamwork among group members whose work must be integrated in order to optimize total value (Mohrman, Mohrman & Lawler, 1992). Unless work is truly independent, individual level performance awards (such as merit pay) can discourage teamwork and tend to link individual rewards to indicators of merit that may not be related to organizationally meaningful outcomes (Mohrman, Mohrman & Worley, 1990).

A number of group performance plans are used in a significant percentage of private sector corporations (Lawler, 1992; McAdams & Hawk, 1992). At the corporate level, profit-sharing and employee ownership schemes link employee compensation to the financial performance of the firm, and thus give them a stake in conducting their jobs in a manner that enhances corporate value. However, because of the size of large corporations and the relative difficulty for an employee to see the impact of his or her contribution to the bottom line, these group awards primarily have cultural and symbolic impact, rather than being able to shape the behavior of employees in support of a particular strategy. When rewards are based on the performance of smaller units, it is easier for the individual to understand what behaviors contribute to results and to experience a feeling of personal impact. Consequently, many organizations reward sub-units such as plants, regions, product lines, or work teams based on group measures that ideally reinforce overall organizational performance.

One form of group performance rewards is productivity gainsharing. Gains accrue when employees are able to increase the ratio of outputs to inputs. This occurs when employees are able to maintain current levels of performance while decreasing inputs (controllable costs) or to increase levels of performance without increasing inputs. Although some gain can accrue when employees become more efficient at current methods, significant

improvement generally results from adoption of innovative methods. Most gainsharing plans share gains between the company and the employees according to a predetermined formula. Gains are generally paid out to all employees (individual contributors and managers) in the measured performing unit. Sometimes payout is a percentage of each individual's salary; other organizations choose to pay each individual an equal amount. Gainsharing pay-outs do not accrue to base salary. They are an example of variable performance pay in which the payout varies directly with the performance achieved. In this case the performing unit is a group and not an individual.

As opposed to most other bonus plans gainsharing payouts are "self-funding." This is true because gains are measured relative to a baseline of expected productivity given historical performance. If productivity is higher than expected then the increased revenues or the cost savings (or both) that resulted in the higher than expected gain in productivity are the source of funds that constitute the bonus pool that is split between the organization and the employees. This is different from bonus plans that set aside a predetermined amount for bonuses ahead of time. These prebudgeted bonuses are potentially problematic because they represent a fixed pie of money that must be spread around to all groups that achieve or surpass expectations. The more groups that do so, the less there is for each group.

Successful gainsharing plans are generally developed with a great deal of employee participation, so that there is buy-in to the underlying logic. In fact, gainsharing is most successfully implemented in conjunction with participatory improvement processes such as total quality management; these improvement processes give employees tools and opportunities to make process changes required to improve performance.

Gainsharing plans have been extensively utilized by companies such as Motorola, Amoco, Eaton, TRW, Xerox and many others. Research shows that such plans work to encourage better performance to the extent that employees are involved in planning and implementing improvements. Gainsharing plans that do not provide meaningful employee involvement mechanisms are not successful (Blinder, 1990).

Other forms of group performance bonuses tie pay-outs directly to the attainment of pre-determined targets. Again, these bonuses can be paid to groups of various size ranging from entire divisions to small teams. Generally the targets represent the key strategic emphases

of the organization. Xerox, for example, bases pay for its service offices on customer satisfaction and retention, as well as revenue generation and employee satisfaction measures. Motorola has based bonuses for new product development teams on meeting schedule, cost and quality targets. As with gainsharing, such bonuses do not accrue to the base salary.

There are several key design issues in constructing group performance bonuses. The larger the size of the unit to be rewarded, the more difficult it is to involve all employees in improving the group's performance. The unit should have control over a product, a defined set of services or services for a defined population. The unit to be rewarded should be minimally interdependent with other units. Many organizations deal with this issue of interdependence by having awards at two levels. An organizational unit such as a product line or a plant might have a gainsharing or other form of performance bonus, and the teams or sub-groups within it might each have a team bonus as well. This scheme recognizes each team for its own performance, but also fosters cooperation among teams in service of overall organizational performance (Lawler, 1992).

Performance bonuses give employees an up-side compensation potential. Organizations sometimes trade-off base salary for such "at risk" pay, by pegging base salary somewhat lower in the market range, but offering offsetting potential of achieving compensation well above market based on performance attainments.

The next section applies these concepts to schools, and describes a new teacher compensation plan that would fit with systemic reform and school based management.

Application of Group-Based Performance Rewards to Schools

A fully developed high-involvement compensation system must also include a link between organizational performance and compensation. School awards, such as those in South Carolina (Richards & Sheu, 1991), that must be used for local education improvement are one strategy to link rewards to school performance. That might not be an adequately powerful linkage to draw attention to the desired improvement because it does not tie to teacher compensation. This section provides a description of an approach to create an explicit performance bonus that is aligned with student achievement targets. Again, this potential school-based reward plan is offered only as a possible example to spark new compensation

approaches; it is not the only school-based performance reward program possible.

A group-based performance reward system could be pegged to schools exceeding target improvement thresholds, such as an increase in the percentage of students in the school achieving at some performance level. The group-based performance reward could provide a lump-sum bonus to the compensation of all staff in the school. This could be in addition to improvement monies awarded to successfully improving schools such as in the South Carolina example. The performance reward discussed in this section, unlike school improvement awards, is a compensation bonus.

Establishment of bonus pool. The philosophy of the bonus program should be one of continuous improvement at the site, not one of competition between schools. The state or district would need to budget monies to cover a bonus payout to all successful schools, since a fixed pot of money would decrease the bonus as more schools were successful. Annual funds not used for bonuses could be spent for professional development, or for other purposes geared to raising performance levels.

Levels of reward. In order to avoid rewarding conservative improvement targets, two levels of rewards might be possible. The first might be a modest but meaningful bonus based on accomplishing an improvement threshold. A second level would be achieved when the school exceeded its improvement target by an additional percentage. For example, if a school had been targeted to increase the percentage of students achieving at the "proficient" level by 15% in a particular time period, the first level of payout could be achieved if 15% more students achieved at that level during that period. The second level of payout could be achieved if, say, 20% more students achieved at that level. The second level payout should be more substantial because it represents a substantial accomplishment beyond what had been minimally targeted. The actual value of performance rewards varies considerably in private industry. On average, gainsharing and profit sharing bonuses were around 9 percent of base salary from 1980-1985 (O'Dell, 1987).

Philosophy underlying distribution of funds. Different philosophies may guide the distribution of bonus funds. Each school member could be given an equal share of the total bonus or the total bonus could be divided so that each school member got a bonus equal to a certain percentage of his or her base pay. A lump sum distribution that is equivalent

for all staff, regardless of their base salary would be based on the premise that differentiation between value of contribution is captured in the base pay portion of compensation. If the school has carefully designed its work system to maximally utilize the skill of its employees, school success will be equally due to the successful efforts of each member of the team. This approach will partially offset any dysfunctionalities of establishing teachers with different skill-block status, and should contribute to the cohesion of the team, and to its mutual problem-solving efforts. On the other hand, many organizations choose to deliver bonuses as a percentage of base salary. This also has a compelling logic. Those with larger base salaries will be those with more depth and breadth of skills and thus, it could be argued, have more pivotal effects on school performance.

School site variation. As schools develop their own work designs, it is possible that they may want to develop a bonus distribution system tailored to their work design. In particular, if schools create sub-units within the school whereby a defined staff is responsible for the learning needs of a defined group of students, the school may choose to allocate bonus monies partially on the basis of the performance of each sub-unit. This decision could be made by the school council, and might require approval from a majority of the staff in the site. In this case, the total bonus pool made available to the school would be determined by overall school performance. Part of the bonus could be paid on an equal basis to all staff in the school, in order to reward and motivate school-wide effort and collaboration. Another part could be paid to staff in sub-units that have exceeded the school target. This system should not put sub-units in competition with one another, since school wide collaboration is important. Consequently, all successful sub-units must be able to receive their performance bonus, and the size of the bonus must not be inversely proportional to the number of successful sub-units. The monies budgeted but not paid out to less successful sub-units could be used for staff and team development activities aimed at increasing the performance levels of those units.

The application of bonus monies to reward sub-units within a school may appear to be a contradiction to the intent to treat schools as the unit of improvement. However, if the school evolves the kind of work design that is recommended in much of the school reform literature to create smaller units within a larger school (e.g., Carnegie Council on Adolescent Development, 1989; Sizer, 1992), the impact of rewarding the smaller unit will be much more powerful than a school-wide reward. This can be accomplished as long as the total bonus pool is contingent on overall school performance, and a component of the bonus is based on school wide

performance.

Gradual phase-in. Based on past failures of merit pay, it can be predicted that school performance bonuses will not be readily accepted in the education community and will probably be misinterpreted. In the short term, the skills and knowledge based component of the new pay system might be given priority for implementation. Should an education system determine in the future that a performance bonus is desired, this delay will not seriously jeopardize its impact. There is precedent in the private sector for initial implementation of skills and knowledge based pay, often contributing to performance improvement over a several year period when combined with redesign of the work processes to take advantages of the skills and knowledge bases of the employees. A subsequent introduction of school performance bonuses can provide a renewed impetus for performance improvement, often several years after the initial implementation of the altered base compensation system.

School performance bonus systems can be gradually phased in. During the first year, a minimal bonus could be made available, so that the stakes are not too great as teachers learn how the system works and begin to apply their collective talents to improving school performance. During the following year, the full sum could be made available, based solely on school-wide performance. In subsequent years, schools could begin a two-component bonus system. Schools that already have a fully developed "house" or "schools within school" system might want to begin with a two component bonus system.

Currently, the emphasis and pressing need in nearly all districts and states is on the improvement of student achievement, and if a bonus system were to be implemented, it would be sensible to concentrate on performance outcomes as the bonus-worthy performance. However, cost-containment may become of equal importance, as school systems are required to improve performance with stable or declining resources. At some point, it may be wise to transition to an explicit gainsharing plan, where teachers are rewarded for the cost savings experienced while increasing performance with a stable or shrinking school budget. In the meantime, the fact that many school districts are encountering severe resource pressures means that bonus systems targeted on school performance are de facto gainsharing plans.

CONCLUSION

This article has argued that there should be a linkage between systemic reform and teacher compensation. Drawing upon recent organization and compensation theory and practice, the article has shown how high involvement management needs to be a key component of implementing systemic reform, and how both skill-based pay and pay for group performance should be integral parts of such system changes. The article has shown how various components of these new approaches to compensation work and outlined several ways each component could be incorporated into a revised compensation system for educators. The political processes for implementing such new approaches and the specific design features would need to be determined as individual states and districts took on the challenge of redesigning teacher compensation as one of several components of implementing systemic reform.

FIGURE 1

IDEALIZED SKILL BLOCKS

	BREADTH				MANAGEMENT
DEPTH	B_{11}	B_{21}	B_3	B_4	M_1
	B_{12}	B_{22}			M_2
	B_{13}	B_{23}			M_3

Certification by National Board for Professional Teaching Standards

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