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ABSTRACT

The idea of changing the teacher compensation system is not new, but concepts regarding the appropriate basis for paying teachers have changed in recent years. Three major options to the single-salary schedule include pay based on either individual or organizational performance, job tasks, or skills and knowledge. This paper seeks to broaden the focus of current debates on teacher compensation by examining these three alternatives. It first discusses concepts regarding the appropriate basis for individual teacher pay. Examples of the skill-and-knowledge compensation approach, with a focus on career-development systems, are described next. They include the pay plans of Flowing Wells, Arizona; Charlotte-Mecklenberg, North Carolina; Pocatello, Idaho; and the Advanced Skills Teacher (AST) system in Australia. The next section presents a model for a career development-based compensation system, which is comprised of starting pay, career stages that qualify teachers for a major pay increase, and a mechanism for increasing pay separate from skill and knowledge enhancement. The key issue is to devise an alternative salary system that considers the cultural and political realities. The ideal model would address educators' low compensation and complement collective bargaining, teacher development, and collegiality. (LMI)

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Linking Teacher Compensation to
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Experimentation with alternative systems of teacher compensation moved to a prominent position on the educational policy agenda during the 1980s. Initially, states and districts attempted versions of individual merit and incentive pay that were ultimately unsuccessful.¹ States then developed and implemented teacher career ladder programs that tied teacher pay to career-level advancement within the profession. However, many of these systems also experienced difficulties (Bellon and others, 1989; Freiberg & Knight, 1991; Schlechty, 1989; Southern Regional Education Board, 1994).

These developments have generated much debate over whether an appropriate alternative to the present system of teacher pay can be found (English, 1991; Frase & Poston, 1991). Some observers suggest that changing the present teacher compensation system will increase teacher motivation and satisfaction, student performance, and the quality of teacher supervision while, at the same time, decreasing teacher attrition. Others maintain that alternative pay proposals may simply be methods to deprofessionalize teaching and to gain greater control over teachers' work.

The teacher compensation literature has been less than helpful in advancing and refining this debate since it typically confines discussion to individual performance-based pay. However, three major options for paying employees actually exist; pay

can be primarily based either on individual or organizational performance, job tasks, or skills and knowledge (Lawler, 1990). This paper thus seeks to enrich current compensation debates by broadening their focus to include all three of these pay alternatives.

We initially discuss concepts regarding the appropriate basis for individual teacher pay. Some illustrations of a skill-and-knowledge compensation approach are discussed in turn, with a particular emphasis on career development systems. A model for a career-development-based compensation system is then discussed. In the concluding section, a prognosis of the prospects for changing teacher compensation systems in education is offered.

On What Basis Should Teachers Be Paid?

The idea of changing the teacher compensation system is not new, but concepts regarding the appropriate basis for paying teachers have changed in recent years. The traditional system of compensating teachers, the single-salary schedule, allocates pay based on years of experience and level of education. Typically, alternatives to this system which have been proposed or implemented seek to base pay on evaluations of the performance of individual teachers. Another perspective on the appropriate basis for teacher compensation emerged in many of the career ladder plans proposed in the 1980s (and, earlier, in the differentiated staffing systems of the 1960s). Several of these plans, as proposed or implemented, paid teachers according

to their job responsibilities or tasks (e.g., for developing curriculum, evaluating programs, or serving as mentors for beginning teachers). A third basis for teacher pay was also evident, although often not explicitly identified as such. Career ladders which incorporated this option compensated teachers more for their professional skills and knowledge than for the specific tasks they performed (Bacharach, Conley, & Shedd, 1990). Research suggests that a number of difficulties are associated with the first two approaches; the last may hold more promise in educational organizations.

Individual Performance-Based Pay

Individual performance-based pay (i.e., teacher merit pay) has been the focus of the majority of experimentation in education although it has been difficult to implement. Studies of districts that implemented and later abandoned a merit pay system cited staff dissension, administrative problems (such as record keeping and personnel evaluation), and problems in determining who deserved extra pay as among the primary reasons for discontinuing such a pay plan (Murnane & Cohen, 1986; Robinson, 1983). Whereas some observers frame evaluation difficulties and staff friction as technical problems that must be solved before implementing merit pay, others see more fundamental difficulties in applying the concept in educational systems (Astuto & Clark, 1985; Bacharach, Lipsky & Shedd, 1984; Johnson, 1987; Mohrman, Lawler, & Mohrman, 1992; Murnane & Cohen, 1986; Odden & Conley, 1992).

First, educational settings differ from organizational settings where merit pay has been used successfully. Individual performance-based pay tends to work best in settings where the work technology or process is relatively simple and well-understood, straightforward methods can be used to measure performance, and workers' efforts are not interdependent (Lawler, 1990, 1992; Mohrman et al., 1992). For example, performance-based pay has been implemented successfully in piece rate work and sales jobs where a clear and direct link can be established between measures of work performance (such as number of shirts ironed or automobiles sold) and increments in pay (Bacharach et al., 1984). However, because of the complexity of the teaching enterprise, effective teaching cannot be characterized as the application of specific, well-defined techniques. Furthermore, in settings where merit pay has been used effectively, organizational effectiveness does not depend on employee cooperation and teamwork (e.g., such as sales occupations). However, good teaching is an inherently collegial and interdependent enterprise (Little, 1982; Rosenholtz, 1989). By forcing teachers to compete for scarce organizational rewards, merit pay systems undermine the collegial and interconnected nature of the effective educational organization.²

A second difficulty in applying the merit pay concept to education is that such plans are based on the assumption that extrinsic rewards are necessary to motivate teachers to improve their performance. However, evidence confirms that money is not the sole or primary motivator in teaching. Teachers enter the profession because they

value the intrinsic rewards that result from reaching students and helping them to learn. Once in teaching, effectiveness and motivation derive largely from the satisfaction of meeting "higher order" needs, e.g, feeling responsible for their work, seeing student learning occur as a result of their efforts, and having opportunities for job challenge, participation in decision making, and skill utilization (Conley & Levinson, 1993; Johnson, 1987; Lortie, 1975; Pastor & Erlandson, 1982). Teachers who leave the profession often do so because of early adverse teaching experiences that deprive them of these "psychic" rewards (for example, lack of opportunities for personal growth and student discipline problems) (Astuto & Clark, 1985). Although teachers have reasonable expectations concerning their level of pay, a sense of personal accomplishment is the primary motivator in teaching (Johnson, 1987).

Analyses of performance-based pay systems in education have diminished the expectations of scholars and policy-makers that individual performance can (or should) serve as the primary basis for teacher compensation. In this context, an alternative basis for teacher pay offers some appeal for scholars and practitioners: payment for the tasks that teachers perform.

Job-Based Pay

The second approach to paying teachers, job-based pay, was apparent in some of the career ladder systems in the 1980s, as well as the early differentiated staffing systems of the late 1960s and early 1970s. In the private sector, job-based pay is a

well-developed system for paying employees that begins with a detailed analysis of each job in the organization (Lawler, 1990). Jobs are then ranked according to several factors that apply to all jobs (for example, complexity and degree of supervision required). Jobs deemed more complex or important are paid higher salaries, and employees seeking to advance must enter jobs with higher-ranked duties.

In education, job-based pay is traditionally most evident in positions involving administrative tasks. Teachers improve their pay by accepting new administrative responsibilities; therefore, it is not surprising that attempts to change compensation within the teacher ranks often followed this same basic logic. Many teacher career ladders during the 1980s allocated pay on the basis of the specific tasks teachers were performing.

Critics of job-based pay systems in education (Bacharach et al., 1990; Freiberg & Knight, 1991) suggest that the use of job-based pay in the teaching profession may produce several detrimental outcomes. First, it may define classroom teaching as less than professional by implying that teaching functions are less important or require less expertise than tasks performed at the next level. Second, in reserving certain duties for higher levels, job-based systems remove teachers from the classroom, resulting in quotas on high-level positions. Third, a disjuncture is created if outstanding teaching skills are a criterion for movement into the new position, but the position requires a different set of skills and knowledge for performing the new tasks (e.g., staff

development or curriculum development). However, payment-for-jobs systems have the potential of compensating teachers on a relatively objective basis, i.e., teachers who do more are paid more (Griffin, 1985). These systems thus offer the advantage of avoiding the subjective performance evaluations that plague merit pay systems.³

In their analysis of the Temple City, California, differentiated staffing plan in the 1970s as well as the State of Tennessee's career ladder program in the 1990s, Freiberg and Knight (1991) illustrate some of the difficulties associated with job-based pay. The Temple City plan created a four-tier teaching hierarchy where teachers at the lowest salary level performed the simplest duties and received the lowest pay, and those at the highest levels had formal supervisory or administrative authority over other teachers.⁴ Freiberg and Knight trace the demise of the program to increasing competition among teachers for scarce top-level positions, which ultimately hindered teacher collegiality and contributed to teacher isolation. According to the authors, the career ladder program in the State of Tennessee similarly fostered competition among teachers by focusing on individual rewards and confining advancement opportunities (e.g., master teacher positions) to a select few.

Skill-and-Knowledge-Based Pay

A third basis for compensating teachers, skills and knowledge, has received less attention although it has appeared in some literature (Bacharach et al., 1990; Mohrman et al., 1992; Mohrman, Mohrman, & Odden, 1994; Odden & Conley, 1992).

Scholars examining this approach to compensation have generally confined discussion to distinguishing between skill- and job-based approaches (Lawler, 1990; Schuster & Zingheim, 1992); less attention has been provided to programs in education that illustrate its use.

In private sector organizations, skill- and knowledge-based pay have been defined as salary systems that provide pay increases on the basis of an employee's mastery of a larger number of skills and professional competencies and an increasing capacity to contribute to organizational performance (Mohrman et al., 1992). A reported advantage of such systems is that they enhance organizational flexibility and responsiveness while encouraging employees to upgrade their skills and knowledge (Lawler, 1990). Scholars have documented several positive outcomes of these plans in manufacturing organizations, including increased individual pay, worker productivity and morale (Jenkins, Ledford, Gupta, & Doty, 1992).

The education literature suggests three primary rationales for basing pay on a teacher's knowledge and skills. First, an increasing recognition exists that teachers should be afforded continuous opportunities for professional development throughout their careers (Darling-Hammond, 1993; Hawley & Evertson, 1993; Little, 1993). However, compensation systems do not often facilitate this development (Bacharach et al., 1990; Smylie & Smart, 1990). Indeed, neither performance- nor job-based systems appear to address teachers' development needs adequately. All too often, performance-based pay systems use "snap-shot" evaluations of a teacher's

performance rather than assess the teacher's growing contributions and skills over time. Furthermore, such systems tend to place the responsibility for upgrading performance solely on the individual teacher rather than on the school and school district as well. Finally, most performance-based systems use identical evaluation methods to assess the performance of beginning, mid-career, and veteran teachers; assessments might instead reflect the organization's changing expectations as teachers reach various points in their careers.

As previously discussed, although job-based systems appear to address some teachers' needs for professional development by providing a way for them to take on additional responsibilities, not all teachers are likely to advance to assume those tasks; top-level jobs are determined by the number of positions required to perform designated tasks and by turnover in those positions. Indeed, Smylie & Smart (1990) found that teachers' perceptions regarding the opportunities alternative compensation systems provided for their own professional learning and development were critical to their support of such plans. In affording all teachers opportunities to enhance their professional and career development, genuine skill- and knowledge-based systems would thus seem likely to receive greater teacher support than job-based plans.

A second rationale for basing pay on knowledge and skills is the growing recognition that a pay system in teaching would ideally enhance intrinsic rewards as well as extrinsic ones (Johnson, 1987; Mitchell & Peters, 1987; Smylie & Smart, 1990). A longstanding criticism leveled at merit pay plans, for example, is that they

promote an instrumental orientation to one's work (Bacharach et al., 1984; Johnson, 1987). In education, a system based on knowledge and skills would potentially provide all teachers with the intrinsic rewards that come with continuous opportunities for professional and career enhancement (McLaughlin & Yee, 1988; Smylie & Smart, 1990) which in turn should also lead to higher student achievement (Johnson, 1987; Rosenholtz, 1989).

A third rationale for pay based on knowledge and skills is the emergence of the National Board for Professional Teaching Standards. Beginning in late 1994, this group will begin to "board certify" teachers on the basis of their knowledge and skills. Board certification for elementary and secondary school teachers will be available in over 30 areas, and high and rigorous standards have been set for the knowledge and skills teachers must demonstrate to earn Board certification. The National Board hopes that Board certification--which will represent an advanced expertise--will be recognized by some pay increment (Bradley, 1994).

Pay systems based on professional skill and knowledge would, therefore, appear to offer some advantages over previous approaches. As the weaknesses of performance- and job-based compensation approaches gain attention, knowledge and skill based approaches may receive increased consideration. In this context, educators can be expected to focus on how teachers acquire and develop teaching skills and knowledge over time.

Teacher Skill and Knowledge Development

Two sources of literature concerning skill and knowledge may be of assistance in considering how teachers develop skills and knowledge over time. The first draws upon private sector literature related to the skill and knowledge growth of employees in general. The second draws upon teacher career development literature that specifically examines teachers' skill expansion.

The literature on private sector compensation systems provides a basis for conceptualizing three types of employee skill and knowledge growth: (a) depth, (b) vertical, and (c) horizontal (Lawler, 1990). Employees expand upon the depth of their skills when they acquire a broader array of technical skills within their fields or specialties. For example, an electrical engineer working in a company that designs computers might deepen his or her skills and knowledge in the areas of micro-chip theory and technology. Employees expand vertical skills when they learn skills normally possessed by managers or staff professionals. For example, the engineer might increase his or her ability to set direction for, organize, and monitor a team of workers. Employees develop their skills horizontally when they work in lateral areas in the organization. For example, the engineer might learn more about the organization's quality control and sales functions.

Although education literature does not draw upon this delineation of skill and knowledge explicitly, it appears to be applicable to teaching. For example, teachers who train to become peer mentors would seemingly enhance their skills and

knowledge in all three areas. A mentor would be an expert teacher with deep knowledge of content, curriculum, and pedagogy; mentoring would expand those skills by broadening that teacher's own instructional repertoire. A peer mentor would also increase vertical skill acquisition because mentoring is an important managerial support function. Furthermore, peer mentoring would strengthen the teacher's skills in an area that is lateral to teaching (that is, horizontal skill acquisition in mentoring). This example illustrates that differences among these skills are subtle because elements of each can emerge in a single organizational experience.

In teaching, discussions of skill and knowledge growth typically draw upon a developmental conceptualization which posits that a sequence (or pattern) exists in the way teachers expand upon their skills over time. Although it is not possible to survey all of the literature that is representative of this perspective, we will attempt to highlight some relevant literature from various disciplinary perspectives. Using a psychological "life-cycle" conception of teacher development, Huberman (1989) differentiates among three career stages or phases. The amount of time required for a teacher to advance from one stage to the next varies within the ranges indicated. The initial phase (years 1 - 6) represents, for some teachers, an "easy beginning" characterized by positive relationships with pupils and an early sense of pedagogical mastery. (Others experience "painful beginnings" marked by difficulty with pupils and a sense of isolation among peers.) The second phase in a teacher's career (approximately years 4 - 8) is characterized by formal appointment in the organization

(tenure) and a period of pedagogical "stabilization." During this phase, teachers consolidate their basic instructional repertoire, expand upon their ability to differentiate materials and treatments based on students' reactions, and become integrated into a peer group. For many teachers, the next stage (from years 6 - 10) is spent refining and diversifying classroom materials, instruction, and modes of classroom management. Such experimentation, according to Huberman, is typically collaborative and, if not school-wide, is at least multiple-classroom in scope. Teachers subsequently enter stages or "trajectories" marked by serenity or conservatism (in years 19-30) and, finally, disengagement (years 31-40).

Fuller's (1969) sociological examination of the career patterns of early-career teachers provides an additional resource for conceptualizing teacher development. Initially, the teacher is self-concerned or preoccupied with acquiring control of the class and forming relationships with supervisors and colleagues. He or she asks, "Where do I stand?" or "Can I try new things myself?" Next, concern regarding whether the teacher fully understands and feels adequate in teaching his or her subject matter emerges. Teachers gradually develop the ability to "have the freedom to fail on occasion, to anticipate problems, to mobilize resources and to make changes when failures reoccur" (p. 221). They also learn to cope with evaluation by becoming willing to "listen for evaluation and to partial out the bias of evaluators" (p. 221). Lastly, teachers become child-centered in their approach and concerns, focusing on diagnosing student abilities and assessing their progress. Concerns in this phase

include the ability "to understand pupils' capacities, to specify objectives for them, to assess their gain, to partial out one's own contribution to pupils' difficulties and gain and to evaluate oneself in terms of pupil gain" (p. 221).

Finally, Bacharach and colleagues (1990) examine teacher skill acquisition from an organizational behavior perspective by focusing on teaching as a decision-making activity. Teachers initially apply basic classroom decisions, such as planning instruction, evaluating classroom management, and counseling students. Next, teachers concentrate on the ability to shape or "adapt" decisions to reflect the diversity and unpredictability of the particular classroom situation they face. Teachers adapt decisions to unique classroom contexts in two primary ways. First, they acquire the ability to integrate decisions; for example, to instruct students while also maintaining order (see also Carter, 1991). Second, they develop the capacity to frame alternative strategies for dealing with classroom problems mentally. For example, as discussed elsewhere (Conley, 1994), a less-experienced teacher may conceive of one way to deal with a student quarrel, for example, by asking the students to stop or threatening them with punishment from the principal's office. The more-experienced teacher, in contrast, may draw on past experience to frame alternative courses of action cognitively, such as redirecting the students' energies to academic concerns by asking them whether they have finished their work, defusing the situation by incorporating it into a class lesson, or calling a class time-out and addressing the students individually. Having acquired the ability to adapt decisions to specific classroom situations,

teachers concentrate on making their classroom decisions and adaptations more accessible to others, thereby strengthening the overall instructional program of the school. This development is similar to Huberman's (1990) description of experimentation on a multiple-classroom or school-wide basis. For example, a math teacher might develop expertise in integrating math with other types of content and thus become a resource to other teachers in the school.

In sum, the work of various scholars suggests that although all teachers are concerned with instructional, classroom management, and student counseling activities, the specific focus may change. As interest in identifying developmental patterns increases, educators can be expected to generate more specific recommendations concerning how various systems of the organization (i.e., compensation systems as well as work groups and training and evaluation systems), may facilitate teacher development.

Forms of Skill- and Knowledge- Based Pay in Education

The most common current form of teacher compensation, the single-salary schedule, is viewed as one type of knowledge- and skill-based pay that ties pay to indirect indicators of skill expansion. Teacher career development systems, we suggest, may be conceptualized as an additional form of teacher skill- and knowledge-

based pay involving more direct measures of skills. For each type, we summarize its salient features and limitations.

Tying Pay to Indirect Assessments of Knowledge and Skills

The traditional form of teacher pay, the single-salary schedule, can be conceptualized as one form of skill-and-knowledge-based pay that uses indirect indicators of skill and knowledge expansion: number of years of teaching experience and total number of college credits. The question of whether these attributes contribute to teaching expertise is in fact a matter of some debate in the literature. Indeed, the teacher development literature cited above considers experience an integral component of basic developmental sequences: career stages or phases are delimited by particular years of teaching experience (e.g., see Huberman, 1990; Rosenholtz & Simpson, 1990). Field studies document that teachers learn to teach over time by repeatedly confronting different classroom environments, trying strategies, and eventually adding them to or dropping them from their repertoires (Richardson, 1991). In addition, teacher expert-novice studies suggest that experienced teachers have more sophisticated diagnostic and problem-solving abilities than do novices (Carter and others, 1987; Reynolds, 1992).⁵ Finally, input-output analyses of schools identify teacher experience--and education--as critical "input" variables related to student achievement. One review of such studies (Glasman & Biniaminov, 1981) found that teaching experience had a significant effect on student

achievement in 12 of 16 studies and that education was a significant predictor in 5 of 11 studies. Two other reviews, however, reported that the connections with experience may weaken when experience exceeds three to five years and that the results for education show no or negative connections as frequently as positive connections (see Hanushek, 1989, and Murnane, 1993). Other research evidence suggests that the teacher experience-student achievement relationship is moderated by powerful intervening variables related to workplace conditions, including collegiality, goal consensus, involvement in decision making, and opportunities for professional development (Rosenholtz, 1989). Thus, experience and education appear to be reasonable, albeit indirect, indicators of a teacher's growing acquisition of knowledge and skills.

Some additional advantages of the single-salary schedule should be noted. Unlike other pay approaches, it does not interfere with teachers' developmental processes, pit teachers against each other, encourage teachers to withhold information from superiors, or induce teachers to see teaching as a means to an end (see Bacharach et al., 1984). These advantages should not be considered lightly. Evidence from private sector and educational organizations clearly indicates that many pay systems quash employee teamwork, deter organizational effectiveness, and interfere with employee development. Indeed, a growing number of private sector organizations are abandoning individual performance-based systems precisely because they cause employee dissension; furthermore, many are discontinuing job-

based pay systems for failing to promote the full range of employee development (Lawler, 1990).⁶ The fact that the single-salary schedule does not create these detrimental consequences may explain why it has been in place for most of this century and is consistently reinstated when teacher merit pay is abandoned (Robinson, 1983).

An additional advantage should be noted in the context of the knowledge- and skill-based pay concept. The current system does not preclude districts from finding new ways to diversify and expand on teachers' skills or make this skill expansion a component of the pay system. For example, some districts offer "in-house" coursework in areas considered relevant to the district, school, and classroom. Teachers completing these courses advance on the single-salary schedule. Summer internships or teacher-proposed sabbaticals could be treated similarly. Teachers might also be required to document the types of skills they acquired through such experiences and how they were incorporated into the classroom or school. Thus, the current system could be modified with an eye toward professional and career development in ways that are consistent with the concept of paying for skills and knowledge.

The present system thus has the advantage of recognizing (largely indirect) indicators of skill and knowledge growth (i.e., experience and education) while avoiding many of the drawbacks associated with other systems.

Linking Pay to Direct Assessments of Skill and Knowledge Development

In the private sector, the majority of skill- and knowledge-based systems have been used to pay production employees. According to Schuster and Zingheim (1992), skill-based pay has been used in new manufacturing operations contained within a single physical facility. The process begins by identifying skills and forming skill combinations or "skill blocks" based upon how they will be performed by employees. Skills may be combined on the basis of depth, vertical, or horizontal growth patterns or some combination of the three (Lawler, 1990). Skill blocks are then priced, based partly on the external market and partly on the assessed value of the skills to the organization; for example, a manufacturing employee might receive higher pay for having the necessary skills to restart the manufacturing process in the event of a malfunction (Schuster & Zingheim, 1992).

Few systematic investigations of pay-for-knowledge plans have been conducted, however. A 1987 study examined plans in 19 manufacturing facilities and 1 service organization (Gupta, Schweizer, & Jenkins, 1987). In these settings, production workers typically began at a base rate and accrued additional pay increases by demonstrating that they had acquired particular skills in the organization (e.g., additional depth or technical skills and skills in team membership and management). Employee surveys identified some strengths and weaknesses of the plans. Strengths included an "emphasis on employee growth and development," "local managerial commitment to the plan," and "employee commitment." One weakness

was the specification of "too many skills," making some systems administratively complex and difficult to discern.

Summarizing the results of several studies examining private sector skill- and knowledge-based pay plans, Schuster and Zingheim (1992) suggest that their success is dependent upon several factors. These include

- (1) employee involvement in the design, administration, and monitoring of skill-based pay;
- (2) employee perceptions that skill-based pay is fair compared to what others outside and inside the organization receive for comparably skilled performance;
- (3) fair and understandable management of the skill-based pay program; and
- (4) adequate opportunities for training and rotation. (p. 97)

Based on the growing promise of these plans in manufacturing settings, a number of observers are calling for their possible application to professional and managerial work (Gupta et al., 1987; Lawler, 1990; Schuster & Zingheim, 1992). Schuster and Zingheim (1992), for example, suggest that the compensation systems in many professional settings are consistent with the concept of skill-and knowledge-based pay. They suggest that professionals require an approach to pay that provides salary recognition for not only learning and using necessary skill blocks but also for keeping skills current. Furthermore, they observe that job-based pay systems for most professionals fail to provide mechanisms for encouraging them to remain contemporary in their particular areas. In the professions of medicine, law, and higher

education, for example, promotions and salary increases recognize the acquisition of greater levels of professional skill and knowledge as opposed to the specific tasks professionals perform. Senior staff physicians in medicine may be more likely to mentor medical interns; however, staff physicians are not promoted simply to perform these tasks. Similarly, promotions from assistant to associate professor in higher education--or from associate to partner in the field of law--are not awarded based on additional jobs or tasks but on the display of an increasingly broad array of professional skills. These pay systems have in common an emphasis on clearly defining a "career path for the professional, based on skills" (Schuster & Zingheim, 1992, p. 104) and providing ways for professionals to expand their skills. The authors note that because of the nonroutine nature of professional jobs and the latitude given to professionals, skill-based pay might come in the form of lump-sum awards, as opposed to the incremental payments characteristic of manufacturing settings. Thus, pay systems geared toward recognizing greater levels of professional and career development appear highly appropriate in professional work settings.

Examples of Skill- and Knowledge-Based Pay in Education

Such systems have received little attention in education, however. As previously discussed, most alternative compensation systems that have been proposed or implemented base pay either on differentiated performance or, in the case of career ladders, on job responsibilities. Some career ladders, however, avoid

job differentiation and pay-for-performance and base pay instead on a teacher's expansion of professional skills and knowledge over the course of his or her career. In this context, a teacher career-development system (or, if you will, a career lattice) is an ideal type of career ladder. To illustrate some of the features of this approach, career ladder programs in three districts are briefly described below: Flowing Wells, Arizona; Charlotte-Mecklenburg, North Carolina; and Pocatello, Idaho. The Advanced Skills Teacher (AST) system in Australia is presented as an additional example.

Flowing Wells, Arizona. An example of a career development-oriented career ladder is the "career development plan" in the Flowing Wells school district in Southern Arizona. Flowing Wells was one of nine school districts in the state selected for career ladder funding during the 1986-1987 school year. The plan's projected budget for the 1994-95 career ladder was \$800,000 (J. R. Hendricks, personal communication, June 21, 1994). The plan is voluntary for teachers who have completed two years in the district and is designed to identify and promote effective teaching skills throughout a teacher's career.⁷ The developmental emphasis of the plan is reflected in the different expectations for teacher skill growth that are articulated for teachers in various "groups" or at different levels of the plan. Teachers are placed into one of four career development groups based on their years of teaching experience and their success in meeting the expectations of the previous level. As teachers progress from one group to another they are expected to increase

their teaching innovation and leadership, while the number of formal classroom observations they experience decreases.

According to a 1992 description of the plan, first-year teachers are classified into a "pre-entry" group that "leads them through the district staff development programs and provides peer coaching assistance for their classroom teaching" (Flowing Wells School District, 1992, p. 2). Second-year teachers are placed in the next group and receive further coaching and mentoring assistance. To advance to the next category, teachers must demonstrate growth in their teaching skills through successful classroom observations, positive assessments of work on special projects and "action plans," and evidence of participation in school and district leadership. Teachers in the top group continue to demonstrate their contributions to teaching and leadership at both school and district levels.

The program designers were careful to craft requirements that would not move teachers out of the classroom as they progressed in the system but would instead enhance their teaching skills and knowledge. For example, teachers develop action plans designed to further their professional growth and development in such areas as instructional delivery, curriculum, staff development, and student and parent counseling. Furthermore, teachers provide evidence that student growth has occurred as a consequence of the action plan. Experienced teachers additionally participate in "study teams" composed of five to nine members. These teams meet to discuss chosen topics related to "teacher and student growth" including teaching "creativity,

classroom management, and reading strategies" (Flowing Wells, 1992, p. 30). Finally, the requirement that teachers participate in school- and district-wide programs is not intended to remove teachers from the classroom but rather to strengthen their capabilities in contributing to the overall instructional program of the school and/or district. Teachers may demonstrate this leadership in a variety of ways: by working on a school discipline or evaluation plan, developing specific content curriculum, or adopting a new textbook series for the district.

The district's teacher career development plan thus delineates skill and knowledge expansion in the areas of teaching skills, teaching innovation, and leadership as primary career goals for teachers as well as bases for teacher pay. For beginning teachers, pay is based largely on number of years in the district, participation in staff development, and the results of classroom observations; for more advanced teacher groups, pay is based primarily on district longevity and assessments of such teaching innovations as action plans, study teams, and special projects. Furthermore, though not an intentional feature of the plan, teacher compensation is linked to the district's decision to grant tenure. As previously mentioned, beginning (pre-tenure) teachers are required to participate in staff development workshops for the purpose of strengthening their classroom expertise. At the conclusion of this period, if the teacher earns tenure, s/he is formally eligible to participate on the career ladder and also receives a significant pay increment. This pay increase, then, marks

the end of a significant period of growth for the teacher and, implicitly, the transition from apprentice to journeyman.

Charlotte-Mecklenburg, North Carolina. Another example of a system focused on professional and career development is the Charlotte-Mecklenburg Career Development Program (Hanes & Mitchell, 1985; Schlechty, 1989). The district adopted the program on its own initiative in 1984-85. According to one of the original architects of the program, the system was designed to be a "skill-based" as opposed to a "performance-based" compensation system (Schlechty, 1989). Furthermore, it was explicitly designed to develop new teachers as professionals; teachers selected for the program engaged in training and practice over a four- to six-year period (Hanes & Mitchell, 1985). An assessment-advisory team comprised of the building principal, an assistant principal, and a teacher mentor was assigned to each participating teacher. The team designed an action-growth plan for the teacher that focused on such skills as managing instructional time and student behavior, presenting and monitoring instruction, and communicating with students and adults (Hanes & Mitchell, 1985). In addition, teachers could select areas in which they desired further professional growth. Action-growth plans provided most of the documentation needed to allow teachers to advance to higher levels of the system.

Teachers progressed through four career development steps: provisional teacher, career nominee (Level I), career candidate (Level II), and career teacher (Level III). The distinguishing feature among these steps was the level of professional

skill demonstrated by the teacher; decision-making skills related to teaching strategies were required at intermediate levels, and the development of professional skills beyond the classroom (including the capacity to lead other adults) was desired at higher levels (Hanes & Mitchell, 1985; Schlechty, 1989). An additional feature of the plan was that promotion to the first career level coincided with receiving tenure. As Schlechty (1989) noted,

The granting of tenure would be associated with the school system's assurance that the teacher in question was outstanding--all career level teachers were to be outstanding. . . . The only teachers who would not be career level I . . . would be neophytes who were in the process of developing the skills to be outstanding.

Career Level I teachers originally received a \$2,000 annual salary increase (Hanes & Mitchell, 1985).

However, the plan experienced early difficulties when a quota (via a lottery system) was imposed on the number of experienced teachers who could be selected for higher levels of the system (Schlechty, 1989). This quota resulted from a district-level decision that the system could not accommodate the organization's 4,000 teachers during the first year of implementation; therefore, only 150 teachers were selected. Despite the difficulties created by this quota, Schlechty assessed the general approach taken by the program favorably. Comparing the program to other career ladders, such as the one in the State of Tennessee, Schlechty suggests that

the Charlotte program uniquely focused on assessing skills that teachers had an opportunity to develop over a period of time, concentrated on formative (diagnostic) systems of evaluation, and made available to teachers resources for upgrading their professional expertise. While other career ladders specified teachers' job activities bureaucratically or based advancement on measures of a teacher's performance, the Charlotte plan clarified expectations for (pre-tenure) teachers' professional growth and development while also affirming the responsibility of the school and district to support that development.

Since about 1989, the program shifted its emphasis, in part because of its participation as one of 16 pilots in a state-sponsored career ladder program (see Southern Regional Education Board, 1994). Principals, assistant principals, and supervisors were included in the program. Because the state and district used different standards and pay for the various levels of the system, confusion was created among program participants and the program lost some of its momentum. The state began to phase out the plan in the early 1990s, freezing the program bonuses at the 1993-94 level. Furthermore, it became increasingly difficult for the district to reconcile some of the features of the plan with new district and state initiatives, including the delegation of management decisions to site principals, a state emphasis on student performance-based accountability, and a locally-sponsored school-based bonus program for schools who meet their benchmark goals (e.g., parent participation, attendance). Despite these developments, a district official with

whom we spoke (Kay Mitchell, personal communication, July 10, 1994) noted that "instructional skills and teacher collegiality" had increased substantially in the district during the 10 years following program implementation. She cited numerous instances of innovative teaching, teacher leadership, and teacher mentoring and instructional resource support on the part of principals. Furthermore, the vast majority of the 150 original participants in the career ladder are now recognized as teacher leaders in their schools and the district while some have assumed administrative roles.

Pocatello, Idaho. The "career compensation plan" in Pocatello, Idaho, provides a third example of a career development plan. In 1984, the state of Idaho created a mechanism for local districts to develop career compensation programs.

Approximately 25 of the state's 113 school districts developed such programs with the expectation that they would be implemented the following year; however, the state legislature subsequently failed to appropriate implementation funding (Southern Regional Education Board, 1994). Although this development precluded the Pocatello district from implementing the plan, it is important to note that the proposal was developed by school administrators in conjunction with teacher association members.⁸

The purpose of the career compensation plan is to reward teachers with "outstanding pedagogy skills and leadership abilities" (Career Compensation Committee, 1987).

The proposal has two components: strategies for developing and enhancing professional skills and knowledge and a career ladder pay structure. The plan includes two approaches to professional development--training grants and extended

contracts--and a career ladder. Training grants of up to \$1,000 will be available to teachers for workshops, research, college courses, seminars, and expenses incurred to visit exemplary educational programs. These activities must be deemed applicable to the current assignment of the applicant. The amount of money received from the state for training grants will be allocated to specific schools and to the district's "Education Center" based upon the number of full-time equivalent certificated employees. A "professional leave committee" will be established to specify criteria for proposals and to approve grants.

Extended contracts are defined as teacher proposals to lengthen their work period beyond the regular contract for a period of up to three months. The proposals are expected to address enhancements in such areas as professional development and established curriculum. Applications will be approved by a "special project committee" under the purview of the district's director of curriculum. A state teacher association official estimated that a three-week (15-day) extended contract would cost approximately \$1,500 per teacher.⁹ Because extended contracts are viewed as a resource within the career compensation plan, a fixed percentage of the career compensation program is to be used exclusively for extended contracts.

The three-level teacher career ladder is voluntary. The plan specifies skill-based "growth plan criteria" in four areas: instructional process, management of student behavior, interpersonal relationships, and professional functions. For each career level, the number of more-specific skill criteria that must be demonstrated is

outlined. Teacher growth teams comprised of a principal and two teachers are organized for each participating teacher for the purpose of "assisting, directing and facilitating the candidate in reaching the objectives of the growth plan" (Pocatello, 1987, p. 18). Teacher skill growth is assessed by teacher-developed portfolios, conferences, and observations. An appeals process is also specified. Thus, as teachers demonstrate their growing skills and expertise--supported by training grants and extended contracts--they are able to advance their compensation through advancement on the career ladder.

Australia. Finally, Australia has recently experimented with a knowledge- and skill-based approach to pay. The "Advanced Skills Teacher" (AST) classification, established in 1990, was designed to keep outstanding teachers in the classroom by linking pay to career development within the teaching profession. The plan includes a series of three additional career steps for teachers (AST1, AST2, and AST3) which would provide them with a salary equivalent to that of a deputy principal (Ingvarson, 1992). As Ingvarson (1992) notes,

It is characteristic of most professions that career advancement is based on payment for the person, for their knowledge and skill. It is a characteristic of bureaucracies that the pay system is based on payment for the job or payment for occupying a position in an organisational hierarchy. Extra pay for teachers in [Australia] state schools beyond the basic scale has traditionally followed the bureaucratic model; extra pay

for extra duties and responsibilities, not extra pay for advanced knowledge and skill or expertise. (p. 8)

According to Ingvarson (1992), criteria for advancement to the first step (AST1) focus on basic, generic teaching skills (e.g., skills in evaluating student progress, establishing positive relationships with students, and knowledge of Government policies). Applicants submit a one-half page form documenting their capacity to meet these criteria; only a minority are interviewed personally. Panels composed of a principal, teacher, union representative and several administrators evaluate the applicants. The vast majority of applicants are awarded the classification; for example, in the state of Victoria about 65% of the 19,500 eligible teachers applied and 93% were successful. However, Ingvarson notes that many teachers failed to perceive a link between AST status and genuine professional development, viewing it instead as a general salary boost.

Two additional difficulties were noted. First, the idea of paying teachers more for meeting professional standards as opposed to performing additional tasks was difficult to justify to the public. Second, the financial crises in many state governments resulted in quotas on AST2 and AST3 positions, thus further undermining the goals of the program: "Instead of paying teachers for knowledge and skill, the AST 2 and 3 positions have reverted to the bureaucratic career ladder model of paying for extra tasks and responsibilities" (Ingvarson, 1992, p. 24). Odden and Odden (1994) report, however, that AST positions in the state of Victoria provide up to 40% of staff in those

schools that provide opportunities for teachers to expand their expertise, particularly in the curricular area.

To redress the difficulties with the AST system, the authors suggest the creation of a National Teaching Council staffed by union members and leaders of other teacher groups (e.g., the Australian Science Teacher Association) to develop professional standards and assessment procedures. Such a process would provide greater specificity about what constitutes advanced knowledge and skill in the profession of teaching.

Discussion. In sum, a distinction may be drawn between career ladders that are based on jobs and those based on careers and related directly to teacher skill and knowledge. Career ladders that emphasize career development are designed to support and recognize a teacher's acquisition of an increasingly broad array of professional skills and knowledge. Direct assessments of those skills often include, as in the aforementioned programs, teacher-developed portfolio assessments and supervisor/peer conferences and observations. Following Lawler's (1990) analysis, such tools assess a teacher's growing expertise in depth, vertical, and horizontal skills and knowledge. Conceptually, growth in depth skills (i.e., in pedagogy or subject matter expertise) need not be limited to portfolio assessments, however. The acquisition of additional teaching certifications may be an additional indicator. A national board, such as National Board for Professional Teaching Standards (or specialty boards at the state level), might serve as a bridge to greater skill expansion

beyond initial licensing; board certification could indicate advanced teacher expertise. Horizontal skill expansion (related to teaching knowledge and skill development in other content or functional areas) might be demonstrated by such endeavors as participation in a team teaching program, curriculum development or modification, instructional materials evaluation, student counseling, and school improvement. Vertical skill development (related to teacher involvement in school and district management) might be reflected in varied activities such as teacher and student schedules and budgeting, personnel selection, and school leadership (e.g., membership on a site-based decision-making committee). The work of teacher career development theorists (e.g., Huberman, 1990; Fuller, 1969) may provide greater guidance related to the types of skill expansion (e.g., vertical, horizontal, or depth) that could become the focus of assessment for teachers at different points in their career development.

Some possible difficulties with career development systems should be noted, however. As with the performance evaluations used in performance-based pay, skill assessments rely on the subjective judgment of another professional, whether a teacher or administrator.¹⁰ Furthermore, teacher associations may be reluctant to endorse plans that base pay on less than thoroughly objective criteria or that utilize peer review (particularly for pay decisions). Administrators may also view the involvement of teacher peers in pay decisions as a diminution of their managerial prerogative. However, as suggested elsewhere (Conley, 1994; Conley & Bacharach,

1990), subjectivity need not be detrimental. Indeed, it may signal a shift in control and judgment from the bureaucracy to the profession. Certainly, in medicine and law, the use of the judgment of expert peers is essential in defining these occupations as inherently professional. In addition, teachers and administrators may negotiate their relative influence on evaluation and pay decisions to the satisfaction of both parties.¹¹

A Model for a Career Development-Based Compensation Structure

Each of the plans profiled in the preceding section was based on the notion of skill and knowledge development that occurs over the career cycle of a teacher, and a pay system related to major demarcation points in such career development. While the plans differed in the degree to which they were integrated with extant education and experience salary schedules, they all included three or four career stages that would qualify a teacher for a significant pay increment.

A possible model for such an approach would consist of three components:

- o Starting pay
- o Career stages that would qualify a teacher for a major pay increase
- o A mechanism for increasing pay each year apart from knowledge and skill enhancement.

Starting pay would be determined by setting some external benchmark for recruiting individuals into teaching (Odden & Conley, 1992). A key decision point

would be whether beginning teachers are considered interns or residents, i.e., graduates of a teacher training program but not fully licensed, or a fully licensed teacher. Our model assumes the former. As such, the beginning pay could be lower than it is today, since the new recruit would not be considered a fully licensed professional, but an individual in the final stages of developing the clinical skills required for competent and effective teaching.

A career stage teacher compensation model then could include three to five stages, with advancement into each stage qualifying a teacher for a pay increment. Some of the career increments could be as follows:

- o Resident teacher, i.e., beginning teacher from a teacher training program
- o Qualifying for a full teaching license, based on demonstrating a beginning set of skill and knowledge (Interstate New Teacher Assessment and Support Consortia, 1992; Reynolds, 1992; Odden & Odden, 1995, Chapter 5).
- o Earning tenure through a solidification of curriculum and instructional skills
- o Additional advancement of skills and knowledge including participation in school wide curriculum, professional development, and school improvement activities
- o Advanced certification either from a state teaching standards board or the National Board for Professional Teaching Standards.

We assume that it would take an average teacher several years to develop the skills and competencies to move from one developmental stage to the next and that

not all teachers would necessarily move through all stages. Such a compensation structure also would require district-supported opportunities for professional development and equitable access to this training. As with all plans in the above section, advancement from one career stage to the next would be based on a rigorous assessment of specified skill and knowledge areas, with identified high standards that must be met in order to qualify.

An additional issue that would need to be determined is the salary increment associated with each career promotion. We would recommend that a 10 to 25% pay increment be associated with such promotions. If the above model replaced the current teacher salary schedule and a 20% pay advance was associated with each stage, a board certified teacher at the fifth career stage would earn 207% of a new teacher, or just above double the salary of a new teacher. A 25% increment would set the top salary at 244% of the pay of the resident teacher. Pay increments, of course, could be larger or smaller and differ by stage. A critical decision would be how much higher the salary at the top stage should be than the entry level or fully licensed (i.e., Stage 2) salary.

Such a system could constitute the entire salary schedule with some type of cost-of-living adjustment to the schedule each year to provide for more modest annual pay increments. The structure could also be considered in terms of columns along with a set of rows that provided an extra salary increment for years of experience in addition to annual cost-of-living adjustments. Such a salary also could be augmented

with some type of group or school-based performance award (Mohrman et al., 1994; Odden & Conley, 1992). The key aspect of the above structure, however, is that it can be tied to developmental stages of teachers' careers, specifically the advances in professional expertise that are associated with movement through those career developmental stages.

Strategic Pay in Education

Lawler (1990) maintains that in any organization, participants must be careful and strategic about the compensation changes that are implemented. The first step in designing a strategic compensation structure is to align the pay system with organizational goals by defining a set of core principles for the organization, as well as for its compensation system. Designing a compensation system is thus more than simply determining how to pay individuals. It is an activity that must center on (a) identifying the organization's primary goals, (b) selecting the organizational structure that best supports the strategies needed to accomplish the goals, and (c) using an approach to management that fits the organizational structure and implementation strategies chosen. In other words, designing a compensation structure is more than a pay issue; it involves an approach to management, raises issues of how managers view workers, and is inextricably linked to organizational culture and norms (see Kanter, 1987).

In this section, no specific prescription is offered; rather, an attempt is made to provide some strategic considerations that may guide the development of an alternative compensation approach. For example, the placement of the single-salary schedule in schools was originally aligned strategically with important organizational goals and values. It was designed to redress a situation in which men were paid more than women and secondary teachers more than elementary teachers because elementary teachers had less training. As a 1937 report of the National Education Association of the United States stated,

By payment of teachers according to preparation [i.e., formal educational qualifications] rather than position [that is, secondary as opposed to elementary grades] the single-salary schedule tends to place competent teachers in all grades, thereby [assuring all] . . . children the best possible contacts in every school room. (p. 1)

The system was also designed to encourage teachers to extend their formal preparation. It provided incentives for them to continue their education beyond the bachelor's degree by guaranteeing a return on their investment (by assuring regular pay increments).

In education, a strategic reevaluation of teacher pay should consider not only basic organizational goals but also school culture, norms, and micropolitical processes (Conley & Bacharach, 1990). Corbett, Firestone, and Rossman (1987) found school culture to be characterized by "sacred" or immutable norms. In schools where teacher

collegiality is a sacred norm, teachers share information about how they teach. Proponents of merit pay plans have seldom questioned how plans that foster competition among teachers fit with this norm of collegiality. In addition, it should be noted that the single-salary schedule leaves the current status of collegiality untouched.

Policy analysts, then, should strategically consider how an alternative system of compensation might affect sacred norms of collegiality. We have suggested, for example, that career-development systems might include provisions for peer assistance and peer review. While peer assistance may provide beneficial effects for collegiality, teachers may have reservations about being evaluated by their colleagues. Peer assistance may also be viewed by administrators as a reduction of their managerial prerogative. Such considerations need to be carefully weighed prior to implementing such a system.

Literature on the micropolitics of education (Blase, 1990) raises additional strategic questions concerning how alternative compensation systems may be viewed by different constituents. Seldom is it considered that teacher-compensation packages often restore pay and work conditions to the status of management prerogative. That is, pay and work conditions are issues that are hotly contested by unions as being within the scope of bargaining. Teacher unions may thus view themselves as being disadvantaged by such proposals.

The key issue is that an alternative salary system which considers cultural and political realities should be devised. For example, at what point does the redesign of the salary structure disrupt notions of collegiality and foster the micropolitics of the advantaged and disadvantaged? And how much redesign is enough to restore collegiality and not disenfranchise concerned constituent groups?

Drawing from a skill- and knowledge-based pay perspective, it appears that systems designed to promote skill and knowledge growth within the profession have the potential to (a) tie pay to variables that are under the control of the teacher and (b) encourage collegial teacher involvement. As in higher education and law, progression from one level to another and accompanying pay increases would not be based on distinctions among job duties but, rather, on growth within the profession. In schools, as opposed to higher education and law, however, peer review may be a double-edged sword. On one hand, peer review is not a sacred norm. On the other, we have suggested that such a system may encourage teachers to take greater responsibility for their collegial involvement--and their compensation.

This discussion has introduced some strategic notes and concerns aimed at raising the level of debate surrounding teacher compensation. An unresolved issue is that teachers can demonstrate that they are underpaid relative to those in other occupations with similar educational requirements at each point of their career paths (Odden & Conley, 1992). The present system has the distinct advantage of providing members of a low-paid professional occupation with regular and predictable salary

increases. However, the present system does not, in and of itself, encourage teachers' collegial efforts or create beneficial teacher-administrator relationships. If an alternative compensation plan that addresses the problem of educators' low compensation and also complements collective bargaining, teacher development, collegiality, and teacher-administrator relationships can be found, it would deserve serious consideration.

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1. The most visible example is the demise of the Florida merit pay program.
2. Unlike workers in such occupations as sales and piece rate systems, teachers are not able to generate additional resources for the organization through their performance. They must therefore compete for a fixed sum of money (Bacharach et al., 1984).
3. Although new-style merit pay plans, i.e., plans that link the pay of individual teachers to measures of student performance, also appear to avoid the problem of subjectivity, they present a number of additional problems. Therefore, they are rarely used in school districts. For a fuller discussion, see Murnane and Cohen (1986).
4. The four positions in the Temple City hierarchy were Associate Teacher, Staff Teacher, Senior Teacher, and Master Teacher.
5. For example, Carter et al. (1987) note that experts and novices differ in the amount and kind of information they remember about individual students. In recalling a class they had taught, experts focused on the parameters of the group (e.g., size, handicapped students), while novices focused on individual students. Experts and novices also differ in the type and amount of attention provided to student assessment data. Finally, experts are more sophisticated than novices in their interpretation of instructional and curricular issues ranging from student homework to test information.
6. Specifically, Lawler (1990) maintains that job-based systems discourage employees from expanding their depth or lateral skills and only encourage vertical movement and development.
7. Approximately 68 percent of the district's teachers are voluntary participants in the career ladder program (J. R. Hendricks, personal communication, June 21, 1994).
8. Personal communication, Rob Nicholson, Director of Research, Idaho Education Association, Boise, Idaho, August 11, 1994.
9. Personal communication, Rob Nicholson, Idaho Education Association, Boise, Idaho, August 11, 1994.

10. Bacharach and colleagues (1987) note that assessments of growth in knowledge and skill, while subjective, appear to offer several advantages over typical classroom performance evaluations. First, while most performance evaluations are designed to evaluate the effectiveness of a teacher's performance, skill, and knowledge, assessments focus on skills and knowledge that are likely to contribute to performance. That is, unlike performance evaluations, skill assessments do not require evaluators to make explicit judgments about the success or failure of a teacher's specific actions. Second, skill assessments allow evaluators and teachers to discuss the possible utility of different approaches without implying that a particular approach taken by a teacher was erroneous. Third, skill assessments require more active participation by the teacher involved than most performance evaluations and are therefore much better suited to formative evaluations (conducted for improvement purposes) than summative evaluations (conducted for the purpose of deciding promotions or pay). Finally, implicit in a career development system is the assumption that the development of professional skills and knowledge is a complex and lengthy process. Rather than using summative evaluations constantly (as in merit pay plans), such evaluations would be used only periodically. The use of a summative skill assessment at the tenure mark (as is the case in some districts in Arizona and the Charlotte-Mecklenburg system) illustrates this approach.

11. As Conley and Bacharach (1990) point out, a continuum exists with teachers or administrators having full authority for pay and evaluation decisions making up the ends of the continuum, and one party exercising influence over the final decision making up the middle. For example, in Charlotte-Mecklenburg, principals had final decision-maker power for evaluations, and teacher evaluators exercised input.