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Competency Pay for Professionals and Managers in Business: A Review and Implications for Teachers

CEO Publication
G 97-16 (328)

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November, 1997

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Abstract

This paper examines the relevance to teachers of business sector experiences with systems that identify and reward the skills, knowledge, and competencies of professionals and managers. We consider the appropriateness of competency pay, review models and methods used to determine competencies, show how competencies are linked to pay, and review literature on the use and effectiveness of competency pay. We present two cases from the business sector.

Research on teacher skill, knowledge, and competency is decades old. Work on competency-based education models dates to the 1960's, and this work led to job assessment models for certification in the 1970's and 1980's. The development of competency models often was followed by attempts to link pay systems – as well as other human resource systems – to the demonstration of critical competencies by teachers. However, attempts to encourage the development of teacher competencies through merit pay, career ladders, and other means have been limited and ineffective (Odden and Kelley, 1997). Many efforts failed to take into account the whole range of human resource functions (training, role descriptions, selection, performance appraisal, careers, promotion, and termination) in addition to pay. A notable exception was the work of the Joint Committee on Standards for Educational Evaluation (1988), which offered guidelines on how to develop standards for a wide range of human resource assessments in educational settings. During the 1990's, extensive effort has led to the development of the PRAXIS, INTASC, and National Board for Professional Teaching Standards models that are discussed by other papers in this issue. The new systems again raise the question of whether pay can be linked effectively to the demonstration of competencies included in the models.

In the private sector, interest in competencies has grown steadily during the last 30 years. Fundamental changes in the nature of work have been the spur for these developments. Jobs – this is, discrete, stable collections of well-defined tasks – are evolving into fluid roles and broad assignments. Constant change has led to the need for completely different technical and social skills as business has become more complex, more global, and more oriented toward change rather than stability. Companies are experimenting with ways of organizing human resource systems such as staffing, development, and compensation around competencies (Lawler, 1994; Lawler & Ledford, 1992). These systems differ greatly from traditional human resource systems, which are defined by the language of the well-defined job (Ash, Levine, & Sistrunk, 1983). Competency-based systems define work in the language of the person. Work is described by the knowledge, skills, abilities, and other characteristics of the person performing work (Spencer & Spencer, 1993).

Competency systems in education have developed independently of those in business. (However, competency-based education models from the late 1960's and early 1970's have been an important influence on the development of British national standards for such professions as accounting [Finegold, Lawler, & Ledford, in press].) The purpose of this paper is to review developments related to competencies and competency pay in the private sector, and to consider how these may be relevant to educational organizations. In particular, we will examine the appropriateness of competency pay, review models and methods used to determine competencies, show how competencies are linked to pay, and review literature on the use and effectiveness of competency pay.

A theme in this paper is that competency pay cannot be effective in isolation. Competency definitions must be deeply rooted in organizational needs, and must be reinforced by a wide variety of human resource systems in addition to pay. This is consistent with some prior thinking and experience in the field of education (for example, the Joint Committee on Standards for Educational Evaluation, 1988; Mohrman, Mohrman, & Odden, 1996).

The Competency Concept

The concept of competencies for managers and professionals, especially as it relates to pay decisions, is controversial (Lawler, 1996; Hofrichter & Spencer, 1996). While there is agreement about the desirability of competent managers and professionals, there is disagreement about the definition of competencies and the importance of being competent versus producing measurable results. Both of these issues will be reviewed followed by a discussion of when competencies seem appropriate to use for pay decisions.

Definition of Competencies

Here we define competencies as demonstrable characteristics of the person, including knowledge, skills, and behaviors, that enable performance (Ledford, 1995). This means that competencies are portable, since they are characteristic of individual employees rather than the job. They also must be verifiable, an important characteristic for purposes of pay system design. Finally, competencies enable superior performance but are not direct indicators of performance. This means that a competency pay system will not be a complete pay system; some means of paying for performance in addition to paying for competencies is necessary.

Definitions of competency are surprisingly controversial. While most would agree that competencies include knowledge, skills, and abilities, there is wide disagreement as to whether "other" characteristics of the person represent competencies. Even if "other" characteristics are included in the definition, there is little agreement as to whether "other" characteristics represent competencies. "Other" characteristics may include motives, general disposition, attitudes, values, and self image (Spencer & Spencer, 1993). It is plausible, for example, that teacher competency may be related to such individual traits as sociability, intelligence, and extroversion.

The "other" category is controversial as a basis for pay decisions in business organizations for two reasons (Lawler, 1996). First, the ability of organizations to measure these characteristics in a reliable and valid manner is suspect. One need only look at the measurement problems associated with some merit pay plans to see the lack of attention paid by some businesses to measurement issues in the reward context (Heneman, 1992). Second, the measurement of these characteristics may be at odds with court interpretations of employment laws such as the Civil Rights Act. American companies used psychological tests of individual traits, such as personality characteristics and intelligence, extensively for such purposes as personnel selection and appraisal until the 1970s. Court rulings that unvalidated psychological tests were illegal as a basis for discrimination led most firms to abandon their use. Historically, the courts have frowned especially on the assessment of traits for appraisal and reward purposes (Field & Holley, 1982). Although the courts currently may hold traits in a less negative light (Werner & Bolino, 1997), we cannot recommend that organizations adapt the "other" category for managers and professionals. Measurement issues still exist and poor psychometric properties for competency measures are likely to produce inaccurate pay decisions. An unvalidated system that discriminates against protected classes, even inadvertently, puts the organization in legal jeopardy. We are pessimistic about whether trait-based systems used in teacher pay decisions can avoid the measurement, validity, and discrimination problems that afflict trait-based pay systems generally.

From a theoretical perspective the omission of the “other” category is problematic, especially when motivation, a key determinant of performance, is omitted. Campbell et al. (1993) developed a comprehensive model of performance which suggests that performance is a function of declarative knowledge (facts, principals, goals, and self-knowledge), procedural knowledge and skills (cognitive, psychomotor, self-management, interpersonal), and motivation (choice, level, persistence). We will refer to these concepts later in this paper. Clearly, more research is needed to determine the extent to which these fundamental constructs can be successfully operationalized in the context of competency pay. For example, although the frame of reference applied by compensation decision makers includes motivation, this construct has not been measured directly as a part of formal compensation systems (Cohen & Heneman, 1994).

Importance of Competencies

Traditionally, managers and professionals have been paid based on their education (for example, maturity curves and most teacher pay scales) or their results (for example, Management by Objectives). Flaws with both approaches are suggestive of the need for competency pay. A maturity curve pays based on type of degree and years since degree. Most teacher pay systems are even simpler, offering increased salary for teachers who have earned advanced degrees (Odden & Kelley, 1997). While easy to administer, this approach only certifies mastery of declarative knowledge. Declarative knowledge may become obsolete over time and fails to capture procedural knowledge often required for success. Results oriented systems, like Management by Objectives, pay for accomplishments on countable measures of performance such as cost, revenue, and profit. Results-oriented measures are limited by the fact that they may be both deficient and contaminated (Heneman, 1986). They may be deficient because they may overlook ‘softer’ or less countable indicators of performance such as interpersonal skills. They may be contaminated because they may be outside the control of the individual. In schools, for example, the quality of the student body and the level of parental involvement influence pupil performance but are not under teachers’ control.

Competencies help fill the void when the focus is solely on education and/or results. In particular, competencies are very specific measures of declarative and procedural knowledge rather than general measures of declarative knowledge. Also, many competencies are under the control of the individual. Such competencies may include the personal and interpersonal skills needed to successfully achieve the desired results. Competencies are an important supplement to traditional reward systems for managers, which emphasize achievement only. Dysfunctional results can occur when the focus is solely on the achievement of results. For example, at Solomon Brothers, a results-based pay system with limitless bonuses led to unethical behavior (Norris, 1991), and at Sears, mechanics cut corners on repairs in order to meet the time quotas with their bonus plan (Lorant, 1992). A reward system focusing partly on competencies helps to balance the emphasis on performance with an emphasis on development and work processes.

Appropriateness of Competencies

Although we note the positive features of competencies for managerial and professional reward systems, they are certainly not appropriate in all situations. The degree of emphasis placed on competencies versus results depends upon several factors (Sibson & Company, 1997). Competencies seem to be most appropriate in dynamic business environments where work roles are very flexible, results are achieved through knowledge, and employees are empowered. An emphasis on results is more appropriate in static business environments where work roles are fixed, results are achieved through consistent execution of repetitive tasks, and employees have little discretion in performing their work (Lawler & Ledford, 1997). Clearly, teaching better fits the former than the latter set of conditions.

Competency Models

The first step, and most critical one, in paying for competencies is to develop a competency model. A competency model offers a conceptual basis for identifying competencies, defines critical competencies, and provides standards for competency assessment.

Types of Competencies

Competencies vary along a number of dimensions. Here we consider three dimensions. First, competencies can be general or specific to the organization (Ledford, 1995a). General competencies are common across businesses while specific competencies are specific to a particular business. Organizations may be reluctant to develop general competencies because they are easily transferable to their competitors. On the other hand, general competency systems may be easy to design and implement but may not adequately meet the specific needs of the organization. Second, competencies can be basic or advanced. Organizations usually select people to ensure that they have the basic knowledge, skills, and abilities to learn more advanced competencies. In the field of education, the PRAXIS and INTASC certification systems are oriented more toward assessing the competencies of prospective or new teachers, while the National Board for Professional Teaching Standards certification is oriented toward advanced teachers.

Third, advanced competencies can be either role based or organization based. Role based competencies are defined by the expectations surrounding the completion of assignments. Usually these competencies are determined by position in the organizational structure. Organization based competencies are the expectations of the wider organization held for people in all positions within the organizational structure. Usually they are based on the vision and mission of the organization. In schools, for example, role competencies may apply to teachers, while organizational competencies may apply to administrators as well as teachers.

Businesses that adopt competency systems usually do so to seek competitive advantage. An interesting question is whether competition might motivate the adoption of competency based systems in schools. The answer probably is "yes, to some extent." Clearly, there is competition between public and private schools and, to a lesser degree, between and within public school districts. Indeed, high profile innovations in several states have attempted to increase competition by rewarding schools that perform better than their peers. Nevertheless, competitiveness is a less dominant force in public school systems than in the business sector, because public school systems have discrete geographic territories, mostly captive student populations, and the virtual certainly that enough public funding will be provided to enable system to survive. The different level of competition in public schools has one positive effect, however. School systems tend to be less reticent than businesses about sharing human resource innovations because they have less fear of losing trade secrets that confer competitive advantage.

Organizations seeking a competitive advantage from competency systems invest most heavily in developing competencies that are difficult for their competitors to imitate (Barney, 1986). Competency models providing competency advantage also should emphasize specific and advanced competency types (Zingheim, Ledford, & Schuster, 1996). Examples of competencies that seem to be appropriate for professionals and managers include fostering organizational learning, innovation, and entrepreneurship (Lado & Wilson, 1994). Research (Cofsky, 1993), reviews of the literature (Spencer & Spencer, 1993), and other work (Tucker & Cofsky, 1994) indicate that interpersonal influence, political skills, motivation, customer-service orientation, and leveraging technical information are competencies associated with professional and managerial success. On the other hand, many pay-based competency models appear to be very general and basic. Consequently, they are easy to imitate and likely to produce a small return on investment because they do not provide a source of competitive advantage. Their advantage lies in the comfort of using competency systems that are similar to those of other organizations, and faster design and implementation than is the case in a customized system.

Sources of Competencies

The most popular sources of competencies are dictionaries with lists of predefined competencies available from consulting firms and the government. Examples include the McBer/Hay dictionary, Career Architect from Drake Beam and Morin, Profiler from Personnel Decisions International, Prospector from the University of Southern California, and O*Net and the National Skills Standard system from the U.S. Government. Most of the dictionaries have been created for purposes of employee development rather than for purposes of compensation. Adopting these systems "off the shelf" for pay purposes is likely to be problematic. On the other hand, they are ready-made, quick, and easy to use. Organizations that must quickly move up to industry standards to succeed may be forced to rely upon a dictionary approach. In the field of education, some have urged the use of the PRAXIS, INTASC, or National Board certifications as a basis for competency pay, albeit in some cases with local modifications based on local needs (e.g., Conley & Odden, 1995; Mohrman, Mohrman, & Odden, 1996; Odden & Kelley, 1997).

Another approach is to develop customized competencies for a particular organization. Under this approach, competencies are specifically defined for a particular organization. The advantage of this approach is that time and unique competencies can be used to guide the organization forward. The downside, of course, is the time and cost to develop competencies. In most organizations, this process takes a year or more (American Compensation Association, 1996). There are some indications that organizations tend to build competency pay systems around a handful of social competencies, such as communication skills and team orientation, that are fashionable but probably not the result of a customized analysis of unique organizational needs (Zingheim et al., 1996). There are some examples of school districts that have developed customized competencies systems, with mixed results (Conley & Odden, 1995).

Competency Assessment

Emerging from the practice and research literature is a prototype process to assess competencies. The first step is the creation of competency standards. Attention here needs to be focused on three sets of standards: national competencies, individual competencies, and core competencies (Finegold, Lawler, & Ledford, in press). National competencies are those general and basic competencies applicable across a multitude of organizations and available from government agencies, professional associations, and even consulting firms. More often than not, these standards are used for the purpose of selection rather than for the purpose of pay. Sometimes, however, organizations may be in labor markets where they cannot find people with these talents and they may need to develop pay systems to reward existing employees for mastery of general and basic skills.

Individual competencies are more specific and advanced competencies are required by the business to succeed. These competencies are often identified by subject matter experts internal to the organization. Subject matter experts create lists of behaviors which are believed to separate effective from ineffective performers in the organization. This approach originated with the critical incident technique (Flanagan, 1954) for purposes of performance appraisal (Latham & Wexley, 1994) and has now been refined into behavioral event interviewing (Spencer & Spencer, 1993).

A potential problem with individual competencies is that the sum of performance at the individual level may not sum to effective performance at the corporate level (Finegold, et al., in press). Hence, attention must also be given to core competencies in the creation of standards. Here we define core competencies as those aspects of the business believed to have the greatest strategic value to the business (Prahalad & Hamel, 1990; Marino, 1996). These core competencies are measured at the level of the organization rather than at the level of the individual. Often they are explicit or implicit in vision, mission, values, and aspiration statements. Increasingly, core competencies are viewed as human capital rather than financial capital (Capelli & Crockner-Hefter, 1996). Individual competencies must be validated against these core competencies of the business if competencies are going to help a business achieve competitive advantage.

Another important aspect of standards development is the use of employees in formulating standards for defining competency content and for measuring the use of competencies in the work place (Heneman & von Hippel, 1996). When employees are involved in the setting of standards, they are more likely to see the system as valid (Friedman & Cornelius, 1976) and be more satisfied (Silverman & Wexley, 1984) than when they are not involved. The lack of participation in standard development is a source of concern for competency pay systems that are based on standard dictionaries established at the national level. On the other hand, national standards may facilitate implementation if they have been well institutionalized. Also, from the employee perspective, competency standards are desirable because they apply to multiple employers in the labor market.

The second step of competency assessment is to attach rating scales to the performance standards. Fortunately, because competencies are most often measured as manifest behaviors, previous research in performance appraisal is very helpful for this step. Competencies can be assessed using Behaviorally Anchored Rating Scales (BARS) that use a Thurstone scaling methodology. Competencies also can be assessed by Behavioral Observation Scales (BOS) that use Likert Scales. Latham & Wexley (1994) indicate a preference for BOS based on psychometric, legal, and user reaction criteria. Unfortunately, competencies often seem to be measured using trait labels and graphic rating scales. This approach often leads to disastrous results with merit pay programs (Heneman, 1992) and a similar fate is likely to await competency pay programs that do not devote the time necessary to develop behavioral measures with sound psychometric properties.

The third step in the process of competence assessment is the selection and training of raters. Increasingly, organizations are using multirater or 360° review procedures (Heneman & von Hippel, 1996). Under this approach, ratings not only come from immediate supervisors, but from the job incumbent, peers, subordinates, and customers. While this approach appears to work well for developmental reasons, caution must be exercised when using this approach for reward decisions. Raters need to be carefully trained and conditions need to be set to minimize the chances of rating errors (von Hippel & Heneman, 1996). Unfortunately, some organizations with competency pay fail to take these precautions and the competency assessment becomes compromised by political issues (Longnecker, Sims, & Gioia, 1987).

The fourth step in the competency assessment process is validation. Validation studies help assure policy makers that the competency system rewards behaviors that indeed are associated with effective performance. In addition, validation studies offer legal protection in case the competency system discriminates against protected groups. In actual practice, however, empirical validation procedures are infrequently used by businesses that attempt to manage competencies (American Compensation Association, 1996). When validation is done, it is usually by large rather than smaller organizations, and a content validation strategy is usually used with competencies being identified by job incumbents. Moreover, the validation step may be omitted due to the changing nature of competencies. By the time a validation study is conducted, a new set of competencies may be needed by the organization for strategic advantage (Ledford, 1995a). Some competencies may be more stable than others and these are more likely candidates for validation work. Possible avenues for validation research include assessing reliability, correlating ratings with business results, surveying employee reactions to competencies, and undertaking construct validation procedures.

Although there has been some research validating competency models used for such purposes as selection and development (Spencer & Spencer, 1993), we found no empirical studies of the validity of competency models developed for pay purposes. A notable validity study for purposes other than pay is by Spreitzer, McCall, & Mahoney (1997). They assessed the construct validity of a model developed to assess the early identification of executive potential. To do so, they undertook an elaborate content, concurrent, and predictive validity study using ratings from over 800 executives in 21 countries. Although there were methodological problems such as common method bias for some of the data, the results were very promising. Another notable exception is the work of Borman & Brush (1993). They reviewed the literature on managerial performance and developed a taxonomy of managerial performance requirements based upon 26 empirical studies. Using subject matter experts, the dimensions of managerial performance identified in these studies were collapsed into 18 dimensions using inductive and empirical procedures.

It should be noted that so far, few businesses using skill-based pay have faced discrimination and other legal cases (Jenkins, Ledford, Gupta, & Doty, 1992). This probably is due, in part, to the high level of employee involvement that typically is used to develop such pay plans. Also, these plans tend to be "face valid," that is they seem sensible to employees who are on these plans. Certainly, school systems should bear these lessons in mind by involving teachers in the design process and by using competencies that appear obviously related to teacher effectiveness.

Although these steps probably offer some legal prophylaxis, it should be remembered that competencies with face validity are not necessarily valid in a legal or predictive sense. Teachers and administrators may firmly but wrongly believe that certain competencies are related to teaching performance. For example, authorities have tried for decades to specify the "one best way" to teach – that is, the way that intuitively seems "obviously" related to performance – even though effective teaching styles may be highly variable and context specific.

Formal validation is likely to be an important step in educational organizations. Teacher competencies probably do not change rapidly, facilitating such studies. Moreover, public organizations tend to face considerable risk of litigation, and the protection afforded by validity studies can be valuable. However, educational organizations cannot escape the possibility of legal liability if their competency systems discriminate against protected groups and appropriate evidence of validity is unavailable. It should be noted that basing competency pay on the available national certification standards (PRAXIS, INTASC, and National Board certifications) is no guarantee of legal protection. Other papers in this volume explore the state of validity research on these certification processes, but we may summarize the findings by saying that validity research on all of these processes is still at a very early stage.

Linking Competency Assessment to Pay

Three major issues arise when linking competency assessment to pay: The pay form must be determined, a pay structure must be constructed, and market value must be assessed.

The first choice is whether to add competency pay to the base wage (salary) or to pay it in the form of a one-time bonus. The bonus option is rarely considered in the education literature that discusses pay for skills or competencies. (One plan that does reward competencies with bonuses is the Douglas County, Colorado skill pay system.) Base pay systems are typical, and employees usually prefer the permanent increase in pay they provide. However, bonuses are attractive in several situations. First, if employee pay is already high relative to the market or relative to the resources available, bonuses may be the only way to provide a meaningful incentive for new behaviors. Second, bonuses are desirable when the competencies that employees must absorb are changing rapidly, because the organization need not offer a permanent wage increase for skills with temporary value. Bonuses have other advantages as well. Bonus plans are simple to administer. Also, one-time bonuses can be larger—thus offering a larger immediate incentive—than base pay increases, which usually must be conservative because of the annuity effect of increases in base pay.

Second, a pay structure is necessary, especially in base pay systems. Competency pay can be blended into existing pay structures or a new pay structure can be created to accommodate competency pay. The pay structure sets limits on the amount of pay. If combined with merit pay, competencies can be used as the performance criteria to evaluate performance for purposes of a pay increase or lump-sum bonus.

Many pay structures have pay ranges for each pay grade. Because the distance between the minimum pay level and maximum pay level within each grade is small, usually around 40%, it may be difficult to use competencies to move employees pay within the pay grade on the basis of competency mastery. Consequently, broadbanding is often used with competency pay. Under this approach, the number of pay grades is reduced and the distance between the minimum and maximum is increased. Movement within the broad band is then based on mastery of competency sets rather than on performance. For example, the team leader, lead person, supervisor pay grades may be collapsed into a broad band known as "management." Director, manager, and vice president pay grades may be collapsed into a broad band known as "executive." Progression within each band may be based on mastering competency sets such as technical expertise, coaching, and strategy. Competency sets may be basic for the management grade and advanced for the executive grade.

Broadbanding represents a significant departure from traditional models for teacher pay. Pay is no longer directly bound by a matrix of degrees and years of experience. Under traditional models of teacher pay, degree and years experience are 'signals' of likely competence on the job. Broadbanding allows for competencies to be measured directly and does not equate professional credentials with competencies.

It is difficult to price the market values of competencies. Market surveys report the value of jobs rather than the value of competencies that individuals have mastered. Nevertheless, it is critical to approximate market value to establish control points in the structure. In the absence of market control, competency pay can lead to excessive costs. To establish market value, usually some sort of benchmark procedure is used. For example, for the previous example of the "executive" pay band, we might establish the maximum for the band by looking at the maximum pay rates for executive jobs in our surveys. The minimum may be established by looking at the minimum pay rates for manager jobs in our surveys. A more precise procedure to establish market value is to survey the amount paid in the market for competencies rather than job. Unfortunately, market surveys of this nature are only in their infancy and more crude job based surveys must be used.

One method that could be developed to translate job-based market survey data into person-based market values is to use a "synthetic" market value approach. This procedure first requires the identification of competencies for a particular position. For example, 30 percent of the team leader position may require managerial competencies and 70 percent may require technical competencies. Next, job-based survey data would be examined to find the market values of jobs with similar managerial competencies and technical competencies. Lastly, the market value of the team leader would be the sum of the market value for jobs with similar managerial competencies multiplied by 30 percent plus the market value for jobs with similar technical competencies multiplied by 70 percent.

Empirical Research

Given how recent competency pay plans have been established, there is very little research available to guide competency pay efforts. As will be shown, most of the research is descriptive in nature. It is organized around two themes: practices and effectiveness.

Practices

The American Compensation Association (1996) sponsored a survey of competency management practices, covering all human resource practices including pay. The survey was sent to 19,016 North American companies. Of these, 1,257 respondents indicated that they had or were developing competency systems, and 217 companies agreed to complete a detailed survey. Only 54 organizations reported using competency pay practices. Most respondents were in large organizations with about an even mix of manufacturing and service organizations.

Competencies assessed most frequently included performance behaviors and personal attributes. Also frequently assessed, but less frequently than performance behaviors and personal attributes, were technical skills and knowledge. Although personal attributes were used, only one company had faced a legal challenge. The number of competencies assessed ranged from less than five to more than 30. The modal category was the assessment at 5 to 9 competencies. 360° feedback is often used, but many require the manager to interpret and feedback the data.

In terms of specific pay practices, about 30 percent of organizations use broad bands for managerial and professional positions. About 70 percent of managers and professionals are covered by competency pay in the average company with competency pay. Competencies are usually used to assess position within the pay grade. The form of pay is usually an adjustment to base pay rather than a bonus. Competency pay usually follows from prior experience in the organization with the use of competencies for other purposes, such as development or selection.

The data from this study make it very clear that competency pay is being used very cautiously in business. While it is common to use competency pay for managers and professionals in those firms with competency pay, the absolute number of companies with competency pay is very small. When it is used, it is usually developed after other competency-based human resource applications such as performance management, staffing, and training have been developed. 'Soft' attributes are measured more often than technical knowledge and skill.

Effectiveness

The same survey from the American Compensation Association (1996) reported on the perceived effectiveness of competency models. It did not report on the perceived effectiveness of competency pay, probably because of the small number of organizations with competency pay responding to the survey. A majority of respondents with competency models in their organization for more than a year perceived the result as favorable in terms of goal accomplishment. Many were uncertain of the result and very few respondents indicated that the competency model had no effect or negative results. Although these data are suggestive, they are limited by their self-report nature.

Considerable prior work on skill-based pay is relevant to the issue of the effectiveness of competency pay. These plans typically reward the demonstration of technical competencies for employees at the bottom of the organizational hierarchy, such as factory workers. Large-scale survey studies (Jenkins et al.1992) suggest that these plans have a high success rate. Several available case studies (Ledford & Bergel, 1991; Ledford, Tyler, & Dixey, 1991) are also encouraging.

An unpublished study by Murray and Gerhart (1997) is more experimental in nature. They examined the effectiveness of a skill based pay plan in manufacturing. They compared the output of two comparable auto parts manufacturers, one with skill based pay and the other without. Outcomes were measured over 37 months. Productivity and quality were higher at both while labor costs were lower at the plant with skill based pay.

Another interesting unpublished study is by Mericle and Kim (1996). They surveyed the effectiveness of skill based pay for 227 employees in a unionized manufacturing firm. Effectiveness was measured as actual skill acquisition, based on company records. The results indicated that about 90 percent of the respondents had mastered one or more of the six skill sets since plan inception in 1991. Greater skill acquisition took place when employees were more educated, had more knowledge of how the plan worked, and had higher pay satisfaction. Skill acquisition also increased when employees were younger, had a lower level of commitment to the union, and had less experience with workplace innovations. Although the type of competency pay and type of occupation again bound these results, the results again show that competency pay can be related to hard outcomes. In addition, they raise the important possibility that competency pay is not only moderated by pay plan characteristics, but by individual difference variables as well.

Skill-based pay plans typically apply to factory workers and others at lower levels of the hierarchy, whereas the label competency pay is more often applied to systems for professionals and managers. Although the results of skill-based pay research are encouraging, we need data directly relevant to competency pay systems for managers and professionals such as teachers. Skill based pay tends to measure more "hard" outcomes such as procedural knowledge, while competency pay typically measures softer outcomes such as interpersonal skills. Hence, the generalizability of results from skill-based pay to competency pay is open to question. In the teaching profession, the critical issue is to identify both "hard" or "soft" competencies that are related to student learning.

Case Studies

Given the limited empirical evidence on competency pay and the limited use of competency pay for managers and professionals, we thought that it might be interesting to report on two case studies. The authors have been personally involved with these systems. The two companies are the Limited, Inc. and a major food processor.

The Limited, Inc.

A full version of the Limited case study is presented in Heneman & Thomas (1997). A brief synopsis follows. The Limited is a $9 billion dollar retailer of specialty brands. There are 18 business units including well-known brands such as Victoria's Secret, Henri Bendel, Limited, and Abercrombie and Fitch. There are over 6,000 stores and over 33,000 employees. Over the past 9 years, the Limited has grown rapidly from a $400 million dollar business to a $9 billion dollar business. Because of this growth, the focus has been in the achievement of results such as sales, market share, and growth. Two years ago, senior management became aware that in order to manage this large enterprise, emphasis would also need to be placed upon developing leadership competencies to supplement the entrepreneurial focus on results.

In order to focus management attention on leadership competencies, a competency model was established for the top 500 managers in the company. Developing the Limited's competency model took two years, a long time frame permitted ample manager participation in the development of competency standards. The company's model consisted of eight company "sets," and each set was further defined by one to five subdimensions. Each subdimension was anchored by critical incidents of performance ranging from highly effective to ineffective. Supervisors rated subordinates on the competencies included in the model.

An example of a competency set in the model was “thinking skills.” Two subdimensions captured this competency: (1) analysis and decision making and (2) visionary thinking. A critical incident for analysis and decision making was “Makes timely decisions.” This incident was anchored with a rating scale ranging from “Towering strength = Consistently makes timely decisions that balance systematic analysis with decisiveness” to “Ineffective/Needs Improvement = Makes snap judgments and decisions without necessary information or delays too long on decisions.” Although this particular competence is somewhat general, more specific competencies such as “fashion sense” were included as well. All competencies were defined by specific, observable behaviors to insure appropriate rating.

The competency model was first developed for staffing, performance management, and development purposes. The performance management system was pilot tested in several business units before implementation. Survey data were gathered on user reactions to the new system and they were used to modify the system before implementation across all the business units. Currently, the competency is being used for all business units. Work is now underway to use it for purposes of compensation decision making. Merit pay increases and stock options will now be based upon competency mastery as well as the achievement of bottom line results. Currently the system is being extended to professional employees as well.

Experiences at the Limited reinforce some of the points in the prior literature. On the positive side competencies helped managers to learn how to lead the organization toward the accomplishment of results. It is very difficult to achieve competitive advantage by solely focusing on the achievement of goals. The path to the goal can be established with the development of competency standards. In addition, participation in the development of standards was very helpful in gaining user acceptance of the new systems. This acceptance may not have been achieved had an “off-the-shelf” system been installed. On the negative side, and again consistent with the literature, the Limited has devoted little attention to the systematic evaluation of the new system either in terms of validity or effectiveness. While no news may be good news, a more proactive approach to evaluation might help them to further develop the system before cascading it down to other levels in the organization.

Issues not covered in the literature have arisen at the Limited as well. Questions have arisen as to whether the same competency standards can be applied across different types of managerial jobs and different business units. The intent of the system was to have a common set of standards to promote labor mobility between managerial positions and to have a common yardstick to make administrative decisions. This approach may conflict with the need to develop specific standards which are unique to the various assignments and divisions. This tradeoff represents an important strategic consideration that large organizations must consider. In some settings, a compromise may be reached where there are a core set of competencies for all positions and divisions, and a specific set of competencies for each position and division.

Another important point brought out by the Limited case study is the role that competencies can play in bringing about organizational change. Competencies could have been treated at the Limited as a job analysis project sponsored by the human resources department. The impact of this approach on bringing about change in the organization would more than likely be negligible. The process used to develop a competency system at the Limited helped to transform the organization. Top management first applied this process to themselves which clearly established the importance of competencies. Top management helped design the system, which gave ownership of the system to management rather than to the human resource department. The system was tied directly to the business plan to emphasize the business need for competencies. The system is being linked to merit pay and to stock options to show the rewards associated with participation in the process. Mangers were provided extensive training on how to use the system so that it was properly implemented.

Food Processor

The second author has recently completed the collection of extensive data about a mature competency pay system covering managers at a well-known food processing company (which we will call "FoodCo"). The system, now five years old, covers over 1000 managers at over 40 plants and distribution/sales centers throughout the U.S. The system covers all managers from first line supervisor up to the level of the plant management team. The system was installed at a time of great change in the company. Senior management was redefining the role of the manager and eliminating levels of management, which reduced opportunities for hierarchical advancement. Senior management approved the system as a way to facilitate and support these changes. It collapsed a number of prior pay grades into one broad pay band for managers on the system. There were three titles within this band: Resource, Senior Resource, and Site Resource. Managers were rewarded not for hierarchical advancement but for their progress in developing four competencies. These were leveraging technical and business systems, leading for results, building workforce effectiveness, and understanding and meeting customer needs. The emphases on developing subordinates and meeting customer needs were relatively novel in the company.

The research project involved an assessment of the plan based on surveys of almost 700 employees on the system, one survey per site completed by a senior manager, archival data (promotions and turnover), and performance rankings of 21 regions (each including one or more plants). The results suggested that there was a wide range of attitudes about the system and considerable variation in the level of implementation effectiveness across locations. Overall, employee attitudes on average were mildly positive about the system.

The most interesting results concerned the relationship between hard rankings of performance and aggregated survey responses. The company uses a composite ranking that combines hard indicators of productivity, cost, quality, and employee outcomes. For both 1996 and year-to-date 1997 rankings, the correlations with design and implementation factors measured on the surveys were strong, in a number of cases ranging from .30 to .47. These correlations are very strong when viewed in the context of compensation research, where typically correlations range between .00 and .20 when studies relate pay practices to hard indicators of productivity, cost, quality, and employee outcomes. For example, the correlation between senior manager ratings of the degree of ongoing communication about the competency pay system and 1997 performance ranking was .47. Other key success factors included amount of money available under the system (.41), and degree to which the system was tailored to meet local needs (.35). The correlations between performance rankings and aggregated employee attitudes were similarly high. The strongest predictors of 1997 performance ranking were alignment of the competency pay system with training and development practices (.42), fairness of the system (.39), communication about the system (.39), and fairness of competency appraisals (.37). Preliminary analyses indicated that the high correlations are not the result of statistical artifacts, such as aggregation effects, and the results cannot be explained away by any higher level of pay or promotion in the more "successful" regions.

The results of this study are extremely encouraging for several reasons. The study examines a mature system for managers and professionals. It provides some of the first good research evidence that a competency pay system is related to hard performance outcomes at the organization level. Finally, the study points to a number of design and implementation factors that have implications for action as the company attempts to improve the system in the future.

Conclusions and Implications for Teachers

Competency models are being used extensively in business. They are being used to develop business strategies based on people rather than capital. Also, they are being used to develop "person-based" rather than "job-based" human resource systems. Ultimately, they represent an attempt to link organizational and individual goals. Unlike previous attempts to link organizational and individual goals which emphasized the accomplishment of results, competency models place the focus on knowledge and skills which are under the control of employees and measured by observable behaviors.

Competency models have primarily been developed for the purpose of employee development rather than for the purpose of pay, and have primarily been developed for nonexempt employees rather than managers and professionals. Increasingly, however, employers are beginning to experiment with competency pay for professionals and managers.

Conclusions reached in the business literature on competency pay for professionals and managers just reviewed clearly support conclusions in the education literature on competency pay for teachers (Odden & Kelley, 1997; Kelley, 1997; Conley & Odden, 1995; Mohrman, Mohrman, & Odden, 1996). In particular, several messages stand out. First, unlike merit pay, competency pay is not a "one size fits all" type of pay plan. It must be carefully matched to the goals, culture, and political realities of the organization. Competency pay should be viewed as one pay delivery along with others such as school bonuses and individual incentives. Second, there is often a tradeoff between developing competencies at the local versus national level. At the local level, acceptance can be gained by teacher participation in the development process. At the national level, while the level of participation may be reduced, greater care can be taken to ensure reliable and valid measures are created. To resolve this dilemma, a strategy used by business is to use "mass-customization" (LeBlanc, 1997) where a core set of competencies are established at a central level and supplemental competencies are established at the local level. From our perspective, both participation and measurement are vital components. Third, care must be taken to avoid the use of competencies which have little meaning. Competencies may have little meaning because they fail to be tied to the core capabilities of the organization or because they fail to measure competencies in behavioral and observable terms. Competency pay systems with meaningless competencies are poorly developed merit pay plans in disguise.

Our review raises two issues that need to be kept in mind by educational institutions considering competency pay: the importance of process and the relationship of competencies to other components of organizational effectiveness. In terms of process, it is very clear that meaningful competencies by themselves add little value to improving organizational effectiveness. Experiences by business with performance appraisal and by educational organizations with merit pay and differentiated staffing points to the importance of how competencies are developed and used. Competencies must be fully integrated into all phases of human resources (staffing, development, compensation) rather than be a stand alone product for purposes of pay decisions. Merit pay was often developed as an isolated human resource practice and in many cases it failed because it was not created in the context of human resource goals for the organization. The Joint Committee's work (1988) again illustrates how competencies might be applied consistently across a variety of human resource systems.

Another important process issue has to do with the commitment of resources to a competency pay system. The design, administration, implementation, and evaluation of these plans is costly. Training, for example, plays a critical and expensive role here. Care must be taken to ensure that assessors are using the competencies in a reliable manner. The form itself can only contribute so much toward this end. Judgment must be applied and safeguards must be established, including training, to ensure accurate and reliable assessments. Obviously this is no small hurdle in a politically-charged educational setting.

A second important lesson from business is the fact that competency models are more than simply human resource systems. They also impact other important systems in the organization which are related to organizational effectiveness. An example of another system is the strategy of the organization. Competencies must be consistent with the core competencies and capabilities of the entire organization. If these competencies are to be useful, they must be unique to the culture of the organization such that they add value that cannot be found elsewhere. As another example, competencies of the organization need to be consistent with the structure of the organization. Work in the organization must be structured in ways that facilitates the development of core competencies and capabilities. Large bureaucracies have for years, for example, hindered movement toward site-based reform. Finally, these systems of the organization must be in alignment with another. In order for employees and organizational goals to link together, strategy, structure, process, people, and rewards must be aligned with one another. Just as the pay system cannot operate independent of other human resource systems, so too must competency models be in alignment with other systems of the organization.

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