



## ***Practitioner's Corner***

### **Quality Management for Education Reform**

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Principles of quality management have been successful in the business realm, producing quality products and services through a structured and comprehensive delivery system. Standardization reduces the variance of each task and improves overall effectiveness. Performance and attention to the bottom line are the measurement of success. Principles of quality management have been applied to student learning in an effort to produce widespread educational reform, but teachers have reported negative results when it comes to the effect of standardization on their job perceptions. In an effort to quantify how standardization of the American educational system has affected classroom teachers' perceptions of their jobs, a study was done based on data from a sample of 184 elementary teachers (K-6) from 16 different elementary schools in a medium-sized suburban district. Contrary to the rhetoric, some very surprising results were discovered. Teachers who implemented standards-based education to a higher degree reported decreased levels of stress, increased levels of job variety and career commitment, and no effect on job autonomy.

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Principles of quality management leading to standardization have been applied to education and have become central to international educational reform efforts in Canada, Australia, Japan, the United Kingdom, and the United States. In the United States, the implementation of the federal *No Child Left Behind (NCLB) Act of 2001* has mandated that states establish tough new academic standards and hold schools, and ultimately teachers, accountable for increasing the academic achievement of all students (Hargrove, Walker, Huber, Corrigan, & Moore, 2004). Changes in the nature of teaching jobs brought about by environmental and political pressure has forced educators to measure success by the bottom line—increases in test scores. However, attention to bottom-line criteria only may not completely tell the story of the success or failure of the intended change. Gilmore, Shea, and Useem (1997) warned that unanticipated side effects can undermine or even defeat an intended change.

Further, managerial actions required to implement a desired change may evoke unintended responses such as resistance by teachers to the increased pressure to implement standards-based education as a vehicle for increasing students' test scores. While a reasonable

amount of pressure is healthy, too much pressure can lead to teachers disliking their jobs and possibly exiting the teaching field (Hargrove, Walker, Huber, Corrigan, & Moore, 2004). Bob Chase (2001), former President of the National Education Association, argued that standards-based accountability required by NCLB is having a negative impact on the teacher profession and teacher morale, squeezing out the creativity and discretion of skilled teachers. In a speech to the American Association of Colleges for Teacher Education, Chase complained that tests drive everything including curriculum, promotion, and graduation decisions and are driving some of our most creative teachers to look for other careers. He called teaching a profession in crisis.

In January 2003, The National Commission of Teaching and America's Future (NCTAF) presented evidence that the current teacher shortages are partially related to the problem of nationwide teacher retention (Hunt & Carroll, 2003). The NCTAF study estimated that almost one third of America's teachers leave the field during their first 3 years of teaching, and almost half leave after 5 years. With this level of attrition, America's schools may face serious problems finding highly qualified teachers for every classroom (Hargrove et al., 2004), as required by NCLB and hoped for by every parent of a student in the public school system.

Tye and O'Brien (2002) reported a growing discontent and increasing attrition among experienced California teachers due to the "test mania" (p. 24) that pervades the state. In a study of alumni of the teacher preparation department at Chapman University, Tye and O'Brien received responses from 114 teachers (12.6% of the sample) who had graduated between 6 and 10 years before. Teachers who already left teaching had described the pressures associated with accountability (high-stakes testing, test preparation, and standards) as the main reason they found the work environment to be negative. Tye and O'Brien also measured the discontent among those experienced teachers who were still teaching at the time of the survey. Teachers complained that state standards and high-stake tests dictated the curriculum regardless of the professional judgment of the teacher.

Flaws in the implementation of standards-based education may force educators to reconsider the entire system without recognizing its inherent profitability. Standards-based education is a system of performance-based accountability focusing educational policy, administration, and practice directly on teaching and learning. The alignment of curriculum is possible by defining goals, allocating authority, managing incentives, building capacity, measuring progress, reporting results, and enforcing consequences related to student performance (Adams & Kirst, 1999). The success of standards-based reform implementation is important because of the fairness of the system for students. Reeves (2002) explained that students can be evaluated two ways: by comparing a student's performance to an objective standard or to the performance to other students. The traditional bell curve, used for years in the classroom, has compared a student's performance to other students ensuring that the largest percentage receive C's while a lower percentage of students end up on the high or low end of the grade continuum. This works fine in athletic competitions such as the Olympics where an athlete's success is compared to others to see who is the fastest runner or the highest jumper. However, in other fields, such as licensing drivers, brain surgeons, and jet pilots, merely beating the competitors, or grading on a bell curve, does not ensure the safety of the patients or passengers. Students who demonstrate proficiency meeting an objective set of standards is as important in the classroom as it is in the operating room to ensure that students acquire the required body of knowledge.

As leaders make the case for the fairness of standards-based reform, they must also pay close attention to its implementation because teacher support appears to be waning, according to

The Business Roundtable (2003). In two separate surveys, 73% of teachers supported standards, accountability, and testing in 1999, compared to 55% of teachers supporting the same in 2001. The decline in teacher support for standards-based reform may be explained by teachers' negative job perceptions and feelings of increased job stress, reduced job variety, and reduced career commitment.

The effect of standards-based education on job characteristics such as job stress, job variety, job autonomy, and career commitment is important for three reasons. First, management research is interested in redesigning jobs to reduce the problems of alienation at work and to increase productivity. Second, the psychological study of work motivation can be highly related to the characteristics of the work itself. Third, the study of leadership has sometimes ignored the influence of task characteristics on the relationship between leader behavior and subordinate satisfaction and performance (Sims, Szilagyi, & Keller, 1976).

In an effort to quantify how principles of quality management through standardization of the American educational system have affected classroom teachers' perceptions of their jobs, a study was done based on data from a sample of 184 elementary teachers (K-6) from 16 different elementary schools in a medium-sized suburban district. Teachers self-reported how well they had implemented standards-based education by responding to a 14-point checklist created by Reeves (2002). Stress was measured by the Job-Related Tension Index (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Amazingly, teachers self-reported a reduction in stress with higher implementation of standards. Stress appeared to be created by the change process itself, and the more comfortable teachers were with standards, the less job stress they reported.

One explanation for the perceptions of lowered job stress with higher standards-based implementation is that there is "good" stress as well as "bad" stress. Lazarus and Folkman (1984) stated that people assess stressful situations as either potentially threatening or as potentially promoting mastery, personal growth, or future gains. The stress related to standards-based education may be viewed by teachers as good stress that promotes mastery and personal growth in their teaching craft. The good stress also adds to their perceptions of high job variety and high career commitment as teachers invest time and energy to attend trainings and collaborative meetings to implement standards. The stress associated with standards-based implementation may be viewed as obstacles to overcome rather than debilitating stress that reduces career commitment.

In the same way, challenge stressors and hindrance stressors (Cavanaugh, Boswell, Roehly, & Boudreau, 2000) may also explain teachers' perceptions of job stress related to standards-based implementation. Challenge stressors include demands such as high workload, time pressure, job scope, and high responsibility. These stressful demands are many times viewed as challenges to be overcome in order to learn and achieve. Hindrance stressors include stressful demands that thwart personal growth and goal attainment. Teachers may consider the stress associated with standards as a demand to be met to enhance their personal growth as a professional. Teachers who have implemented standards-based education at a high level have mastered the demands of the challenge stressors. Since standards-based education is in its 7th or 8th year of implementation, teachers with a high level of standards-based education implementation found a reduction in stress and an increase in career commitment as they reach personal growth and goal attainment.

Another job characteristic that seemed to create negative job perceptions for teachers during the implementation of standards-based education was reduced job variety. Job variety is the degree to which employees perform a wide range of operations and use a variety of

equipment and procedures (Hackman & Lawler, 1971) or the extent to which a job involves performing a number of different tasks and frequently encountering exceptional circumstances requiring flexibility (Dean & Snell, 1991). Standards-based education appears to reduce job variety because it requires that teachers use a uniform set of standards mandated through the federal, state, and district levels.

In this study, however, teachers who perceived a greater extent of standards-based implementation in the classroom also reported a greater extent of job variety. The increased job variety may have been reported because of the changing demands placed on teachers to learn new skills and change the way they have done things in the past. As teachers got to the place of high standards implementation, their report of job variety also significantly increased.

Reduced job autonomy was another job characteristic that may have been affected when quality principles were applied to the teaching profession. Hackman and Lawler (1971) defined autonomy as the extent to which employees have input into their schedule, choice of equipment, and procedures. In the teaching field, job autonomy is valued for four reasons: (a) teachers believe that they are the ultimate authority in the teaching–learning process because of their expertise in specialized fields, (b) teachers believe they have the right to organize the learning process as they see fit, (c) teachers have few school rules that affect teaching and learning within the classroom, and (d) teachers feel that they have the legitimate right to say no to some district policies as a matter of professionalism in a bureaucratic organization (Hanson, 1996).

Autonomy in the classroom has always been constrained by limits imposed by the state legislature (e.g., choice of books from an approved list), the court system (e.g., no prayer in the schools), the school board (e.g., student instruction must be individualized), or the principal (e.g., teachers and students must be in the classroom by 8:00 AM). However, the network of constraints imposed by standards-based education has begun to permeate the teaching–learning process, an area traditionally reserved for teachers.

In this study, teachers' perceptions of job autonomy were not affected by the implementation of quality principles in the form of standards-based education. The lack of effect may be explained by the professional and leadership context of teaching that includes a strong sense of teacher job autonomy. Further, teachers currently “enjoy the protections of a tenure system that provide consequential job security and a buffer that allows them actively or passively to resist many requests or even demands from supervisors” (Bess & Goldman, 2001, p. 421). Even though standardization would appear to give teachers less freedom to make autonomous choices in their job, teachers may already have such a strong sense of autonomy that the extent of standards implementation does not affect teachers' perceptions of job autonomy.

Career commitment was one of the greatest concerns for leaders decrying the effect of standards-based implementation. The term *occupational commitment* has replaced the term *career commitment* in recent studies because of a potential confusion with the definition of career as a series of jobs, vocational choices, and other work-related activities over the individual's lifetime. Occupational commitment is defined as the psychological link between a person and his or her occupation that is based on an affective reaction to that occupation (Lee, Carswell, & Allen, 2000). Lee et al. defined an occupation as an “identifiable and specific line of work that an individual engages in to earn a living at a given point in time, made up of a constellation of requisite skills, knowledge, and duties that differentiate it from other occupations and, typically, are transferable across settings” (p. 801).

Occupational commitment was measured by a seven-item measure by Blau (1985). The results of the data produced significant results opposite from what was expected. A greater extent

of standards-based education implementation had a significant positive relationship with career commitment. Further, job stress and job variety mediated the relationship between standards-based instruction and career commitment. This mediation demonstrated that the positive relationship of the extent of standards-based education implementation with career commitment could be explained through the effects of job stress and job variety on the nature of teacher's jobs. The mediation confirmed Lee et al.'s (2000) findings that job stress is negatively related to career commitment. However, the higher extent of standards-based implementation reduced job stress, thus positively affecting career commitment.

These findings have strong implications for the future of systems designed to create an atmosphere of quality management. Many times when strict structures and processes are in place with tight monitoring and sanctions for implementation the expectations would be that the climate would be stressful and demoralizing. Instead of teachers feeling stressed and burned out, a higher degree of standardization appears to have enhanced teachers' job outcomes.

The data results demonstrate positive job outcomes for teachers who have participated in the change to a higher extent of standards-based implementation. Gilmore et al. (1997) stated that although change brought improvements such as quality, service, productivity, and risk taking, it also created negative effects in regards to workplace climate and employee morale. The negative effects of workplace climate and employee morale were not indicated in the data results. This research adds to the body of knowledge about employee reaction to change called for by Meyer and Herscovitch (2002) who described a paucity of research on employee reaction to change.

The data from this study do not support the dire warnings or rhetoric of highly qualified teachers leaving the profession en masse due to high stress and unhappiness with the nature of their teaching jobs since the implementation of standards. In fact, a higher extent of standards-based implementation actually showed a positive relationship to reduced stress and a greater extent of job variety and did not significantly affect a teacher's view of autonomy. These results are very significant for those who support standards as the fairest way to evaluate students (Reeves, 2002). Teachers are finding standardization to actually enhance their job outcomes as they implement the requirements of programs such as NCLB to a higher degree.

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## References

- Adams, J. E., & Kirst, M. W. (1999). New demands and concepts for educational accountability: Striving for results in an era of excellence. In J. Murray & K. S. Louis (Eds.), *Handbook of research on educational administration* (2nd ed., pp. 463-489). San Francisco: Jossey-Bass.
- Bess, L., & Goldman, P. (2001). Leadership ambiguity in universities and K-12 schools and the limits of contemporary leadership theories. *Leadership Quarterly*, 12, 419-450.
- Business Roundtable. (2003, March). "What parents, students, and teachers think about standards, tests, accountability...and more." Washington, DC: Author. Retrieved April 7, 2009, from [http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?\\_nfpb=true&\\_ERICExtSearch\\_SearchValue\\_0=ED482283&ERICExtSearch\\_SearchType\\_0=no&accno=ED482283](http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=ED482283&ERICExtSearch_SearchType_0=no&accno=ED482283)
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology*, 85, 65-74.
- Chase, B. (2002, February 21). Speech presented at the meeting of the National Education Association to the American Association for Colleges for Teacher Education (Board of Directors), New York. *NEA Communications*.
- Dean, J. W., & Snell, S. A. (1991, December). Integrated manufacturing and job design: Moderating effects of organizational inertia. *Academy of Management Journal*, 34, 776-804.
- Gilmore, T., Shea, G., & Useem, M. (1997). Side effects of corporate cultural transformations. *Journal of Applied Behavioral Science*, 33, 174-179.
- Hackman, J. R., & Lawler, E. E. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology*, 55, 259-286.
- Hanson, E. M. (1996). *Educational administration and organizational behavior* (4th ed.). Boston: Allyn & Bacon.
- Hargrove, T., Walker, B. L., Huber, R. A., Corrigan, S. Z., & Moore, C. (2004, Spring). No teacher left behind: Supporting teachers as they implement standards-based reform in a test-based education environment. *Education*, 124, 3.
- Hunt, J. B., & Carroll, T. G. (2003, January). No dream denied: A pledge to America's children. *National Commission on Teaching and America's Future* (Summary Report). Washington, DC. Retrieved April 7, 2009, from [http://www.nctaf.org/resources/research\\_and\\_reports/nctaf\\_research\\_reports/rr\\_03-no-dream-denied\\_summary.htm](http://www.nctaf.org/resources/research_and_reports/nctaf_research_reports/rr_03-no-dream-denied_summary.htm)
- Kahn, R., Wolfe, D., Quinn, R. Snoek, J., & Rosenthal, R. (1964). *Organizational stress: Studies in role conflict and ambiguity*. Oxford, England: John Wiley.
- Lazarus, R. S., & Folkman, S. (1984). *Stress appraisal and coping*. New York: Springer.
- Lee, K., Carswell, J. J., & Allen, N. J. (2000). A meta-analytic review of occupational commitment: Relations with person- and work-related variables. *Journal of Applied Psychology*, 85(5), 799-811.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11, 299-326.

- Reeves, D. B. (2002). *The leader's guide to standards: A blueprint for educational equity and excellence*. San Francisco: Jossey Bass.
- Sims, H. P., Jr., Szilagyi, A. D., & Keller, R. T. (1976, June). The measurement of job characteristics. *Academy of management Journal (pre-1986)*, 19(2), 195-212.
- Tye, B. B., & O'Brien, L. (2002). Why are experienced teachers leaving the profession? *Phi Delta Kappan*, 84(1), 24-32.
- U.S. Department of Education. (2001). *No child left behind*. Retrieved April 7, 2009, from <http://www.ed.gov/policy/elsec/leg/esea02/index.html>