

Perspectives

School restructuring and downsizing: using TQM to promote cost effectiveness

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Abstract

Examines an alternative to downsizing in the restructuring of organizations. Suggests that the restructuring and downsizing of staff often result from economic inefficiency. They are used to make immediate financial savings and to keep floundering organizations solvent. Such practices seldom produce sustained results. New financial difficulties soon arise because the root of the problem is not addressed – poor management practices. Examines the application of Deming's 14 points to promote quality education, reduce waste, eliminate inefficient and ineffective programmes, and negate the need for downsizing. Concludes that through empowered teacher teams, the application of zero-base budgeting, and the quality management principles, educators can provide cost effective programmes, job stability, increase teacher morale, and foster pride in workmanship.

The call for quality in education has been associated with the need for school reform and restructuring. However, the term restructuring is sometimes as “notable for its ambiguity as it is for its meaning”[1]. Restructuring means many things to many people with no one common, workable definition. There is, however, the generic concept that an overall change in the instructional delivery system of schools is needed if quality products and services are to result and greater economic efficiency is to prevail.

In the private sector, restructuring has a somewhat different connotation and usually means taking measures, drastic at times, to remain competitive in price and service, or sometimes to remain solvent and stay in business. Measures most often used are either a substantial restructuring of the organization's production system or the use of downsizing – personnel lay-offs or hiring freezes. Either approach is costly and not without sacrifice to employees and the overall efficiency of the organization[2]. Not surprisingly, most businesses opt for employee lay-offs as opposed to restructuring as the initial step to cure the organization's economic ills. This stems from the belief that reduction in force is easier, quicker, and less costly than restructuring the organization. However, as Enderwick points out, companies which downsize usually evidence immediate economic relief but, in a short period of time, will again suffer financial difficulty because they failed to address the root of the problem – poor management practices. This article examines an alternative to downsizing in the restructuring of organizations.

In education, reduction in the workforce and hiring freezes are also practices used in school systems experiencing financial difficulty. Cutting personnel seems to be a first option or the quickest solution to fiscal problems, since 60 to 70 per cent of all educational budget expenditures consists of employee salaries and benefit packages[3]. In education, as in business, this approach is short-sighted. Cutting instructional programmes, which have direct benefits to students, should be the last option to be considered in times of fiscal crisis. Cuts of this nature evoke strong public and parental outcry and call into question the competence of those in charge of running the school system – boards of education and superintendents. Despite these negative

repercussions, such cuts are currently taking place throughout the United States.

A TQM approach to restructuring

The need for educators to be more cost effective with their limited resources, and still provide quality products and services, is a clear and compelling reason to explore new and different ways to restructure the educational delivery system. Restructuring through the application of the principles of total quality management (TQM) can provide a means to revamp the school's inefficient instructional systems and provide quality products and services at a minimal cost to taxpayers.

Deming's [4] guidelines provide a road map to both cost effectiveness and quality education. Chappell [5] notes that Deming's TQM practices now exist in over 400 public school districts. However, there is considerable variation in the ways in which these TQM principles are being implemented and in the purpose for their implementation. Chappell relates that, in many of these schools, TQM principles are used to increase quality performance in administrative services, teaching performance, student achievement and personnel practices. However, use of quality principles was not found in the area of business services, nor was there specific mention of school systems using TQM tools in an effort to be more cost effective. The emphasis currently placed on TQM is clearly in the areas of instruction and school administration [6]. Johnson [7] maintains that TQM practices which have demonstrated success in raising student achievement test scores, increasing teacher morale and enhancing student self-esteem should be expanded to other areas of schooling which lack quality. Johnson argues that the same TQM principles which work in instruction can work equally well in instructional support areas and have direct application to the business functions of school systems.

Independent networks

Deming [4], writing about business, government and education, finds all three organization types to have two essential components in common. Each is a system composed of interdependent networks that, when working together, achieve organizational goals; and each organization has a management system

designed to achieve these goals, regardless of what they may be. To Deming, the purpose of management is to facilitate the workings of these various networks found within the system to meet the goals of the organization more fully. Management, Deming observes, has been in a static state for decades, still largely based on the scientific management precepts of Fredrick Taylor which place the needs of the organization above those of the employees. The role of management in quality-oriented organizations is to transform the static organization into a dynamic one which emphasizes co-operation, teamwork and continuous improvement. In this role, management becomes the facilitating force for infusing and sustaining the quality principles in the daily operations of employees so that the needs and goals of the organization and employee become reciprocal.

Quite often, management in organizations in financial difficulty fails to look at operations within the total organization when efforts are needed to improve its economic trouble [2]. Many times, management simply looks at a single plant or departments within a plant and focuses on finding short-term solutions for economic troubles. Quick and easy fixes are usually proposed with treatment immediately applied. Downsizing is usually the result. Many times, these organizations fail to ask themselves certain questions which could provide answers but which would run contrary to their quick-fix solutions. One question which might be asked is: "Are we using all of our people and existing resources in the most effective and efficient way possible?"; and not: "What is the minimum number of people we can employ and still produce the necessary daily quota for profit?". The first question gets to the core of organizational productivity because it addresses the people aspect of production. Deming [4] consistently stresses the fact that people, not technology or other organizational variables, make the products, provide the services and are the solution to quality and cost effectiveness. The cost of replacing people, he maintains, is incalculable given the various intangibles each one contributes. In short, downsizing or hiring freezes go against the quality philosophy and should not be an option for management in times of economic crisis. The elimination of people to bolster sagging bottom-line figures represents no real or lasting solution to the problem. The real problem is the

perpetuation of antiquated management practices with the belief that quick and easy fixes are viable solutions to economic symptoms as opposed to solutions for economic problems.

Lunenburg and Ornstein[8] argue that downsizing has numerous negative side-effects for school systems and liken it to cutting off one's nose to spite one's face. Two of the most forceful arguments against downsizing is that a reduction in force is only a temporary fix (financial gains are usually eroded by the need for temporary help and/or the need for new products or programmes which leads to additional personnel) and that downsizing creates negative morale among those employees not affected by the lay-offs. As Geiger[9] points out, organizations which have cut personnel in the past tend to continue to use downsizing as a means of staying fiscally solvent because the results are immediate to top management. The inherent danger lies in the perceived quick and easy solution which prompts some to cut even deeper into the pool of employees during the next economic crisis.

Downsizing has negative results for both the organization and management as well. When employees receive word that financial difficulties exist within the organization, employees fear for job security and paranoia begins to set in among their ranks. This erodes job performance, decreases worker morale, fosters distrust of management and diminishes loyalty to the organization[10]. Consequently, downsizing's negative results far outweigh the perceived positive aspects since the practice ensures no long-term solution to the problem and has negative repercussions for the organization, management, and employee.

Improving educational quality

Knowing this, what can school administrators do to prevent the need to downsize and to provide a quality education for their students through cost-effective means? The answer lies in adopting the quality principles of Deming[4] and using quality techniques as they are applied to the principle of continuous improvement. What follows are suggested ways to infuse the quality principles to promote cost effectiveness, increase quality outcomes and negate the practice of downsizing in school systems.

Empowered teams within each school, which share the vision and goals of the school system itself, provide the initial impetus in promoting quality education and cost effectiveness. Addressing local problems through teacher and administrator teams whose goal is to deliver a quality education through more efficient practices, is central to the mission of being cost effective. Conley [1] documents that schools managed by empowered teams of teachers and administrators have the autonomy of setting their annual budgets and making policies which have an impact on the quality and economic efficiency of the instructional programme. At each school, budget priorities are jointly established and dollar allocations are assigned based on the annual allotment of monies provided by the school system. Odden[10] finds this once-a-year budget allocation for each school to be more cost effective because it directly links the school's fiscal resources with its actual operating costs and allows the use of resources to have a direct impact at the point of need. Furthermore, Odden relates that empowered teacher teams then realize that they are stakeholders in the organization and have a vested interest in the total operation of the school. With a vested interest, teachers hold themselves more personally accountable for the use and care of both fiscal and material resources and the issue of promoting cost effectiveness is more fully realized.

However, the use of teacher and administrator teams in making budgetary decisions is not without criticism. Richards and Shen[11] identified some potentially negative aspects of empowered teams which were identified in a South Carolina study. First, teachers may lack a basic understanding of financial concepts and the necessary knowledge and skills required to be held accountable for dollar expenditures. Second, teachers may lack an overall understanding of the school system's fiscal policy which is required to make sound decisions to ensure that their school remains financially solvent *within* the guidelines of system policy. This task, they point out, is far more complex and demanding than keeping monthly household budgets and requires training in the financial aspects of school business management. These obstacles, the writers maintain, can be overcome through in-service programmes specifically designed to address the fiscal management aspects of their school.

The question now arises as to what can be done to assist school-level teams to be more cost effective and to promote quality instruction at the same time? The answer lies in two of Deming's [12] quality principles which state that quality can be achieved when employees are "trained and retrained" to meet the expectations of quality and to "continuously improve" the organization's quality-producing efforts. To promote cost effectiveness, teachers must first be taught cost-effective practices and be provided the necessary knowledge and skills to accomplish the task. Through in-service programmes, teachers can glean the information required for budget planning and the use of quality techniques necessary to practise and evaluate their cost effective efforts.

Zero-base budgeting

Caldwell and Spinks [13] maintain that cost effectiveness begins with programme planning through the setting of goals and objectives for each programme within the budget and then allocating the necessary fiscal resources to each programme based on its needs. Each programme should have an evaluation design to assess the effective use of dollar expenditures in relation to the programme's goals. Thompson *et al.* [14] found that zero-base budgeting (ZBB) holds particular promise for cost-minded educators in quality-oriented schools. The idea behind ZBB is that a lump sum of dollars is allocated yearly to each school and is based on their pre-determined programme needs. With each year's school budget set at zero dollars, monies are then allocated to each school based on their programme needs and goals. Justification of dollars requested, by programs, are determined through a yearly needs assessment and an end-of-year evaluation of programme achievements.

Caldwell and Spinks [13] suggest certain steps to be taken when developing ZBB school budgets. First, programmes from major areas within the school, such as curriculum and instruction, administration and technology, have teams which consist of those who are involved in these programme areas and serve as the co-ordinating unit for budget preparation. Next, based on annual needs assessments and programme evaluations, needs for each year are identified and prioritized and goals are then developed based on

each programme's needs. Third, a plan is developed outlining how the goals will be attained and those who will be responsible for goal attainment. Fourth, resources, supplies and equipment become line items which are deemed necessary to achieve each of the programme's goals. Finally, an evaluation design is developed which clearly delineates how each programme goal will be evaluated. Through end-of-year evaluations, programmes which show improvement become candidates for the next year's funding with dollars being requested and justified through these yearly evaluations. Consequently, programmes showing little or no progress or deemed wasteful or non-productive can be cut. The flexibility of ZBB allows for increased fiscal resources where continuous improvement is made and decreased funds for wasteful or non-productive areas. Budgets which are developed on a programme-by-programme basis align the allocated dollars with specific programme needs and become a financial translation of an education plan for an entire school [3].

Swanson and King [15] maintain that ZBB allows more dollars to go to the actual point of impact, with fewer dollars being consumed by overhead or administrative costs. Odden [10] notes that ZBB decisions, made by teachers, provide an holistic view of the school's educational programme, its existing resources and its instructional goals. In using teams to develop budget priorities, the Deming [12] principle of letting those closest to the problem solve the problem is practised and some TQM techniques are directly applied. For example, through brainstorming, teachers can identify ways to better utilize existing resources and delete wasteful practices which have a negative impact on cost-effective procedures. Duplication of efforts, ineffective instructional support programmes, and antiquated materials can be identified and deleted. Brainstorming also provides for the input of creative ideas on how to further reduce waste and inefficiency by comparing work habits, new and different uses of instructional technology, and more time-efficient methods [16]. Weller [17] notes the use of benchmarking as an effective TQM technique which can be used to incorporate quality practices in non-instructional programmes. Ideas gained by examining cost-effective methods used in other school systems can then be implemented.

Waste

Walton[18] notes that “waste” of any kind is a major detriment to quality-producing efforts. Economic waste inflates the cost of any given unit of material and ultimately increases the cost of operating the organization. The use of empowered teams, she maintains, to make certain budget decisions can serve to reduce waste at the sources which cause most waste – the attitudes and work habits of individual employees. Shingo[16] relates that waste can be found in materials or supplies or wasted motion and effort in work habits. Until people have the opportunity to examine their job behaviours, waste remains hidden and, therefore, self-perpetuating. Walton notes that some employees take the attitude that job performance means doing “just enough to get by.” Attitudes of this nature run counter to Crosby’s[19] concept of zero defects which means that when people take pride in their work they do the job right the first time. This translates into zero rework and no wasted materials. Crosby and Deming agree that the real barrier to achieving zero defects is lack of pride which stems from an individual’s perception about the importance and value of the job. Weller[20] relates that teachers who lack pride in their work have low morale and self-esteem which can be attributed to highly regulatory management practices. On the other hand; empowered teams of teachers evidence high morale and self-esteem and take pride in their work because they have the freedom to make decisions and solve the problems which have a direct impact on their daily work[7].

Deming[12] maintains that a contributing factor to poor quality is a feeling of frustration over the inability to change the way job functions are performed. Often, employees see a better way, a more effective and efficient way to perform certain tasks but are kept from making these changes through inflexible management behaviour. This frustration contributes to waste, rework and poor job performance. Deming notes that when management shows a lack of response to calls for new equipment or supplies or the repair of malfunctioning equipment, a lack of pride in workmanship results, and effort and time are wasted. As Odden[10] points out, the variables of time and effort are key factors in determining the cost effectiveness of any organization, but are ones which are often

overlooked by managers who focus on production quality. Also, many in management have the mind-set that new technology is too expensive for their budget, regardless of its benefit to quality-producing products. This posture only promotes waste through inefficient work methods and further inflates the cost of the product itself.

Monk[21] agrees with Deming’s[4] observation that cost-effective and quality-oriented organizations regularly consult those who are using production materials regarding their “fitness for use”. In education, technology such as computers, software packages or textbooks can quickly become outdated or are often purchased without teacher input concerning their ease of use or appropriateness for grade level or content area. Dissatisfaction with these materials contributes to their lack of use which translates into waste. In some school systems, the decision to purchase certain instructional supplies is based on price alone. Deming warns against “awarding business on price tag alone” [4, p.39] because materials which are not used increase the cost of overhead and, therefore, increase the “real cost” of the unit itself. The lack of use of these materials defeats the purpose of buying the cheapest product. Moreover, purchases made by administrators who are often far removed from classrooms often reflect administrator preferences and may not coincide with the preferences of teachers who are responsible for their use in the classroom [7]. Empowered teams of teachers, on the other hand, can make better cost-effective choices about instructional materials because of their knowledge of the needs and goals of the school’s instructional programmes and their own needs and preferences as well.

Weller[17] notes that administrators contribute to waste when they purchase new technology for the purpose of merely keeping up with competing school systems. This collection of technology is highly “showcased” but rarely used. Another factor which contributes to cost is the failure to train teachers adequately in the use of newly purchased hardware and software. Without proper instruction on use and application, technology itself is of little value.

Finally, empowered teams provide teachers with a support network which serves to sustain the use and development of new cost-saving resources. Teacher teams serve to reinforce the commitment to continuously

practise economic restraint and to make sound decisions during the annual budget review and development process.

Conclusion

In conclusion, the use of TQM principles provides a mechanism for school restructuring and reduces both operational and overhead costs at the school level. Through team decision making, teachers can make budgetary decisions which promote cost effective instruction and school management practices. Savings of this nature can greatly alleviate the necessity to downsize personnel during times of economic crisis. Moreover, through the use of teacher teams, administrators provide teachers with the opportunity to channel monies into effective instructional programmes, purchase technology and other materials they both want and will use, and monitor their own work habits in an effort to reduce waste in the classroom and promote quality instruction.

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Commentary

Are there any initiatives out there where some of the skills and experiences from corporate quality improvement are being transferred, by companies, into schools? An interesting project for fast-track executives, maybe, great PR, and a contribution to the community for those on the BQF/EFQM Awards road?