

# Developments In Business Simulation & Experiential Exercises, Volume 21, 1994

## INTEGRATING "ACTION-BASED" LEARNING INTO EXECUTIVE DEVELOPMENT PROGRAMS

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### ABSTRACT

This paper describes one model for developing and delivering an "action-based" experiential learning exercise in the application of Total Quality Management (TQM). The exercise involves a daylong experience where a group of mid- and upper-level managers, enrolled in a 15 week, non-credit, management development program, visited one of Motorola's manufacturing sites in Elma, New York.

In addition to witnessing, first hand, how "empowered principles" altered management methods and improved the financial viability of the division, participants were given the opportunity to provide feedback to site executives. The extension of the simple "plant tour" to an audit of TQM resulted in a more meaningful experience for program participants and also the Elma site.

### INTRODUCTION

For twelve years, Rochester Institute of Technology (RIT) College of Business has offered a non-credit executive development program, currently titled the Advanced Management Institute (AMI). The program typically enrolls 20-25 participants, representing an average of 14 different companies. A number of companies including Eastman Kodak, Xerox Corporation, Rochester Telephone and Rochester Gas & Electric have included AMI in their portfolio of training opportunities for management, since its beginning.

AMI participants meet once a week for 6 hours and are expected to dedicate approximately the same amount of time outside of class for reading and case analysis. The program is conducted as a seminar with a blend of lecture, case analysis, simulations and experiential activities. The fifteen week modules are divided into four major headings: INTERPERSONAL, CROSS-FUNCTIONAL, STRATEGIC DECISION MAKING, and GLOBAL & ETHICAL ISSUES.

The INTERPERSONAL module deals with self-assessments, including developing a personality profile and understanding how to work more effectively with others. The CROSS-FUNCTIONAL MANAGEMENT module presents strategic business topics (e.g.) finance/accounting, marketing, manufacturing, human resources, technology management, and general business strategy, cross-functional and integrated around the theme of TaM. The STRATEGIC DECISION MAKING module gives participants the opportunity to apply some of their newly acquired skills via a TQM strategic business simulation. Balanced participant teams compete against one another in the areas of strategic and tactical decision making for their hypothetical firm. The final module, GLOBAL & ETHICAL ISSUES, encompasses international/global management issues, ethical analysis and understanding of business/government relations.

### BENCHMARKING WITH MOTOROLA UNIVERSITY

Among the reasons for the program's long-term success is its (1) applied focus and balancing of theory with practice, (2) cross-functional modules integrated around the principles of TQM and its (3) recent emphasis on action based learning.

In an attempt to continuously improve the balance between theory and application, and to learn more about the industry's approach to management and executive development, a number of RIT administrators and faculty have visited Motorola University's training facility

in Illinois. As a result of these visits and our on-going partnership with Motorola, we have integrated a daylong exercise into the AMI program. The session was held in November of 1993.

The experience was developed jointly with representatives from Elma and A. William Wiggenhorn, President of Motorola University, who led the session. With cooperation from site executives, program participants not only toured one of Motorola's leading facilities in the production and assembly of electronic components for car manufacturers, they were also asked to provide feedback on their observations. Highly structured in nature, the session provided both participants and the host company valuable insight into the application of TQM.

### Motorola and the Elms Plant . . . Selecting the Site

Motorola, a 1988 Baldrige winner, has over thirty divisions across the United States ranging in size from 300 to 5000 employees. Elma has approximately 450 permanent employees and is a site, which nearly closed, in late 1980s. Today, it is considered one of Motorola's most successful examples of the application of TQM including the measurement of quality, participatory management and teaming. Acknowledgement of their commitment to quality came in 1992, when this site was a recipient of the New York State, Governor's Excelsior Award.

The Elma plant is part of Motorola's Automotive and Industrial Electronics Group (AIEG) based in Northbrook, Illinois. This group is responsible for the design and manufacturing of a diverse line of products in electronic components, modules, subsystems, integrated systems and products for original equipment manufacturers, electronic suppliers and consumers. The Elma group is responsible for those systems, which are developed primarily for the automotive industry with Ford Motor Company as one of its major customers.

Founded in 1928 by Paul Galvin, Motorola's reputation as a leader in the quality movement is worldwide with customer satisfaction as a fundamental corporate objective. Their six-sigma (3.4 defects per million parts) quality improvement target is frequently used as a benchmark by other companies with similarly ambitious quality improvement goals.

AMI participants had an opportunity to evaluate Motorola's Participative Management Program (PMP), in action. Perhaps more than any other Motorola initiative to implement TQM, PMP appears to be one of the company's most successful approaches to participatory management.

The Elma facility has employees grouped by functional teams, ranging in size from 25 to over 100! On the surface, the sheer size of the groups raises questions with respect to our traditional thinking of teams. While they would appear to resemble functional departments, the teams do have considerable latitude in decision-making, each directed towards the measurement and control of activities such as process management, quality improvement and even personnel issues. The level of sharing and consensus building which is working in these groups would suggest that team size has no boundaries.

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## DEVELOPMENT OF THE AGENDA

Over the past three years, RIT's College of Business has been striving to become a TQM organization--by integrating TQ principles into all of its activities including curriculum, operation and student services. The college has worked closely with Xerox, IBM and Motorola and has been recognized for its efforts, winning two national awards; the Motorola University Challenge and a \$1.28 million grant from IBM to advance the principles of TaM.

It was A. William Wiggernhorn who first suggested the idea of enhancing our AMI programs by doing more action-based exercises. Our first attempt came in 1992 when AMI participants visited a manufacturing division of Xerox and one of its local suppliers, Trident Tool.

Prior to the actual 1993 session, participants were required to review training material prepared by Motorola. This material helped establish a framework for participants to understand the intended outcomes of Motorola's TQ initiatives. Authored by senior people including the Corporate Director of Human Resources and the Vice President & Director of Participative Programs, this material is issued to middle managers at Motorola sites and provides the framework for establishing empowered teams with an existing workforce.

Upon arrival at the plant, Motorola executives provided an overview of the company's TQ objectives, including competitiveness, customer focus and employee relations. Participants were then segmented into small groups to interview Elma personnel on teaming and empowerment issues including; their understanding of Motorola's TQ goals and objectives, production improvements, such as reduced cycle time, actual levels of team empowerment, peer performance reviews and effective communication. Of particular interest were those questions related to obstacles which Elma faces in meeting their TQ objectives. "Seed" questions were provided by session organizers to assist participants in structuring their interviews. The following are examples of the types of questions used:

### Teaming and Empowerment

During the initial phase of forming and empowering teams, what were the obstacles, which were encountered?

In what ways does the current operating structure at Elma encourage empowerment and promote a teaming environment?

In what ways are teams enabled to function independently (e.g. resource allocation and commitment to training)?

What decisions are teams not currently empowered to make?

How are team goals integrated with other operating units and that of the organization as a whole?

In what ways do teams identify root causes of problems? What latitude do teams have in correcting these problems?

Empowerment teams initially focused on quality, productivity, cycle time & cost. What do you think will be the next phase in the evolution of empowered teams at Elma?

### Challenging Empowerment

Do employees believe the current teaming structure is effective? Why or why not?

What is the downside of teaming at Elma?

What obstacles have teams encountered in developing working relationships (intra and interteam conflict and dealing with non-team players)?

### Quality and Strategic Issues at Elma

To what extent is management involved in and serious about the quality initiatives at Elma?

How do they demonstrate their commitment?

What changes have you seen in the role of managers as a result of the new teaming structure?

What specific strategies/tactics have been utilized to reduce quality improvement cycle time?

Feedback to Motorola on these and other questions come in two forms. Before departure from the Elma site, AMI participant groups provided verbal feedback of their observations and interviews with plant personnel. Recorded responses to the "seed" questions were summarized at a later date and sent to all participants as well as Motorola executives.

## SUMMARY

The model described in this session was developed jointly by industry and academia and is readily adaptable to other programs and company sites. An important element in the design and execution of the experience is an agreement between the school and the company on its purpose and expected outcomes. It is not to merely conduct a tour. Selected sites must recognize they have an opportunity to capitalize on the breadth of knowledge and experience which participants possess and be willing to accept their feedback. Just as in any good benchmark study, all parties should share and benefit in knowledge gained from the study. Total quality requires an attitude of sharing.

During recent days the Wall Street Journal and New York Times have been featuring articles highly critical of current trends in executive and management development programs administered by universities across the country. Joint efforts such as the one described above will enhance working relationship between industry and academia, providing benefits to both parties.