TWO METHODS USEFUL FOR STARTING

A QUALITY IMPROVEMENT PROGRAM

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Two methods useful for starting a quality improvement program in an organization are a group planning activity and a "quality improvement priority matrix." 1) A group planning activity can, in a short period of time such as two days, produce a definition of an organization's vision, define obstacles to achieving the vision, develop strategies for removing the obstacles, and then create actions to implement the strategies. 2) A quality improvement priority matrix begins with a list of features of a product or service or an organization. Customers or employees rate the features on importance and performance. Attention is then focused on features that are rated high in importance and low in performance. This method of "data-driven decision-making" is very easy to use. It requires no special knowledge of statistics.

The first method involves people in identifying problems and in devising solutions. The second method provides regular feedback to managers about where additional effort will produce the highest return in customer and employee satisfaction. Both methods are illustrated with examples from a group of professors from the former Soviet Union who were studying for a year in the U.S. under programs sponsored by the U.S. Department of State.

INTRODUCTION

Since 1994 the Research Program in Social and Organizational Learning at The George Washington University has hosted visiting professors from the New Independent States (NIS) of the former Soviet Union. These visiting professors have been supported by several programs funded by the U.S. Department of State: the Junior Faculty Development Program (JFDP), the Regional Scholars Exchange Program, and the Fulbright Program. In the past these scholars spent their time in the U.S. improving their English, observing American teaching methods, studying the American literature in their fields, auditing classes, writing papers, and attending conferences.

During this time Stuart Umpleby attempted to interest visiting scholars in the field of management in the methods of total quality management or continuous quality improvement. He felt that these methods would be particularly useful in the NIS in improving industrial productivity, government services, and the administration of universities. However, the visiting scholars expressed little interest in these methods. He was told, "We tried that several years ago," or "Those methods might work in the U.S. but not in Russia," or "We have more urgent concerns." Indeed, the past twelve years have been a time of major social change in the NIS. Methods for improving organizational processes did not seem very important in a society undergoing the most fundamental changes in its political and economic systems. However, institutions in the NIS now seem to be stabilizing, and interest in improving organizational performance seems to be increasing. In the fall of 2000 when Umpleby spoke with Irina Naoumova about process improvement methods, he received a very different response.

Naoumova had been a JFDP scholar in the 1996-1997 academic year at the University of Tennessee. In 2000-2001 she was a Fulbright scholar at GW. She was very enthusiastic about the idea of teaching process improvement methods to the visiting scholars. Indeed she had used such methods to improve operations in her institution, Kazan State University, where she is head of the Department of Management. In their conversations Naoumova and Umpleby agreed that a familiarity with quality improvement methods would enable NIS scholars visiting in the U.S. to be more effective in introducing changes in their universities when they returned home. So Umpleby and Naoumova decided to organize a meeting for the group of scholars then at GW to introduce them to some basic quality improvement methods. In a two-hour meeting (10 a.m. to noon on December 15, 2000) they introduced the scholars to two methods – a way of conducting a problem-solving or planning meeting and a Quality Improvement Priority Matrix. Attached are several items that describe the December 15 meeting and its results:

1. The results of the brain-storming activity – problems/ opportunities and strategies/ actions
2. The questionnaire that we used to collect data for the Quality Improvement Priority Matrix with averaged responses to the questionnaire
3. The Quality Improvement Priority Matrix

THE PLANNING MEETING

The meeting had several purposes: to acquaint the visiting scholars with these two methods of organizational improvement and to give the scholars an introduction, during the orientation part of the two brainstorming activities, to a wide range of situations, with real world examples, in which quality improvement methods can be used. The results of the exercises are also interesting as a description of their home universities.

For the planning activity we chose the topic of problems/ opportunities at their home universities and strategies/ actions to resolve these problems. The result is an impressive list of suggestions for actions that could be taken at their universities. We are hoping that some of the scholars will use this method for bringing together their colleagues and devising similar plans when they return home.

In this exercise the planning activity was divided into two parts – problems/ opportunities and strategies/ actions. In each part there were four steps – background and instructions, individual brainstorming, small group discussions, and whole group discussion including clustering of items. A more thorough discussion could be achieved by allocating a morning to problems/ opportunities and an afternoon to strategies/ actions. A two-day planning

meeting could discuss mission and/or vision on the morning of the first day and obstacles to achieving the vision on the afternoon of the first day. Strategies to remove the obstacles would be discussed on the morning of the second day and actions to implement the strategies on the afternoon of the second day. Consequently at the end of a two day event an organization would have a written mission and vision, a list of obstacles to achieving the vision, a set of strategies for removing the obstacles, and a list of assignments on who should do what, when and at what cost in order to implement the strategies.

In the weeks and months after the planning meeting, progress in implementing the plans should be communicated to the whole group. Communicating achievements both celebrates successes and implicitly reminds others of what they promised to do. After six months or a year the organization can review what has been achieved and what plans were easier or more difficult to implement than expected. The organization can then review and modify the mission and vision and repeat the task of defining obstacles, strategies, and actions.

A QUALITY IMPROVEMENT PRIORITY MATRIX

The Quality Improvement Priority Matrix asks customers or employees to rate several features of an organization on two scales – importance and performance. That is, how important to them is that particular feature, and how effectively is the organization currently performing on that feature? For this exercise we asked the scholars to evaluate academic exchange programs that they are familiar with, e.g., the Junior Faculty Development Program or the Fulbright Program. Although everyone connected with these programs feels that they are excellent programs, the quality improvement literature claims that improvement is always possible. If so, where is improvement most needed? With this method one looks at the quadrant that corresponds to high importance and low performance. What features of the organization fall into this quadrant? The results are somewhat surprising.

Item 19, follow-up activities in the NIS, is something the scholars had not experienced, so the low rating on performance on this item is probably not useful data. Item 12 is office space at GW. This has been a continuing concern. We do the best we can, but we have fewer facilities for visiting scholars than are available on some campuses. The other items in this quadrant – 7, 8, 9, 16, and 17 – are about advice on attending conferences, help with preparing papers for conferences, how to interact with American academics at conferences, how to build teams, and instruction in quality improvement methods. There was less concern with available funds. Hence, it seems that the areas of potential improvement at the present time do not involve resources but rather advice or instruction that could be dealt with in training activities.

The quality improvement priority matrix is a simple but powerful management tool. It makes possible data-driven decision-making. Often in organizations resources are allocated to favored groups. For example, a dean who is a chemist might choose to allocate more funds to the chemistry department. Or additional resources are allocated to the group that complains the loudest. This matrix presents an alternative. By gathering data from customers and employees a manager can easily find out where improvement is most needed and where additional attention will produce the greatest returns in customer and employee satisfaction. The matrix can also be used to explain why funds are allocated as they are and thereby serves as an answer to critics of the way funds are allocated.

CONCLUSIONS AND SUGGESTIONS

We believe that these two methods illustrate the utility of quality improvement methods in helping a group of people formulate common goals and focus attention where improvement is most needed.

We believe that scholars visiting the US would benefit from more training in team building, teamwork, organizational change methods, and quality improvement methods. These activities involve special skills that would help the scholars be more effective innovators and change agents when they return to their home institutions.

To summarize what occurred in this meeting, the visiting scholars became acquainted with:

- Two effective methods of organizational improvement;
- A wide range of situations in which such methods could be used and the successful example of the application of such methods at Kazan State University in Russia; and
- An example of planning by an international team of professors.

The scholars found themselves defining organizational problems and devising solutions, even though most of them were very pessimistic originally about their role in organizational problem solving. After clustering problems in the seminar, they recognized that changes are interconnected and that curriculum and personnel changes could lead to widespread organizational changes. The experience increased their confidence that positive changes in their home institutions are not only needed but are also possible.

We believe that these and other management methods should be practiced by visiting scholars while they are in the U.S., that they should attempt to use these methods with their colleagues when they return to their home countries, and that they should come together periodically in their home countries to exchange views on how the methods are working and how they can be improved. Furthermore, we believe that these two simple methods are a very effective starting point for a quality improvement program in any organization.

REFERENCES

SPENCER, L. (1991) *The Technology of Participation*. Alexandria, VA: Miles River Press.

TROXEL, J. (1993) *Participation Works: Business Cases from Around the World*. Alexandria, VA: Miles River Press, 1993.

UMPLEBY, S. (1994) What is to be done? Learning democracy while improving organizations, *Cybernetics and Systems*, Vol. 25, No. 6, pp. 827-836.

UMPLEBY, S. (1989) Methods for community development: The work of the Institute of Cultural Affairs. Research Program in Social and Organizational Learning, The George Washington University, Washington, DC.

RESULTS OF THE PLANNING MEETING

On December 15, 2000, a planning meeting was held at the Research Program for Social and Organizational Learning at The George Washington University. Stuart Umpleby and Irina Naoumova organized and led the meeting. The participants represented the following countries:

Georgia, Armenia, Russia, Uzbekistan, Ukraine, Croatia, USA (GWU faculty and staff, and managers from the American Council of Teachers of Russian).

The group first defined problems or opportunities facing their home universities. They then devised strategies or actions for dealing with these problems or opportunities. Below are the results of the brain-storming and group discussion activities. The clusters have been arranged with the largest (most frequently mentioned) first and the smallest last.

Problems or opportunities

INSUFFICIENT TECHNICAL EQUIPMENT
Old, obsolete computers
Inconvenient computer locations
No access to internet for students
Slow or non-existent internet connections
Lack of technical equipment
No modern in-class equipment

Old laboratory facilities
Insufficient modern scientific equipment

OLD METHODS
Insufficient skills in TQM
Improvement methods are not known
Old methodology of teaching, especially in seminars
Need for a new educational process
Need for interesting class presentations
Scientific plagiarism

INSUFFICIENT FUNDS
Low faculty and staff salaries
Disappearing or nonexistent teachers' wages
Inadequate budgeting for educational needs
Poor government support
Limited money for scientific conferences
Lack of travel funds
Need access to most recent international resources

INSUFFICIENT TEACHING MATERIALS
Lack of teachers' instruments
Lack of teacher training materials
Lack of textbooks
Old and insufficient textbooks
Limited sources of academic literature
Old, scarce materials

LIMITED NETWORKING BEYOND CAMPUS
No access to communications for students and professors
Limited networking opportunities
Need more communication and sharing of experiences
Low skills in marketing of higher education
Not enough research activity
Low level of community relations

LOW FACULTY QUALIFICATIONS
Lack of highly qualified professors
Aging faculty
Over-burdened, apathetic faculty
Low qualification of staff due to lack of access to world knowledge
Hiring of graduate students

SLOW CURRICULUM CHANGE
Need for new curriculum
Inflexible curriculum development
Slow course modification
Slow transformation of higher education
Poor writing standards

UNRESPONSIVE UNIVERSITY ADMINISTRATION
Narrow-minded, inflexible administration
Extreme bureaucracy
Strongly centralized education management
Administrative corruption

Strategies and actions

USE CURRENT SYSTEM TO IMPROVE CURRICULA

Each university should work out its own priority directions
Chairs should develop major and optional subjects in each field
Start obligatory changes in major subjects
Arrange domestic visiting professor programs
Organize lectures for a competent audience with two professors using different methods for teaching a subject (for comparison)
Provide opportunities for other professors to see new teaching methods in practice
Organize meetings with outstanding teachers who are successful in the same country and in the same conditions
Set up a university teaching center to coach faculty on teaching methods
Teach philosophy of education (not necessarily global, but local philosophies)
Implement a credit hour system
Organize student evaluations of professors

CREATE A COMMUNITY-ORIENTED UNIVERSITY STRATEGY
Create specific faculty teams to examine opportunities
Make the university responsive to demands of the job market
Establish certificate programs (to retrain workers and raise funds for university)
Develop paid groups for getting second education or professional development programs
Assign student group projects to help local organizations
Participate in local government activities

NATIONAL AND INTERNATIONAL GRANTS AND PROJECTS
Plan more conferences for faculty and staff to exchange new ideas and meet contemporaries
Encourage student and professor exchange programs
Create more professor exchanges: domestic and international
Obtain international grants and projects (staff and students)
Arrange faculty exchanges going both ways between NIS and USA
Conduct international cooperation in courses via email

ORGANIZE FUND-RAISING ACTIVITIES
Search for grants to improve academic networks
Develop a strategic plan to obtain research grants
Organize business-supported research centers
Establish a fund-raising office to work with alumni
Foster long-term contacts with alumni to fund activities

IMPLEMENT PROPER FINANCIAL MANAGEMENT
Increase paid services (educational and others)
Establish joint projects (investments and collaboration)
Grant universities more freedom in managing finances
Make annual reports available

BUILD AND USE WEBSITES
Create websites for courses
Obtain internet access for sharing of information
Use internet, websites, and listserves for specific academic fields

QUESTIONNAIRE FOR A QUALITY IMPROVEMENT PRIORITY MATRIX

Below is a list of features of academic exchange programs, such as JFDP and the Fulbright program. To create a Quality Improvement Priority Matrix using these features we asked participants to rate each feature on a scale from 0 to 10. That is, on the importance scale, 0 would mean the feature is not important at all. 5 would mean the feature is moderately important. 10 would mean the feature is very, very important. On the performance scale, 0

would mean that current performance is very, very poor. 5 would mean that current performance is neither bad nor good. 10 would mean that current performance is excellent. Below is the average of responses to the questionnaire.

	FEATURE	IMPORTANCE	PERFORMANCE
1	Cultural orientation to American life	8.18	8.27
2	A good mentor	8.91	7.18
3	Help with finding housing, opening a bank account, etc.	9.18	7.46
4	Amount of money available for living expenses	9.36	8.27
5	Amount of money available for travel to conferences	8.91	8
6	Amount of money available for books to take home	7.91	8
7	Help in finding out about conferences in your field in the US	7.82	4.46
8	Assistance with preparing papers for academic Conferences in the US	8.46	4.64
9	Advice on how to interact with American academics at conferences, etc.	7.36	4.27
10	Opportunities to observe American teaching methods	9.27	7.27
11	Opportunities to lecture in American classes	7.4	6.4
12	Office / study space	8.64	2.91
13	Access to computers	9.45	6.64
14	Invitations to social events on campus	7.27	7.45
15	Instruction in how to be successful in organizational change in home department / college / university	8.36	5.27
16	Instruction in how to build teams	5.73	4.82
17	Instruction in quality improvement methods (no matter whether you are focusing on improving a course, a curriculum, or an organization)	9	5
18	Instruction in how to use library resources	6.27	6.91
19	Follow-up activities in NIS in later years	9.64	2.18

QUALITY IMPROVEMENT PRIORITY MATRIX