

A Study on Developing World-class Management Education for India using Malcolm Baldrige Model framework and the concept of Multiple Intelligence

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Abstract

“The true test of education is not what one gets from it; but what one becomes through it” Internationalization, growing technology and their development influence education in society, thus increasing the need for managing education and learning. The purpose of this paper is to apply Malcolm Baldrige Model framework, which can provide, streamline educational processes for systematic quality improvement and excellence in developing World- Class Management Education. This paper is an attempt to understand Multiple Intelligence and its application in Educational area by emphasizing on redefining the Role of each stakeholder, purpose of education and process (Curriculum, Resources, Strategy)

Keywords — *World- class Management Education, Multiple Intelligence, Malcolm Baldrige Model*

I Background of the study

Technological advances, heightened student expectations, shifting student demographics, stakeholder demands for accountability, and new vehicles for educational delivery are all current challenges driving the need for innovation in Management Education. It is extremely difficult to meet these challenges given the environment of limited financial resources, and is clear that institutions must reexamine traditional methods of operation and innovate in order to remain viable now and in the future.

Since the late 20th Century, the government of India has aggressively sought international assistance to overcome the critical shortage of management resources. India identified a lack of world-class management education program as one of the major obstacles in its endeavor towards modernization. Efforts over more than one decade have still not resulted in achieving it.

Driving innovation and implementing sustained improvements are often extremely difficult for Management Institutes. To some degree, each institution in its own way may consider itself to be somewhat innovative. Every Management Institute and university can produce an array of press releases describing new programs and activities that are different from the academic norm and break new ground (at least for that institution) and that talented people have designed for good purposes.

This paper is an attempt to understand the application of the Malcolm Baldrige Model, which is a tool to provide a systematic process to drive and manage change.

Statement of the Problem

There are some good and bad practices the world over in management education. India's management education needs to rethink on it because of its diversity, profound cultural base, collective thinking changing role and involvement of stakeholders, purpose of education and process (Curriculum, resources, Strategy). At present, most of the management institutes are mainly emphasizing on the development of logical intelligence and linguistic intelligence (mainly reading and writing). However, according to Gardner's theory it is being observed that students will be better served by a broader vision of education, wherein teachers use different methodologies, exercises and activities to reach all students, not just those who excel at linguistic and logical intelligence.

Literature Review:

The Theory of Multiple Intelligences, which was published by Howard Gardner in 1983, suggested that all individuals had seven independent intelligences, These "intelligences" were: linguistic and logical-mathematical, musical, spatial, bodily kinesthetic, interpersonal, intrapersonal intelligence. Gardner used 7 different criteria to understand if capacity could be thought as intelligence.



1. Linguistic Intelligence

Linguistic intelligence involves sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish certain goals. This intelligence includes the ability to effectively use language to express oneself rhetorically or poetically; and language as a means to remember information. Writers, poets, lawyers and speakers are among those that Howard Gardner sees as having high linguistic intelligence.

2. Logical-Mathematical Intelligence

Logical-mathematical intelligence consists of the capacity to analyze problems logically, carry out mathematical operations, and investigate issues scientifically. In Howard Gardner's words, it entails the ability to detect patterns, reason deductively and think logically. This intelligence is most often associated with scientific and mathematical thinking.

This group of students enjoy working with data bases and spread shedson computer.

3. Spatial Intelligence

Spatial intelligence involves the potential to recognize and use the patterns of wide space and more confined areas (Gardner, 1999). Art activities, reading maps, charts and diagrams, thinking in images and pictures are the favorites of the students who have spatial intelligence (Teele, 2000). According to Armstrong (1994) these students have highly developed senses for color, line, shape, form, space. They also have the ability to visualize ideas.

4. Musical Intelligence

Musical intelligence involves skill in the performance, composition, and appreciation of musical patterns. It encompasses the capacity to recognize and compose musical pitches, tones, and rhythms. According to Howard Gardner, musical intelligence runs in an almost structural parallel to linguistic intelligence (Gardner, 1999).

Bodily-Kinesthetic Intelligence

Bodily-kinesthetic intelligence entails the potential of using one's whole body or parts of the body to solve problems. It is the ability to use mental abilities to coordinate bodily movements. Howard Gardner sees mental and physical activity as related

(Gardner, 1999). They can move and act, they are also able to achieve success in a class where physical activities and hands are provided.

5. Intrapersonal & Interpersonal Intelligence

Intrapersonal intelligence entails the capacity to understand oneself, to appreciate one's feelings, fears and motivations. These students enjoy being alone; they can feel and appreciate their own powers, weaknesses and inner feelings. They like keeping a journal, they study in quiet atmospheres and they are usually self-reflective.

Malcolm Baldrige Model

One such TQM management and planning tool that has gained widespread recognition in the business world is the Malcolm Baldrige Model, which was developed by the U.S. Department of Commerce in 1988 to honor Malcolm Baldrige, who was Secretary of Commerce from 1981-87. Three yearly awards in three possible categories (manufacturing, service, small business) are given to U.S. companies for accomplishments related to quality and business performance.

I. Leadership: To examine how our organization's senior leaders' personal actions guide and sustain organization.

II. Strategic Planning: To examine how organizations develop strategic objectives and action plans.

III. Customer Focus: To examine how organization engages its students and stakeholders for long-term market success. This engagement strategy includes how an organization listens to the voice of its customers (students and stakeholders), builds customer relationships, and uses customer information to improve and identify opportunities for innovation.

IV. Measurement, Analysis, and Knowledge Management: To examine how an organization selects, gathers, analyzes, manages, and improves its data, information, and knowledge assets and how it manages its information technology

V. Workforce Focus: To examine organization's ability to assess workforce capability and capacity needs and build a workforce environment conducive to high performance.

VI. Operational Focus: To examine how an organization designs, manages, and improves its work systems and work processes to deliver student and stakeholder value and achieve organizational success and sustainability.

VII. Results: To examine an organization's performance and improvement in all key areas— student learning and process outcomes, customer-focused outcomes, workforce-focused outcomes, leadership and governance outcomes, and budgetary, financial and market outcomes.

Hoisington and Vaneswaran, (2005) discussed that managing for innovation is one of the core values of the Malcolm Baldrige criteria. The criteria provide a comprehensive structure for educational institutions to align their mission, vision, values, goals, and strategic challenges with the resources essential for long-term improvement.

Research Objectives:

1. To explore the significance of Baldrige Model in management Education
2. To study and apply Gardner's multiple intelligences in developing world class management education.

Research Questions:

1. What differences will exist in the perceptions of administrators, faculty, and staff/support Staff after applying the Baldrige Model in management Education?

2. What are the existing skills of the management students and how it can developed towards achieving multiple intelligence

Research Framework

The framework for this study is based on the theory of *change management*, or the continuous process of aligning management education with its corporate requirements to become more responsive and effective than its competitors. The concept of change management is grounded in the principle of sustained measurement of and feedback from the people, processes, and systems within an organization, in which people behave as they are measured (Berger, Sikora, & Berger, Sikora, & Berger, 1994). These basic concepts associated with the theory of change management form the basis of the Malcolm Baldrige Model and Gardener's Multiple Intelligence theory for this study.

Research Methodology

Quantitative research methodology is used for this study. Stratified convenient sampling method was selected for the purpose of this study. To understand the multiple intelligence 200 students from five management institutes affiliated to University of Pune, India are surveyed to study the perception of different stakeholders 282 respondents were selected. Thus, sample sizes for each of the three strata were 23 administrators, and 97 faculty, 162 staff/support staff, (totaling a proportional sample size of 282). The data is collected with the help of questionnaire by using likert Scale. Data Analysis is done by using Mean Score, F Test.

Reliability and Validity

The data used to calculate the Cronbach's Alpha was drawn from the 201 returned instruments. Cronbach's Alpha value for the instrument was calculated to be .96. It should be noted that although this researcher had intended to calculate the Cronbach's Alpha with the use of pilot study data, there was an insufficient number of pilot study participants to generate reliable data.

Cronbachalpha values for the seven categories of Malcom Baldrige Model ranged from 0.77 to 0.90. The alpha reliability coefficient for the dimensions ranged from 0.88 on the information and analysis variables to 0.96 on the leadership variable. Results indicated that the seven categories are distinct constructs and are being measured reliably.

Significance of the Study

As has been suggested, institutions of management education have established a trend of applying business and industrial management models to their own institutions. In particular,

Theories and models associated with Multiple Intelligence and the Malcolm Baldrige have become increasingly important to Management Students, administrators, as have the concepts associated with continuous quality management. As management education leaders explore quality-related programming changes, they will need to learn the viewpoints of the Students administrators, faculty, and staff/support staff if those initiatives are to be successfully implemented. Findings from this study could provide valuable insight to quality consultants, as well as to other management education administrators in providing world class management education in their own institutions.

Data Analysis:

The Malcolm Baldrige criteria for education, first published in 1999, provide a comprehensive structure for educational institutions to align their mission, vision, value, and goals with the resources essential for a long – term improvement effort. The Malcolm Baldrige criteria show a framework of values that could be addressed in management institutions for improving and management of training quality. It is explained below:

Leadership: Creating a sustainable organization must be taken into account for senior leaders' task. Leaders set two-way communication throughout the organization and create value for students and other stakeholders in their organizational performance expectations.

Strategic Planning: Nowadays, management education is facing rapid changes of environment so strategic planning is important in development of management education. In order to keep pace with marketing changes and needs, India management education must emphasize on two phases: strategy development and strategy implementation in strategic planning.

- In Strategy development process, it needs to determine key process steps, key participants, key weaknesses, core competencies, strategic challenges, and strategic advantages as well as fixed time for the process.
- Strategic planning must be based on actual capacity of the organization to meet the goals of the strategic planning. Strategic planners pay more attention on factors that are students, stakeholders and markets when establishing and implementation strategic planning.
- Competitiveness factor also needs to be taken into account
- When performing the action plan needed to calculate the resource factors such as financial support, implementation staff and performance measures.

Customer and Market Focus:

Management Institutes should care about feedback that relate to the satisfaction levels of students and stakeholders. Based on feedback, management institutes identify requirements for educational programs and services. From that point institute can improve educational programs and services to meet the requirements and exceed the expectations of students and stakeholders. This activity will help to enhance their satisfaction and engagement.

Measurement, analysis, and knowledge management

Institute must review organizational performance capabilities to assess organizational success, competitive performance, and progress relative to strategic objectives and action plans as well as organization's ability to respond rapidly to changing organizational needs and challenges in operating environments.

Workforce Focus

Institute should examine how they engage, manage, and develop workforce to utilize their full potential in alignment with organization's overall mission, strategy, and action plans. Workforce needs to be trained skills for adapting to change. Attention to develop skills of building and sustaining relationships between management institutes and students, stakeholders for staff is one of the priority tasks in achieving world-class management education.

Operations Focus

World class Management Education is dependent on how educational programmes and services are designed to meet customer needs and to identify critical customer needs and competitor characteristics are suggestions for India Management Education.

Results

Customer focused outcomes describes student and stakeholder focused performance results in terms of satisfaction, dissatisfaction, and engagement. Workforce focused outcomes concern workforce focused performance results in terms of workforce capability

and capacity, workforce climate, workforce engagement, workforce development. Leadership outcomes examine senior leadership results. Leadership is measured in aspect senior leader’s communication and engagement with the workforce to deploy vision and values, encourage two-way communication, and create a focus on action. Fulfillment of societal responsibilities is also taken into account.

Pointing out current levels and trends in key measures of budgetary and financial performance as well as current levels and trends in key measures of market performance are the last component of results.

Table1 - Intelligence type of Management Students

Sr. No	Intelligence type	Mean Score	In Percentages
1	Linguistic	11	55
2	Logical-Mathematical	16	80
3	Musical	15	75
4	Bodily-Kinesthetic	18	90
5	Spatial-Visual	12	60
6	Interpersonal	19	95
7	Intrapersonal	12	60

From the survey of 200 management students, it is being observed that majority of students i.e. 95% are found to have Interpersonal skills followed by 90% students having Bodily- Kinesthetic skills. And Least no of students i.e.55% are found to have Linguistic Skills.

Table 2 - Group Means for Each of the Seven Malcom Baldrige Categories

S. No.	Category	Group	Mean
1	Leadership	1	4.06
		2	3.67
		3	3.58
2	Strategic Planning and Deployment	1	4.32
		2	3.76
		3	3.78
3	Student, Stakeholder & Market Focus	1	3.68
		2	3.43
		3	3.39
4	Information and Analysis	1	3.93
		2	3.53
		3	3.46
5	Faculty-Staff Focus	1	3.22
		2	2.96
		3	3.08
6	Process Management	1	3.62
		2	3.56
		3	3.37
7	Organizational Performance	1	3.84
		2	3.32
		3	3.42

An ANOVA was conducted for each of the seven quality categories to determine whether differences existed among the three groups in this study (administrative, faculty and staff/support staff). For categories that showed significance,

Table 3 - Group Perceptions for category One- Leadership

Source	SS	Df	MS	F
Between Groups	4.80	2	2.39	3.34*
Within Groups	142.31	198	.72	
Total	147.11	200		

*p < .05

Above table indicates that for Category One (Leadership) indicated a significant difference between groups.

Table 4 - Group Perceptions for category Two- Strategic Planning& Deployment

Source	SS	Df	MS	F
Between Groups	6.57	2	3.29	4.20*
Within Groups	154.84	198	0.78	
Total	161.41	200		

*p < .05

Above table indicates that for Category Two (Strategic Planning& Deployment) indicated a significant difference between groups.

Table 5 - Group Perceptions for category Three- Student Stakeholder & Market Focus

Source	SS	Df	MS	F
Between Groups	1.77	2	0.88	1.43*
Within Groups	122.59	198	0.62	
Total	124.36	200		

*p < .05

Above table indicates that for Category Three (Student Stakeholder & Market Focus) indicated that there is no significant difference between groups.

Table 6 - Group Perceptions for category Four- Information & Analysis

Source	SS	Df	MS	F
Between Groups	4.495	2	2.248	3.404*
Within Groups	130.729	198	0.660	
Total	135.224	200		

*p < .05

Above table indicates that for Category Four (Information & Analysis) indicated that there is significant difference between groups.

Table 7 - Group Perceptions for category Five- Faculty & Staff Focus

Source	SS	Df	MS	F
Between Groups	1.33	2	0.67	0.70*
Within Groups	186.95	198	0.99	
Total	188.28	200		

*p < .05

Above table indicates that for Category Five (Faculty & Staff Focus) indicated that there is no significant difference between groups.

Table 8 - Group Perceptions for category Six- Process Management

Source	SS	Df	MS	F
Between Groups	12.25	2	1.12	2.05*
Within Groups	108.51	198	0.55	
Total	120.76	200		

*p < .05

Above table indicates that for Category Six (Process Management) indicated that there is no significant difference between groups.

Table 9 - Group Perceptions for category Seven- Organizational Performance

Source	SS	Df	MS	F
Between Groups	4.96	2	2.48	4.11*
Within Groups	119.59	198	0.60	
Total	124.55	200		

*p < .05

Above table indicates that for Category Seven (Organizational Performance) indicated that there is significant difference between groups.

Results and Conclusion:

From the data analysis, It is found that there is significant difference in the Category One (leadership), Category Two (strategic planning & deployment), Category Four (information and analysis) and Category Seven (organizational performance results).

And there is no significant difference found in Category Three (student, stakeholder and market focus), Category Five (faculty and staff focus) and Category Six (process management)

Based on the study findings of this study several conclusions can be derived.

For Category one (leadership), significant difference were found. These results correspond with

Deming's (1989) belief that to be an effective leader, one needs to successfully manage any ambiguity that arises out of change in order help an organization thrive. This result also concurs with Morgan's (1988) view that managers and leaders must be proactive about an organization's future and anticipate forthcoming changes.

For Category Two (strategic planning and deployment), Significant difference were found. One probable explanation offered for this difference in perception may be found that alignment of human resource plans for hiring and training through the approval process, a systematic process to integrate these plans across the university are not in place.

The results for Category Four (information and analysis) significant difference were found. A possible reason for this difference is also mentioned in the Malcolm Baldrige Feedback Report, which stated: "Below the Chancellors Advisory Committee, there is no systematic method for selecting and aligning measures/indicators for tracking daily operations. In several departments, there are goals but not performance measures, or the department review measures that do not relate to department goals"(Malcolm Baldrige Feedback Report, 2001, p. 24).

Results for Category Seven (organizational performance) significant differences were found. One possible explanation for this difference can be found in the Malcolm Baldrige feedback report that indicated: Overall employee satisfaction/morale trends are flat for "moral at a high level" for faculty and staff as demonstrated by scores of 3.16 in 1994 on a five-point scale and 3.48 in both 1999 and 2001 results. Additionally, faculty and staff show an unfavorable trend for "my opinions are valued" for three years reported from scores of 3.38 in 1994 and 3.61 in 1999 and 3.29 in 2001. p. 42).

Recommendations:

Most management education specialists would be reluctant to admit that they are content with the status quo, as it is far more acceptable to be striving for excellence. As educators constantly seek ways to improve their institutions, new and better approaches to problem solving are needed. For Conserving resources, improving institutional effectiveness, implementing quality measures, and dealing with changing role of stakeholders (faculty, students, administrators, staff and parents) following Nine principles associated with effective quality to enhance involvement of stake holders in developing world class Management Education:

1. Are driven by vision, mission and outcome driven: Without a clearly defined mission an organization lacks a clear sense of direction and focus. Their vision, mission and outcomes are defined by the expectations of all the stakeholders.

2. Are system dependent: Institutional performance is defined as how well procedures and members interact as part of an interdependent system or process

3. Have leaders who create a quality culture: Leaders are responsible for helping members understand that new ways of thinking and behaving may be necessary to achieve the declared vision, mission and outcomes.

4. Exhibit systematic individual development: Because an organization is constantly changing, it is necessary to continually update all its members' knowledge and skills to meet the demands of existing changes and to systematically prepare for future changes

5. Make decisions based on fact: The basic cause of a problem cannot be clearly understood unless all relevant data are systematically gathered.

6. Delegate decision-making: If individuals are to be held responsible for achieving a stated mission, they must be made aware of how their position and actions

relate to the mission, as well as be given the flexibility to make necessary changes to their job tasks. The more individuals sense they can influence a process the more they take ownership.

7. Collaborate: Collaboration and teamwork produce results when individuals who have a stake in the outcome are involved in the decision-making process.

8. Plan for change: Institutions need to embrace change as a cultural value; they need to perceive change as a potentially positive force and anticipate it. Planning for change is a fundamental component of continuous improvement

9. Have leaders who support a quality culture: Senior management need to support the implementation of the quality principles by ensuring that the necessary systems and resources are available, which will create and nourish a culture of change.

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