

A Study of Leadership Pattern of Engineering Students of Indore

Dr. Rajeshwari Gwal

Assistant Professor

Acropolis Faculty of Management and Research, Indore (M.P.)
Approved by A.I.C.T.E., New Delhi Affiliated to D.A.V.V., Indore
(M.P.) rajeshwarigwal@acropolis.in, Contact No. 9826510090

Dr. Sumeet Khurana

Dean and Professor

Acropolis Technical Campus
Sumeetkhurana.atc@acropolis.in, Contact No.9893398955

ABSTRACT

Students are the society's leaders of tomorrow. Very few engineers become leaders. Engineering students are involved in high-profile societies, teams and clubs that are international in scope and incur hundreds and thousands of dollars in annual expenditures. It is imperative that these groups be led by knowledgeable, skilled and capable leaders. If engineering students are provided with an opportunity to accelerate their careers and realize their full leadership potential; when they graduate, a new generation of skilled leaders will enter the workforce. The Blake-Mouton Managerial Grid has been applied in the present study to assess and analyze the leadership skills of the Engineering students-the future managers-who would be leading the corporate world of tomorrow. The study helps to analyze, develop and polish the abilities of these future technically sound engineers but with a scope for further improvement to their skills to be a perfect team leader.

Keywords: Leader, Leadership, Leadership Vs Engineering, Work Culture, Team Leader

INTRODUCTION

In today's business world the pace of businesses is rapidly changing. Leader is the dynamic word, which adapts changes with respect to the requirement. Leader is an important factor for making successful any type of organizations. (H Swain, S Mohapatra, 2013). As many organizations are diversifying their businesses they need to develop the leadership skills within their employees. Leadership always matters, and it has never mattered more than it does now (Warren Bennis, 2007). Good Leadership and good management are different and both are essential for an organization to thrive. They both involve influencing people. They both require working with people. Both are concerned with the achievement of common goals. In spite of conflicting conditions, an employee's perception of someone caring about them and their working conditions in itself lead to higher productivity (Elton Mayo, 1927-1932). The behaviors of managers toward workers satisfaction and needs could improve productivity (Anteby & Khurana, 2010). Genuine trust must be built between leaders and followers (Bernard Bass, 1997).

LEADERSHIP Vs ENGINEERING

Leadership ability cannot be acquired by reading a textbook or listening to a lecture. Instead, parents and educators must provide interactive and challenging activities and opportunities that allow engineering students to develop qualities such as determination, focus, decisiveness, time management, social confidence and self-discipline. These characteristics are crucial to developing leadership skills. As students become more assertive and self-confident, they improve their academic and social skills, increasing the likelihood of continuing their education and becoming leaders.

The interdependency of technical and socioeconomic problem solving has increased the need for engineers to also prioritize the development of their "soft," or professional skills (Bayless, D. J., & Robe, T. R. (2010)).

The dilemma is that engineering curricula all over the country are not positioned to strategically address this growing challenge. Engineering students have the propensity to focus on details, rather than the overall broad picture.

In modern engineering programmes; Engineers can make excellent leaders if their technical skills are combined with leadership and creativity in community and professional roles. If advanced concepts in leadership are shared with the student leaders; using a structured mechanism; for accelerating the capabilities of students charged with the successful execution of work; They will be perfectly positioned to internalize these concepts in a way that reflects their own leadership style within their areas of responsibility. Organizations should place greater emphasis on experiential learning so as to foster sustained behavioral and practice changes. Organizations can introduce formal mentoring and job rotation programs, “stretch assignments” and opportunities for more senior responsibilities to build the experience base. These activities have been found to be powerful stimulants of experiential learning (**Hirst et al ; 2004:324**).

When they graduate, a new generation of skilled leaders enters the workforce but before that it becomes very important to find out the current standing of the student in terms of his orientation toward task or people. The task oriented managers focus on the execution of tasks to achieve organizational goals whereas the people oriented managers lay emphasis on their relationship with their subordinates and generating mutual trust and respect (**G.Kriel, D.Singh et al.,2007**).

REVIEW OF LITERATURE

Henri Fayol's work focused on the personal duties of managers. He developed 14 principles of management that he considered to be universal truths of management. Many of his principles are still followed today. He was the first to identify specific management functions of planning, organizing, commanding, coordinating, and controlling

Most definitions of leadership reflect the assumption that it involves a process whereby intentional influence is exerted by one person over other people to guide, structure, and facilitate activities and relationships in a group or organization.” (**Yukl, 2002:2**)

The Scottish Executive states that it 'sees the role of leadership in schools and the wider educational community growing in importance' (**Scottish Executive, 2005, p2**). The importance the Executive attaches to leadership and development of leadership capacity is reflected in the leadership agenda set out in *Ambitious, Excellent Schools* (**Scottish Executive, 2004a; Scottish Executive, 2005**). These documents make the link between effective leadership, leadership development and pupils' school success. The stated intention is that by assisting schools in their leadership work, not adding to their workload (Scottish Executive, 2005), schools will be more able to develop pupils' 'capacities as successful learners, confident individuals, responsible citizens and effective contributors to society' (**A Curriculum for Excellence, Scottish Executive, 2004**).

According to **Solly (2003)**, we need to develop high-calibre leaders in the early years who can both 'maintain' and 'enhance', but studies (**Rodd, 2005; Bloom, 1997, in Muijs et al, 2004**) show that most leaders in early childhood settings in the UK found that roles most common to their work could be described as focusing more on maintenance than development; there was more emphasis on management than on leadership (**Muijs et al, 2004**).

Four contextual elements - paradigms, actions, education in the substance meaning of early childhood education, and environment- seems to be important for a successful leadership in the early years. It is asserted that the more the interest groups in early childhood education share the meaning of these elements, the better

the everyday reality of leadership will function (Nivala in Nivala and Hujala, 2002).

Contingency and Situational approaches are grounded in the philosophy that leaders should act as the situation demands. The situational variant suggests that leaders should develop a repertoire of skills and styles that can be deployed to suit the particular situation. Its origins derive from the original Ohio State and Michigan University studies which popularised the distinction between task-centred and relationship-centred leaders (Hempill, J.K., 1949). These studies, in turn, led to the 'people or production' Leadership Grid work of Blake and Mouton which suggested that it was possible to have high concern for both people and production.

RATIONALE OF STUDY

According to Fayol the key function of a manager is to control activities and people by measuring and or correcting them to give performance according to organizational plans. Every level of management requires skills and abilities. Identifying the leadership pattern of an engineering student in terms of his orientation towards tasks or people and to groom them according to the requirements of an organization ,leadership training and development can be incorporated in the Engineering Programmes so that these students can take up special challenges that young and minority leaders face. Maximize productivity, shape a positive culture and promote harmony.

OBJECTIVE OF THE STUDY

To study the leadership style of Engineering students using Blake and Mouton's Managerial grid model.

RESEARCH METHODOLOGY

To fulfill the desired objectives of the study a group 200 Engineering students were chosen from various Engineering colleges of Indore. A structured questionnaire on 5 point Likert scale ranging from never (0) to always (5) was given to them to collect the data as required by Blake and Mouton's Managerial grid model.

Blake and Mouton's Managerial grid model explains how leaders combine task and relationship behaviors to influence subordinates in their efforts to reach a goal. This model suggests different types of leadership approach viz.-

- **Authoritarian management style / “Authority-Obedience” approach** - Leadership behaviour highly concerned with production with a very low concern for people.
- **Country Club management style /“Love conquers all” approach** - A high concern for people and low concern for results .
- **The “Middle-of-the-road”/ “Get results but do not kill yourself” approach** - Leader has an equal balance for both task and results.
- **Impoverished management style / “Speak no evil, hear no evil, see no evil” approach** - Leader lacks concern in both areas.
- **Team management leader style /“one plus one can add up three” approach** - High focus on both people relationships and task efficiency.

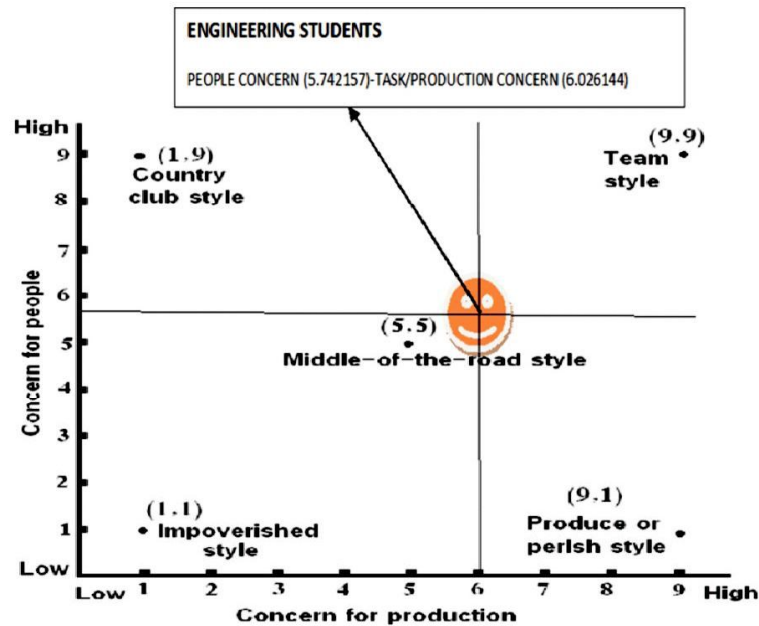
FINDINGS

In this study the major concern was to evaluate the orientation of engineering students towards people-relationship and task efficiency. To find out the orientation as per the model the basic issues discussed with them are summarized as follows-

PEOPLE ORIENTATION	Mean Value
I encourage my team to participate when it comes decision making time and I try to implement their ideas and suggestions.	3.647059
I enjoy coaching people on new tasks and procedures.	3.111111
I encourage my employees to be creative about their job.	3.235294
I enjoy reading articles, books, and journals about training, leadership, and psychology; and then putting what I have read into action	2.777778
When correcting mistakes, I do not worry about jeopardizing(to put in danger) relationships	2.705882
I enjoy explaining the intricacies and details of a complex task or project to my employees	2.823529
Nothing is more important than building a great team.	3.882353
I honor other people's boundaries.	3.25
Counseling my employees to improve their performance or behavior is second nature to me.	3.277778
Sum of Mean	28.71078
20% of Sum of mean =Y	5.742157

TASK ORIENTATION	Mean value
Nothing is more important than accomplishing a goal or task	3.666667
I closely monitor the schedule to ensure a task or project will be completed in time	3.5
The more challenging a task is, the more I enjoy it	3.722222
When seeing a complex task through to completion, I ensure that every detail is accounted for.	2.833333
I find it easy to carry out several complicated tasks at the same time	3.055556
I manage my time very efficiently.	3.277778
Breaking large projects into small manageable tasks is second nature to me	3.722222
I enjoy analyzing problems.	3.176471
I enjoy reading articles, books, and trade journals about my profession; and then implementing the new procedures I have learned.	3.176471
Sum of Mean values	30.13072
20% of sum of mean	6.026144

After plotting the mean of final scores on the graph we get the following point of intersection



The area of intersection of two lines shows score of 5.74 in the **Concern for People** section and a score of 6.03 in the **Concern for Production** section. The quad where the two lines intersect is the leadership style. In this case, the leadership style of the Engineering students identified is Team Management Style.

The present study found that the Engineering students of Indore are having a blend to be a team leader rather than orientation towards country club or perish or produce style in general, although with a further scope of improvement in their skills to be a perfect team leader. Further, we may say that on an average they are supportive, open to suggestions and adopt a sharing and caring attitude while acknowledging the skills and efficiencies of employees without getting diverted from the main focus of reaching a defined goal on one side and study predicts that they have an attitude in nurturing the skills of employees along with giving due weightage to their well-being. They believe in creating an employee friendly environment along with following rules and regulations to create an OCTAPACE culture and improving the business results with much satisfaction.

CONCLUSION

As the world of engineering expands globally, leadership skills and communication techniques become even more paramount to success in any engineering profession. Engineers need to keep in mind that leadership and management are part of their job, so not having these responsibilities is not really an option. What is optional, however, are the specific leadership and management characteristics they will be accountable for in their engineering roles. Today's Engineering Institutes should educate and prepare engineering leaders who will create future and that goes beyond inventing new technologies. They need to understand how these solutions make a difference in people's lives. Engineering Institutes should focus on developing diverse, real-world relationships with others and knowing how teams work. There's a growing demand for engineers who can skillfully lead projects and organizations; who can be entrepreneurial and collaborative and also who can inspire others to innovate and succeed.

To refine the managers of tomorrow the Engineering Program should be designed in such a way that it will help the students to set goals for an organization and to reach them in an ethical manner by analyzing their performance and improving upon their leadership skills by making them operate at the extreme ends of team leader. Positioning the leadership functioning positively in the student's mindset not only will help in uplifting the business results up to greater heights, but will definitely increase a sense of loyalty and motivation among them.

This research provides an insight into how this shift in leadership style can be brought about in the Engineering students. Education Policy makers, Faculty and governing bodies of Engineering Institutes should envisage these being developed and incorporated into the personal behavior of the students of Engineering Institutes. To create such higher levels of leadership styles, customized, action learning-based interventions are to be built around the culture, complex challenges and organizational structure.

REFERENCES

1. Anteby, M., & Khurana, R. (2010). Harvard Business School and the Hawthorne Experiments (1924- 1933). Retrieved 2014 22-July from The Human Relations Movement: <http://www.library.hbs.edu/hc/hawthorne/intro.html#i>
2. Bayless, D. J., & Robe, T. R. (2010). Leadership Education for Engineering Students. *Frontiers in Education Conference (FIE), 2010 IEEE*, (pp. S2J-1 - S2J-6).
3. Bennis, W G (2007), 'The seven ages of the leader', *Harvard Business Review*, 82(1), pp 46–53, 112.
4. Bernard Bass (1997). <http://gustacci.com/steve-jobs/literature-review/>
5. Blake, R. and J. Mouton (1964). *The managerial grid* . Houston, Gulf Publishing
6. Cutaja, M. (2010 July). Henri Foyol's Principles of Management. Retrieved 2014 22-July from Business Manaement@ suite 101: <http://maureencutajar.suite101.com/henri-fayols-principles-of-management-a265588>
7. H. Swain, S. Mohapatra , 2013: A Comparitive Study of Leadership Factors affecting Public and Private Sector Banks in India :An Employee Perspective (pp.28-36).Prabandhan:Indian Journal of Management,September 2013
8. Hempill,J.K. (1949),'The Leader and his Group' *Journal of Educational Research* 28,pp.225-229,245-246.
9. Hirst, G., Mann, L., Bain, P., Pirola-Merlo, A., & Richver,A.(2004)Learning to lead: the development and testing of a model of leadership learning, *The Leadership Quarterly* 15, 311-327 Retrieved from <http://gustacci.com/steve-jobs/literature-review/>
10. Scottish Executive (2005), *Ambitious, Excellent Schools – Leadership*, A Discussion Paper, Edinburgh: Scottish Executive Education Department
11. Singh, D., & Kriel, D. (2004). Resistance to Change. In J. Berning, A. Beer, D. Toit, G. Kriel, J. Kriel, H. Louw, et al., *Focus on Management Principles. A Generic Approach* (pp. 81-86). Lansdowne.
12. Solly, K (2003), What do early years leaders do to maintain and enhance the significance of the early years? A paper on a conversation with Kathryn Solly held at the Institute of Education on 22 May 2003
13. Yukl, G. (2002). *Leadership in Organizations*. Upper Saddle River, NJ, Prentice Hall Inc.