



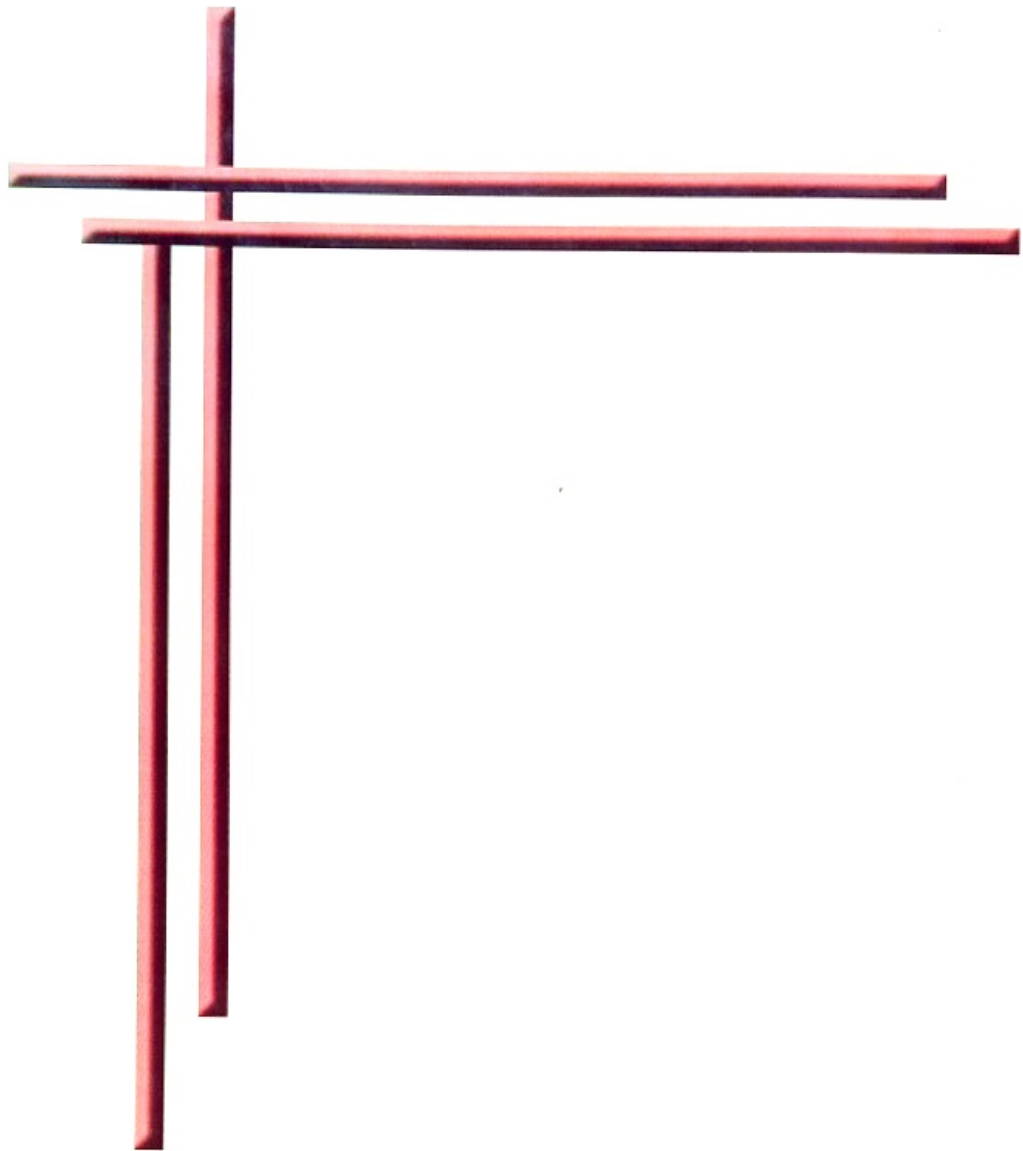
NEELKAMAL

INNOVATIONS IN EDUCATION



Dr. Jayan Erancheri Illam
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**INNOVATIONS
IN
EDUCATION**



Innovation is often the hidden thing,
because we can't put numbers to it.
And yet it's the thing that defines
the way we live, the things we'd like
to have for everyone whether it's
health or education.

— *Bill Gates* —

INNOVATIONS IN EDUCATION

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Bhavya P.V.

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Preface

This book "Innovations in Education" is a collaborative initiative by Sreekrishnapuram V.T. Bhattathiripad College, University of Calicut. This aims to comprise the research perspectives of E-teaching and E-Content development. Researchers are from different educational backgrounds and they all are here to express their innovative ideas. Now, there is a lot of researches going on in this area of E-teaching and E-Content development. This book aims at motivating beginners in E-teaching by introducing new methodologies, going through discussions about the impact of digital teaching in the higher education area, and also provides new insights about E-teaching and E-learning. It is the need of the present day scenario. We extend our sincere gratitude to all who stood along with us in this great venture. We congratulate all the authors for their contributions to this volume.

This book suggests some approaches that they can adopt to manage this sudden shift of teaching and learning from physical classrooms to digital classrooms. Even though the internet and all the E-teaching technologies are around us for a long time, we were hesitant of implementing these into our Teaching-Learning process. This book aims to walk along with the teachers and guides them to a new era of E-teaching.

We must thank our publisher Mr. Suresh Chandra Sharma, Managing Director of Neelkamal Publications Pvt. Ltd., New Delhi-Hyderabad, who has taken a lot of interest in this book. His efforts to bring out the Book in the excellent form will always be remembered.

We feel happy to entertain any suggestions and additions for refinements of this book and all such modifications will be taken care of in the next issue of the book.

Editors

Dr. Jayan Erancheri Illam

Dr. Saritha Namboodiri

Bhavya P.V.

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The technical support given by EMMRC, University of Calicut for our teachers and contributors to the book in related to educational technology is highly appreciated. We express our sincere gratitude to the team EMMRC for this successful endeavour.

We are extending our gratitude to all the contributors of the book.

Thank all those who contributed to the success of the physical creation to completion of this book.



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Importance of Leadership

– Sadeep. K.*

Mohammed Azeez V.K.**

ABSTRACT

Leadership is an essential ingredient for a successful organization. It is the process of influencing the behaviour of others to work willingly and enthusiastically for achieving predetermined goals. It is the lifting of man's visions to higher sights, personality beyond its normal limitations. This paper deals with importance of leadership and also deals with importance of developing leadership qualities among students. Leadership is achieved through the interaction between the leader, the follower and the environment and it is important that students experience leadership opportunities during school, learn the art of building relationships within teams, define identity and perform tasks effectively. It also offers the opportunity to the students to show effective communication and interpersonal skills.

7.1 Introduction

Leadership is important because it establishes a clear vision and communicates effectively with its subordinates / colleagues. The clear vision gives them a better understanding of the direction of the organization and makes them understand their roles and responsibilities. Everything you need to know about the importance and meaning of leadership in management.

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Leadership is a matter of pressure on people until they do what the leader wants them to do. Leadership is primarily about removing barriers so people can act freely and independently. Leadership encourages and stimulates workers' action by innovating them in planning and decision-making activities. Good leadership is essential for businesses, the government and the many groups and organizations that shape the way we live, work and play. Leadership is an important factor in the success of an organization. Leadership turns potential into reality.

7.2 Meaning and Importance of Leadership

Leadership is the action of key employees to achieve goals. It plays an important role in employee performance and productivity. A good leader: establishes a clear vision by influencing employees to understand and accept the future state of the organization.

7.3 Leadership Nature and Leadership Importance

Leadership can be defined simply as the ability to influence others. Leadership is the work done by the leader. It is a process of social influence in which a person can request the help and support of others in carrying out a common task.

7.4 Why is Leadership Important for Students?

It is important that students experience leadership opportunities during school, that they learn the art of building relationships within teams, define identities and perform tasks effectively. It also offers the opportunity to learn to identify and show effective communication and interpersonal skills.

7.5 The 3 Most Important Roles of a Leader

Leaders have to do different things according to their areas of activity, roles and responsibilities, as well as their desires and goals. The three tasks are common: visualize, align followers with your vision and ensure execution. In all three roles, influence remains the main skill

Leadership Features

- **Influence on the Behavior of Others:** leadership is an individual's ability to influence the behavior of other employees in the organization to achieve a common goal or goal of voluntarily cooperating with each other for compliance.

- **Interpersonal Process:** it is an interpersonal process between leaders and followers. The relationship between leader and follower decides how the organization's goals are achieved efficiently and effectively.
- **Achieving Common Organizational Goals:** the purpose of leadership is to guide people in an organization to work towards common organizational goals. The leader unites people and their efforts to achieve common goals.
- **Continuous Process:** leadership is an ongoing process. A leader should guide his employees every time and also monitor them to make sure their efforts are going in the same direction and that they are not deviating from their goals.
- **Group Process:** it is a group process that involves two or more people interacting with each other. A leader cannot lead without followers.
- **It Depends on the Situation:** it is subject to a situation, since everything depends on facing current situations. Therefore, there is no single best leadership style.

7.6 Importance of a Good Leader

- **Provide Guidance:** Guidance involves training, instructing team members during the vision or goal of the organization and ensures that there are no deviations from the vision or goal despite justifying the adoption of corrective measures. It also implies the leader's ability to provide advice that allows team members to grow and develop.
- **Promote Creativity:** Good leaders abandon their ego and leave room for their subordinates to express themselves in order to encourage new ideas, innovations that can make an organization move towards the new millennium. For example, a leader may decide to stay away from a certain task, so that team members only complete it to increase their creativity. Because creativity resides in every man, but the mechanism for freeing him can be different and the leader is in a privileged position to free the creativity that each team member has, even if they don't know him.
- **Motivation:** Motivation is vital for reaching an organization. A good leader ensures that the energy of the team members is high to do the job in the best possible way. An efficient leader motivates team members by building trust in them to take a positive approach to work and organization in general. Motivation is also achieved by creating a hassle free environment by creating trust between team members to

improvetogetherness among the team members in relation to company objectives, rather than focusing on individual goals. Incentives also can be a medium to motivate team members.

4. **Communication:** Excellent communication between team leader and team members is essential while doing work in an effective and efficient manner. Communication involves exchange of ideas, information and messages between people at a particular place and time through speaking, writing or gestures. Effective communication is the essence to create understanding and it is the bed rock to effective leadership. Rollo May, American psychologist comments, "Communication leads to community, that is, to understanding, intimacy and mutual valuing". An efficient leader will be able to create understanding of the vision, values and direction of the organization to the team members or individuals involved in the business in clear terms.
 - **Foster Good Values:** Exhibition of good values is vital to the achievement of an organization. A good leader will endeavour to foster good values among team members by exemplifying it. For instance, a leader that displays humility, integrity and kindness will serve as model for the team members to imbibe such character thereby enhancing the productivity of the organization.
 - **Conflict Resolution:** A productive leader manages conflicts that stand as threat to unity of team members, productivity and motivation. Conflict is best dealt with in the primitive stage therefore it is important for a leader to discern signs of conflict early before it escalate. To resolute conflict, a leader would have to evaluate the situation, develop a common understanding of the problem, adopt solutions and by agreement select a solution. Tools effective leaders engage to manage conflicts includes, *Avoiding*; not all conflicts can be avoided, *Accommodating*; in the interest of the team, a team member may need to step down, *Compromise*; one of the parties involved in conflict may need to step down, *Collaborative*; by working closely with the team a team leader can foster co-operation among team members and *Forcing*; exercise authority if deem necessary.

7.7 Qualities of a Good Leader

- **Influence:** The impact a leader has on its team members determines the exploit of team members. A leader by exemplification, deposit sense of hope, energy, morale, focus and feeling of accomplishment into

team members thereby creating an enabling environment that is gear towards productivity.

- ◆ **Communication Skills:** Good leaders communicate clearly both verbally and in written form in a way the team will understand the objectives. A good leader must be able to listen actively and understand from the perspective of the team members, listening also includes observing the body language and other environmental signals. Effective listening helps the leader to provide a more comprehensive understanding of the information.
- ◆ **Delegation:** A good leader knows the responsibilities to share and who to share it with so to improve productivity. Delegating certain responsibilities permit a leader to focus on more productive matters.
- ◆ **Confidence:** A good leader must be confident and must be able to instil confidence into team members. A good leader does not waver over his decisions.
- ◆ **Organization:** A good leader must possess special organizational skills in order to coordinate company goals and objectives in such a manner that will enhance team members' productivity. It also involves setting up parameters that guides team members towards attaining company aim and objectives.
- ◆ **Negotiation:** negotiation is the process of establishing a mutually acceptable interest in the conflict of interest. An efficient leader must be able to negotiate indifference in the interest of team members and establish a common interest.
- ◆ **Impartial:** a leader must be impartial in dealing with team members. Impartial in prizes and also impartial recognition in disciplinary actions.
- ◆ **Integrity:** it is imperative that a leader possess integrity. A good leader must demonstrate honesty at all times to gain the trust of team members.

7.8 Conclusion

There is no absolute best style for leadership. A good leader must be able to change his style based on the project. It is a common opinion that leadership is vital for functional and organizational and social success. Leaders create commitment and enthusiasm among followers to achieve goals. Leadership is achieved through the interaction between the leader, the follower and the environment and it is important that students experience

leadership opportunities during school, learn the art of building relationships within teams, define identity and perform tasks effectively. It also offers the opportunity to learn to identify and show effective communication and interpersonal skills.

References

1. Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
2. Adair, J. (1988). *Effective leadership*. London. Pan Books.
3. Bennis, W. (1994). *On becoming a leader*. (Rev. ed). Reading, MA: Perseus Books.
4. Bryman, A. (1996). *Leadership in organizations*. In Clegg S. R., Hardy, C. and Nord, W. R. (Eds). *Handbook of Organization Studies*, pp.276-292. London: Sage.
5. Avery, G. C. (2005). *Understanding Leadership*. London: Sage Publications
6. Northouse, P. G. (2007). *Leadership: theory and practice*. 4th ed. Thousand Oaks, CA: Sage Publications.

