

PPC

ASME Professional
Practice Curriculum ©

Welcome to the Members Only Edition of the PPC! Our goal is to help you be better prepared for entry into and early advancement in the engineering profession.

This edition is a free downloadable sampler that includes the following modules:

- *Introduction to Intellectual Property (Business & Legal Series)*
- *Leadership Styles and Attributes (Management & Leadership Series)*
- *Effective Technical Presentations (Communications Series)*
- *Product Management (Product Management Series)*
- *Policy Gear (Business and Legal Series)*

To download the complete curriculum (12 series of modules) for free, visit our website at www.professionalpractice.asme.org.

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- Studying Engineering
- Graduate Studies
- Introduction to an Engineering Career
- Mechanical Engineering and Multidisciplinary Thinking
- Engineering Ethics

Industry Series

- Career Planning: Choosing an Industry
- Aerospace
- Automotive
- Consumer Sporting Goods
- Energy
- Healthcare

Business & Legal Series

- Entrepreneurs: Business Planning
- Engineering Public Policy - Policy Gear
- Introduction to Intellectual Property
- Patent Law
- Codes and Standards

Management & Leadership Series

- Leadership Principles
- Leadership Styles and Attributes
- Team Building
- Management Skills
- Workplace Diversity
- Mentoring
- Critical Thinking and Problem Solving

Communications Series

- Communicating to Non-Technical Audiences
- Conducting Effective Meetings
- Effective Technical Presentations
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- Communication Skills

Project Management Series

- Project Management
- Project Controls
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- Systems Engineering
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Sustainability Series

- Sustainability: Intro
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Writing Winning Proposals Series

- An Introduction
- The Technical Proposal
- The Cost Proposal
- Grant Writing for Engineers

Sales and Marketing for Engineers

- Sales for Engineers
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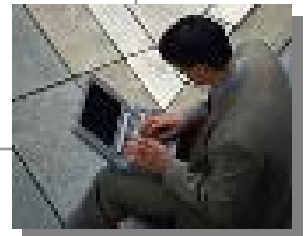
**Members Only
Edition**

PPC

ASME Professional
Practice
Curriculum[®]

Business & Legal Series

Volume 6



Members Only
Edition

ASME
SETTING THE STANDARD

The ASME Professional Practice Curriculum:

Welcome to the printed version of the PPC Online, a program of study for engineering students and early career engineers that supplements the formal college/university engineering curriculum. The PPC aims to better prepare you for entry into and early advancement in the engineering profession.

Visit us at <http://www.professionalpractice.asme.org>

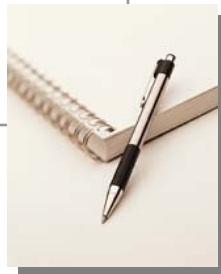
For Faculty

It is a major aim of ASME to help colleges of engineering guide the development of students and teach the principles of engineering practice and professionalism without overburdening an already full undergraduate curriculum. The PPC Online is meant to supplement the formal college/university engineering curriculum and aid engineering faculty in better preparing graduates for entry into and early advancement in the engineering profession. The modules cover a diverse array of topics, some corresponding to the ABET a-k criteria, designed to be suitable for assignment wherever appropriate in the engineering curriculum.

The ASME PPC Online is a joint project of the Center for Education and the Center for Professional Development, Practice and Ethics and is funded by the ASME Foundation.

The ASME Professional Practice Curriculum:

Volume 1	The Project Management Series
Volume 2	The Product Management Series
Volume 3	Writing Winning Proposals
Volume 4	The Engineering Design Series
Volume 5	Sustainability Series
Volume 6	Business & Legal Series
Volume 7	Entrepreneurial Series
Volume 8	Career Transition Series
Volume 9	Sales and Marketing for Engineers
Volume 10	Communications Series
Volume 11	Management & Leadership Skills Series
Volume 12	Industry Series



The ASME Professional Practice Curriculum: Management & Leadership Skills Series

Volume 11

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Leadership Styles & Attributes

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Leadership Styles & Attributes

Introduction

Great leaders exist in every social role in society. You might have some in mind that you admire greatly for their leadership effectiveness. What traits and mannerisms do they have that you would like to incorporate into your own leadership role as you study leadership skills? Keep in mind that you should assume your own nature and do not have to perform a drastic personality change to become a good leader.



1 Effective Leadership

Effective leadership is based on a series of personal qualities and capabilities. For the sake of our discussion, we will divide these into two categories: *styles* and *attributes*. We use the term "style" to describe certain techniques or approaches that leaders use to implement their vision and objectives. We use the term "attributes" to describe certain qualities or features that are inherently present in the personalities of most effective leaders. Styles and attributes can be learned and developed over the course of time and experience. The table below illustrates examples of styles and attributes.

Attribute	Style
The ability to communicate effectively to others.	Sensitive to the goals and needs of individuals.
The ability to make decisions.	Proactive Techniques
The ability to organize and manage resources	Open-minded and continually seeks new ways to get things done.
The ability to solve problems and facilitate conflict resolution.	Demonstrates an attitude of enthusiasm and "can do"
The ability to foster teamwork	Demonstrates loyalty to the organization

2 Selecting Approaches

Some leaders develop their styles and attributes in response to conditions in their environments. These conditions may be determined by social, economic or cultural factors. Other leaders learn to utilize different approaches based upon the situations with which they are confronted. In environments that are highly factionalized, some leaders may stand out as conciliatory in their ability to bring conflicting parties together. In environments where change is slow to occur, some leaders may stand out as innovative or revolutionary in their ability to inspire new ideas. The key concept is to understand where and when a particular style of leadership will be positive and not destructive.

Leadership Styles & Attributes

Non-Progressive and Slow to Change

In environments where change comes slowly, effective leaders may choose to take on a more engaging role to enable themselves to stand out. He/she might be more willing to give their own opinion or to generate some form of dialog by facilitating thought and discussion among their peers and subordinates. Effective leadership may require some risk-taking with respect to challenging old norms and facilitating change, innovation and alternative or "out of the box" thinking.

Factionalized Groups, Infighting and Internal Conflict

In environments where groups are factionalized and the organization is plagued with in-fighting, an effective leader might take on the role of peace-maker or healer. In this case, he/she may assume a more impartial tone. Such leadership requires skills in listening, negotiation and the ability to communicate empathy to all sides in dispute. This style also requires the ability to bring differing parties together under a series of broad, universally-accepted objectives.

Organizational Problems and Operational Inadequacies

In environments where a variety of problems exist (operational, service delivery, structural, etc.) effective leaders assume a problem-solving role that often requires the qualities of decisiveness, careful analysis and the ability to develop strategic solutions. The problem-solver leader is pragmatic - able to evaluate situations and respond to them with workable, realistic ideas and a keen understanding of how to balance the variables of time, budgets and human resources.

Corruption, Indifference and Negative Organizational Image

In environments where corruption, indifference and a poor organizational image exists, effective leaders must be effective reformers. They must be able to inspire ethics, morality and a sound personal example. These leaders must communicate a higher set of values and beliefs. They must also be willing to stand behind their principles in environments that can be hostile, divisive and personally destructive. In the case of indifference, such leaders must have the charisma to generate awareness and sentiment for the problems they seek to solve.

Limited Group Interaction and Lack of Teamwork

Some environments suffer from limited group interaction - lack of teamwork is also a lack of potential in any organization. In such cases, an effective leader works to "synergize" different groups of people by bringing them together to facilitate communication, brainstorming and social interaction. This leadership style is designed to melt down the walls that exist between professionals from different disciplines, cultures and backgrounds.

Leadership Styles & Attributes

3 Standard Attributes

A compilation from the Army Leadership manual lists some excellent attributes from a mental, physical and emotional perspective of great leaders. Click on the categories on the right to reveal each group of attributes:

Mental Attributes

- Possess and display will, self-discipline, initiative, judgment, self-confidence, intelligence, common sense, and cultural awareness.
- Think and act quickly and logically, even when there are no clear instructions or the plan falls apart.
- Analyze situations
- Combine complex ideas to generate feasible courses of action.
- Balance resolve and flexibility.
- Show a desire to succeed; do not quit in the face of adversity.
- Do their fair share.
- Balance competing demands.
- Embrace and use the talents of all members to build team cohesion.

Physical Attributes

- Maintain an appropriate level of physical fitness.
- Present a neat and professional appearance.
- Meet established norms of personal hygiene, grooming, and cleanliness.
- Demonstrate nonverbal expressions and gestures appropriate to the situation.
- Are personally energetic.
- Continue to function under adverse conditions.

Emotional Attributes

- Shows self-confidence.
- Remains calm during conditions of stress, chaos and rapid change.
- Exercises self-control, balance, and stability.
- Maintains positive attitude
- Demonstrate mature, responsible behavior that inspires trust and earns respect.

Leadership Styles & Attributes

4 Leadership Orientation

These orientations are described in their extreme definitions and has changed over time to reflect the current business and social environments. Certain orientations are applicable to the situation at hand depending on the scenario. The following orientations reflect leadership styles and attributes:

Democracy/Autocracy

Democratic leaders focus on the team welfare. Their consideration lend themselves to be easily approachable, relationship oriented and have consideration for team member's feelings. They feel that the team will be more productive if the team needs are met. More job satisfaction is felt in this environment.

Autocratic leaders focus on getting the job done and feel a great deal of personal responsibility for the task. Their concern is more for the job issues and less on individual issues. Their approach is more to direct and command rather than collaborate.

Participation/Direction

A participative leader encourages team participation in problem solving and decision making. It is a fact that more input by various individuals allows for more options for solutions resulting from more access to data, experience and opinions. This style works well in a rapidly changing environment that is less structured.

Directive leaders determine the approach and then communicate it to their teams. Minimal input is considered from the team and usually the explanation behind the decision made without them. Leaders tend toward this approach when combination of factors exists such as higher uncertainty, little time is available, or short term increase in productivity is needed.

Relationship/Task

The leader who sets relationships as a priority recognizes the power of attending to the people side of work. To ensure quality and productivity, they consider the member's needs. These leaders maintain close, trusting and open relationships with the members and support their needs.

The task oriented leader structures the work, defines the goals and allocates resources to make deadlines and quotas. This leader uses a less flexible approach with the team resulting from aggressive timelines or higher risk.

Consideration/Initiation

Considerate leaders solicit the input of the team because they are sensitive to the feels, needs and goals of the individuals. Before making decisions, these leaders will seek suggestions from the team and consider the impact that these decisions may have on the team before committing them. These leaders also openly praise and privately correct subordinates thereby creating a trusting and respectful environment.

Initiators are those leaders that start tasks and organize work. They tend to structure the team work and make many of the decisions. These leaders determine what needs to be done, who does it and how it will be accomplished.

Leadership Styles & Attributes

Proactive/Reactive

A proactive leader takes on and embraces work responsibilities for the entire lifecycle of the task or project. They will actively seek to improve and use the leadership principals described in this module. Actively monitoring performance and seeking out potential roadblocks and issues that might be encountered, this leader is proactive. Teams working for this type of leader understand their own level of authority, their responsibilities and work scope. Having this knowledge and the latitude to get their job done in the manner they choose gives teams the amount of independence and self-direction that most crave.

Reactive leaders are less aware of impending issues and are made aware of them only when others notify them. This orientation frequently occurs during a project of great uncertainty, new process or new technology when it is difficult to foresee all possible issues.

5 Attitude Characteristics

The following list of attitudes and descriptions reveals more about leadership styles and attributes:

Loyalty to Organization

Organizations place people in positions of leadership because of the leader's good judgment to help them achieve their goals. Leaders who are loyal to organizations become part of the solution instead of the problem. Complacency is not an option. When issues or problems arise, leaders proactively seek out solutions to keep the workflow moving toward the goals. Complacency is not an option. Example: A co member approached you to complain about how the "organization is taking advantage" of teams. You have some choices. You can either join in and validate her attitude and complain as well or you can support the organization and understand that it must do what it does to stay competitive. Too often, it is much easier to agree with the person currently in presence to gain their instant acceptance; however, word tends to spread and others will learn of comments and attitude.

Appreciation of Team Members

Good leaders recognize and acknowledge the talents and capabilities of their subordinates. Many will praise them publicly when appropriate. These leaders will keep their team members enthused, trained and satisfied and will be much appreciated by the team. Example: A team and its individuals require validation for the effort they extend. Positive reinforcement is a more powerful and longer-lasting strategy than punishment for lack of performance. A good leader will provide regular acknowledgements in the form of verbal commendations, small gifts to the team or a teambuilding celebration function. Monetary rewards are given as a result of a culmination of recognized successes.

Focus on Solutions

By focusing on the solutions and continuous improvement you and the team will arrive at much better outcomes. Dwelling on the past to place blame or curtail good decision-making due to fear will prevent team from operating at its optimum. Instead, understand the cause and move forward proactively with creativity. Example: A team meeting has been called to address the lack of performance of a board that reports to the ASME Board of Governors. Some team members may start to point the finger at certain individuals and their behavior. Others may want to skip to a quick fix and either disband the Board or reestablish new membership. A good leader will review the

Leadership Styles & Attributes

Board's original vision and mission and determine how to get from here to the end goals without the interference of blame or quick fixes (band aids).

Having a “We Can Do It!” Attitude

The team relies heavily on the motivation of the leader. They depend on the leader to provide hope, direction, persistence and resources to get the job done. They also need to understand that rewards will be realized through hard work and dedication. A good leader paves the way by demonstrating these high standards of performance. Example: A young engineer has been struggling with a problem for a few days and not apparently making productive headway. A good leader will check what the young engineer may need and offer extra resources (literature, peer assistance, cross-departmental resource advice, etc.) while still relying on the young engineer to retain ownership. This level of confidence inspires people and creates environments that enable and empower them to solve problems.

Leading with Responsibility and Accountability

The CEO or President of a company has ultimate accountability to the organization and its shareholders to complete the responsibilities assigned or accepted. The CEO, however, depends on the leaders to accept delegation of authority to go hand-in-hand with the CEO to accomplish the responsibilities with the quality expected and within budget and schedule. The leader cannot evade accountability for not fulfilling certain responsibilities. They must accept credit for accomplishing or not accomplishing the goals and, if possible, do a better job the next time. Example: A team is scheduled to release a product the following day. The last revisions of the production environment are happening. One of the team members goes home without thoroughly completing his assignment and the team must postpone the release. The leader must take responsibility and be accountable for this missed release date. To openly blame the team member is not accepting responsibility nor being accountable. Instead, the leader will need to coach the team member in private to better support the team in the future. Similarly, admit mistakes made, recognizing that no one is perfect. There is a natural tendency to avoid sharing or rationalizing a mistake. Determine who is affected by the mistake and take corrective action if necessary. Show how mistakes are learning opportunities as documented "lessons learned" for each project.