

A Curriculum for Tomorrow's Master Black Belt



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Today's Master Black Belt (MBB) training curriculum fails to address tomorrow's organizational needs. This refrain is heard repeatedly from

organizational leaders.

"To survive, my business needs more than superior project execution," one leader might say. Another might reveal, "My business needs MBBs who will create and orchestrate systems to improve financial results so we can compete effectively in what can only be described as a predatory environment."

To state the challenge another way, MBBs must help their organizations embed in their operations the three R's of business: Everyone in the organization is doing the right things and is doing them right at the right time. MBBs need to help organizational leaders establish goals as well as provide a roadmap for reaching them.

They must create a measurement and improvement system that not only monitors operations but also marshals the entire workforce to march together to meet the organization's goals. An MBB's ultimate objective is to help provide maximum, measurable, predictable and sustainable bottom-line results.

Wide Range of Capabilities Needed

What kind of mind-set should be established and what skills should be taught so a new generation of MBBs can help organizations meet these ambitious goals?

For any MBB training process to be successful, students must gain hard and soft skills, business acumen and technical know-how.

Their capabilities must include:

- Understanding corporate roles and responsibilities.

- Navigating organizational structures.
- Identifying all stakeholders and securing their enthusiastic cooperation. Include executive management by using superior leadership skills.
- Spotlighting opportunities for improvement and leveraging them.
- Isolating flashpoints that cause firefighting and eliminating them.
- Sweeping away performance barriers.
- Pulling rather than pushing for the creation of projects so every project contributes toward meeting goals.
- Establishing tamper-proof metrics that comprise a real-time, full-screen management dashboard.
- Assuring that everything that matters is measured and everything that is measured matters.
- Deploying a wide range of tools, each aligned to the true needs of the organization.
- Building a Six Sigma business strategy.
- Creating a Six Sigma culture.

A MBB training program that is open to the public can include attendees who were trained by different providers. Their skill sets are typically diverse. For example, some might have had minimal statistical training, while others had much more. The course has to accommodate a wide variation of backgrounds.

Students might have also forgotten classroom learning skills. Instructors must enliven the teaching through the use of case studies, hands-on exercises, video demonstrations, homework assignments, designated projects and personal encouragement. Instructors need to understand the personality characteristics of individual students and adapt their one-on-one coaching accordingly.

Understanding Business

The education of tomorrow's MBB begins with a thoughtful analysis of this question. What does success look like in a business? An MBB training pro-

gram curriculum must include a thorough understanding of corporate finance and accounting. The topics that should be covered include:

- Financial statements.
 - Types of costs.
 - Cash flow.
 - Profitability indexing.
 - Six Sigma financial benefits.
 - Benefit calculation.
 - Value chain analysis.
 - Business improvement methods.
 - Project execution and tracking.
 - Six Sigma organizational chart development.
 - Adroit management of players' relationships by capitalizing on a knowledge of adult learning.
 - Managing up.
 - Peer coaching.
 - Mentoring.
 - Characteristics of an effective implementation culture.
 - Culture change.
 - Change strategies.
- Make certain there is agreement about the problem being addressed before presenting a solution. Define the problem in a way that leads most directly to your recommended solution.
 - Sell the benefits of your solution before you describe its features. Avoid unnecessary details.
 - Determine what stakeholders know about your position, how they feel about it and—equally as important—how they feel about you personally in order to be effective during meetings with those stakeholders.
 - Ask open-ended questions for a free flow of ideas and use closed ended questions to focus on an issue. Anticipate the likely objections, such as: “We lack resources,” “I have a better idea,” or “Doing this will be hard.”
 - Support your viewpoint with evidence. It must be relevant, believable and understandable. New evidence is best. Evidence is particularly important when you might be seen as having low credibility or vested interests.
 - Support your viewpoint with body language and other techniques that demonstrate confidence. For example, use animated gestures, stand erect and lean slightly forward. Vary your voice to emphasize important points, and look directly at the listener to build rapport and gauge attention.

Management Skills

Position alone—even that of a CEO—does not guarantee automatic support of Six Sigma's implementation. By itself, the MBB's status and expertise cannot persuade others to provide the support the MBB needs to achieve goals. Particularly, in situations where there is resistance to change, the MBB must deploy superior management skills. The curriculum for tomorrow's MBB must provide these skills.

One such MBB curriculum includes a broad based leadership skills module built on the teachings of today's leading management experts. The following are some examples of the tactics taught in the classroom. These tactics can be used by any manager who needs to motivate others to help meet goals.

- Build alliances. Your network is probably bigger than you believe. Cultivate it. Never underestimate the value of keeping in touch.

Understanding Individual Stakeholders

To lead successfully, tomorrow's MBB must understand the individual personalities of the many different stakeholders whose cooperation is needed—and interact with them in ways that secure their cooperation. A number of different instruments can be used to understand the stakeholders' personalities. The most widely used test is the Myers-Briggs type indicator.

Myers-Briggs helps evaluate four different personality characteristics of an individual by observing behaviors. The instrument helps determine if the individual is:

1. Extroverted (preferring to act, then reflect, then act further) versus introverted (preferring to reflect, then act and then reflect again).
2. Sensing (trusting tangible and concrete information, and looking for details and facts) versus

intuition (trusting abstract and theoretical information).

3. Thinking (task focused, logical and stressed by mistakes) versus feeling (values relationships, consensus and stressed by conflict).
4. Judging (wanting planning, strategy and control, stressed by last minute revisions and unaccountability) versus perceiving (seeks options, learns as things unfold, stressed by over planning and micromanagement).

Once these personality characteristics are understood, training decisions should take into consideration the MBB's own personality, the personalities of each of the organization's key stakeholders, and how these personalities affect leadership, learning, communication, team dynamics, conflict, problem solving, decision making and organizational development.¹

The Education of an MBB

Consistent with their extraordinary responsibilities, MBBs require training that is broad based and business oriented. Indeed, training has to prepare them to become valued partners of organizational leaders. Excellence in project execution represents only a small part of an MBB's contributions to the organization.

Curriculum design must constantly be updated to incorporate new technological developments and emerging management disciplines. MBB candidates must approach the training with energy and commitment. Their organizations have to provide the needed support. Maintaining integrated enterprise excellence in a challenging economy requires nothing less.

REFERENCE AND NOTE

1. An informal Myers-Briggs 72-question self evaluation is available online at: www.humanmetrics.com/cgi-win/jtypes2.asp.

Six Sigma and Customer Facing Data Quality Metrics



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In some respects, data quality and Six Sigma methods seem tailor-made for each other.¹

Today's databases are enormous (and getting larger), and each entry represents an opportunity for error.

Perhaps most importantly, data quality problems are enormously costly, and mitigating them can yield impressive returns.

When applied consistently, problem solving techniques such as define, measure, analyze, improve and control (DMAIC) can be remarkably effective at identifying and eliminating the root causes of data errors.

But simply turning the crank without adapting Six Sigma techniques to the issues and opportunities at hand slows progress. Here we'll focus on the measure portion of the DMAIC cycle and begin with an example.

Financial services firms buy and sell securities on behalf of their clients. To successfully complete the transaction, they must issue a trade confirmation that provides relevant details, including the security, how much was bought or sold (shares or lots), what was paid or received, the commission, and terms and conditions, such as the call date associated with a fixed income security.

About the Author
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In a professional career spanning over a quarter century, Forrest Breyfogle has established himself as a leading edge thinker, a prolific author, an innovative consultant, a world-class educator, and a successful business executive. His work is documented in eleven books and over ninety articles on the topic of quality improvement.

A professional engineer, Forrest is also a member of the board of advisors for the University of Texas Center for Performance Excellence. He is the founder and CEO of Smarter Solutions, Inc., an Austin, Texas based consulting firm offering business measurement and improvement consultation and education to a distinguished list of clients worldwide, including BAMA, CIGNA, Dell, HP, IBM, Oracle Packaging, Sherwin Williams, Cameron, TIMET, and TATA. He served his country on active duty in the US Army for 2 years, and has played an active leadership role in professional and educational organizations. Forrest received the prestigious Crosby Medal from the American Society for Quality (ASQ) in 2004 for his book, *Implementing Six Sigma* (second edition). This award is presented annually by the American Society for Quality to the individual who has authored a distinguished book contributing significantly to the extension of the philosophy and application of the principles, methods, or techniques of quality management

He is a widely recognized authority in the field of management improvement and is a frequent speaker before professional associations and businesses. His earlier work in the field of management science has been widely acclaimed. A previous book, *Implementing Six Sigma*, sold over 40,000 copies and still ranks among the top Amazon books in Applied Mathematics/Engineering Statistics and Industrial Engineering /Quality Control.

He founded Smarter Solutions in 1992 after a 24-year career at IBM. The associates of Smarter Solutions specialize in helping companies throughout the world improve their bottom line and customer satisfaction through the implementation of techniques that are beyond traditional Lean Six Sigma and the balanced scorecard methodologies. His latest and most extensive work has been in the documentation of a new system of enterprise management, the Integrated Enterprise Excellence (IEE) system, in a series of four books. IEE provides a detailed roadmap that builds on and integrates the best practices of earlier disciplines like Six Sigma, Lean, TQM, PDCA, DOE, and TPS combined with innovative analytical tools to produce improvements at the highest level of an enterprise.

In addition to assisting hundreds of major clients in the wise implementation of improvement systems worldwide, Forrest has also developed over 300 hours of classroom instruction used to train executives, managers, and Black Belt practitioners to plan for, implement, and manage IEE systems. He also leads formal seminars and workshops worldwide.

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