

Position Regarding Online Learning

Web-based courseware has expanded the learning landscape and provides opportunities for anyone to pursue developing an improved capability in almost any desired area of application. Most notably, online learning curricula in Six Sigma, Design for Six Sigma, and Lean have propagated quickly, following on the heels of the rapid progression of Six Sigma in the marketplace. Many providers of Six Sigma training and consulting are now offering online programs in order to provide alternatives for their customers. The purpose of this paper is to delineate Air Academy Associates' philosophy regarding online learning and its integration into an effective Six Sigma program. (Usage of the term "Six Sigma" herein includes Lean, Design for Six Sigma and Continuous Process Improvement methodologies.)

Just as a martial arts trainee experiences hands-on interaction with a master, we believe that a Six Sigma trainee should ideally go face-to-face with a master in order to become the best he/she can be. While many basic skills and competencies can be obtained and practices online, we have found that there are many topics that are best and most quickly learned in a highly motivational, interactive, live classroom setting. In many situations a live classroom setting provides interaction between instructor and students, as well as between the students themselves, that contributes greatly to the learning process.

For example, Design of Experiments (DOE), also known as Multi-Variate Testing (MVT), is a topic that we believe benefits greatly from classroom instruction. It is very difficult, for example, to get the concept of "differing confounding patterns between 12-run and 8-run orthogonal designs" across to a learner without rapid and repeated interchanges between teacher and student, where the interchange is dictated by the student's point-in-time understanding of what is being transmitted. Not only this technical knowledge, but also the motivation for why this difference is important, is more easily and better accomplished in a face-to-face environment. If you happen to be a Six Sigma Black Belt and haven't engaged in this type of interchange you have been short-changed in your Six Sigma training.

Air Academy Associates strives to make such concepts clearly understandable using our daily vernacular, not in theoretical terms, while making the concepts come alive. We believe the curriculum and classroom environment must be designed and executed to achieve these quick hitting "ah-hahs," and Air Academy Associates has had over twenty years of success in putting together such learning environments for our clients. We have found that people learn best by using some sort of "association technique," and our live, motivational classes and coaching sessions are designed to aid participants in establishing those linkages.

Position Regarding Online Learning

CONTINUED

For these reasons, Air Academy Associates recommend a blended approach to Six Sigma learning and application. The proper integration of both online learning combined with live teaching/coaching sessions will provide the most efficient and effective learning solution. Specifically, we recommend carefully blended learning experience based on our clients goals, prior experience or competency and organizational culture. In addition to face-to-face sessions a student should have continuous access to online courses and knowledge assessments for the following purposes:

- (1) Up front exposure to selected topics before they are covered in the classroom. This gives the student familiarity with the material, terminology, and style and will allow for better retention during the classroom experience.
- (2) Continuous and constant review of the topic after students are exposed to a practical and motivational scenario in the classroom or during coaching. This provides the student the opportunity to reinforce the learning and to formulate questions, as needed, to close any gaps with the master. After all, sometimes “it is better to know some of the questions than all of the answers” (from James Thurber).
- (3) Continuous and constant feedback through assessment of the learning. This is clearly a major advantage of having online capability, giving the student flexibility and convenience in assessing their knowledge level on a regular basis. Frequent checks to make sure concepts are properly understood helps build a solid foundation for rapid learning.

In our busy world of “fire fighting” and every task seeming to require urgent attention, lack of time and procrastination is a major issue. People want to learn and access their online lessons, but have difficulty prioritizing time to do so. This is a major reason periodic live sessions, whether structured classroom days, group review sessions, or hand-on exercises, are so valuable. They create accountability for timeliness. There is nothing more compelling and motivational than to know that on a certain date at a specific time one will be going face-to-face with the master and held accountable. Though sometime more difficult to incorporate in an online environment, we have found that accountability deadlines can be structured into the phases of the online program and project completion requirements enabling the online learner to satisfy the need for timely program completion which is (or should be) a critical element of any company’s successful Six Sigma rollout.

Clearly, the optimal percentage blend between online and live presentation will depend on many factors, including the corporate culture, the individual’s background, and the goals and objectives of the implementing organization. However, combining both live and online training whenever possible gives an organization the greatest depth and financial impact that it is capable of achieving. Combining online learning with classroom-based motivational instruction that makes the material come alive creates a synergy that will pay dividends in results and in spreading an infectious attitude throughout the organization that says this “Six Sigma thing” can be fun as well as profitable. Changing the attitude (i.e., making it challenging, fun, and personal) enhances the organization as individuals come to work wanting to solve tough problems and looking forward to each new day and new challenge.

Position Regarding Online Learning

CONTINUED

Because of our strong belief in the value of the blended approach and based on external constituencies' expressed interest and desire to have online learning in Six Sigma, Air Academy Associates has recognized partners capable of providing that service. These partners recognize the value of a well designed blended approach and provide learning paths that support both the face-to-face knowledge generation capability of Air Academy Associates, while providing knowledge delivery capability 24/7 to individuals worldwide. This online capability provides our clients an opportunity to have access to learning material at their convenience and at their own pace. This is a critical requirement for many clients. This access also allows our students to actively pursue "continuous and constant review" of the material as described above. This is a time proven technique for mastering a subject and has always been a key learning absorption objective at Air Academy Associates. Key face-to-face classroom or coaching learning experiences can be integrated based on client pace, culture and deployment goals.

We are finding that online programs appeals to smaller organizations that want to develop only a few Green Belts and Black Belts; to individuals who understand the commercial value of Six Sigma but whose employer may not yet have embarked on a Six Sigma path; as well as to larger, more mature Six Sigma clients who have utilized our consultants as classroom instructors in the past and who now desire to make Six Sigma pervasive throughout their organization in as flexible a manner as possible.

While we strongly encourage the blended approach to Six Sigma education, we recognize that online learning presents an opportunity to many who otherwise may not have access to industry-recognized trainers and materials. Online learning has an appeal to those who prefer the individual learning environment for its flexibility and convenience. In partnering with recognized online learning providers that offer learning opportunities in Six Sigma, Lean, DFSS, and other concepts, our goal continues to be maintaining the integrity of the curriculum and accountability for results as we provide our customers with as much flexibility, convenience, and variety in learning environments as possible. Please contact Air Academy Associates to explore a blended approach and learning path that supports your unique requirements.