# WHITEPAPER

# **Project Management Online**

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# **Online Course Quality Perception**

A collaboration by ACT and Art and Science, LLC surveying college bound students taking the SAT test in October and December 2014, revealed that "prospective undergraduate students have almost no interest in online learning and associate it with inferior academic quality". (studentPoll 2016, p.1) Given that this generation of students has spent a great deal of their time online, they should be the most receptive to online courses. The negative results from the most receptive group emphasizes the poor reputation that online learning has acquired. While this survey does not address working adults or continuing education, it does represent a general perception that online education is inferior to traditional onsite classes.

The quality of online courses currently covers a very broad range which has created the negative perception towards online in general. Many online courses merely organize information and present it in a power point outline or video format that provides very little education. The availability of free online information makes these courses obsolete. Over time the market place will eliminate the nonvalue added classes, but to change the quality perception of online, course delivery must shift to more closely resemble an onsite course.

### **Online Versus Onsite**

The major advantages of online courses to Universities are lower cost of delivery since physical facilities are not required and broader geographic coverage since travel is not required. Student advantages include lower cost and no travel making it possible to participate in the course from any location. If the course is asynchronous, students have the added advantage of setting their individual schedule to participate in each class anytime within a specified period covering several days or weeks.

In contrast the face to face environment of the traditional on campus class has several advantages:

Focuses attention on the topic

Group environment that fosters relationships

Nonverbal aspects of Communications are included

Real time two-way feedback to questions.

Students can network, share views, and help each other.

A hybrid is a form of class that uses a traditional classroom for a portion of the class and on line for the rest. A properly designed hybrid can be on a par with an onsite class, but it minimizes the online advantages since it requires facilities, travel, and a fixed schedule for the onsite meetings.

Today most online classes are fully asynchronous allowing students to fit them within their own schedules. However, this aspect is a significant roadblock to competing with onsite classes, since it restricts opportunities for student to teacher and student to student interactions. In addition, all communications in asynchronous classes are written, while the valuable nonverbal aspects of the

communication are lost creating misunderstandings and reduced efficiency. To compete on a par with traditional campus classroom courses online requires a synchronous element utilizing available technology to create a live online environment equivalent to the onsite classroom. This may be combined with asynchronous elements to maximize the use of the live online class, provide students some schedule flexibility, and maximize online benefits.

# **Unique Project Management Needs**

In the author's experience, a high-quality learning experience in project management requires three additional elements: active learning, learn by doing, and practice in behavioral skills.

Active Learning: Project Management requires mature students typically in their twenties or older with sufficient life experiences to apply the principles being taught. Thus, the target market for Project Management courses includes working adults, continuing education, 3<sup>rd</sup> and 4th year undergrad, and graduate students. These individuals require more than the traditional lecture and reading assignment oriented classes. They respond better to a learning environment that requires their active participation and contributions to the class. This active learning is accomplished by incorporating structured class discussions and exercise report/discussions into each class.

Learn by Doing: Project Management courses that employ a learn by doing approach provide opportunities for students to apply project management principles to increase understanding and retention. The learn by doing approach involves specific exercises for each topic that requires students working in small groups to apply the principle and generate a solution followed by the class reviewing and discussing the various solutions. Students learn by doing while performing the exercises, and during reviews and solution discussions, students learn from each other. This is also an extension of active learning which enhances the educational experience. The author recommends small groups consisting of five or less to maximize individual participation and establishing three as the number of small groups for a given exercise to keep report/discussion times reasonable.

A written term project with a class report can provide a learn by doing opportunity, but this is normally submitted at the end of a course and does not allow students to discover and correct mistakes as they progress thru the course. The term project is best utilized as an addition to the class exercises to reinforce principles and evaluate students' comprehension of the course.

Practice in Behavioral Skills: Project success is heavily dependent on people interactions and their communications within the project, therefore a Project Management course must teach both cognitive and behavioral skills. Project Management courses typically include several topics related to behavioral skills. In addition to the traditional behavioral topics a superior quality course utilizes frequent use of active learning techniques with the entire class as well as small groups exercises to provide a forum for students to practice their behavioral skills during the entire course. The small group size helps ensure interaction between everyone in the group, build relationships, and random group assignments at the start of each class ensures students interact with everyone in the class. The relationships built in the small groups carry over and enhance the active learning activities in the full class which allows students to practice behavioral skills in a large group environment.

## **Online Technology Requirements**

Typically, Universities have an overall course module for all classes that provides assignments, reference materials, syllabus, class calendar, online threaded discussions, email communications, etc. for the onsite classes. Ideally the online course synchronous and asynchronous elements are simply components that flow smoothly from this overall course module. The reliability and ease of use of the technology is of paramount importance to compete with the onsite class where technology issues are minimal. Students must be comfortable with the online technology such that it does not hinder their studies or create inefficiency in the execution of the class for online to be on par with the onsite class. Instructors should be trained with hands on experience in all aspects of the online technology and students should receive basic skill training in the technology either before or during the first class.

To create an environment to compete with the onsite classroom, the live online classroom element must include the following technology features:

Audio for all participants to speak and listen

Video for all participants to be seen when talking

Whiteboard for showing presentations

Whiteboard annotation capabilities for instructors and students.

To meet the unique needs of an effective project management class, there are additional technology requirements. The technology must be able to establish small breakout sessions within the class for students to work on the small group exercises. This is critical to support small group exercises, practice behavioral skills, and enhance the active learning process. The breakouts must be efficient in saving and moving documents quickly between the main online classroom and the breakout sessions. The use of video within the breakout session for participants to see each other is highly desirable but not required, since they see each other in the main session. However, the ability for everyone within the breakout to be able to collaborate and annotate the documents efficiently with minimal training is a top priority.

#### Conclusion

An online project management class can achieve the same academic excellence as an onsite class provided it contains a live element with appropriate technology including use of small group breakout sessions meeting all the requirements detailed previously.

#### Reference:

studentPOLL, Volume 12, Issue 1, Prospective Students Lack Interest in On Line Learning, published by ACT and Art and Science Group, LLC, February 2016, <a href="https://www.artsci.com">www.artsci.com</a>

Dean Baker has an extensive background in project management, team building, and improving productivity. Dean has a Master's degree in Electrical Engineering from the University of Michigan and is a certified Project Management Professional®. He teaches project management online for Oakland University and is President of Team Implementers, LLC a consulting company specializing in project management and manufacturing excellence. He is also the author of *Multi-Company Project Management* and the *Project Management eWorkbook*.