

# **Accelerated Learning Techniques in Project Management Education**

Michelle LaBrosse, CEO, Cheetah Learning LLC (PMI REP)

## **Abstract**

Accelerated Learning methodologies were developed over 40 years ago, and have been effectively used to expedite learning in a wide variety of fields. An extensive testing and revision process for developing courses with accelerated learning techniques ensures that every element of the course achieves its desired effect. However, participants only experience their role in an event, and at times are not even aware that they are in a learning simulation.

These techniques are used to develop a fast way to teach the basics of project management. Participants are instinctively able to create and deliver effective project management habits after having experienced the one-day event.

The basic premise of the course was tested in a large corporate research center and piloted with 200 people. The course scenarios are modified for specific industry applications. This approach has been used to teach project management to approximately 1500 people to date.

This paper includes:

- Highlights of the concepts and history of accelerated learning
- An explanation of why and how we use accelerated learning to teach project management
- Examples of how we use accelerated learning to create custom project management experiences for specific industry groups and project teams

The examples given illustrate the theory and research that went into developing the one-day, comprehensive project management training program, provide follow up data from students who have taken the course, and show the effectiveness of using the Internet to support the pre- and post-course follow-up.

## **Introduction: An Accelerated World**

In an information-driven world, moving quickly in business is vital. Pundits speak of an Internet year taking only one month. Others have declared that what used to take a decade can now be accomplished in a year. Business professionals need a simple approach for launching their ideas, initiatives, and projects. They need one consistent way to launch projects so that they can spend their time getting their work done, rather than taking the time to customize each project, with each team member planning a unique way of how to get that work done. Teams need a project management process that enables them to think, react, and change quickly.

Accelerated Learning techniques work for today's fast paced environment. Project teams need a fast way of coming to a consensus on customer requirements, project scope, project schedules, and project budgets, with a process that is simple and reliable. Fifty percent of all product failures are attributed to poor project management. Many project teams do not adequately take the necessary steps for project management because those activities have been time consuming, and the return on the time invested is not considered. Project teams who need to quickly launch their projects can successfully use these accelerated learning techniques.

### **Creating and maintaining your success**

Simply being fast today is not enough. Businesses must also get to their target markets before the competition does, and increasing the speed at which people learn is only part of the whole picture. Maintaining the ability to immediately implement what is learned is equally critical. Creating new skills and having these skills become habits that are used instinctively are the keys to quickly responding to changing market forces. Accelerated learning provides a mechanism to ensure that what is taught is quickly learned and easy to apply. Accelerated Project Management Base Camp is the one-day course that was developed using accelerated learning techniques. It was designed to develop habits that can be used instinctively to quickly respond to new opportunities by using project management methodologies that have been proven to be extremely effective.

In the sections that follow, you'll see a brief history of accelerated learning and its benefits. You'll learn how it was applied to project management training, and what the results were based on initial research used in developing the program. You'll also get a glimpse of the subsequent applications used in a variety of industrial applications.

## **I. What is Accelerated Learning?**

Accelerated learning is a proven way to teach people new skills....

- in a way that will improve their retention and their ability to apply the new knowledge.
- so they can quickly use what they've learned.
- to benefit their projects, and ultimately, their customers.

Accelerated learning techniques were pioneered over 40 years ago in the teaching of foreign languages. They have since been applied to a wide variety of fields in business and in academia. The military has used accelerated learning to rapidly train people in a variety of areas.

These techniques use a combination of teaching principles to make the learner comfortable, and creating an environment where participation leads to learning, almost without any conscious effort on the learner's part. Actually, an accelerated learning program is conducted as if the participants are playing a game, and not actively engaged in a typical learning event.

There is a lengthy testing and revision process of courses developed with accelerated learning methods to make sure that every technique that is used achieves the desired learning outcomes for the participants. The environment is tightly scripted in courses using accelerated learning to ensure that participants leave with a high level of competency.

## **II. A Simple, Accelerated Approach**

The one-day project management course teaches a simple process, which some call project management "lite" or "just enough" project management. With this simplified, accelerated approach, project teams can easily develop:

- Better teaming relationships due to a shared understanding of how to get things done.
- Better distribution of work among team members' work by an understanding of what it is going to take to create specific deliverables.
- The right team by having the right people working on the right tasks, based on their skills.
- A documented agreement between the team members and the project sponsor on the scope of the project, and a mechanism for adjusting the project based on changing requirements.
- A better understanding of the resources necessary to accomplish the tasks in order to create the deliverable, thus preventing cost overruns and slipped deadlines.
- Coordination between other projects on sharing joint resources.

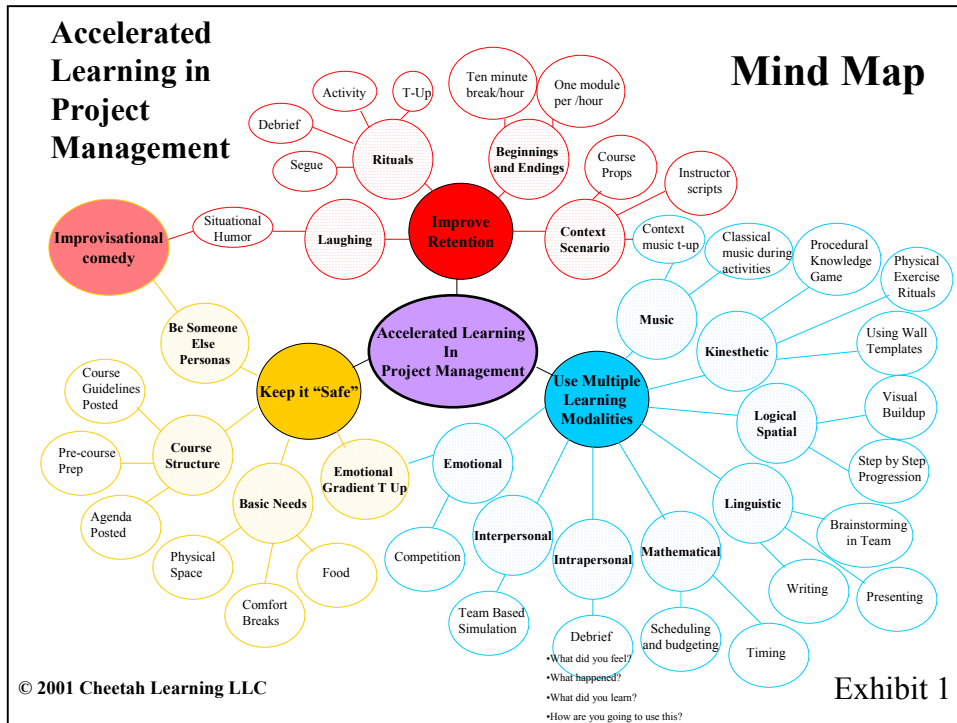
The project management launch methodology taught in Project Management Base Camp was developed over a 15-year period, by carrying out project launch and project disaster recovery facilitation. This experience helped to define the accelerated learning principles that eventually led to the creation of this one-day course. The course uses a technique adopted from process mapping facilitation to quickly help the project teams come to consensus on:

- Customers' needs and acceptance criteria
- Business case for pursuing a project
- Teaming protocols
- Deliverables
- Processes needed to create deliverables
- Conflicts facing a project
- Significant milestones of the projects and the reviews necessary
- Risks facing the completion of deliverables
- Timing of deliverables' completion
- Dependencies of the respective deliverables
- Tasks needed to complete deliverables

- Resources (labor and budget) needed to produce deliverables.

### III. Accelerated Learning Framework

To teach this approach, techniques were adopted from accelerated learning augmented with Gardner’s work on multiple intelligences. Exhibit one shows the mind map of the approaches used to develop an accelerated learning framework for teaching project management.



There are three main elements of this accelerated learning framework:

1. Keeping people safe (based on Maslow’s hierarchy of needs)
2. Focusing on improving retention
3. Having multiple learning modes for people to grasp the concepts

#### 1. Keeping People Safe

The key to success with accelerated learning is in the participation that leads to self-discovery of the basic project management learning objectives. However, the simulations created to accelerate learning push the boundaries for many people. In order to be psychologically prepared to participate, the course is structured to ensure that the participants’ basic needs are met.

As outlined in Maslow’s hierarchy of needs, people need to have their basic needs met in order to reach higher levels of self-actualization. This hierarchy is used in structuring the course so that people can reach the optimal state of self-actualization through self-discovery. The following section lists each of the hierarchical needs, along with examples of how each need is addressed in the construction of the project management course.

#### Physiological Needs

The first need identified in the hierarchy in Maslow’s book “Motivation and Personality” is fundamental

physiology - food, water, oxygen, etc. In other words, anything that the physical organism needs to survive involving very fundamental life or death needs. In the course, food is provided throughout the day, comfort breaks are taken every hour, care is taken to make sure that the physical space is comfortable, and it is recommended that participants prepare for the course ahead of time by getting adequate rest.

### **Safety Needs**

The second of Maslow's hierarchical needs is safety. According to Maslow "If the physiological needs are relatively well gratified, there then emerges a new set of needs, which we may categorize roughly as the safety needs, (security; stability; dependency; protection; freedom from fear, anxiety, and chaos; need for structure, order, law, and limits; strength in the protector; and so on)."

The course structure is explained in the pre-course preparations, with several props used for continual referral regarding the structure. Additionally, an emotional "tee-up" for every new activity is used to ensure that, gradually, people feel psychologically ready to participate in the upcoming activity. All this is done to make certain that the participants' second need for safety is met prior to moving forward.

### **Belonging Needs**

The third of Maslow's hierarchical needs is for belonging and love. According to Maslow "If both the physiological and the safety needs are fairly well gratified, there will emerge the love and affection and belongingness needs, and the whole cycle already described will repeat itself with this new center. The love needs involve giving and receiving affection. When they are unsatisfied, a person will feel keenly the absence of friends, mate, or children. Such a person will hunger for relations with people in general ~ for a place in the group or family ~ and will strive with great intensity to achieve this goal. Attaining such a place will matter more than anything else in the world and he or she may even forget that once, when hunger was foremost, love seemed unreal, unnecessary, and unimportant. Now the pangs of loneliness, ostracism, rejection, friendlessness, and rootlessness are preeminent."

In order to address the need for belonging, the participants are in teams for the entire day. To create an affinity for their team, participants compete with the other teams. Also, very early in the day, participants select personas that are part of the simulation. These personas have quirky personality traits, which are developed based on personality types for the industry in which the participants are working. Personas help to create an environment where the participants can make up a number of shared jokes about their characters. Situational and shared humor further helps the participants to feel an affiliation to their team and to increase their sense of belonging.

### **Esteem Needs**

The fourth of Maslow's hierarchical needs is esteem. According to Maslow "All people in our society (with a few pathological exceptions) have a need or desire for a stable, firmly based, usually high evaluation of themselves, for self-respect or self-esteem, and for the esteem of others. These needs may therefore be classified into two subsidiary sets. These are, *first*, the desire for strength, achievement, adequacy, mastery and competence, confidence in the face of the world, and independence and freedom. *Second*, we have what we may call the desire for reputation or prestige (defining it as respect or esteem from other people), status, fame and glory, dominance, recognition, attention, importance, dignity, or appreciation.

"Satisfaction of the self-esteem need leads to feelings of self-confidence, worth, strength, capability, and adequacy, of being useful and necessary in the world. But thwarting of these needs produces feelings of inferiority, of weakness, and of helplessness.

"The most stable and therefore most healthy self-esteem is based on *deserved* respect from others rather than on external fame or celebrity and unwarranted adulation."

The course structure does several things to meet this need for esteem. During the pre-course preparations, part of the process of the course is to find out what each participants' perception is regarding how well they do with project management, and what they would like to improve. Their esteem need is therefore met as a pre-requisite to the class.

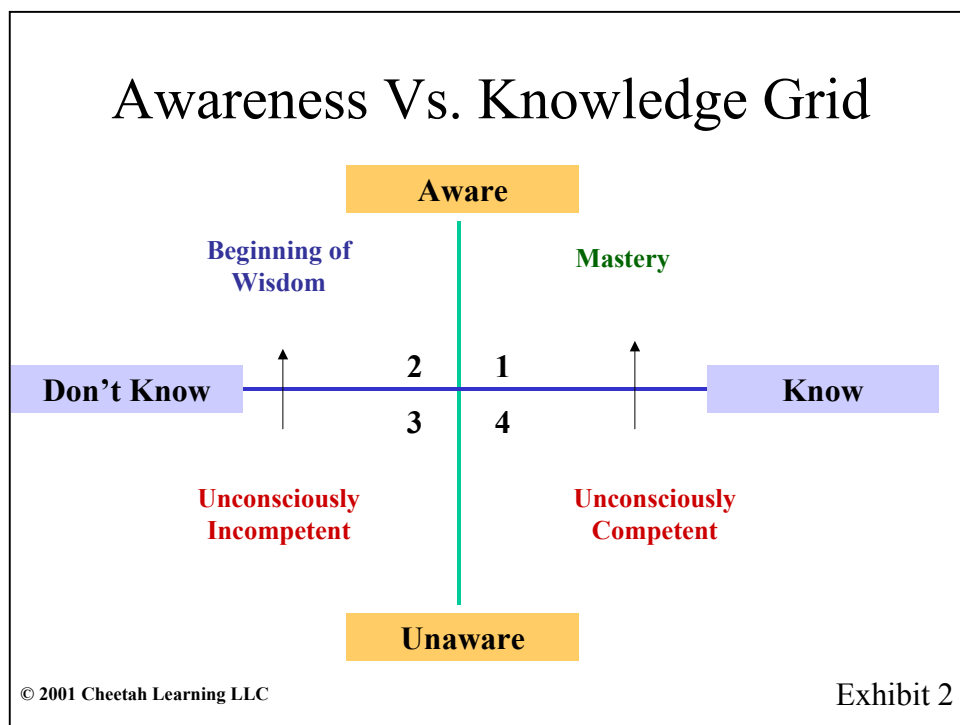
The second element to meet the esteem need lies in the personas the participants select as part of being engaged in the simulation. The persona aspect of the course is introduced by finding out where each participant's expertise lies in their particular field. They will then build off this expertise to develop an expertise in project management.

One of the premises of accelerated learning is that being an expert is a self-fulfilling prophecy. Therefore, the personas are constructed to take in some element of an expert in project management.

The last element to meet the esteem need is used to help people ground themselves in their true expertise throughout the course. This further develops participants' self-esteem so that they are more open to self-discovering project management concepts that may be new to them. Exhibit two shows a model called the awareness vs. knowledge grid. As noted in Maslow's last quote, stable esteem is based on deserved respect rather than on unwarranted adulation. Many people unwittingly think there is absolutely nothing to project management, and because they have achieved a level of respect and mastery in one field they deserve the respect in the project management arena as well – even though they may not have demonstrated consistent competence in this arena.

Many people are unconsciously incompetent. They are not aware of what they don't know, with respect to project management (see quadrant three in Exhibit two). Likewise, there are many people who are also unconsciously competent - they aren't aware that they know much about project management (see quadrant four in Exhibit two).

People operating in quadrants three and four of Exhibit two are not operating in stable self-esteem. Through participating in the course simulation, they move up to quadrants one and two. They discover both areas where they have mastery and areas where they find they need to learn more.



### **Self-Actualization Needs**

The last need in Maslow's hierarchy is self-actualization. According to Maslow "Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what *he* or *she*, individually, is fitted for. Musicians must make music, artists must paint, poets must write if they are to be ultimately at peace with themselves. What humans *can* be, they *must* be. They must be true to their own nature. This need we may call self-actualization."

We use this last need in the premise of learning. When people are learning, they are in a mode of discovery. Self-discovery lends itself to the highest level of learning – when people are self-actualizing their innate growth. By meeting the earlier needs with the course structure and the simulation, people are open to self-discovery, and the pace of their learning is accelerated.

## **2. Improving Retention**

When constructing a course using accelerated learning techniques, there are a number of elements that are implemented to improve retention. Exhibit one shows the four main areas where we use the course structure to improve retention.

The first area is with creating the course scenario. People remember by making associations to what they already know. Creating metaphors develops strong associations from new concepts to "old themes." In creating project management simulations to teach project management for specific industries, great care is taken to develop the scenario of the simulation. The first criteria for the simulation scenario is that the simulation needs to be close enough to the teams' day to day projects, but is still far out enough so that the team won't get caught up in the technical nuances of setting up the project. The scenarios are also developed to stimulate humor among the project teams, since laughing has been proven to be a very strong mnemonic.

The other two elements used to improve retention involve the way the whole day is structured. Participants remember the most at the beginning and endings of sections. Therefore, the course is arranged in eight, one-hour long modules. Within those hour-long modules there are four "rituals" that occur. The rituals in and of themselves improve retention, but also add to the first element, the beginnings and endings phenomena.

Each module has a "Tee-Up". This is where the participants are engaged in a question and answer session, used to establish their preparedness for the module's activities. Once all the participants are prepared to participate in the module's activity, they are given instructions for the activity and allowed to work through the activity as a group. When they are finished with the activity, they go through a debriefing period where they answer questions about their discoveries during the activity, individually and as a team.

The last ritual of every module is the "segue", where the current module is briefly linked to the next module and the participants are given a time for a Q&A period and a break.

### **A Note about Improvisational Comedy**

While developing this accelerated learning framework to teach project management, an ancillary effect of the approach was that it created an environment where improvisational comedy was the norm among the participants. At first it was presumed that the early participants were, by their nature, funny. As more and more groups participated, however, it was obvious that the course structure stimulated the improvisational comedy. It worked to improve retention, since laughing is a strong mnemonic and people laugh the most at their own jokes. It also worked to increase the participants' feeling of belonging. It was an accidental

by-product of the accelerated learning framework for teaching project management, and not an initial conscious creation.

### **3. Using Multiple Learning Modes**

The framework of this course was designed for people to be able to use self-discovery methods to learn project management concepts through many different techniques. The premise of Gardner’s work on Multiple Intelligences is that all people can learn from different intelligence domains, but some have an easier time learning, or are more dominant in, one intelligence over another. This course was developed with the idea that there are opportunities to learn the project management concepts from many intelligence domains. Exhibit one shows the multiple learning modalities used in the accelerated framework for teaching project management. Many of the elements here also tie into accelerated learning theory.

#### **Musical**

The first learning module listed on the mind map in Exhibit one is musical. This module also addresses one of the premises of accelerated learning – classical, baroque, and romantic music can stimulate different aspects of the brain and make it easier to learn new concepts. Various classical, baroque, and romantic musical selections are played during the activities throughout the course. Each piece is selected based on the type of activity and the level of engagement of the participants.

Music is also used to ground people in the rituals with the course. During the breaks, theme music that is related to the simulation scenario is played. Starting the theme music signifies the ending of the “structured” learning and the beginning of the break. Stopping the theme music signifies the end of break and the beginning of the next module.

#### **Kinesthetic**

People learn by participating in hands-on manipulative activities. The course starts out with a ball game to teach the concept of procedural knowledge and how to create solid project management “instincts.” The game gets everyone moving and realizing that there will be a large kinesthetic component to learning the material.

Additionally, the teams record all their agreements on the wall. As the course progresses, participants move between their team space, the wall, and their team table. They create their project plans, carry out risk assessment and quantification, scheduling, and budgeting with a series of kinesthetic activities on their wall templates.

The last element of kinesthetic learning happens at the ending of the breaks. Part of the break ritual includes stretching exercises that the participants lead themselves. The stretching exercises give an opportunity to rejuvenate and relax – a critical element of accelerated learning.

#### **Logical and Spatial**

The course uses a color-coded system with post-its, which the project team participants use to build up their project plans and schedules. A logical progression for how the participants use their color-coded post-its is used, and by the time the scheduling module is done they can see the clear step-by-step progression of how to launch a project. This discovery becomes an immediate “A-ha!” for the participants, and brings alive the project management concepts they self-discover by participating in the simulation.

#### **Linguistic**

People learn by communicating. In this course, linguistic learning happens through writing, brainstorming in teams, and in presenting the team’s work to the other teams. Each team participant is involved in the



writing and the brainstorming, and they self-select the level of presentation participation. This leaves ample opportunity for a presentation by all those who are inclined to participate in learning through the linguistic realm.

### **Mathematical**

People who learn through mathematical expression get cued into the learning objectives by the way the course is structured. Every activity, and each break in the course, is timed. Participants who are mathematically oriented learn many of the fundamental team dynamic concepts because of this timing. They are motivated towards completing the task at hand through effectively working with their teammates, because of the focus on the timing measurement. This heightens their awareness of the task at hand, the importance of sharing team leadership roles, engaging in positive conflict resolution steps, and of setting appropriate team guidelines. Additionally, learning through mathematical expression is an aspect of estimating budget issues and in manipulating the schedules based on the dependencies involved.

### **Intrapersonal**

The intrapersonal mode of learning is represented by how well someone understands him or herself. At the end of every module, there is a debriefing of the activity in that module. Adults learn and retain what they learned by reflecting on what they experienced. Participants are asked to reflect on four questions as part of that debrief:

1. What did you feel doing the activity? (When you associate a learning experience to an emotion, it improves the retention of the learning experience).
2. What happened when you did the activity?
3. What did you learn doing the activity?
4. How are you going to use this?

### **Interpersonal**

People learn through their participation with other people. In this course, participants are involved in a team-based simulation the entire day, so that they can take advantage of interpersonal learning.

### **Emotional**

We are all emotional beings, and emotions can either stimulate or block learning. One of the strongest emotional catalysts for learning is competition. In this course, teams are competing with one another based on timing of the activities, coming back on time from the breaks, and with an end of the class simulation of executing their project plans. This competition element keeps people focused on participating in the simulation - if not for themselves, then for their teammates. It has been found that people will do the right thing because they want to protect their teammates, rather than because it's the right thing for them to do. This finding is also used to stimulate motivation through competition among the teams.

### **Conclusion:**

#### **A Successful Transition from Classroom to Workplace**

While there is a great deal of background work that goes into crafting an accelerated learning project management simulation, this work is not obvious to the participants. Feedback received from a number of former course participants showed they were surprised to find that they had so much fun during the course, and they were amazed at how much they learned. Participants of the course report back that it is easy to implement what they have learned and adapt that into their work environments, on projects within their circle of influence.

Since participants have password-protected access to downloadable customized project management templates on the course website, it is also noted that 90% of course participants access the templates for later use. This approach to teaching project management is unconventional from the standard classroom approaches used today. However, it has been proven highly effective for a wide spectrum audience - people from a wide variety of backgrounds and experience levels.

**Bibliography**

Gardner, Howard, Multiple Intelligences – The Theory in Practice, Basic Books, March 1993.

Maslow, Abraham, Motivation and Personality, Addison-Wesley Publishing, Co., 3<sup>rd</sup> Edition, December 1987

Rose, Colin, Accelerated Learning, Accelerated Learning Systems, December 1985.

**Michelle LaBrosse, PMP...**

is CEO of Cheetah Learning LLC, a PMI Registered Education Provider. She has been designing and teaching accelerated learning programs for businesses since the early 1990's, and traditional courses since the 1980's. You can view her extensive client list at <http://www.cheetahlearning.com>. LaBrosse holds a Bachelor of Science in Aerospace Engineering, and a Master of Science in Mechanical Engineering. She has done extensive postgraduate work in determining effective adult learning strategies, using the Internet and traditional classrooms in industrial environments. LaBrosse created and extensively tested a one-day approach to teaching project management while working as a Research Scientist in Systems Engineering and Learning Techniques and Technologies for United Technologies Research Center (UTRC). Since training was outside the realm of the strategic mission of the research center, they encouraged LaBrosse to leave UTRC to make her courses available commercially. LaBrosse has 15 years of practical experience in project management on small to medium size projects, starting with her career as an Air Force Officer and continuing on through her formulation of many small business development project teams, and as a Research Scientist. She is widely published and is a contributing author for a variety of corporate internal publications relating to Systems Engineering and Quality.

**Contact Information:**

Michelle LaBrosse  
[michelle@cheetahlearning.com](mailto:michelle@cheetahlearning.com)  
<http://www.cheetahlearning.com>  
Cheetah Learning LLC  
P.O. Box 380496  
East Hartford, CT 06138-0495