

# CTE Today

A Newsletter for  
Teachers at USMA

Center for Teaching Excellence

September 2007

*"In a completely rational society, the best of us would be teachers and the rest of us would have to settle for something less."*

--Lee Iacocca

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## The West Point Modern Curriculum and the "Thayer System", by Dr. Mark D. Evans, CTE Director

A Weekly Standard article published last month (see references) entitled: "The Thayer System, After two centuries of success, it might be time to make some changes" by John Noonan, made it clear that not all recognize the significant changes made to our programs over the past decades.

It is a popular misconception that the Thayer System has not changed since the time that Sylvanus Thayer served as Superintendent from 1817-1833. Indeed, it is a little known fact that Thayer himself tried to change the curriculum (and the "Thayer System") in the 1860's to incorporate developments into the curriculum made possible by specialization (majors, etc.). Much has changed since that time, and Thayer would not recognize the West Point academic program that exists today.

The early "Thayer System" consisted of a strict disciplinary structure, organization of the corps of cadets into four major year groups and companies, and an educational system whereby cadets came to class – not to learn, per se – but to be tested through repeated recita-

tion. Cadet learning was done outside of the classroom; no direct instruction or teaching was done by faculty. Cadets came to class to "brief boards" to demonstrate to the professor that they had mastered that block of material and could move on to the next block.

The academic program at West Point ... now offers 45 majors for cadets to choose from – hardly a "one-size-fits-all" curriculum.

The West Point classroom of today is a very different environment. Faculty (civilian and military) actively engage cadets in the classroom so that there is vigorous classroom discussion, active interaction between cadets and faculty, peer instruction in the classroom, and most importantly, cadets can question instructors in the classroom to benefit from the instructor's academic and life's experiences. This is not the so-called "Thayer System" of old.

The academic program at

West Point began offering majors with the class of 1985, and now offers 45 majors for cadets to choose from – hardly a "one-size-fits-all" curriculum. While 64 credit hours of engineering courses were required of all cadets in the curriculum in 1952, only 9 credits of engineering are now required of all cadets. Thirty Math, Science, or Engineering majors are offered as well as 15 Humanities majors. The humanities majors include: Terrorism studies, International History, Foreign Language (Arabic, Chinese, French, Portuguese, Russian, and Spanish), Military Art and Science, International and Comparative Legal Studies, and many others.

Humanities majors offer a curriculum rich in both depth and breadth. The language

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Announcements

### MTP Mentors Needed

Senior faculty or MTP graduates are eligible — email Dr. Evans or Dr. Bonura (CTE) for information

Conferences

**The Lilly Conference on College Teaching for 2007**, our 27th year of presenting and celebrating the scholarship of teaching and learning! Join us in Oxford, Ohio, on November 15-18, 2007. Our Conference theme this year is "Blueprints for Student Learning." Please visit the Conference website: <http://www.muohio.edu/lillycon/>

# Demystifying Classroom Research: Learning More About Your Own Classroom,

by Kimberlee Bonura, PhD, Assistant Director, CTE

You pay attention to how you teach and how your students learn (and if you don't, consider this a wake-up call – you should!). During class, you watch your students – when you notice a lost soul wandering off into sleep deprivation or the lures of the internet on an open laptop, you adjust fire and bring them back on target (possible strategies: stand near them, call on them to answer a question, or shift to a small group activity that requires them to re-focus on the task at hand). After class, you conduct mini-AARs – what worked, what didn't work? What discussion questions, small group activities, and lecture points will you do the same and what will you do differently, next hour, next semester, and next year when you teach the same lesson?

If you're participating in Master Teacher Program, you have to complete a classroom research project in order to earn your MTP certificate. But, if you're not a MTP participant – or even if you have a MTP certificate already hanging on your awards wall – you still should do a classroom research project. Why? Because it will make you more effective in the classroom.

Classroom research is simply a systematic approach to what you're already doing during and after class. By becoming more structured in the implementation, you'll improve the outcomes. The characteristics of Classroom Research define it – at its core, it is learner-centered, teacher-directed, and context-specific. You're going to assess an issue that matters to the learning of your students, based on what you see in your classroom and your course.

## **The process:**

(1) *Pick a focus.* Think about your classroom – where could you use a little improvement? Brainstorm the issues that you tend to think about. If you're still not sure where to start, after each class, write down one or two things that didn't work – at the end of a week, pick the issue that either occurs the most or that bothers you the most. Classroom research is intended to

improve YOUR experience in YOUR classroom, so start with something that matters to you.

(2) *Develop a plan.* How can you look at the issue? Can you try a new strategy with each new unit, and then compare at the end of the semester? Maybe develop five or six small group activities, conduct one per lesson, and then assess them at the end of two weeks? How will you assess the outcomes? There are obvious indicators – grades on projects, homework, and exams. You can look at student participation and interaction, tracking how often and how well your students speak up. You can ask your department peers to observe a few classes and provide feedback about how they think your new technique worked. You can – and should – also ask your students. After you've tried something new, ask them to assess what they liked and didn't like about it. Never forget that your purpose in the classroom is to guide student learning, and that asking students should often be your primary tool.

**“After you've tried something new, ask [cadets] to assess what they liked and didn't like about it.”**

(3) *Analyze your information.* You've gathered some grades, surveyed your students, and made notes after every class. What does all of the information add up to? You might use statistical techniques, but you might also look at the information in a holistic and qualitative manner – what patterns do you see?

(4) *Report the information.* Perhaps you've done something new and groundbreaking – in which case you'll want to add a literature review and submit to a journal or conference. If you're not inter-

ested in publishing, remember that information about the classroom is helpful to other teachers – you might present your findings at a department meeting or as a submission to the CTE (for the newsletter, website, or a brownbag session, depending on your interest).

Master Teacher classroom research projects submitted for 2007 included a look at how more frequent quizzes in a language class impacts cadet preparation time for class; an investigation into student perceptions of online versus printed reading materials; a statistical analysis of ability group sectioning in math; the use of Podcasting in a history classroom; the implementation of “commercial breaks” to re-spark cadet interest during class; and the impact of reading length on student performance in the classroom.

## **Sample Classroom Research Plan:**

Imagine the following scenario: You've noticed that even though you use the same class outline for all of your sections, your A hour class always ends early. You have a hunch that your morning students need to participate more.

(1) *Pick a focus:* Classroom research is about improving your abilities as a teacher by dealing with the context of your classroom. For our example, let's focus on ways to increase discussion.

(2) *Develop a plan:* Brainstorm several different discussion building strategies. For instance, assigning key topics to small groups who report to the class; trying the think-pair-share technique focused on application and evaluation (present a topic – participants think about it on their own; pair with a partner to discuss; then share their results with the whole class); using interactive class games; providing each cadet with an index card and asking them to keep track of their class participation each session and submit a tally at the end of the week; using a small ball or other item to signify who has the floor, with students throwing the ball to each other (see the Oct 2006 CTE Newsletter for more of the Hackesack strategy). Your plan is to use a

## Demystifying, *continued*

different strategy to stimulate discussion each week.

(3) *Analyze your information:* After each class session, jot down your observations and impressions about class participation and student interaction. Ask another instructor in your department (or the CTE) to observe a few sessions and provide feedback. You can look at grades to see if patterns develop based on the discussion strategy used. Most importantly, ask students – at the end of each unit, and again on the term evaluation, ask what they enjoyed and didn't enjoy, and what they felt most contributed to their learning. Use a combination of quantitative and qualitative methods to analyze the information you gather and compare the different methods.

(4) *Report the information:* Give a presentation to your department, offer to write an article for the CTE newsletter about increasing discussion in the classroom, and consider submitting to a conference.

While the process of classroom research follows a general pattern, the details and outcomes of classroom research will be different for everyone, because it is will develop out of your teaching, your classroom, and your students. Conducting classroom research should be a regular part of your work as an instructor, because the answers you obtain will help you to become more effective, both inside and outside of your classroom.

### **Useful texts:**

Angelo, T.A., & Cross, P.K. (1993). *Classroom assessment techniques: A handbook for college teachers*, 2<sup>nd</sup> ed. San Francisco: Jossey-Bass.

Cross, K.P & Steadman, M.H. (1996). *Classroom research: Implementing the scholarship of teaching*. San Francisco: Jossey-Bass.

### **Useful websites:**

<http://www.evergreen.edu/washcenter/resources/acl/c1.html>

<http://www.accessexcellence.org/LC/TL/AR/>

<http://www.prodait.org/research/index.php>

## TEACHING-RELATED REFERENCES FOR ALL FACULTY TO CONSIDER

Lowman, J. (2000). *Mastering the techniques of teaching*, Jossey-Bass, 2nd ed. San Francisco.

Davis, B.G. (1993). *Tools for Teaching*. Jossey-Bass, San Francisco.

McKeachie, W. J. and Svinicki, M. (2006). *McKeachie's Teaching tips*, 12th Ed., Houghton Mifflin, Boston.

Bain, K. (2004). *What the Best College Teachers Do*. Harvard University Press, Cambridge MA. Angelo, T. A., and Cross, K. P. (1993).

*Classroom assessment techniques: A handbook for college teachers*, Jossey-Bass, San Francisco.

## The Teaching Professor

USMA is now a subscriber to the wonderful teaching newsletter called: "The Teaching Professor", by Magnapubs ([www.Magnapubs.com](http://www.Magnapubs.com)). In fact, we have access to several of their newsletters:

- ... Academic Leader
- ... Distance Education Report
- ... The Edutech Report
- ... Online Classroom
- ... The Teaching Professor

One article this month address students and course content and how quickly the content is forgotten. Sound familiar? Another article presents issues in faculty-

student interaction and how good interaction enhances education. A third article describes teacher growth and development.

An article in Online Classroom describes tips to help reduce "social loafing" — a phenomenon well known at USMA whereby one or two cadets do most of the work and one cadet runs for pizza.

Many of the educational issues we deal with at USMA are not unique to USMA and these newsletters can be useful for getting other's perspectives on common issues in education. Check them out!



**Dr. Mark D. Evans, P.E., Director**

119 Thayer Hall  
Phone: 845.938.5502

**Dr. Kimberlee Bonura, Assistant Director**

Phone: 845.938.4257

**Mr. Jeffrey Rohrluck, Instructional Technologist**

Phone: 845.938.4670

Advanced Technology Classroom Laboratory  
(ATCL), 120 Thayer Hall



Center for Teaching Excellence  
West Point

### CTE ADVISORY COMMITTEE

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## The West Point Modern Curriculum and the “Thayer System”, *continued*

requirement for all humanities majors at West Point has increased in recent years to four semesters of a foreign language. An example program of study in the Foreign Language Major: Arabic with honors, would include all of these courses:

- ..Nature of Modern Languages
- ..Language & Culture Capstone Seminar
- ..Arabic I
- ..Arabic II
- ..Intermediate Arabic I
- ..Intermediate Arabic II
- ..The Media in Arabic
- ..Military Readings in Arabic
- ..Arab Civilization I
- ..Arabic Literature I
- ..The Modern Middle East
- ..Arabic Literature II
- ..Arabic Literature III
- ..Advanced Independent Study

Many additional courses are available to select from in the above program of study, this list is just one possible example. Thus, the notion that “An Academy cadet will only get as much foreign study as he can squeeze in between orbital mechanics and advanced calculus,” [Noonan] may have been true in Thayer’s day, but is simply not true today!

This year alone, approximately 140 cadets will spend a semester abroad in one of 12 foreign countries, living in and absorbing a foreign culture. It is anticipated that 10% to 15% of any graduating class will have spent a semester studying abroad. In addition, approximately 390 cadets spent this past summer in a foreign country on an academic development enrichment activity. Thus, the language requirements and cultural immersion opportunities for cadets have vastly expanded as USMA develops future leaders who are more culturally aware than ever before.

While much more emphasis is being placed on language studies and cultural awareness, the Army of the future will continue to leverage traditional programs of study and emerging technologies. For example, this year marks the 4<sup>th</sup> year of operation of the National Military Academy of Afghanistan (NMAA). The NMAA has largely been developed by

USMA faculty who have voluntarily served in Afghanistan for periods of several months to one year, establishing programs and building curricula. The Afghani cadets are not hungry for cultural immersion courses, they are studying courses in areas of: Civil Engineering, Computer Science, English, Law, and Leadership and Management.

“This year ... 140 cadets will spend a semester abroad ... 390 cadets spent this past summer in a foreign country on an AIAD.”

Two additional examples of leveraging traditional programs of study or changing technologies in a modern world include: The West Point faculty member and engineer who developed the highly valued “companycommand.com” web site – used widely by all Captains in the US Army. The West Point faculty member and engineer who (between West Point tours) was responsible for reestablishing the oil flow in northern Iraq.

What would Sylvanus Thayer think of

this classroom picture: In our Advanced Technology Classroom Laboratory (sponsored by the USMA class of 1954), cadet work groups will wirelessly access eight plasma screens around the classroom, displaying and exchanging information collaboratively and wirelessly, while another cadet VTC’s in from his or her semester abroad in a foreign country to contribute to the project from half a world away. These are the experiences of West Point cadets today – not the “Thayer System” of old.

As West Point continues to educate Army leaders for tomorrow’s wars, our academic programs will continue to offer both new and existing majors, leverage advanced technologies, and embrace language and cultural awareness.

References:

Noonan, John, “The Thayer System

After two centuries of success, it might be time to make some changes”, <http://www.weeklystandard.com/Content/Public/Articles/000/000/013/936jvxxm.asp> .

USMA Redbook: <http://www.dean.usma.edu/sebpublic/curricat/static/index.htm>, June 2007.

Evans, M.D., Sylvanus Thayer and the Thayer System, CTE Today, August 2006, <http://www.dean.usma.edu/centers/cte/newsletters/2006/CTETodayAug06.pdf>.

## Newsletter Submissions

### Editor

Dr. Mark D. Evans, P.E.  
Director, Center for Teaching Excellence  
United States Military Academy  
119 Thayer Hall  
West Point, NY 10996  
Phone: 845.938.5502  
E-mail: [mark.evans@usma.edu](mailto:mark.evans@usma.edu)  
<http://www.dean.usma.edu/centers/cte/>

**Submissions** to *CTE Today* are welcome and encouraged. When submitting, please keep these guidelines in mind:

- ..We are interested in a wide range of teaching and learning topics.
- ..We are interested in innovative strategies, techniques, and approaches that facilitate learning

..We are interested in reflective analyses of educational issues of concern.

..Write with the understanding that your audience includes faculty in a wide variety of disciplines and in a number of different departments.

..What you describe must be relevant to a significant proportion of USMA faculty.

..Write directly to the audience, remembering that this is a newsletter, not a journal publication.

..Keep the article short; generally between 1 and 3 double-spaced pages.

..If you’d like some initial feedback on a topic you’re considering, you’re welcome to share it electronically with the editor.