

Teaching at USMA

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Center for Teaching Excellence

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<http://www-internal.dean.usma.edu/centers/cte>

More on Deep/Surface Learning

Last month's article on Deep and Surface Learning elicited such a lively response from the USMA faculty that we're continuing with some more information on this issue.

What "deep" and "surface" indicate is a basic orientation of the learner in response to the learning situation. The following elements have been identified as characteristic of these orientations:

In the Deep Approach, the learner:

- Focuses on what is of significance (i.e. teacher's argument or the concepts applied to solving a problem).
- Relates previous knowledge to new knowledge.
- Relates knowledge from different courses.
- Relates theoretical ideas to everyday experiences.
- Relates and distinguishes evidence and argument.
- Organizes and structures content into a coherent whole.

This listing suggests that deep learning is the implicit goal of instructors, since each item represents a characteristic that is often cited as desirable in students. Thus, promoting deep learning is one way to foster positive the learning behaviors.

The characteristics of the surface approach to learning reflect what might be termed the *semblance* of learning rather than true learning. We can expect little retention and less transfer from this orientation.

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Apgar Award

Nominations



It's time to think about nominations for the 2004 Apgar Award which is conferred annually for a teaching "project" that enhances cadet learning.

Specific criteria for the award and format for submissions can be found on the CTE website at

<http://www-internal.dean.usma.edu/centers/cte/apgar.htm>

This year, the deadline for submissions is **Monday, 10 May 2004**. Please see the information on the CTE website to prepare submissions.

Any questions about the preparation of submissions should be addressed to Anita Gandolfo at the CTE.

Also in this issue:

Page 3—This month's Brown Bag session

Page 3—"Celebrating Teaching" (get your tickets!)

Page 3—A Teaching Tip

More on Deep/Surface Learning

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In the Surface Approach, the learner:

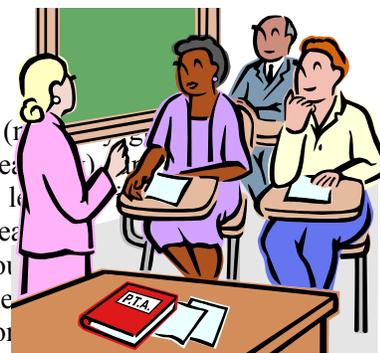
- Focuses on the signs rather than significance (i.e., words and sentences of the text, or unthinkingly on the formula needed to solve a problem).
- Focuses on unrelated parts of the task.
- Memorizes information for assessments.
- Associates facts and concepts unreflectively.
- Fails to distinguish principles from examples.
- Treats the task as an external imposition.

Conditioning the Learner

What is commonly overlooked is that the student does not consciously opt for one or the other of these approaches to learning. The strongest determinant of the learner's orientation is the nature of the instruction. Course design and delivery can promote either "deep" or "surface" approaches on the part of students. The following items have been identified as relevant to these orientations (items that are italicized are discussed further): :

Promoting Deep Approaches

- emphasizing concepts over isolated facts
- essay questions
- problem solving
- project reports
- alternative/authentic assessments
- *no study guides*
- depth of coverage over breadth
- clear explanations and *challenging ideas*
- *cooperative learning*
- high teacher expectations



All three italicized items (*no study guides*, *cooperative learning*, and *challenging ideas*) are based on the principle that the more the learner is challenged, the less likely the student is to adopt a surface approach. This is a characteristic of conscientious student learning, but the teacher's role is to support learning and promote the student who sees the learning task as easily accomplished. Instruction should be clear and focused, but it should also provide *challenging ideas* that students can profitably *explore together*.

Exploratory discussions among students about challenging ideas presented by the instructor tend to lead to an orientation toward deeper learning. The contrast is apparent in the following items that promote a surface orientation:

Promoting Surface Approaches

- using factually oriented, short-answer or multiple-choice questions
- providing detailed study guides
- breadth of coverage over depth
- "spoon feeding" students
- teaching to the test
- low teacher expectations

Deep or Surface Approach—Key Questions

How will you teach?

What effects will your teaching have?

Sources:

Entwistle, N. (1992). "Student Learning and Study Strategies." In B. Clark & G. Neave (Eds.), *The Encyclopedia of Higher Education*, 3, New York: Pergamon Press.

Ramsden, P. (1992). *Learning to Teach in Higher Education*. New York: Routledge.

March Brown Bag Sessions



Each session is presented on two consecutive days to make it easier for every faculty member to attend. So bring your bag and enjoy food for both the body and the mind once a month at the CTE!

Right after Spring Break, join us on

Thursday, 25 March or Friday, 26 March.

Both sessions will be at noon in Thayer 120.

TEACHING WITH THE LEARNER IN MIND

MAJ Mark Read of D/G&EnE will recount his evolution from a competent and successful company commander, focused on *training* soldiers, to an instructor more attuned to *teaching* undergraduates. Since the majority of our faculty members come to USMA from the same experience as MAJ Read, his presentation will provide a rich opportunity for discussion of the elements of learner-centered teaching—along with practical examples of how one can teach “with the learner in mind.”

A Teaching Tip

Getting cadets to “do” the assigned reading is frequently cited by USMA instructors as a problem. In a recent session of the Master Teacher Program, MAJ Iris Cowher of D/History explained a technique she uses occasionally that’s simple but effective.

MAJ Cowher poses a heuristic statement related to the crux of the reading, and asks the cadets to “vote” either negative or affirmative using Outlook. Here’s how she explains her procedure:

I create a statement relevant to the assigned reading and ask the cadets to respond *yes* or *no* via Outlook. In the plebe core course in international history, I might send a statement like, ask

Galileo was the most important historical figure in the Scientific Revolution.

Or

The French Revolution was more influential in world history than the American Revolution.

I always tell cadets that they must come in prepared to explain their response.

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Have you ever attended a quarterback luncheon to cheer for the football team?

This year, you have an opportunity to celebrate our “academic team” at the conclusion of our “season”!

**Join us for our first annual academic luncheon
“Celebrating Teaching”**

On Monday, 17 May 2004 at noon at the West Point Club

**\$10 for a delicious buffet luncheon
stimulating guest speaker
& Door Prizes!**

Tickets can be purchased at anytime directly from the CTE or in your own department (POC is the advisory committee member listed on page 4 of this newsletter).

Cash or checks (made out to West Point Chapter Phi Kappa Phi)

And remember that there’s a drawing for a free ticket at every CTE Brown Bag session this semester!

(February winners were LTC Robbie Williams of D/Math & CPT Chip Stephens of D/EE&CS)

A Teaching Tip (Continued from page 3)

Using the voting options in Outlook is quite easy. After you have written the message and made the statement you want to have the cadets respond to (with a NLT reply date and time), then you go to "View," then "Options." Once you click on "Options," you will see a variety of options for voting. You should then click on the "use voting buttons" option and select one of the three available voting responses. I always use the "yes/no" option because if you offer "maybe," it gives the cadets a way out of making a strong argument.

As the cadet responses come in, you will be offered the option to "click here to view a summary of responses" to get a one-page, tallied list of votes. This allows you to go to class and quickly reference the votes made by each student.

There are many variations possible with this technique. I have also attached related OP/Ed pieces and will ask cadets if the opinion piece is accurate or not.

For example, in my History of Latin America course, I attached a link to a *New York Times* Op/Ed essay and asked the cadets to agree or disagree with the statement:

Samuel Huntington is correct in his assertion of a "clash of civilizations" between Mexican-Americans and "assimilated" Americans.



Having "voted," the cadets tend to give the questions some serious thought because they typically come prepared to defend their vote, and lively debate is often characteristic of those class sessions that follow from this voting process♦



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Do You have a Teaching Tip to share?

Every instructor needs a repertoire of effective techniques that promote student learning. MAJ Cowher's simple technique helps get cadets more engaged with the course material and thus promotes deeper learning.

Do you have a technique that you use successfully to share with your USMA colleagues? Please feel free to send your ideas to the CTE for publication in our newsletter as a "Teaching Tip."