LES Spring 2014

**A Few Quick and Easy Ways to Improve Student Learning**

Do you wish your students saw the real value of what you are offering as clearly as you do?  Do you wish they read more deeply and retained more?  Do you wish they got more out of your lectures and remembered the critical content better?  Is providing notes the answer?

        If you answered yes to any of these questions, please join Ken Jones (LES, Common Curriculum, History) to talk about some relatively low cost ways we can help our students in these areas and thereby increase student learning.

        You have three opportunities to join this conversation: January 27 at **4:10 pm\*** in Gorecki 120, January 28 at 8:10 am in Sexton 200, and January 29 at 1 pm in the TRC Board Room.

**A Few Quick and Easy Ways to Improve Student Learning**

I promised you some quick and easy ways to improve student learning because I had a grab bag of issues that I wanted to address. None of them by themselves merited a session, so I tossed them together.

Let’s get started and see how this works.

In the advertisement for today, I posed several questions --

Do you wish your students saw the real value of what you are offering as clearly as you do?  Do you wish they read more deeply and retained more?  Do you wish they got more out of your lectures and remembered the critical content better?  Is providing notes the answer?

Give you a minute or so to think about them, and figure out what you are most interested in.

Start with one that gets most interest

**Do you wish your students saw the real value of what you are teaching?**

Have you ever had the experience of looking at some of your students, and imagining that you can see the little thought bubbles above their heads saying, “why do I need to know this,” or “why do I have to do this lame homework.”

And even if they are not at that level, we have plenty of students who don’t fully engage because they don’t see any connection between the course material and their world or where they see themselves going.

If we can’t flip that switch – if we can’t get students to see real value in what we are offering, we walking uphill in a blizzard with the wind in our face.

Research has shown that students retain more if they forge an emotional connection with the material, it if makes sense to them – ie, connects to what they know, and if the material has meaning or personal relevance.

Making the connection generates more interest, but it also means more learning – and better student evaluations.

So, what can we do to help them see/value/appreciate what we are sharing? What do people do to make the importance of what they are teaching come alive?

For me, the first critical step is realizing that they don’t share my point of view. I think history is so obviously fascinating and important that saying so would be belaboring the point.

Wrong!

Gradually I have come to realize that I have to make the case – I have to find opportunities to go beyond just being excited about the topic to actually trying to convince them that what they are studying does matters in their lives.

Obviously, one way to do this is to make it a priority, and consistently look for ways you can tie what you are doing to who they are or the roles they see themselves playing in the future.

Let me share a couple more structured approaches.

The first is from Jeff Fox, who teaches at Brigham Young University

First, he makes sure that he has clear learning goals on his syllabus – and that they are written in a way that is accessible to students – in other words, not in not in academic jargon for accreditors.

He talks about them, but ramps it up in a couple of ways.

First, he explicitly connects assignments to those goals.

“How will this assignment help fulfill them?”

“What part of course goals will you be able to do after you do this assignment?

For example, if series of assignments, explain the growing complexity and how they are moving up Bloom’s taxonomy.

Second, he tries to push relevance every day –

He begins class with What, Why and How questions

What are we doing in class today? What concepts will we address?

Why are we studying this? How is it tied to the course learning outcomes? What should I know or be able to do after today’s class? How can the information/skills be used in everyday life?

(Why should this matter to me?)

How are we going to address this content?

The classic, gutsy version of this kind of approach came from a Physics professor at UC Berkeley whose name I have forgotten.

Huge class, mostly lecture

Told students that they could interrupt him at any time by yelling out W-GAS. Stands for who gives a darn.

If someone did that, the professor guaranteed that he would stop, and connect whatever he was talking about to larger ends – and establish why they should care.

I’ve never had the courage to try that, but let me offer you another, probably safer approach --

From Bob Trudeau, Providence College.

He got frustrated when students responded to his question about why they were taking his course with answers like “required” or “it fit my schedule.”

Wanted them to understand that education is about personal change

– So assigned a short paper where they were to explain –

their overall educational/professional plans – to the extent they know them – and how this course might fit into those plans.

Also their educational strengths and weaknesses, and how they might impact performance in this particular class

And based on the above, what the student hopes to get out of this class

Grades on pass fail

Almost everyone passes and gets a few points

Superficial ones fail

Fail – lose five points on participation grade for first half of semester

Don’t do – full letter on participation grade for first half of semester

With FY students, adds requirement that they have to visit him

Then visits with them and brings up their statement of purpose

**Do you wish that your students read more deeply and retained more?**

Do people have strategies that work?

We are swimming uphill. As you know, our students don’t do a lot of reading – and unfortunately most what they read is work – something they have to plow through for school.

And the most deadly of those things they have had to plow through were textbooks.

By the time they get to us, they have read lots of textbooks, but few students have ever had anyone explain how to work them – how to get the most out of them.

How many of you take time to explain the structure of your textbook?

If you are willing to take the time, here are a few suggestions – mostly from Sara Jane Coffman of Purdue

She suggests that we

Explain why we chose the book(s)

Show excitement about it/them

Talk about author/maybe even do video conference

Point out structure –

What can the table of contents tell you about the structure of what you are going to learn?

Is there a “To the student” section that explains how to read

What about chapter headings or other keys that tell you what is important in the chapter?

How should you use highlighted key terms or advanced organizers, or structured overviews

Mini-quizzes in chapter, summaries

Role of photos, diagrams

Supplemental materials that come with text

From there, Coffman suggests that we actually teach them how read effectively

Talk about simply reading or highlighting lots versus other approaches

Explain better approaches like identifying key ideas by writing in margins (or using sticky notes)

Or that you can go even further and re-write important concepts in a separate notebook

Or point out that if they do use a two column system for taking notes in class, they can go back and make notations that tie class materials to key pages/aspects in text)

(Need to explain why this works – neural pathways)

(Need to explain will save time in long run – have key aspects identified and notes and readings tied together – don’t have to re-read whole thing or search around trying to figure out why you highlighted a portion)

Perhaps more importantly, we need to help them understand how to see what is essential in our discipline. May know how to read fiction, but need help reading Chemistry – or vice versa

Don’t just tell – show

Take a chapter or a portion of a chapter and show them what you would do with it –what you would identify as critical and why.

If you are willing to give up the time, do this as group process with them so they get to practice it.

If you do that – if you show students how to sort through a reading, you will be leading them toward what experts talk about as deep reading

While many of our students feel as though they have “done” the reading if they simply have run their eyes over the page, deep readers engage what they are reading. Deep readers constantly connect what they are reading to what they already know. We connect to our own experience, or knowledge of the field, we ask questions of the text as we read, and we predict where the author will go next.

Now, when we really want students to dig into a reading, we often push them by quizzing them on what they read.

Judith and Keith Roberts – both from Hanover College - see this as frequently counterproductive because quizzes typically encourage reading for isolated factual details that students memorize just long enough to pass the quiz. Most just want to find out if the student has read the chapter – they don’t encourage integration or a deeper understanding of the material.

So stop with the multiple choice quizzes, but where do you go next if you want to encourage deep reading.

Well, one thing we do is to try to promote curiosity – and maybe that way generate a willingness to dig in.

The Robertses suggest things like being openly excited about the text

Or making explicit comments about why next reading is great or critical for understanding x

Or helping students see connection between reading and own lives

And connections across courses and fields

And of course, they point out that our evaluation process must stress higher order thinking. We aren’t going to encourage deep reading if what we ask for and reward never gets beyond memorization.

Ok, so far, so good, but the Robertses wanted to go further – see if they could develop daily assignments to encourage students to THINK about what they were reading and begin to make connections.

Did so with reading response assignments

[Thought too much to take in, so Hand out with details]

Students had to write almost every day – could skip four or five days.

Wanted to make the work more appealing to people who find it easier to construct meaning in different ways –

So multiple options

Connect to text – write x “big” questions that represent key concepts, and then answer two of those questions or explain why you think these are the core issues in the reading

Summarize/visualize – do graphic organizer that connects the key arguments/concepts/ideas/evidence in the reading

Reading response journal – write personal response to each section of reading

Studying as a group – discuss most important aspects; recorder summarizes key concepts discussed

Create song or rap – make cd

Encouraged to try different approaches over semester

Evaluation

No response - 0

Basic 3

Extraordinary – 5

Total, if three points each, is equal to good grade in one exam

They say grading is fairly quick

Provide feedback in first couple weeks – 2-3 minutes per student

Later do each in about 30 seconds.

Results –

Increase in doing readings – 78% reported doing more

Students said much more likely “engage” the readings

Students reported they learned how to read better

Anecdotal comments on using tools in other courses

More class discussion

**Do you wish that your students got more out of your lectures and retained more?**

Strategies that people employ? Any ideas on what works?

What about the issue of supplying lecture notes/power point slides? What do people think?

Lots of research that shows that giving students lecture notes/power point slides doesn’t improve performance. And that it actually decreases student ability on conceptual or application types of questions.

Problem is that students want them - easier, less work for them.

Most studies suggest that at most, we should provide skeleton outlines and maybe the spelling of some key words. Also complicated charts/diagrams that might be hard to copy.

Bottom line is that they need to be involved – putting things into own words is crucial for learning.

So how do we encourage real note taking?

Simplest is just to talk about it.

Help them understand how to do it.

Not every word but key points. Help them understand the keys you use to signal critical aspects

Know what is in the book. No point in copying down something you have

Then broaden out

Single notebook for each course

Need to review last class before next – to get brain ready

Emphasize the importance of going over your notes after class – filling in places, raising questions, going to text, figuring out what wasn’t clear, and writing that into your notes. (Need for dual column notes)

And sell the reasons why

That process of writing, reviewing helps create neural pathways that allow you to retain and retrieve information.

Or, can then do survey on next exam. Ask students to mark on exam whether they did this always, sometimes, never. Then correlate with exam scores and post.

If you want to do more – including spending more class time on getting good notes done, here are several ideas, mostly from Maryellen Weimer, formally of Penn State – now retired but very active in teaching and learning field

1. After you say something critical, give them time to write it down, then give them 30 seconds to put it in own words. Then call on two or three to read their version. You can play off that to reinforce the concept.
2. After chunk of content, give them two minutes to look over notes. Encourage them to add more in places where understanding has increased. Then ask, “Where do you need more information” or “What’s the most important thing you have in your notes on this topic?”
3. Begin class with a question that can be answered from notes from last class. Challenge them to find what they have that seems pertinent. Have them read it out loud. Have someone who can answer question read what they had in their notes. Give them time to revise/expand notes.
4. When de-briefing an exam, choose a question missed by many, give them the date that was covered, and have them look in notes. Do they have enough written down? What should they have included?
5. Discuss how students can use notes for exam. Not “go over” but “get into.” Ask questions about the value of re-writing notes versus discussing with others.
6. Let students use notes for quizzes. Motivates better note-taking.
7. Or bring in small note card. Have to really learn material as they choose what to put on card.

Or can go further by making notes into an assignment.

One study (Cohen et al) found a full grade increase when they had students do a “re-structuring notes” assignment.

Had to submit a typed copy of re-organized notes – organized in way that follows connections between ideas rather than just chronology of presentation.

And had to write a summary of main point of lecture in 30 words or less

And had to select one detail from lecture and describe it in 150 words or less, linking it to the central idea.

Graded on accuracy, comprehensiveness, clarity, and coherence.

Reading Response Assignment

Judith and Keith Roberts, “Deep Reading, Cost/Benefit, and the Construction of Meaning: Enhanced Reading Comprehension and Deep Learning in Sociology Courses,” Teaching Sociology, Vol 36, No. 2 (Apr. 2008), pp. 125-140

Students had to write reading responses 25 of 29 class days

To appeal to different approaches to constructing meaning, students were allowed to choose from various formats:

Connect to text – write 3-5 “big” questions that represent key concepts, and then answer two of those questions or explain why you think these are the core issues in the reading

Summarize/visualize – do graphic organizer (concept map) that connects the key arguments/concepts/ideas/evidence in the reading

Reading response journal – write personal response to each section of reading

Studying as a group – discuss most important aspects; recorder summarizes key concepts discussed

Create song or rap that captures key concepts– make cd and turn in

Students were encouraged to try different approaches over semester

Evaluation Process

Students graded on a 0-5 scale. If they didn’t turn in the assignment, it was a 0. A “basic” adequate response was worth 3 points, and an “extraordinary” response earned 5.

If a student earned a “3” on all the assignments, that was equal to a decent grade on one of the course exams.

The instructor provided some feedback for the first two weeks, and then tapered off. The instructor wrote that the initial feedback took about 2-3 minutes per student, but only about 30 seconds for each later.

Results –

Increase in doing readings – 78% reported doing more

Students found approach helped them “engage” the readings

Students reported they learned how to read better

Anecdotal comments on using same tools in other courses

More class discussion

How to Help Students Improve Their Lecture Notes

Maryellen Weimer, Teaching Professor, June 2013

After key point, give them time to write it down, then give them 30 seconds to put it in own words. Then call on two or three to read their version. You can play off that to reinforce the concept.

After you have finished a section of content, give them two minutes to look over notes. Encourage them to add more in places where understanding has increased as the lecture as gone on. Then ask, “Where do you need more information” or “What’s the most important thing you have in your notes on this topic?”

Begin class with a question that can be answered from notes from last class. Challenge them to find what they have that seems pertinent. Have them read it out loud. Have someone who can answer question read what they had in their notes. Give them time to revise/expand notes.

When de-briefing an exam, choose a question missed by many, give them the date that was covered, and have them look in notes. Do they have enough written down? What should they have included?

Discuss how students can use notes for exam. Not “go over” but “get into;” need to use notes to think about big issues and interconnections. Guide them by asking questions about various student approaches like re-reading or re-writing notes versus discussing with others and writing answers to possible questions.

Encourage more investment in thorough note-taking by allowing the use of notes in some or all quizzes. Or allow them to bring one small note card to exam; choosing what to put on a small card requires deep learning.

Note Restructuring

Dov Cohen, et al, “A Note-Restructuring Intervention Increases Students’ Exam Scores,” College Teaching, 61: 95-99, 2013

Students submit a typed copy of re-organized notes – organized in way that follows connections between ideas rather than just chronology of presentation.

And had to write a summary of main point of lecture in 30 words or less

And had to select one detail from lecture and describe it in 150 words or less, linking it to the central idea.

Graded on accuracy, comprehensiveness, clarity, and coherence.

Result was full grade improvement for students who did assignment well