Resources

Contact information: Cynthia Desrochers, Professor of Education California State University, Northridge cdesrochers@csun.edu

The lofty goals atop our yearlong faculty learning community "syllabus" read:

5 GEARS Faculty Learning Community California State University, Northridge, AY 2014-15

CSUN Super Goals: CSUN will promote effective teaching based on current evidence-based research on how people learn; instructors will use this research to be their most effective as teachers, they will share this research with others on campus, and they will make decisions based on this pedagogical knowledge (e.g., what technology to use, how to develop students' learning activities/assignments and assessments, and what to communicate to colleagues about their teaching in peer reviews).

As experts in the field of teaching and learning, when teaching others, we often have the tendency to skip over steps, speak rapidly, and assume that students know something that they don't. This has been termed the *expert blind spot* (Ambrose, et al., p.99).

Hence, to meet our lofty goals above, we opted for the K.I.S.S. ("Keep It Simple, Stupid") approach to running our faculty learning community and have developed a number of activities and tools that scaffold learning for faculty who are in the early stages of learning to use the five GEARS in their teaching; moreover, each activity or tool models explicitly with faculty some practices we are encouraging them to use with their students—metacognitive practices. Below are four sample activities and tools.

1. Learning Logs

We post two questions after each FLC seminar for our eight FLC members to respond to online. Example:

October 23, 2014

- 1. How do I help my students organize their thinking about the content of my course? Is it working? Please explain.
- 2. How do I feel about what I am learning in this FLC and how I am learning it?

We provide group feedback on these Learning Logs via email. Example:

- In response to how you organize content (knowledge), most of you prepare a detailed syllabus. Some of you also provide graphics, concept maps, and outlines. Almost all of you indicated that you plan to think further about how to visually show students how your course "fits together." Not an easy task, so think BIG, move slow. And that might be said of all that we do as educators to add to our teaching repertoire. Said another way: Don't beat yourself up if you're not doing EVERYTHING! No one is!
- Do consider asking fall classes to craft a graphic of the course at the end of the term (extra credit?). You may find a nifty one you can use in spring with permission.
- On organizing knowledge: Giving students a long list of course concepts is not organizing knowledge unless you put those concepts into categories of some sort; hence, an outline works, but just a list of concepts on a syllabus does not.
- You all mentioned that you are learning lots from each other and value the community. We do too, and we continue to learn from you. Thank you!
- One of you mentioned that many of these strategies, such as the Exam Wrappers, take time away from instruction. I would have the students do the Exam Wrappers outside of class and bring to the next class session following your return of their exams; hence, you will not take class time away from instruction.

2. Daily Diary

We asked our FLC members to keep a three-week diary of how they saw the five *GEARS* being used by others. The teaching-learning situations they recorded included:

- an officemate conferring with students
- a financial advisor assisting an FLC member
- student tour guides in the Student Recreation Center
- a Career Center session for an FLC member's students
- a triathlon coach working with an FLC member
- a 6-year-old teaching a peer to make a paper airplane
- an FLC member grilling spare ribs to perfection

Each situation identified the five *GEARS* being used by the *teacher*. This activity helped FLC members gain facility with analyzing all kinds of instruction through the lens of the five *GEARS*. Unfortunately, most FLC members reported a severe lack of *GEAR* usage by these teachers to the detriment of student learning.

3. 5 GEARS Course Design Appraisal Instrument

In an effort to facilitate the FLC members' self-assessment, peer-assessment, and facilitator-assessment of their spring 2015 course redesign using the five *GEARS*, we developed the appraisal instrument below. This is a first draft of the instrument. Stay tuned for further developments in the spring.

Rarely		50/50		Mostly
	objectives eng evaluating)?	gage students in d	eep learning (a _l	oplication, analy
Rarely		50/50		Mostly
earning act xample of fa	ivities, and as nulty alignmen	connection, integro sessments (that w t: Students are tau write a sonnet. Th	hich is <i>intended,</i> ght to analyze so	t aught, and t est nnets in class th
earning act xample of fa	ivities, and as nulty alignmen	sessments (that w	hich is <i>intended,</i> ght to analyze so	t aught, and t est nnets in class th
earning act xample of fa re given the Rarely	ivities, and as fulty alignmen assignment to	sessments (that wat: Students are tau write a sonnet. The	which is in t ended, ght to analyze so nese are two diffe	<u>t</u> aught, and <u>t</u> est nnets in class the erent skills. Mostly
earning act xample of fa re given the Rarely	ivities, and as fulty alignmen assignment to	sessments (that was the students are tauk write a sonnet. The	which is in t ended, ght to analyze so nese are two diffe	<u>t</u> aught, and <u>t</u> est nnets in class the erent skills. Mostly

5. Which, if any, of the 5 GEARS is/are under utilized throughout the course?

Motivating	Organizing	Connecting	Practicing with	Developing
Learning	Knowledge	Prior Knowledge	Feedback	Mastery

6. Identify the <u>most</u> challenging student learning objective in this course. To what extent are all 5 GEARS being used in the teaching and learning of this objective?

1-2 Used 3-4 Used All 5 Used

4. Class Plan Template

There are a number of entry points for faculty to use the five *GEARS* in their teaching: course design level (student learning objectives, learning activities, and assessments), class session level (lesson planning, using familiar teaching-learning strategies, and invented strategies), and student study practices. We are currently piloting the class session plan below as a means of applying the five *GEARS* in our daily teaching.

5 GEARS Class Session Plan Template

This is a decision-making tool: the instructor decides to use (or not) each component.

Goal: To promote student engagement in significant (deep vs. shallow) objectives and activities both inside and outside the classroom, mindful that the person doing the thinking is the person growing the dendrites.

1. Connect

• Identify students' prior knowledge with learning objective

2. Motivate

- Identify relevance (value) of learning objective
- Identify support for achievement of learning objective

3. Instruct

- Deliver as chunks (meaningful units), check, connect chunks, check again
- Identify how knowledge is organized

4. Practice with Feedback

- Require students to apply learning objective
- Require students to apply with variation in authentic contexts
- Monitor and adjust students' guided practice

- Provide specific and timely feedback
 - o Areas where students are successful
 - o Areas where students need to improve
 - o How to improve
- Require students to reflect on
 - What they are learning (and not learning)
 - o Their study habits (and consider new ones)

Resource

Ambrose, Susan A., et al. (2010). *How learning works: 7 research-based principles for smart teaching.* San Francisco, CA: Jossey-Bass.