Teaching tips – Gormley 2017

Know your teaching philosophy
Use teaching strategies known to be effective at facilitating student learning
Develop a lesson plan to vary the types of activities offered in each hour block of class
Observations of your teaching by expert teachers provide necessary feedback for your learning
Social justice approaches are at the forefront of teaching and learning in minority serving institutions

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<th>Top 10 Evidence-based Teaching Strategies</th>
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1. Clearly express a learning goal to your students at the beginning of each class and return to it at the end of class to discuss whether the goal was achieved or not. This strategy has better evidence to foster learning than teachers having high expectations of students. In between, teach what you want them to learn and provide opportunities for them to actively engage in the process of learning it. Connect learning goals to real world professional applications to increase student motivation and cognitive mapping of how this class fits into careers.

2. Show and tell: Share information or knowledge with your students while showing them the skills you want them to gain rather than talking at them for an hour. Allow them to practice at different times in the lesson plan (spaced repetition and plenty of practice have strong evidence for facilitating learning).

3. Check for understanding, not just by asking if students “get it” but also by taking anonymous polls (use electronic devices available at NMSU or scraps of paper) or by breaking into dyads to discuss and report back.

4. Use visual representations of what is being learned. Graphs, charts, cognitive maps, concept diagrams, flow charts, Venn diagrams, and other organizers help students digest complex material before trying to apply it.

5. Now that students have more understanding, allow them to practice the skills again. You can give students a few minutes to write down a conceptualization (applying concepts by following three steps), then share what they wrote with a peer, then harvest some examples to put on the board and discuss how well they fit the lesson goal.

6. Feedback is essential to improve results. Let students know how well they performed on the multiple practice opportunities in class, where they are at with learning the task, and specifically what they can do to improve. This will help them know what they need to work on in their homework assignments.

7. Mastery learning is better for low socioeconomic students; that is, it may take some students more time to learn the same learning goals. Giving students who need it more time to succeed can boost results. The opportunity to redo homework or turn in a draft of a paper early to incorporate feedback are examples of social justice.

8. Productive group work - each member is assigned a different task (minimizes social loafing) and groups are used selectively, so that every individual is prepared to successfully do what is being asked. For example, a third round of practice could be done in a group with assigned observers to point out what fits the model and what does not or what was correct/incorrect about the examples vs. non-examples of a concept, as other members practice.

9. Teach strategies not just content. There are different ways to study material that needs to be recognized (review notes) versus recalled (quiz self with flashcards or app). Conceptualization is a skill that can be broken down into three steps to apply a concept to a real-life situation: (1) first write a formal definition and then demonstrate understanding of the concept in your own words, (2) describe how the real life situation you chose seems to exemplify the concept by telling the story of what happened and including necessary details, (3) compare and contrast the story with the definitions to show how the example illustrates the concept and fits the definition.

10. Encouraging meta-cognition is more effective than all teaching strategies at promoting learning. Have students think about their options for approaching learning, the choices they made, and the results they gained. Rather than just telling them to self-reflect, provide guided time to think about which strategies they could use, which ones they did use, and how that worked or didn’t work to achieve the results they wanted. After a quiz requiring recall rather than recognition, a class discussion about how they studied and whether they knew enough during the quiz often leads to different decisions about how to study the next time (and the formation of study groups with people who know how to quiz themselves and persevere to put in the time needed to succeed).
Developing a teaching philosophy
https://cei.umn.edu/support-services/tutorials/writing-teaching-philosophy

A teaching philosophy is an experiential process that is formulated and then written. Start by articulating your beliefs about how students learn and what teachers do to facilitate their learning. The parallel for therapists is the theoretical orientation, which is unique to each person because our values, beliefs, experiences, and personalities are our own. However, it is also possible to find others with similar theoretical orientations and teaching philosophies. That way we can read the writing of experts with beliefs like ours and learn what they do in situations like those we are encountering.

As your professional teaching identity grows, your teaching philosophy also changes and grows. Revisit and rewrite your teaching philosophy annually during your professional teaching career, as your experience progresses. Your philosophy should be written in your own voice, but you should know about some of the expert teaching pedagogy that theoretically supports your approach to working with students.

Excerpt from a teaching philosophy statement (education):

As I reflect on my beliefs regarding teaching and learning, I find that my mission as a teacher is threefold:

- to promote positive learning;
- to spark learner enthusiasm for learning;
- and to provide a strong foundation for lifelong learning.

To accomplish this, I enjoy applying a wide variety of strategies based on essential educational principles encompassing cognitive functioning, learning theory, diversity issues, instructional planning and assessment.

Excerpt from a teaching philosophy statement (science):

Under many circumstances, I have been fortunate to work with a group small enough to engage in discussion. I am sure I am not alone to say that this is my favorite form of teaching. I enjoy the Socratic method, particularly when one or two students and I can work through a problem together. I also use this approach when training the undergraduate and graduate students in my laboratory. We spend a great deal of time at my white board discussing derivations, designing experiments, and analyzing data. In my opinion, this is the time when the most long-lasting learning takes place. When a student sees the way in which quantitative theory relates to his/her own work, the concepts become an integral part of how they perceive the world from that point forth. I consider this the most important contribution that I can make.

Socially just teaching pedagogies
https://www.google.com/search?q=feminist+theory+of+teaching&oq=feminist+theory+of+teaching&gs_l=psyab.3...7624.12479.0.14389.59.38.0.0.0.193.4012.18j18i86.3...0...1j3i37i46i67.0.QBWPvrBi6Sg

Feminist pedagogy: Uses experience as the basis for learning, demystifies knowledge presumed to be true by challenging it, and exposes the role of gender, race and class in power relationships (McClure, 2000, Feminist pedagogy and the classics)

Critical pedagogy: Critical theories of learning and teaching (e.g., critical race theory) are grounded in theoretical foundations associated with the works of Paulo Freire (1968, Pedagogy of the oppressed)

Recommended psychology resource ($19.95 plus free shipping from APA): Enns and Sinacore (2005), Teaching and social justice: Integrating multicultural and feminist theories in the classroom