Teaching Philosophy Statement Jason R. Finley *August, 2019*

I have always been driven to learn by a sense of wonder, exploration, and discovery. My love of learning has segued naturally into a love of teaching. There is nothing more rewarding than seeing the light of new understanding form in students' eyes. I want to spark wonder in my students, and equip them with the skills to think better and become better people. I have combined my passion with practical insights gained from my studies as a cognitive psychologist and from my various teaching experiences in order to create an enthusiastic, effective, and caring approach to teaching.

Understanding the Perspectives of the Students

Let me start with an analogy. When I am birdwatching in the woods and I see a bird I want to point out to a friend, I first have to check if my friend has a *line of sight* to the bird. Maybe I can see the bird clearly from where I am standing, but my friend has a tree blocking their view, and so first I help them move over, then I point to the bird. This requires *theory of mind*. Teaching new concepts to students is not so different. I must be cognizant of their lines of sight.

So my first priority as a teacher is to emulate the students' perspectives. This is important because once we gain expertise, we easily forget what it was like before we had it (i.e., the *curse of knowledge*). Thus I strive to hold onto my memories of what was confusing when I was a student, and I assume as little as possible about my students' prior knowledge. Most importantly, I regularly check in with them to ask how much sense things are making, and adjust accordingly. This requires an interactive atmosphere where questions and confusion are okay. I want to be there with them in their *zone of proximal development*, not so far up the trail that they can't see me around the bend.

I carefully and slowly introduce new ideas and terminology, breaking down complex concepts into simpler components as needed. I am conscientious with terms that mean something different in psychology versus everyday language (e.g., "short-term memory" or "experiment"), and with acronyms, abbreviations, and symbols. When teaching research methods and statistics I make sure to write and define unfamiliar symbols on the board so they are visible throughout the class, and I orient students to the meaning of graphs and drawings of distributions before tackling the more complex topics that such figures are used to illustrate. For international students, I keep aware of cultural references and idioms, making sure to explain them when encountered. In my PowerPoint presentations I carefully limit the amount of information displayed at once, so as not to overload students' working memory. I ask students to think of examples in class (e.g., "What are some recent fads that might illustrate *conformity*?"), so that I can see not only how they are thinking, but also what their world is like. Another strategy I have used is to have students write to me, at the end of a class session, one thing they think is interesting and one thing they didn't understand. By doing my best to understand students' perspectives and varying levels of comprehension, I am better able to introduce them to new ideas and also make those ideas more relatable to them. Illustrative evaluation comments from students:

- "He presented challenging information in an understandable way, and made sure we really understood the topics." (Research Methods, Spring 2016)
- "The content is challenging, but Dr. Finley took the time to help students and slow down when we did not understand. As [a] student I could tell he was trying to see from our perspective and that helped me excel more in this course because he truly cares about his students and that we are learning." (Cognitive psychology, Spring 2017)

Encouraging Critical and Creative Scientific Thinking

In all of my teaching I emphasize psychology as a science, and that science is a way of knowing that combines empiricism and logic. I use activities and questions that challenge students to exercise critical thinking: What is the claim? What is the supporting evidence? What are alternative explanations? What additional evidence might we gather? For example, when teaching Introductory Psychology I give a "face reading" demonstration in which one student draws a card from a deck that I bring in. I close my eyes while the student holds up the card so everyone else can see it. I ask the student to think vividly of the particular card, and then I "read the subtle expressions on their face" (claim) and correctly state that the card is the 7-of-diamonds (evidence). Students then think up alternative explanations for this feat, and demand additional evidence. We repeat the demonstration and the card drawn from the deck is again the 7-of-diamonds. As students come to suspect, the entire deck is in fact all the same card. In later courses, such as Research Methods and Cognitive Psychology, we practice critical thinking about in-class experiment demonstrations (e.g., there is usually an order confound), and about news articles (e.g., is a causal claim based on correlational data) and empirical journal articles (e.g., how valid are the dependent measures).

At the same time as emphasizing empiricism and logic, I also emphasize the need for *creativity* in psychological science. Astronomer Carl Sagan once said: "to find the truth we need imagination and skepticism both." I have mentored both undergraduate and graduate students in designing and conducting research, and the approach I encourage is this: Unbounded creative curiosity first. Then, rigor. Finally, practicality. I ask students to think through questions such as: What do you want to find out? What study would you run if you had infinite resources (including time travel, access to parallel universes, etc.)? How would you perfectly control for all possible confounds? What statistical analyses would you conduct once you had the data? Finally, how can we scale all those ideas down to something that is practical and ethical? Illustrative evaluation comments from students:

- "He encouraged us to think outside of what is normal for us." (Senior Research Seminar I, Fall 2015)
- "He has successfully challenged my mind to go beyond the realms of critical thinking, and into higher ordered thinking." (Research Methods, Spring 2018)

Promoting Active Learning

Research has repeatedly shown that actively retrieving information from memory improves learning (the testing effect). Toward this end, I ask students lots of questions, and I encourage them to ask lots in return. I want students to feel that I am not simply giving them definitions, but rather am exploring a landscape with them. It is thrilling when a student asks a question I had never considered, and if I don't know the answer offhand, I express my wonder, make a note, and follow-up later once I've found it out.

In addition to frequent review/quiz questions (e.g., "Which statistical test should you use with a nominal dependent variable?"), I ask broader questions aimed at inspiring students to think creatively and critically about important topics. For example: What would it be like to have a "perfect memory" like Funes the Memorious? What if we could randomly assign age? Could you EVER find out the true value of the population variance? Different students work best in different situations, so when I give exercises I will sometimes have students work in small groups, and other times give them a few minutes to work silently on their own. I have found that a diverse approach to active learning is important to engage a diverse group of learners across settings.

Projects are another exciting method to get students actively thinking in new ways, especially ones in which students gather and analyze their own data. I have used projects in which students: observe phone use and stopping behavior at intersections, design and conduct their own survey on a topic of their choosing, design and conduct experiments inside and outside of the classroom, use mechanical counter devices to track the number of involuntary memories they have in a day, and use a wearable camera to test their memory for a visit to the Missouri History Museum. Illustrative evaluation comment from a student:

• "I like how there are learning activities that are throughout the chapters and slides to better learn the material. Its not just staring at a board of notes. He's a fun teacher to have in class." (Cognitive Psychology, Spring 2018)

Inspiring Motivation and Engagement

Motivation is a requisite for learning. But it cannot be taught; rather, it must be inspired. Thus, I seek to inspire students with my own enthusiasm for the subject matter and for learning itself. When their instructor is excited, students get excited too. In every class I also seek to impart to students the belief that intelligence is not an inborn trait but rather a skill that can be perpetually improved (growth mindset). Furthermore, whenever possible I engage students' attention with exciting, humorous, and/or memorable examples and demonstrations. For example, I have: demonstrated theory-of-mind using a dinosaur puppet, illustrated the modeling theory of aggression by punching an inflatable clown, and used the correlational relationship between drinking and grades as a springboard for critical discussion about causality. By student popular demand, I have used some of my own research with wearable cameras to facilitate discussions on the nature of human memory and the methodological issues involved in testing memory outside of a laboratory.

When working with graduate students or senior undergraduates, I am modeling professional scientific thought and practice. I try to make it transparent to them the way I think through research problems. I also don't hesitate to roll up my sleeves and demonstrate hands-on tricks of the trade, using Excel, R, PsycINFO, APA style, and any other tools needed to get a job done. Taking an apprenticeship approach like this entails both training and inspiring my students.

Illustrative evaluation comments from students:

- "Nice to have a teacher who is so clearly passionate about the material they're teaching. That enthusiasm carries over to the students and is very motivating." (Research Methods, Spring 2018)
- "Amazing learning experience. Every class that Dr. Finley teaches makes me get excited about learning and psychology." (Cognitive Psychology, Spring 2018)
- "I enjoyed this class and learned a lot. He is a very good teacher that has a pep that effects the feel of the class room. I have never been excited to learn about stats till this class." (Research Methods, Fall 2015)

Versatility

Versatility is an important quality in teaching, and one that is strengthened through experience. I have worked with a variety of students, including both undergraduate and graduate students, first-generation college students, non-traditional students, veterans, students with disabilities, students needing academic accommodations, international students, transfer students, student athletes, students of color, students of varying religious or political backgrounds, and students of varying sexual orientations and gender identities. I have taught small and large classes, lab sections and lectures, online and inperson, day and night, full semester and half-semester. I have done one-on-one tutoring, facilitated group projects, and given presentations to diverse audiences. I have helped students to hone their writing skills across multiple revisions toward conciseness, consistency, and logical clarity. I have so far mentored 33 undergrad students through research projects, most of those being year-long capstone senior projects. Every situation calls for its own approach, and I am proud of my ability to adapt.

Furthermore, I am comfortable with both high-tech and low-tech teaching tools. I have created intricate PowerPoint animations to illustrate tricky topics like action potentials or confidence intervals. I have used online tools such as InQuizitive (adaptive quizzing system) and ZAPS Labs (experiment demonstrations) to give students interactive experiences from home. For large lecture settings, I have used the iClicker handheld-device response system to implement real-time review questions, demonstrations, and preference polls. At the same time, I am always quick to use chalk/markers or pen-and-paper to flexibly build visual representations on the fly, which is especially important for statistics and research methods. In short, I am comfortable using a variety of tools, and am good at adding more whenever needed. Illustrative evaluation comments from students:

- "He is very accommodating to everyone, especially international students." (Introduction to Psychology, Spring 2018)
- "Great use of concept and terminology repetition and variety of media chalk, ppt, charts, lists etc." (Statistics, Spring 2015)
- "One of the only teachers that can actually teach a 4 hour class. He keeps great pace and doesn't overload an already overloaded 8 week class." (Introduction to Psychology, 8-week version, Fall 2017)
- "Excellent use of a variety of methods, including first-person videos, which really helped bring to life the many topics we covered." (Introduction to Psychology, Fall 2016)

<u>Nurturing</u>

My students are fellow human beings, each on their own journey through life. They have entrusted me with guiding them through part of that journey, and I take that duty seriously. Thus, part of my role is to be a caring mentor. I am teaching students not just the content of the courses, but also how to think better, how to navigate life better, and how to be a more self-actualized person. I am serving young people by sharing what I have learned so far in my life, and by helping them to improve and shape their own minds. I listen to students about what's going on in their lives, and work with them when they are struggling. I show them compassion. When students understand that their professor knows them and cares about them, they can learn better and flourish. Illustrative evaluation comments from students:

- "Dr. Finley is a kind, caring, and respectable man. He will make the time to meet with you outside of class and is very easy to talk to." (Controversial Issues, Fall 2018)
- "I feel as though Prof. Finley really took my needs into consideration and was invested in me, my learning process, and my project." (Senior Research Seminar I, Fall 2015)
- "Dr. Finley is an all-around true gem. I have never met a better professor in Psychology. He cares about each and every student deeply, and he welcomes questions and teaches material extremely well too! He also cares genuinely about the students' needs, and I have always felt comfortable to approach him. He makes a rather difficult subject extremely fun and interesting! I LOVE going to class!" (Cognitive Psychology, Spring 2019)
- "He really puts his all into teaching as well as advising. He gives a lot of time to each student to make them feel like their future is important, and he discusses everything with you. Very helpful!" (Advising, Fall 2018)

<u>Summary</u>

In summary, my approach to teaching emphasizes: understanding the perspectives of the students, encouraging critical and creative scientific thinking, promoting active learning, inspiring motivation and engagement, versatility, and nurturing. With my experience and skills I am confident in my ability to teach a variety of courses to a diverse array of students, and I look forward to supervising undergraduate and/or graduate research, and instilling in others the same enthusiastic curiosity that has driven me to become a scientist and a teacher.