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IN MEMORIAM

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Honoring Dr. Henry S. Pennypacker: Shaping Behavior (and Lives) in the Classroom

The professor stood before the class, donning a yellow button-down shirt with a slightly askew tie, a pair of slacks, and well-loved cowboy boots. He asked us to report our names, year in school, and "how you got yourself into this mess." The question gave me a bit of anxiety and, when it was my turn to report, I lied. Name? Claire St. Peter (that was true). Year in school? Junior (also true). How I got myself into this mess? Obviously, I was very interested in the science of behavior (big lie). After all, the title of the course was the Natural Science and Technology of Behavior, so the response seemed like a good one. The truth was that I had never heard of the science of behavior, and I had registered for the class because it was an upper-division course that fit in my schedule. By the end of the semester, though, it wasn't a lie. I was sold on the power of a natural science of behavior.

Dr. Henry S. Pennypacker (who his students affectionately called Dr. P) was the professor who sold me on the science, and I wasn't the only one. I had the good fortune of taking several courses with Dr. P and then later coteaching these courses with him for years (it was during these later years that I shifted from calling him "Dr. P" to "Hank"). Hank made tremendous contributions to the science of behavior and to the transfer of that science to meaningful technologies. He coauthored a best-selling textbook on research methods that is now in its fourth edition. He saved lives by leveraging stimulus control and discrimination training to develop effective breast self-examination technologies (known as MammaCare). He was broadly passionate about education, helping to transform learning for students of all ages. He developed the Personalized Learning Center at the University of Florida and later founded the corporation, Precision Teaching of Florida. This corporation helped to lay the foundation for what is now the Behavior Analyst Certification Board. I hope that others will provide details on these important contributions in their memorial writings. Instead of reviewing all of Hank's broader accomplishments, I will focus on his teaching.

In the early 2000s, Hank taught three courses at the University of Florida: two undergraduate courses and a doctoral-level course on research methods. Hank's undergraduate courses were arranged in a two-course sequence: students who enjoyed the first course could progress on to the second, although it was not required. The goal of the courses was to shape verbal behavior to the point that students could have had a meaningful conversation with B. F. Skinner. Hank's courses were notable not just for his style but also because the structure was so different from that of typical college courses. In Hank's own words (from the syllabus for the first course in the sequence),

> EAB 4704 is a course organized and taught differently than any other course in the University of Florida curriculum. It is the product of extensive research aimed at improving instruction on the college level … the environment is arranged in such a way as to facilitate the best performance of which he or she [the student] is capable … our instructional procedures emphasize: (a) individualized instruction, (b) precise specification of the required performance, (c) continuous direct recording, to facilitate the analysis of performance, [and] (d) student-determined pacing.

Student learning was enhanced because the course wasn't just *about* behavior analysis: the course *was* behavior analysis. Students learned about the course content in ways that forced them to interact with the subject matter and to think critically about how it applied to their lives. Course assessments were multifaceted: fill-in-the-blank cards, written essays, and oral responses. Assessments occurred weekly as the course material was learned, and students were required to master the content in one unit before moving on to the next. This approach allowed students to demonstrate that the content had been mastered while giving them latitude (in the oral assessment) to focus on the portions of the material that were most meaningful to them. Each student completed these assessments with a "manager" who had previously completed the course. The manager directed and graded the assessments and reported weekly to Hank about their students' progress. Students could readily ask questions of this peer that they might be hesitant to ask an instructor, and they also had accountability to a peer for completing the coursework.

Hank was a stickler for precision in thinking and language for both students and managers. Those who took the class will likely not forget why we say that we reinforce behavior rather than reinforcing people! His courses had exacting standards: students were to complete fill-in-the-blank flashcards orally at a rate of at least 3.6 correct per minute, with no more than 0.4 incorrect per minute. These

standards were based on the responding of experts in the field (graduate students and Hank himself). But Hank also considered individual variation. For example, the standards for written performance were often set such that the student could write an essay about the science of behavior as quickly as they could write an essay about themselves. Here, passing required meeting the fluency goal and also entirely omitting incorrect or irrelevant statements. As Hank noted, "Students quickly learned to write quickly and succinctly!" (Pennypacker, 2016, p. 60), a skill that certainly had broad applications beyond Hank's course.

Students were required to conduct projects: one on their own behavior and one on the behavior of someone else. Hank did not prescribe the kinds of behavior that should be measured in projects, and the projects really ran the gamut from private events (students charting positive and negative thoughts about themselves) to very public responses (how many times newscasters used certain words) to things that weren't even really behavior (like the number of earthquakes per year in California from the earliest records in the late 1800s until the current day). No intervention was required. The point was merely for students to discover that behavior was orderly and that much could be learned from simply measuring and charting it. However, many students chose to intervene and successfully changed behavior that was meaningful to themselves or others.

Students had the skills to change behavior in meaningful ways because Hank always did a masterful job of blending rigorous natural science with humor, joy, and, quite often, song.[1] Although a serious scientist and brilliant scholar, he never took himself too seriously. Embedded in the memorable examples were plenty of opportunities for students to respond, and Hank was a masterful shaper of behavior. He always considered the student's current repertoire and shaped their behavior to a polished final product. His students performed to high standards, and he gave them the flexibility to tailor their education.

The final examination in the course consisted of a one-on-one conversation with Hank. The student had to stay within the realm of behavior analysis, but the conversations were not scripted. Hank would ask follow-up questions, but he set the rule that he could not fully change the topic. Collectively, these approaches meant that students could find the meaning in the course material and see how it applied to issues that they cared about immediately and directly.

In Student Evaluations of Instruction, students described Hank as approachable and caring. They remarked about how comfortable they were in class, and they noted that Hank's humor and encouragement made them want to participate. One student, who was enrolled in the second course in the sequence, remarked,

> I'm sad at the end of every class and really wish it happened more often every week. I literally learn something new every 60 seconds or so and love every minute of it. It's education crack … Seriously, this class and 4704 have inspired me about what I want to do with the rest of my life.[2] Basically anything I do will be an extension of all I've learned and practiced here. I'm gonna go next semester, too, even though I can't get credit for it. That says a lot about how great I think it is.

Hank was a great role model, and his students (myself included) found ways to incorporate the science of behavior into our teaching. We include mastery-based elements and precisely measure student performance, including student verbal behavior. We structure our courses to meet students where they are and to build our students' fluency. We connect our course content to material that is personally meaningful for our students. Although hard to hold a candle to Hank in this respect, we build in humor and strive to take the science seriously but not ourselves. Hank passed away on September 12, 2023, but his influence persists through the teaching, scholarship, and service of the many students who were fortunate enough to learn from him.

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Pennypacker, H. S. (2016). Reinforcement in the key of C. In R. D. Holdsambeck & H. S. Pennypacker (Eds.), *Behavioral science: Tales of inspiration, discovery, and service*. (pp. 51–66). The Cambridge Center for Behavioral Studies.

[1]This was true in and out of the college classroom. For example, when teaching Head Start teachers to use the Standard Celeration Chart, Hank wrote a song to the tune of "Row, Row, Row Your Boat." It went like this: "Care, care, care enough, care enough to chart. If you do, you know that you will give your kids a head start." Hank knew that these teachers used song to teach their students and appreciated the social validity that the inclusion of song might bring.

[2]Indeed, this student, who signed the comment, is now a doctoral-level behavior analyst and faculty member who is engaged in teaching the next generation.