

The Pedagogical Power of Prediction

List three skills our field relies on. What were the three you listed? Did you include prediction? Predictions are made to guide the scientific testing we use to support or refute our theories. Predictions guide science. Predictions help us diagnose and treat. Predictions contribute to whether or not we decide to develop relationships, accept a job offer, or take a chance. And if wrongfully utilized, predictions can have harmful consequences. Simply put, prediction is powerful. But how many of us NITOPpers involve prediction in everyday pedagogy?

To begin, we will start with reasons why teaching about prediction shouldn't be limited to hypothesis testing, statistics, and research methods. How can teaching prediction in these contexts intimidate students? Is teaching about prediction in these contexts limiting students' critical thinking development and stifling the realization that prediction is something our brains do automatically? Hypothesis development shouldn't be so hard! Or, sometimes, so boring...

Next, we will learn about a wide range of prediction contexts and examples. Can prediction examples be exciting and fun? Can they inspire students to learn more? Yes! We will experience the pedagogical power of prediction with a video clip from Neil deGrasse Tyson and the late, great college professor, Dr. John Pilley; a lesson on grocery shopping and schemas; and a tutorial on how to take classic psychology experiments and transform them into memorable exercises in prediction.

Finally, to help you implement the power of prediction in the classroom, I will reveal some free technologies and technology-free methods to engage and reward your students. Yes, giving points to students just for showing up and participating in the power of prediction is something I believe in. The result of this presentation? Some make-you-think-twice real-world applications even you will enjoy.