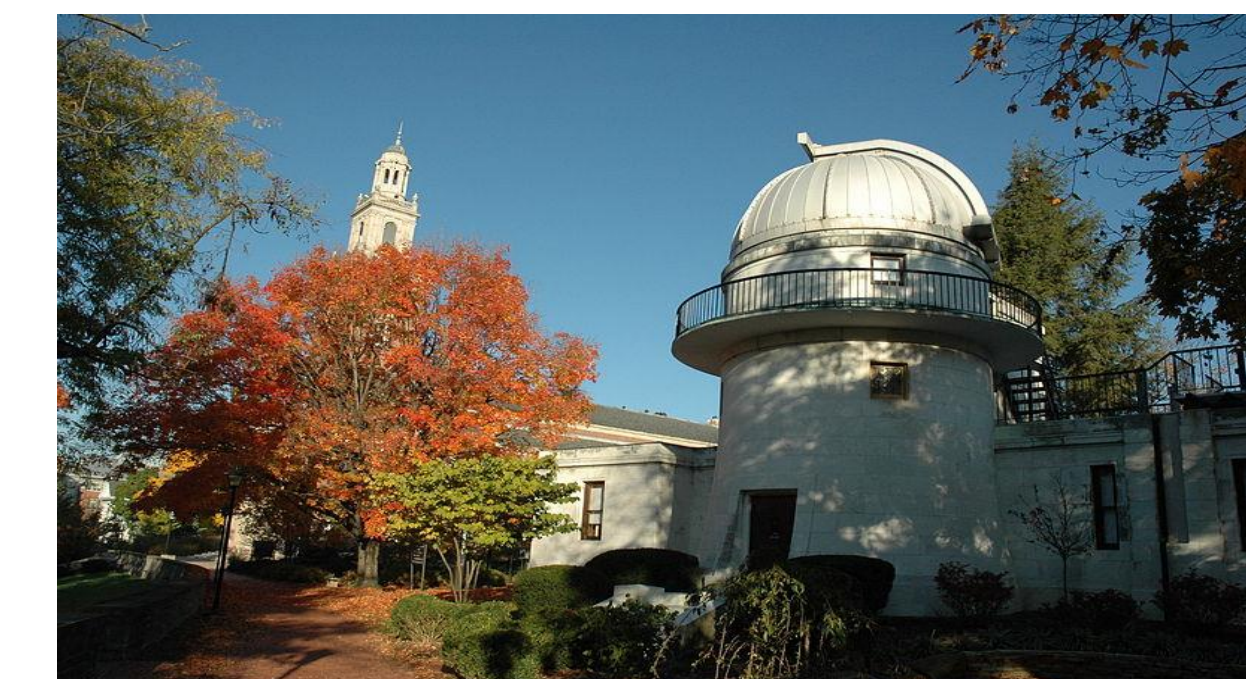


Getting Ahead with TED-Ed

Nestor Matthews, Department of Psychology, Denison University

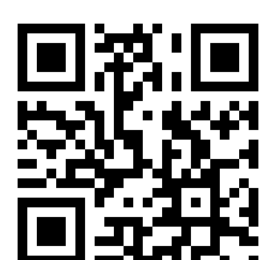
TED-Ed Lesson on Signal Detection Theory: <http://ed.ted.com/on/bxq3ZEOq>

Poster: <http://personal.denison.edu/~matthewsn/nitop2016>



Goal

Improve student learning and engagement by flipping the classroom with TED-Ed Lessons.



Brown, Roediger III & McDaniel "Make It Stick"



Dr. Susan Ambrose 7 Research-Based Teaching Principles



Dr. Dorothy Williams Metacognition Rubric

Flipping the Classroom with Video Lectures



Introduction To Factor Analysis

LESSON CREATED BY NESTOR MATTHEWS USING TED-Ed
VIDEO FROM Nestor Matthews YOUTUBE CHANNEL

Let's Begin...

Introduction to Factor Analysis

Introduction to Factor Analysis

- Watch
- Think
- Dig Deeper



Last Edited 9/03/2015
Psychometric Functions
Understanding Thresholds by Nestor...

17 Students
0 Discussions

Share Edit Delete

Review Student Work



Last Edited 9/02/2015
Signal Detection Theory
Lecture by Nestor Matthews

25 Students
0 Discussions

Share Edit Delete

Review Student Work

Results

PSYC 340 Sensation & Perception

| | TED-Ed & Class Participation | TED-Ed & Writing Grades | TED-Ed & Final Exam | TED-Ed & MC-Motivation | TED-Ed & MC-Acquisition | TED-Ed & MC-Retention | TED-Ed & MC-Performance |
|---------|------------------------------|-------------------------|---------------------|------------------------|-------------------------|-----------------------|-------------------------|
| r(15) | 0.306 | 0.793 | 0.503 | 0.768 | 0.573 | 0.590 | 0.745 |
| r-sqrd | 0.093 | 0.629 | 0.253 | 0.590 | 0.328 | 0.348 | 0.554 |
| p-value | 0.217 | 0.000 | 0.039 | 0.000 | 0.013 | 0.010 | 0.000 |

PSYC 370

Statistics for the Behavioral Sciences

| | TED-Ed & Class Participation | TED-Ed & Writing Grades | TED-Ed & Final Exam | TED-Ed & MC-Motivation | TED-Ed & MC-Acquisition | TED-Ed & MC-Retention | TED-Ed & MC-Performance |
|---------|------------------------------|-------------------------|---------------------|------------------------|-------------------------|-----------------------|-------------------------|
| r(8) | 0.899 | 0.230 | 0.442 | 0.762 | 0.662 | 0.767 | 0.559 |
| r-sqrd | 0.808 | 0.053 | 0.195 | 0.581 | 0.438 | 0.589 | 0.312 |
| p-value | 0.000 | 0.522 | 0.201 | 0.010 | 0.037 | 0.010 | 0.093 |

Significant Linear Increases In Metacognition Across The Semester

PSYC 340 & PSYC 370 Combined (n=22)

1. Internal locus of control (#1; Motivation; p=0.015)
2. Self-directedness (item #3; Motivation; p=0.02)
3. Reorganizing information meaningfully, summarizing information regularly (item #12; Retention; p=0.031)
4. Ability to predict potential exam questions, and practice retrieval accordingly (item #14; Performance; p=0.009)
5. Transferring and integrating knowledge from one source to another (item #16; Performance; p=0.004)
6. Effectively matches test-taking techniques to the assessment situation (item #18; Performance; p=0.003)

draw.to

Draw something and share it!™

PSYC 340: S&P Psychometric Functions

PSYC 340: S&P Signal Detection Theory

PSYC 340: S&P Fourier Analysis

PSYC 340: S&P Sound Cancellation

PSYC 370: Stats 4-Way Interaction

PSYC 370: Stats Multiple Regression

PSYC 370: Stats Factor Analysis

PSYC 370: Stats Discriminant Analysis