

TED-Ed Predicts Metacognition Improvements

Nestor Matthews, Department of Psychology, Denison University



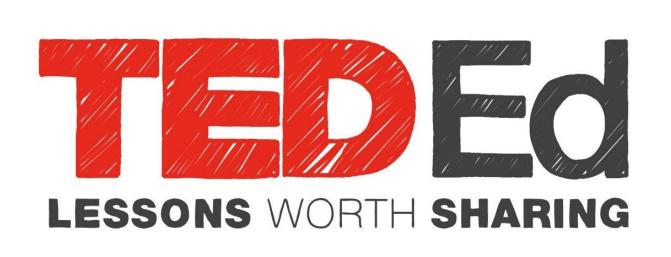
TED-Ed Lesson on Signal Detection Theory: http://ed.ted.com/on/bxq3ZEOg
Poster: http://personal.denison.edu/~matthewsn/apsteaching2016





Goal

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





"Make It Stick"



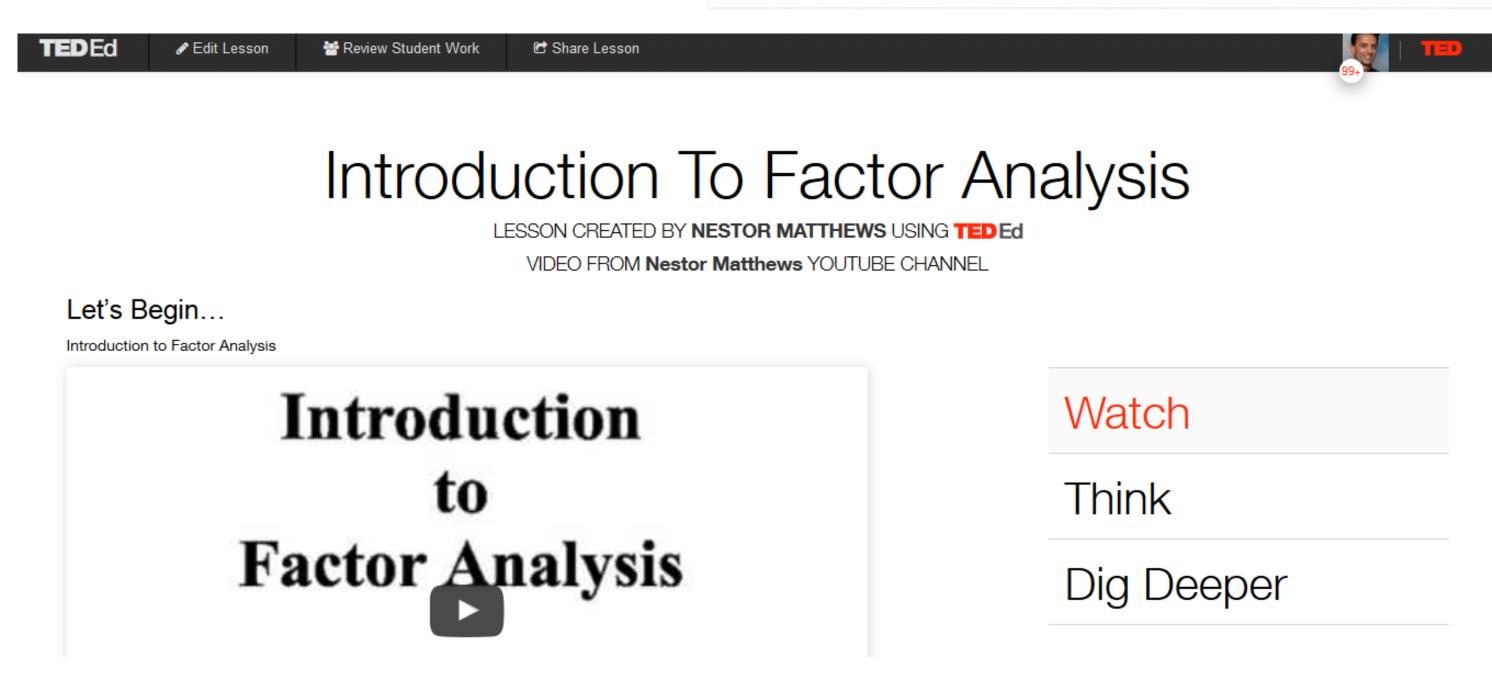


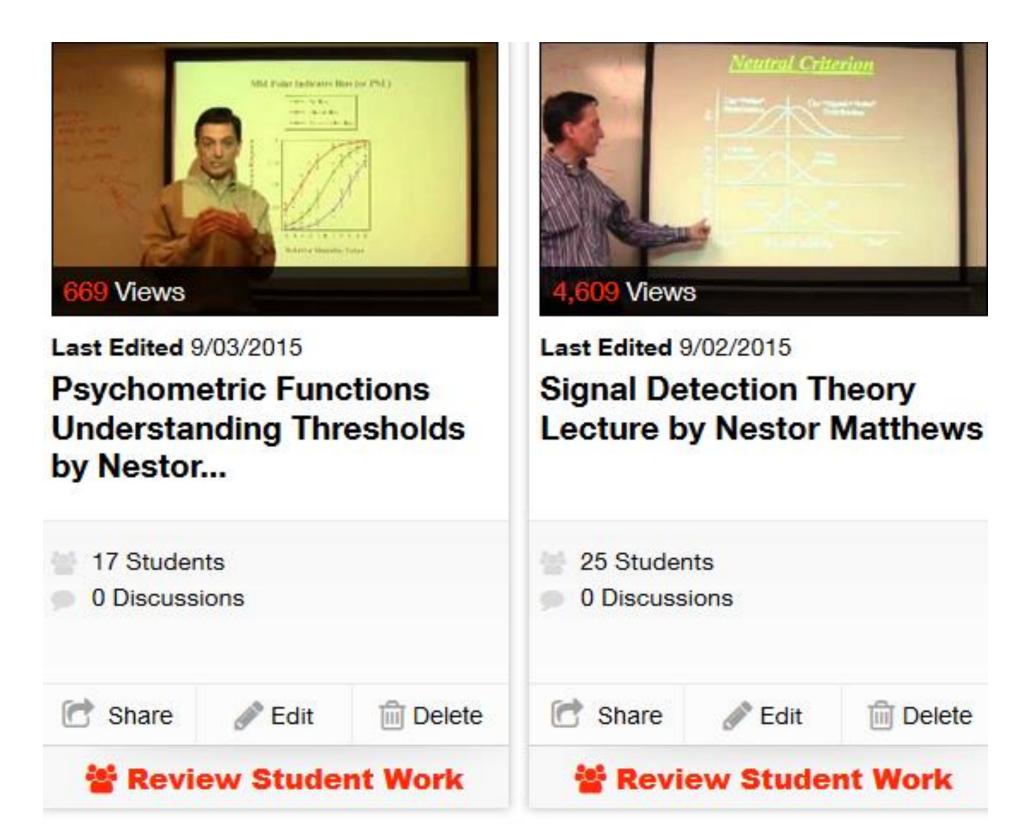


Dr. Dorothy Williams
Metacognition
Rubric

Flipping the Classroom with Video Lectures







Results PSYC 340 Sensation & Perception

	TED-Ed &	TED-Ed &	TED-Ed &	TED-Ed &	TED-Ed &	TED-Ed &	TED-Ed &		
	Class Participation	Writing Grades	Final Exam	MC-Motivation	MC-Acquisition	MC-Retention	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 &	TED-Ed &	TED-Ed &	TED-Ed &	TED-Ed &	TED-Ed &	TED-Ed &
	Class Participation	Writing Grades	Final Exam	MC-Motivation	MC-Acquisition	MC-Retention	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 something and share it!sм

