

Trickle-Down Engagement: Maximizing Teacher and Student Engagement in First-Year Courses

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Why do we teach and why do we learn?

- Because it's awesome!



First-Year Students on Their First Day

- What they are
- What they are not
- What we can do for them

The Importance of Engagement

Engagement

- Cognitive, affective, physiological, and behavioral involvement in a task
 - e.g., Rupayana (2010); Sinatra, Heddy, & Lombardi (2015); Skinner & Belmont (1993); Steele & Fullagar (2009)
- Engaged students and teachers:
 - Are enthusiastic, interested, and psychologically invested in the material
 - Enjoy learning and/or teaching the material

The Focus on Student Engagement

- The experiences and engagement of students in the classroom have been common topics in the scholarship of teaching and learning
 - e.g., Schaufeli et al. (2002); Steele & Fullagar (2009)

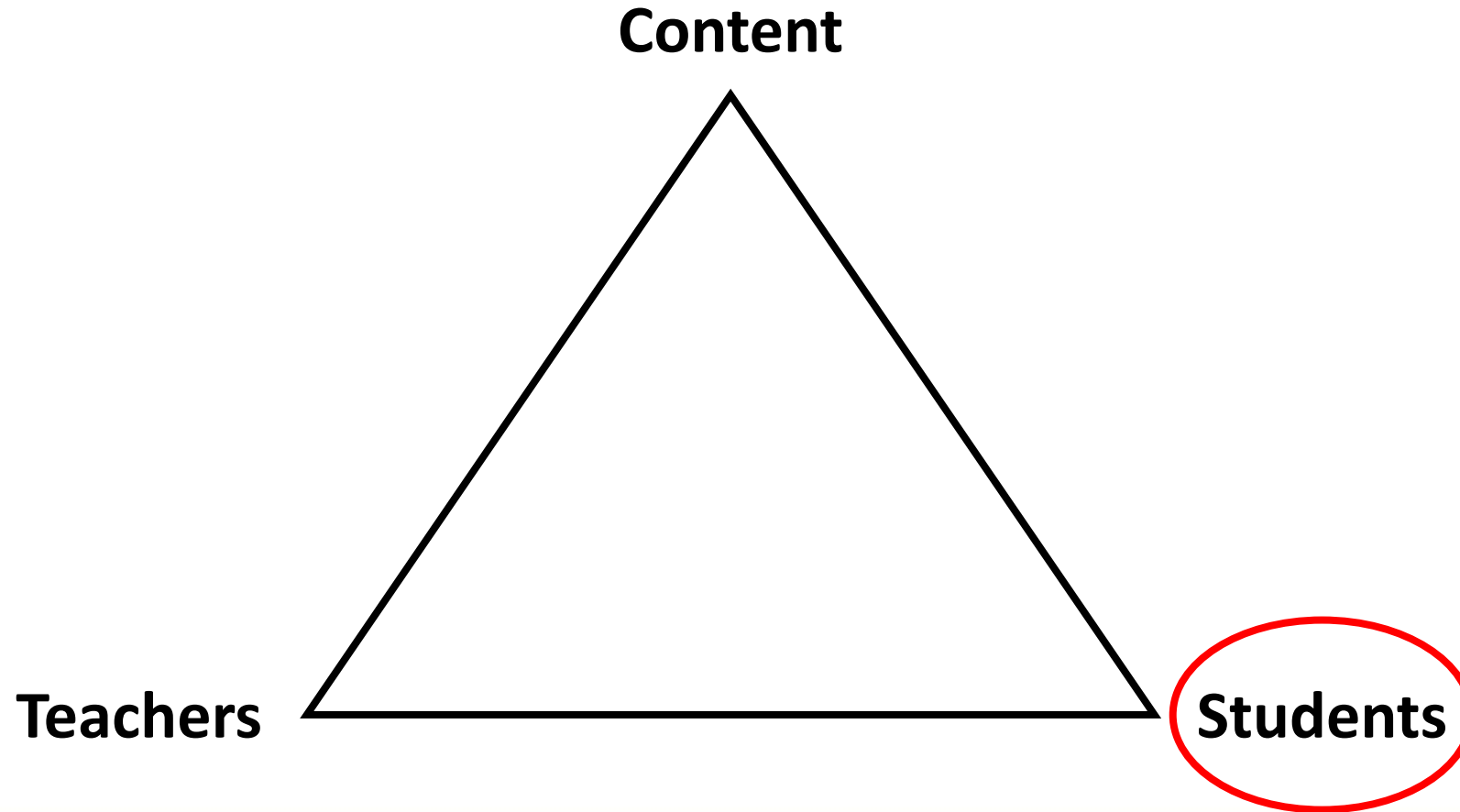
The Importance of Student Engagement

- Student engagement is related to:
- Their interest in the class
- The value they see in the class
- How much they look forward to classes AND exams
- How much they see exams as opportunities to demonstrate learning
- How positively they feel about the learning environment

- Their *intrinsic motivation to learn*

N = 150 General
Psychology students

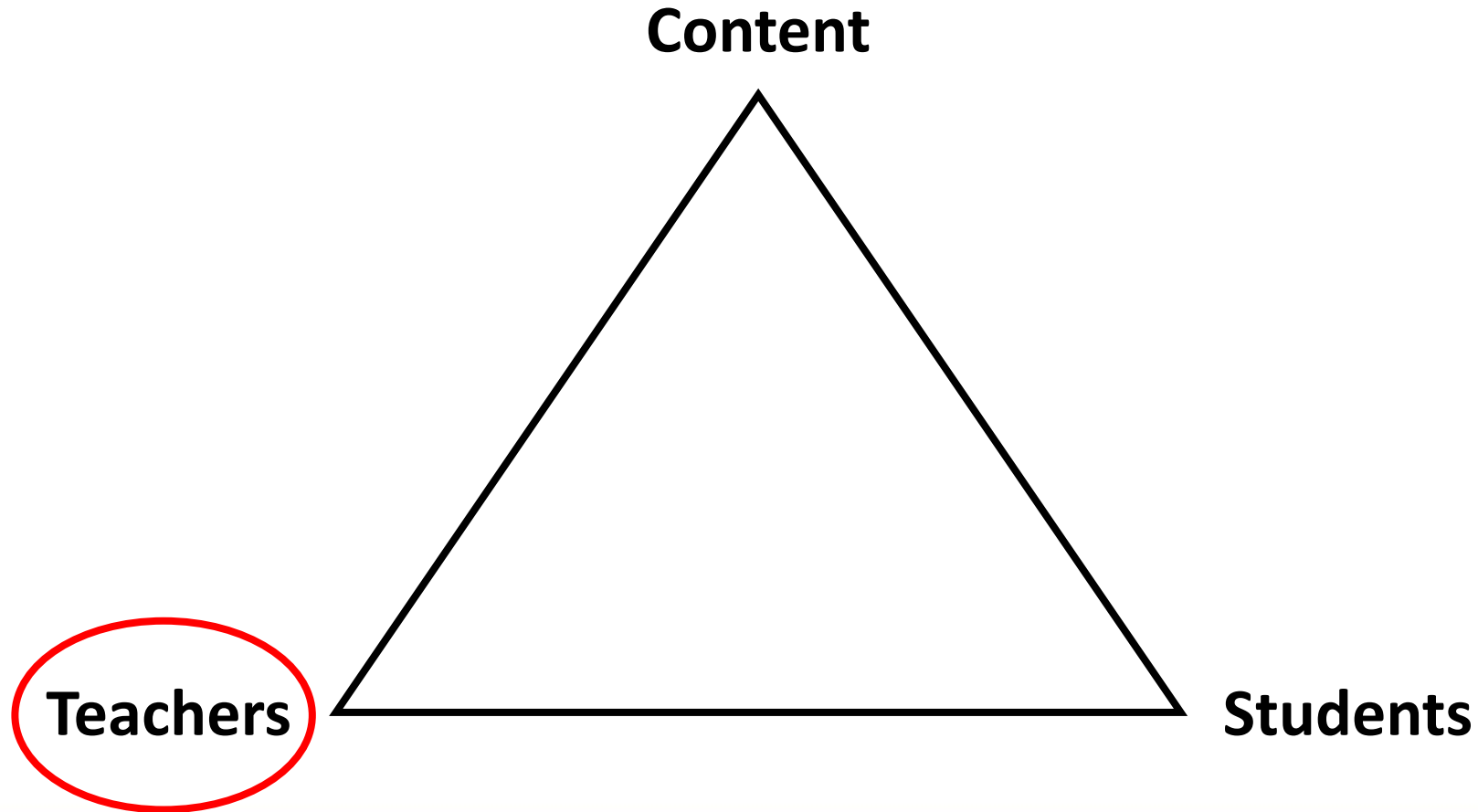
Three Components of Teaching and Learning



When I Engaged and Learned Best as a Student



Three Components of Teaching and Learning

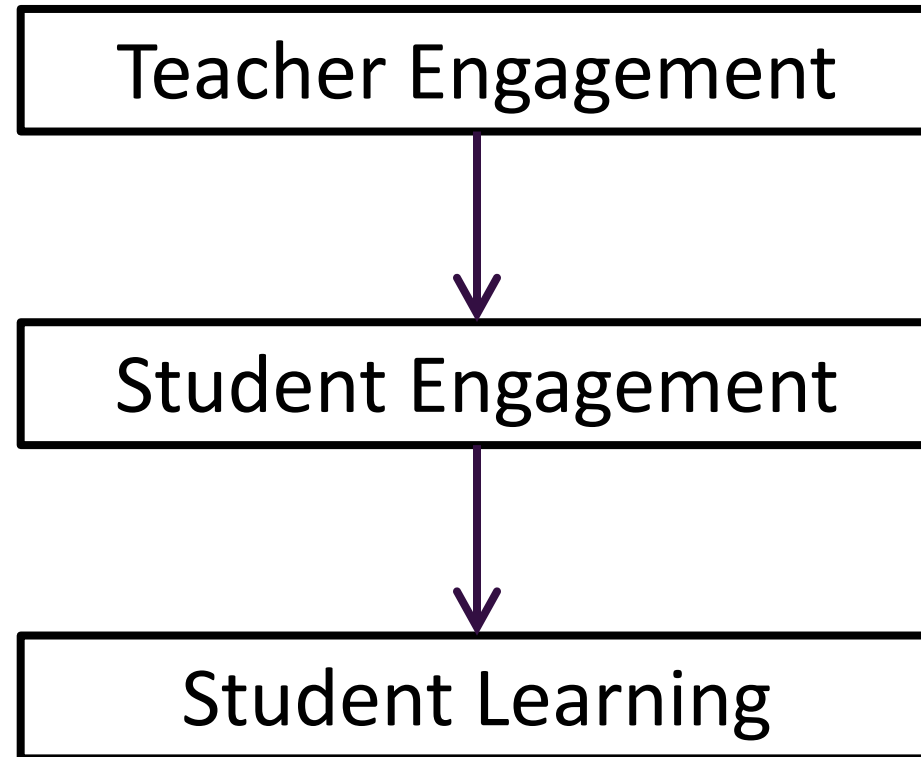


- “Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher.”

- Parker J. Palmer, *The Courage to Teach*

The Trickle-Down Engagement Model

The Trickle-Down Engagement Model



Trickle-Down Engagement

- Theoretical and empirical foundations
 - Positive psychology
 - e.g., Fredrickson (2001); Sheldon & King (2001)
 - Self-determination theory
 - e.g., Deci & Ryan (1985); Eisenberger & Cameron (1996)
 - Research on intrinsic/extrinsic motivation
 - e.g., Deci, Koestner, & Ryan (1999); Ryan & Deci (2000)
 - Emotional contagion
 - e.g., Hatfield, Cacioppo, & Rapson (1994)

Our Research Program

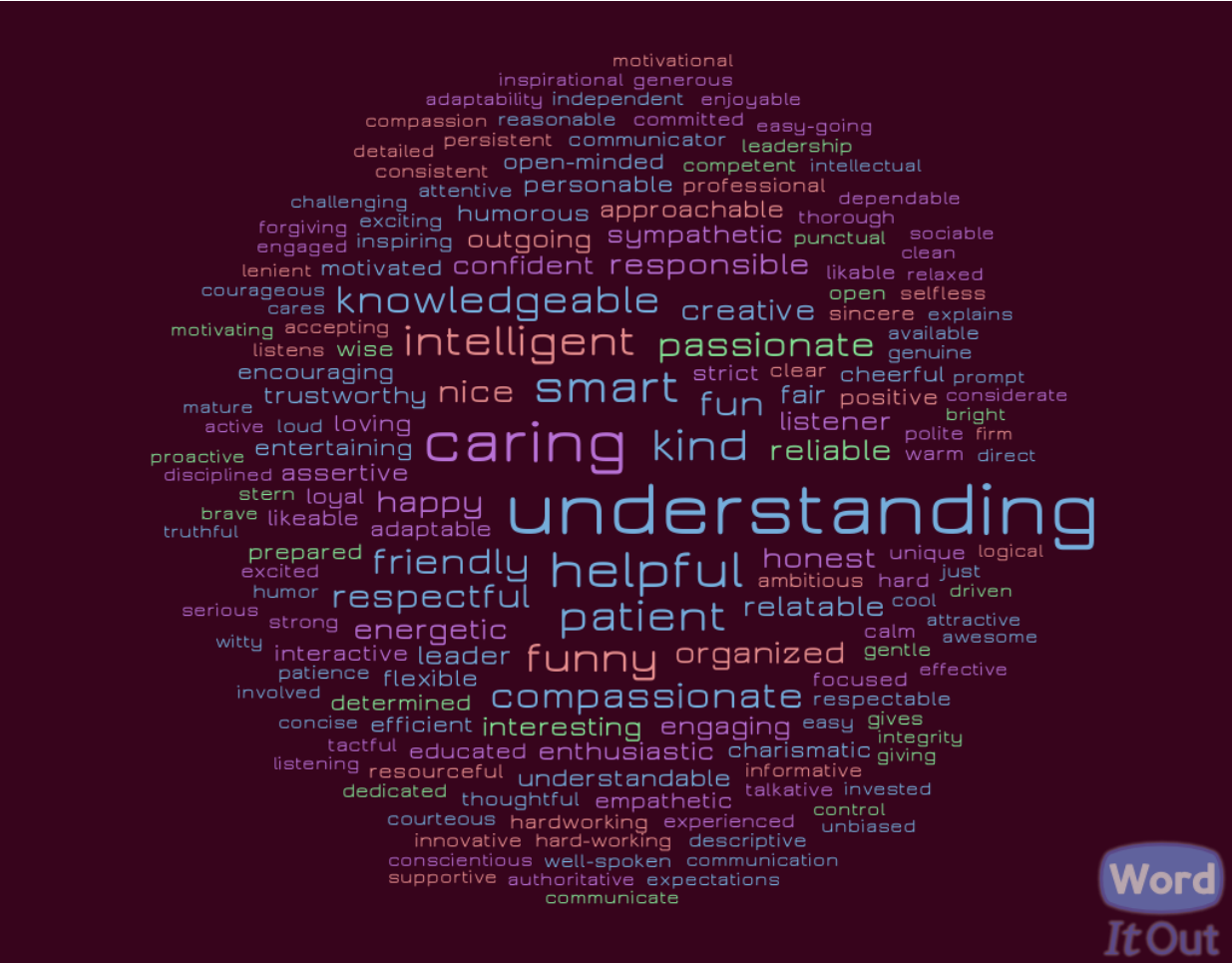
- To investigate the under-appreciated impact of faculty's engagement in teaching on students' engagement in learning
- Sources of data:
- General Psychology students
- K-State First students
- K-State First faculty
- Kansas State Book Network (KSBN)
- Teaching faculty at K-State
- Faculty who won recent teaching awards at K-State



Student Perceptions of Trickle- Down Engagement



What do students want in their teachers?

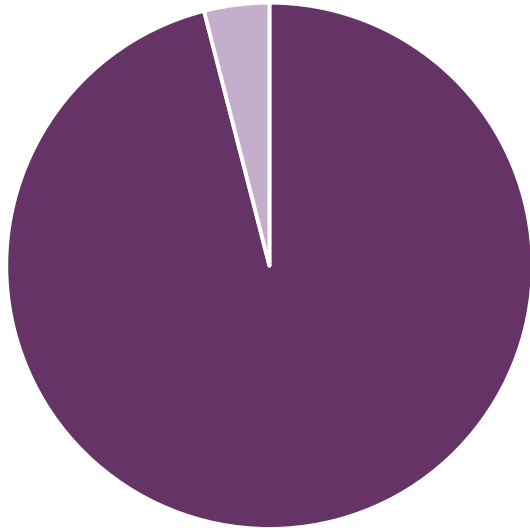


N = 355 General Psychology students



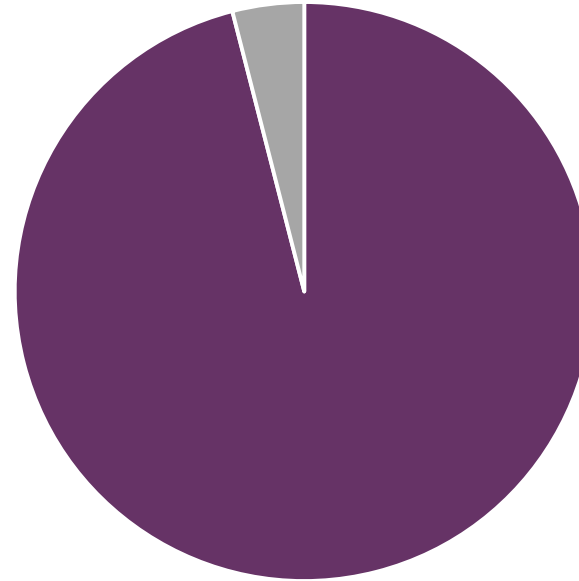
Do students believe in trickle-down engagement?

When my instructor is more engaged in the class material, I am more engaged in the class material.



■ YES ■ NO

When my instructor is more engaged in the class material, I learn the class material better.



■ YES ■ NO

N = 110 General Psychology students



Support for the Trickle-Down Engagement Model

Perceptions of Instructor and Student Engagement (1st sample)

- $N = 195$ General Psychology students (sampled weekly)
- Correlations between perceptions of instructor and student engagement:
 - Student reports: $r = .32^{**}$
 - Instructor reports: $r = .60^{**}$

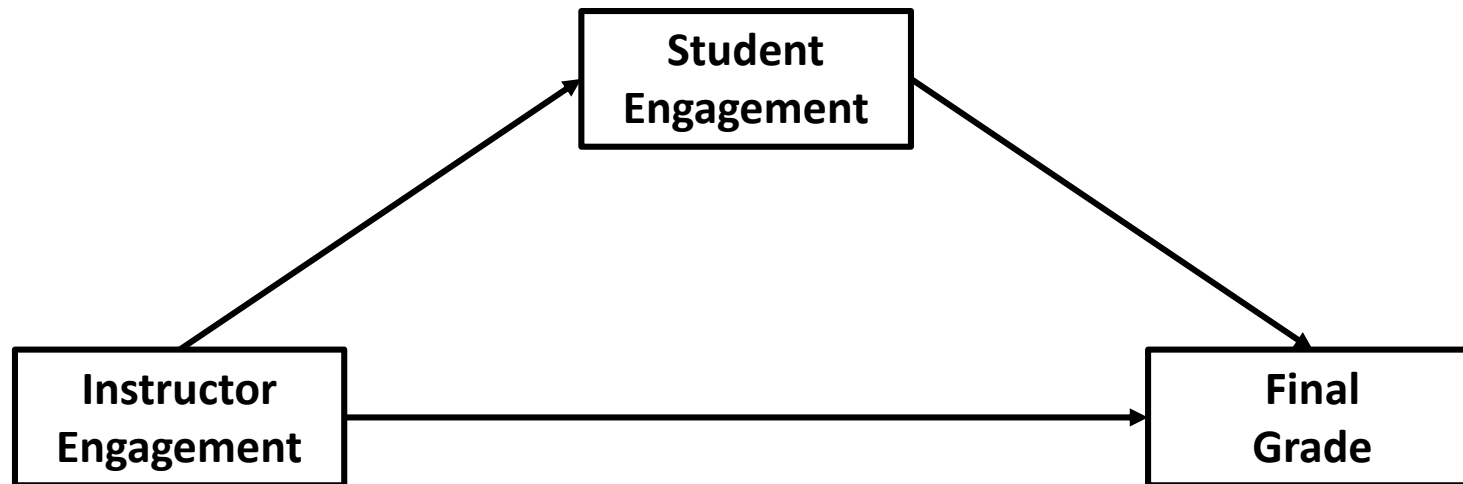
Students' Perceptions of Engagement (2nd sample)

Student's Perceptions	1.	2.	3.	4.
1. Instructor Engagement	--			
2. Student Engagement	.49**	--		
3. Study Engagement	.29**	.50**	--	
4. Final Grade	.14*	.29**	.15*	

N = 210 General Psychology students (sampled at each exam)

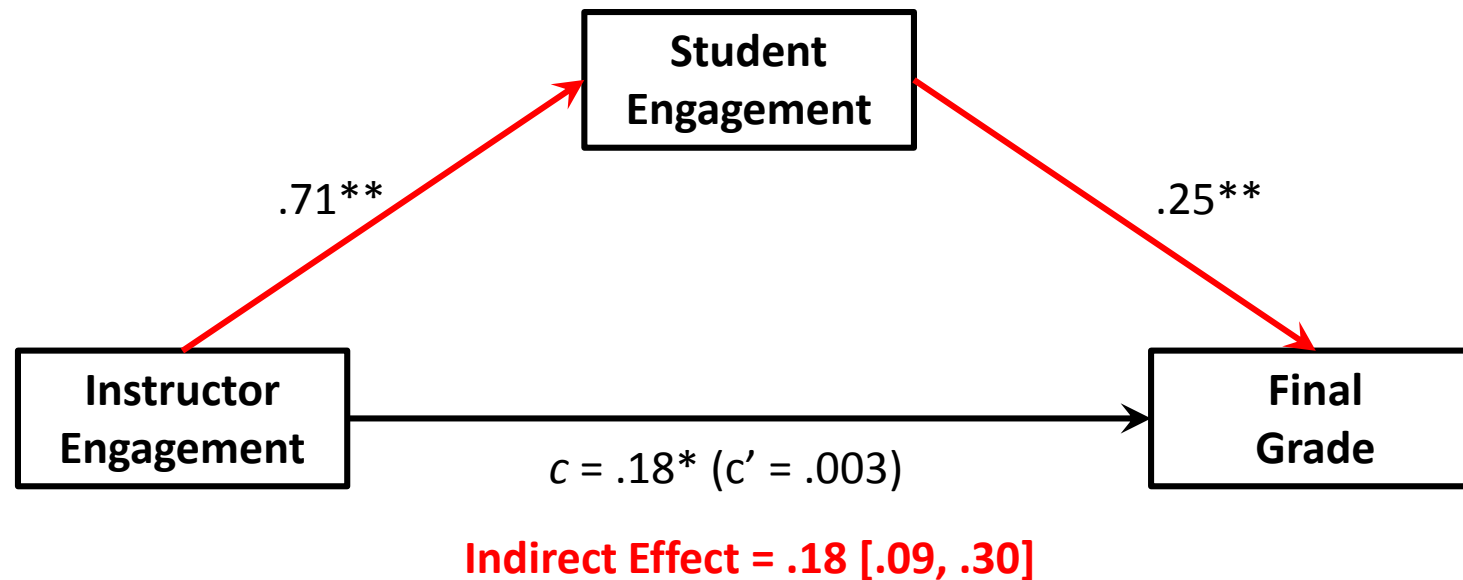
* $p < .05$, ** $p < .01$

Students' Perceptions of Engagement (2nd sample)



$N = 210$ General Psychology students (sampled at each exam)

Students' Perceptions of Engagement (2nd sample)



* $p < .05$, ** $p < .01$

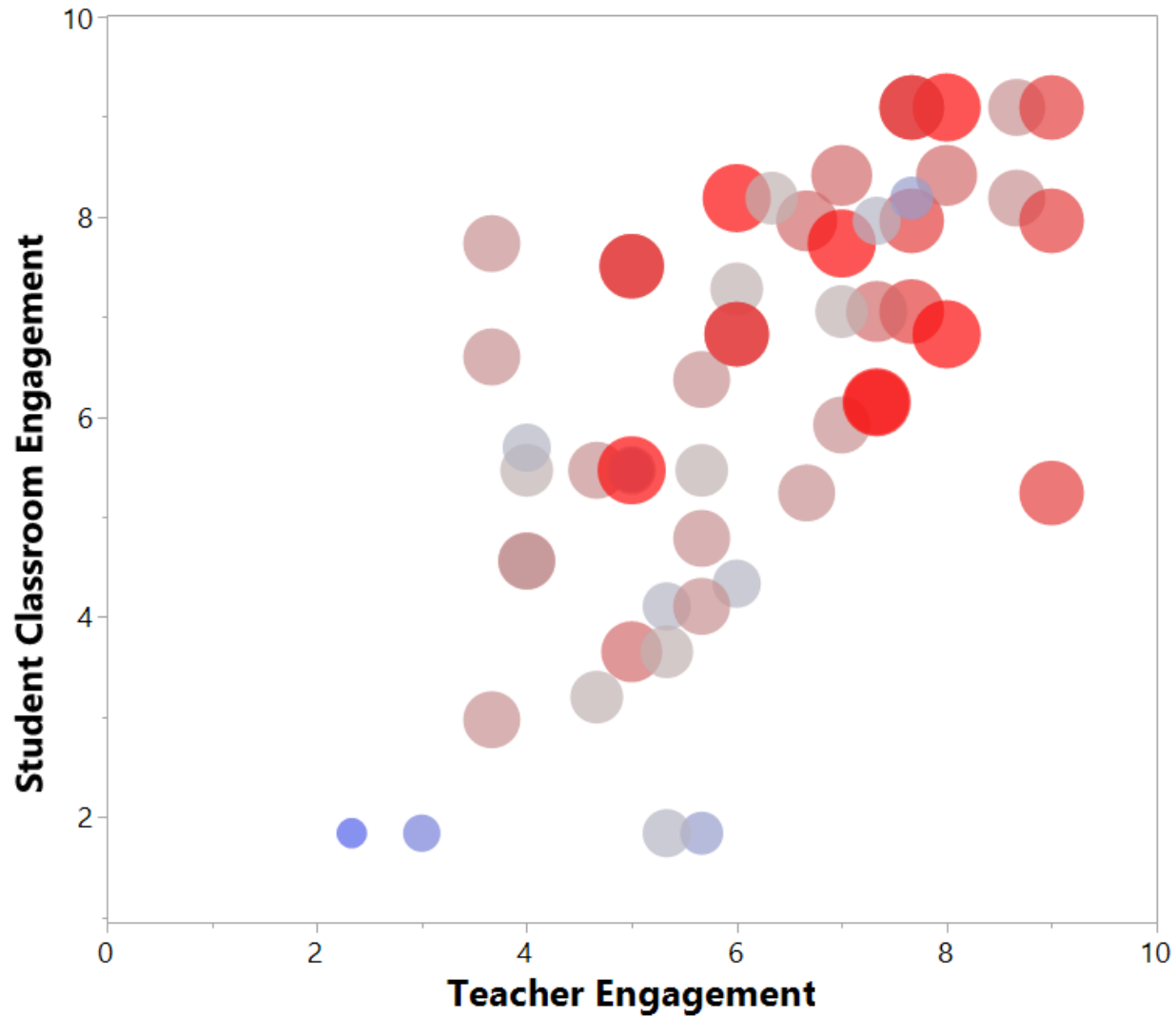
$N = 210$ General Psychology students (sampled at each exam)

Students' Perceptions of Engagement (KSBN sample)

	1.	2.	3.	4.	5.
1. Teacher Engagement	--				
2. Student Classroom Engagement	.65**	--			
3. Student Book Engagement	.65**	.77**	--		
4. Quiz Score	.36**	.57**	.46**	--	
5. Community Around Book	.77**	.72**	.58**	.38**	--

$N = 193$ General Psychology students (regarding their experiences with KSBN)

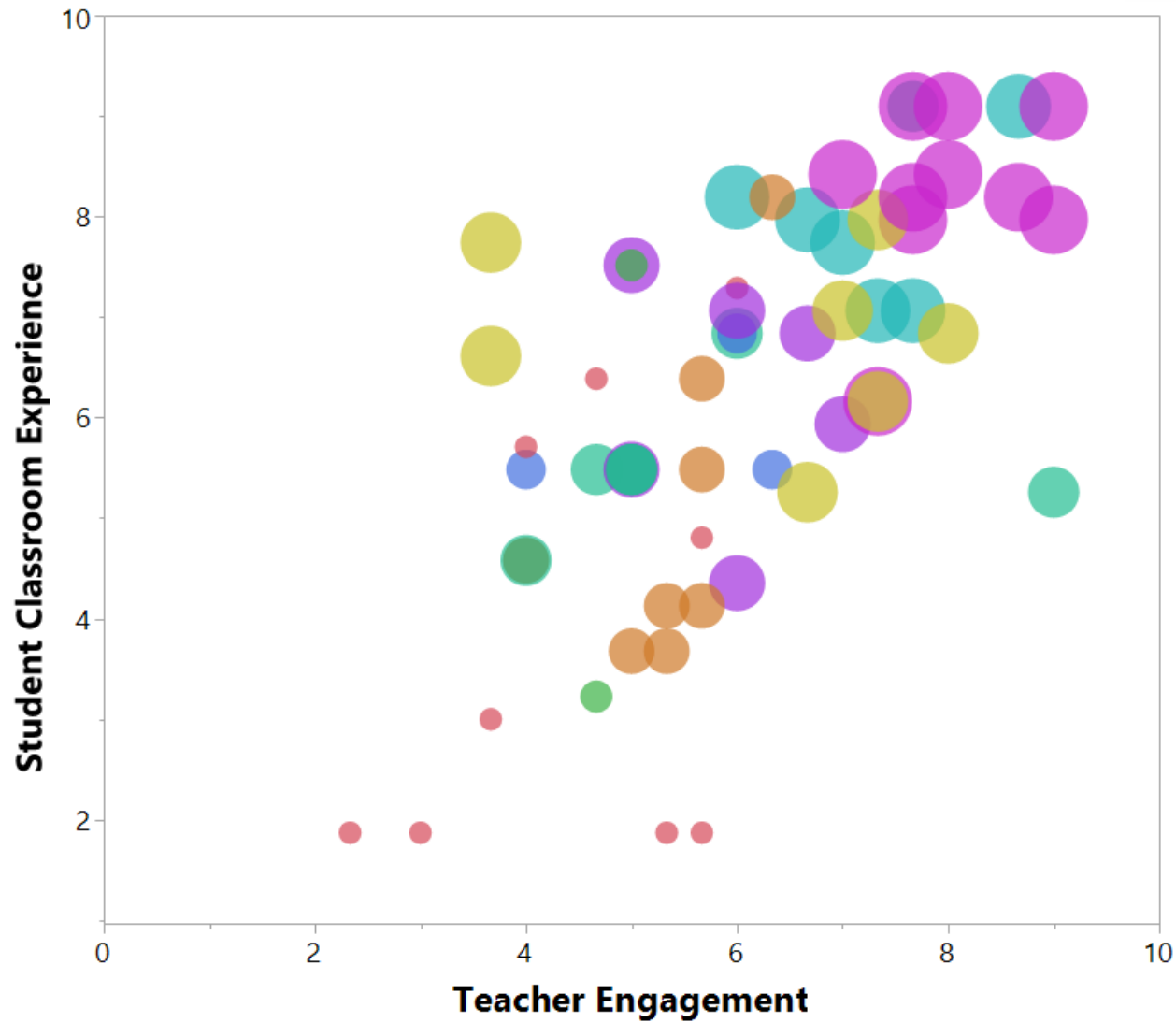
** $p < .01$



Quiz Score/10

- 1 [Blue square]
- 3 [Light blue square]
- 6 [Grey square]
- 8 [Brown square]
- 10 [Red square]

N = 193 General Psychology students (KSNB)



Community

- 1 Strongly Disagree
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9 Strongly Agree

N = 193 General Psychology students (KSNB)

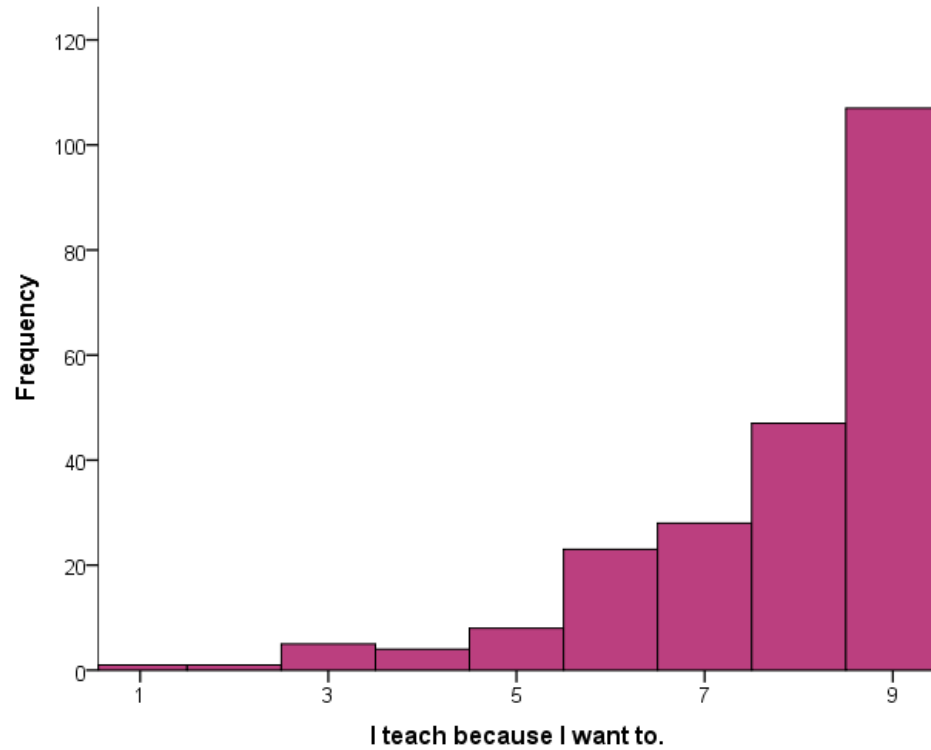
Teachers' Perceptions of Trickle- Down Engagement

Teacher Engagement and Its Importance

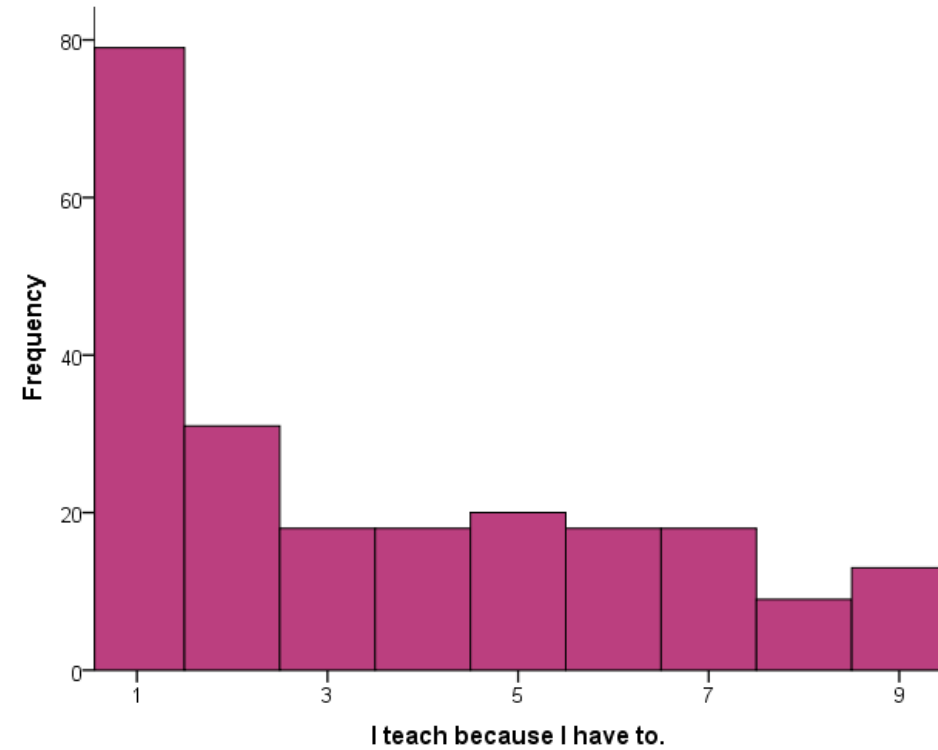
- 1,117 active K-State teachers invited
- 316 responses (28%)
- 221 fully completed surveys (20%)
 - 57% male, 42% female
 - Instructor level to full professor
 - All levels of undergraduate courses and formats (61.6% lecture format)

Teachers' intrinsic motivation to teach?

I teach because I want to.
 $M = 7.80, SD = 1.59$

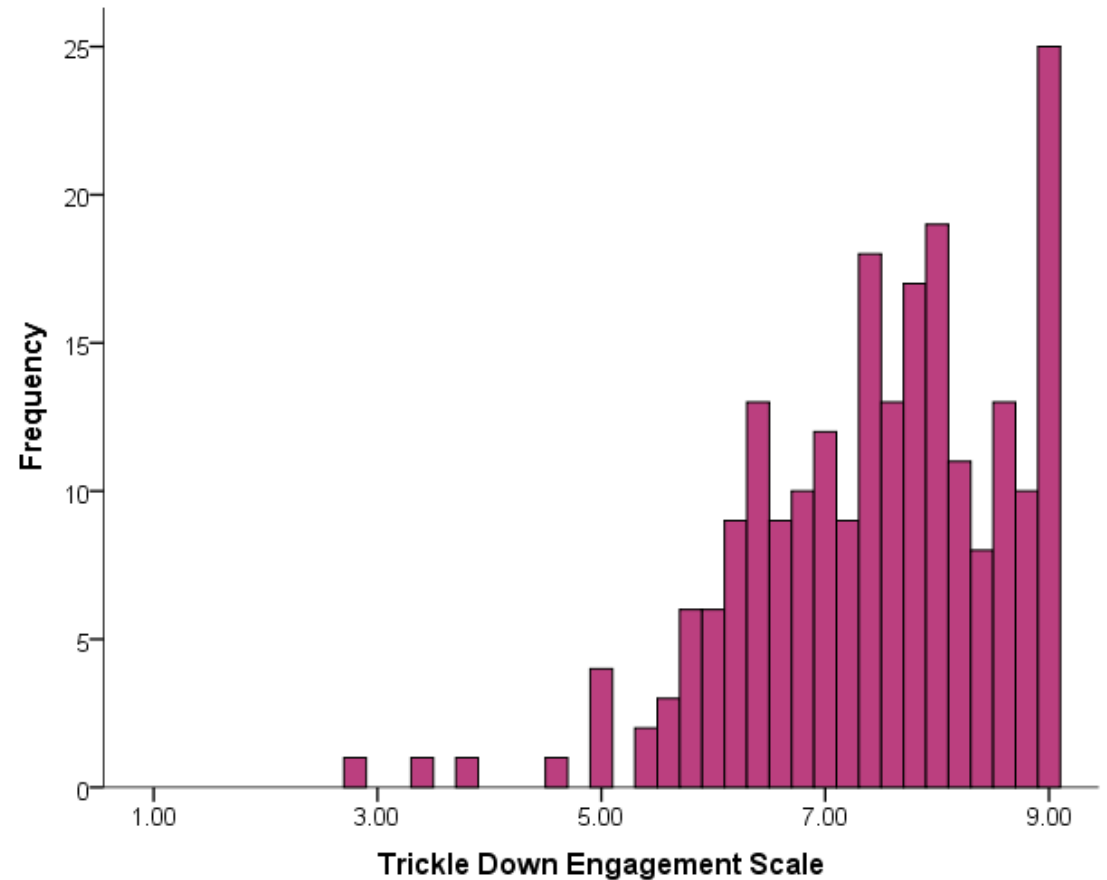


I teach because I have to.
 $M = 3.53, SD = 2.62$



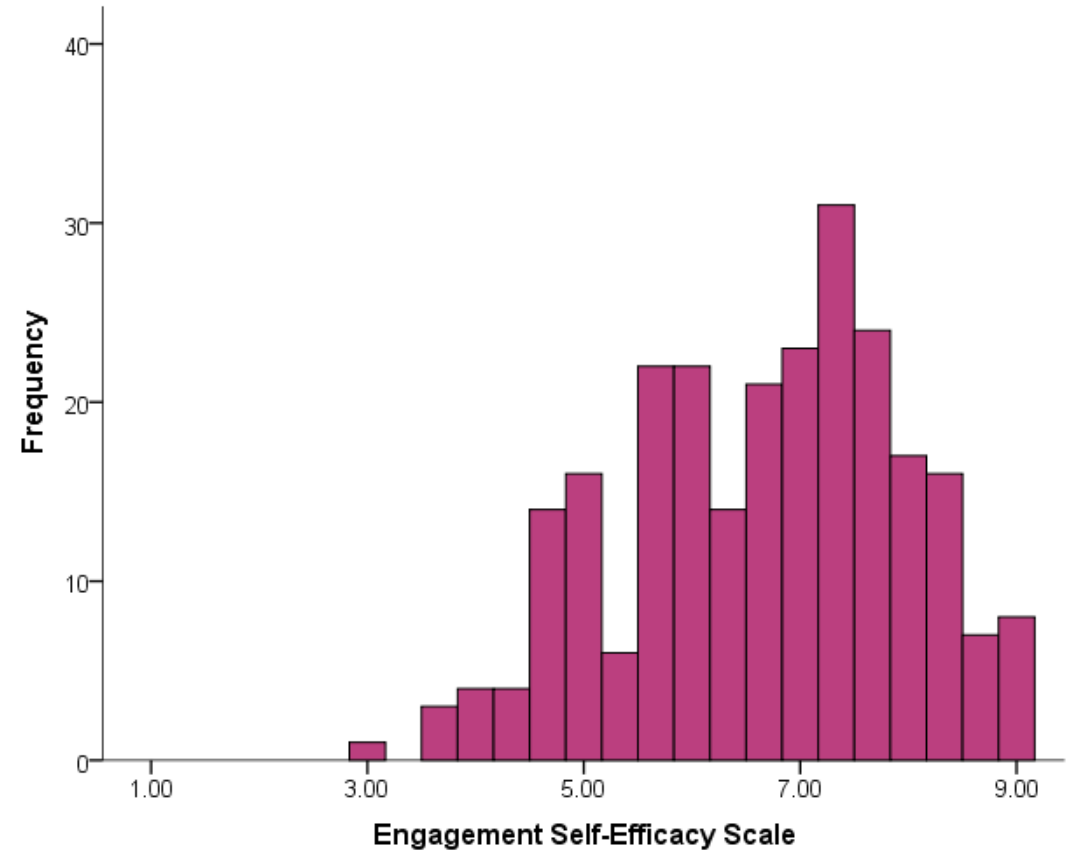
Do teachers believe in trickle-down engagement?

- Trickle-down engagement measure
 - 5 item measure; $\alpha = .82$
 - E.g., *Students are more engaged in the classroom when teachers display their passion about the material*
- $M = 7.45, SD = 1.15$



Do teachers believe in their ability to engage?

- Engagement Self-Efficacy
 - 6 item measure; $\alpha = .87$
 - E.g., *I am able to get my students engaged in the classroom.*
 - $M = 6.59, SD = 1.28$



Teachers' Experiences with Trickle-Down Engagement

Is teacher engagement important?

	1.	2.	3.	4.	5.
1. Trickle-Down Engagement	--				
2. Engagement Self-Efficacy	.48**	--			
3. Positive Experiences	.44**	.48**	--		
4. Negative Self-Directed Experiences	-.15*	-.35**	-.35**	--	
5. Negative Other-Directed Experiences	-.32**	-.37**	-.39**	.57**	--

* $p < .05$, ** $p < .01$



The Importance of Teachers' Own Engagement

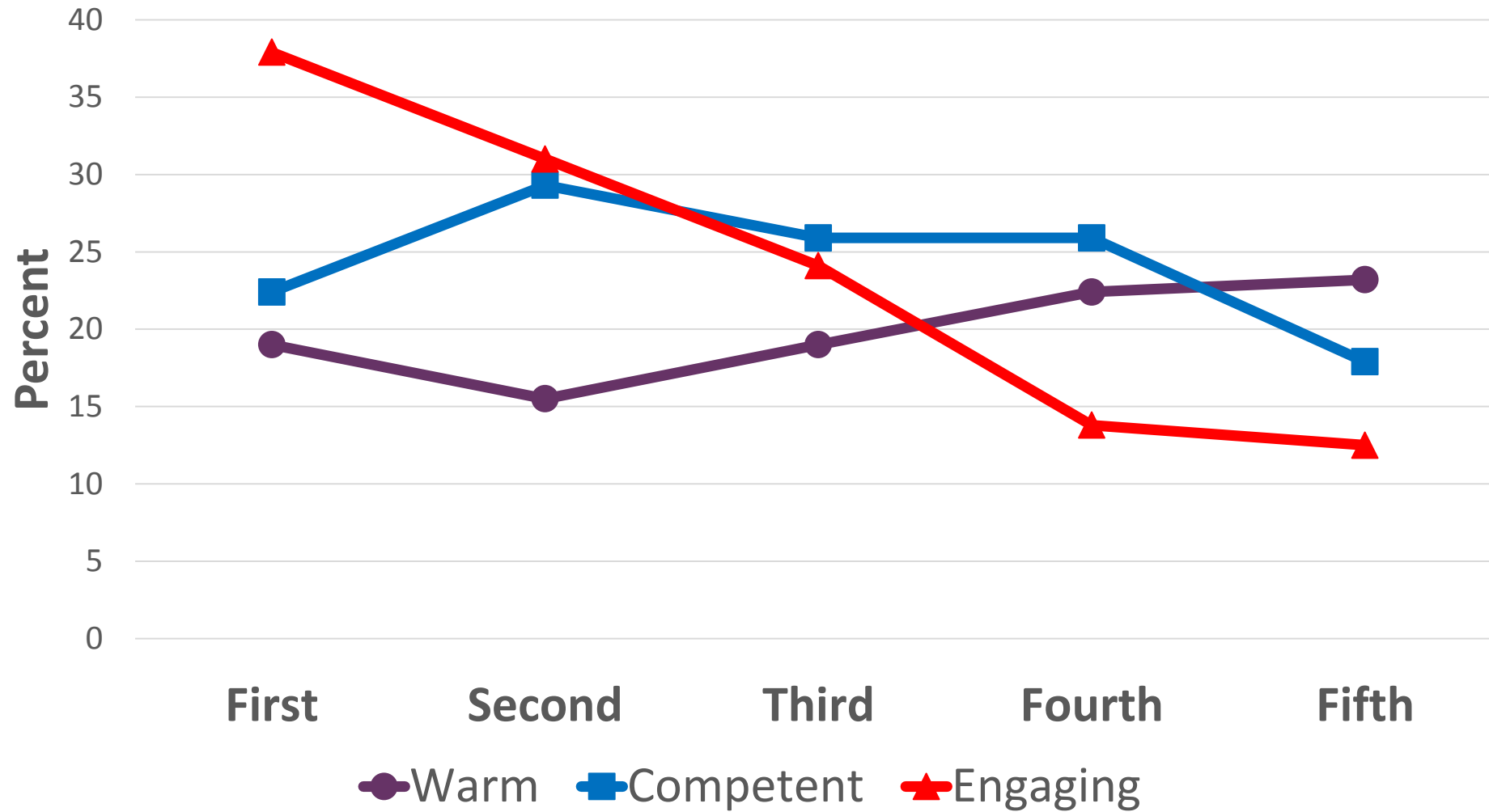
Is teacher engagement central to their self-concepts?

- Contacted 103 award-winning teachers
- 63 participated (61%)
- Descriptions of themselves as teachers
 - *Please list five words that describe you as a teacher.*
- 288 descriptors identified and coded for 11 emergent traits by two independent coders
 - *kappa* = .78

Teacher Personas

Trait	Percent of All Traits Listed	Percent of Teachers Listing the Trait
Engaging	24.0	79.3
Warm	19.8	67.2
Competent	24.3	81.0
Challenging	5.6	
Dedicated	7.6	
Funny	1.7	
Fair	4.2	
Creative	4.5	
Goal-Directed	1.7	
Clear	2.8	
Other	3.8	

Traits Reported



How to Increase Engagement

How do teachers engage (preparing for class)?

- Prepare active learning strategies
 - Plan activities, questions for discussion, visuals/videos/tech
- Contextualize the content
 - Consider the audience; use relevant examples, current events, up to date research; focus on course objectives, connections, transitions

How do teachers engage (preparing for class)?

- Anticipate and prepare for interactions with students
 - Learn names, anticipate pre-class small talk, prepare (strong) opening remarks, prepare to listen
- Prepare oneself to teach
 - Be alert, rested, presentable, happy (“dance”, “coffee”); practice, familiarize self with content

How do teachers engage (during class)?

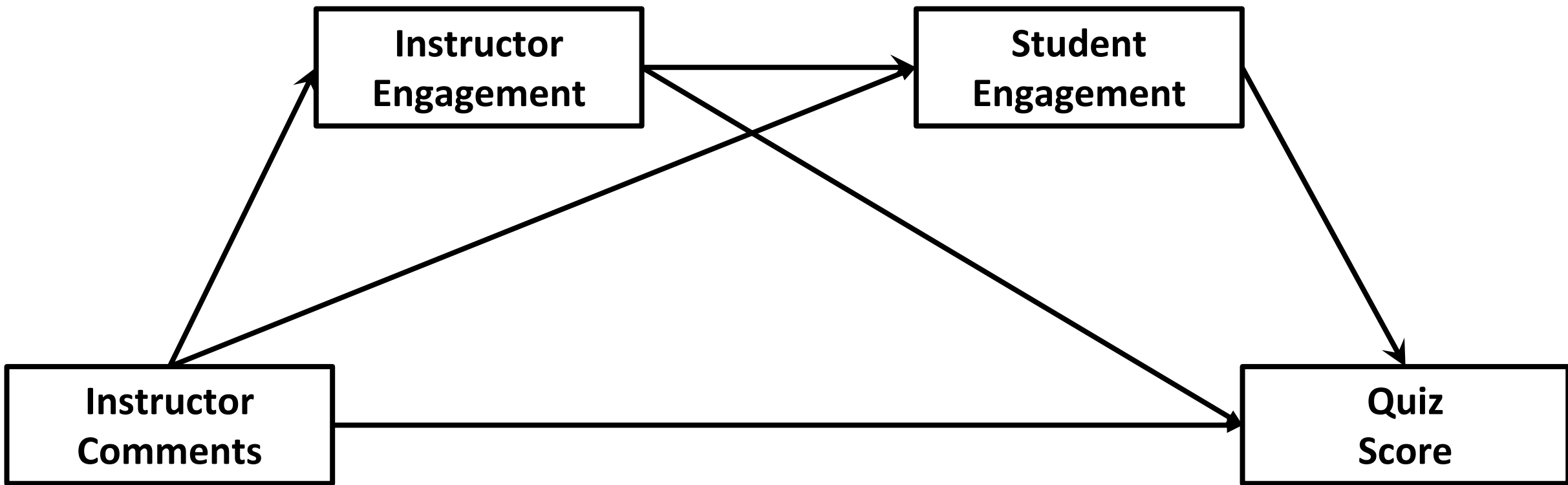
- Use active learning strategies
 - Activities, questions for discussion, visuals/videos/tech, case studies, group work
- Manage the flow of information
 - Brisk/varied pace, breaks/pauses/quiet, pay attention to the energy, switch it up, stay on target

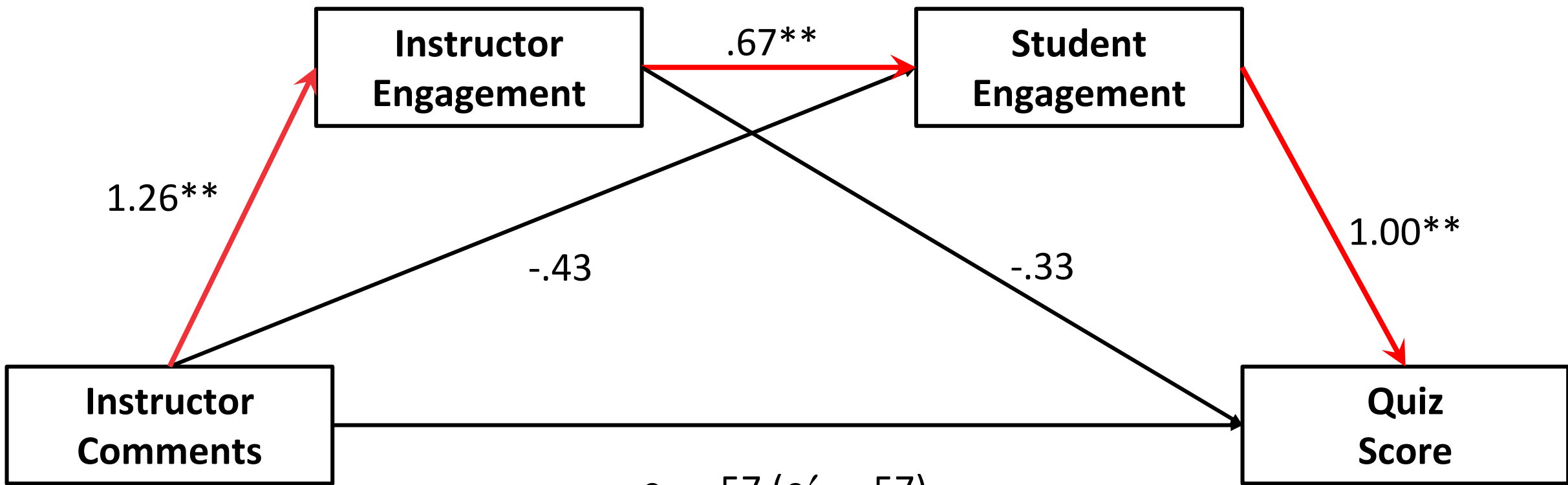
How do teachers engage (during class)?

- Collaborate with the students
 - Find out about students, solicit examples, hold students accountable, assess/evaluate learning, reinforce student engagement
- Manage emotions and behavior
 - Display/manage emotions; show passion, enthusiasm, confidence, energy; be in the moment
 - Smile, make eye contact, use students' names, walk around, use humor, model engagement

A Simple Method for Increasing Engagement

- $N = 178$ General Psychology students watched different versions of a mock lecture:
 - Engaged cue statements
 - e.g., *This finding is really interesting...*
 - Disengaged cue statements
 - e.g., *This finding isn't really all that surprising...*
 - Control condition
 - e.g., no cue statements
- We assessed perceptions of the lecturer's engagement, student engagement, and students' performances on a quiz





Indirect Effect = .85 [.39, 1.66]

** $p < .01$

In Conclusion

Summary of Our Results

- We have empirical support for our trickle-down engagement model
- Teacher and student engagement are positively correlated
 - And predict student performance
- Teacher engagement is important for their self-concepts and experiences
 - And teachers report engaging their students by displaying their own engagement
- Teacher and student engagement can be collectively enhanced

Implications for Teaching First-Year Students

- By enhancing the experience and expression of our own engagement in teaching, we can model students' engagement in their learning
- We have the opportunity to set the norms for their educations
- More than just teaching them content, we can teach them to love to learn
- Thank you!

Questions for Discussion

- How will you engage yourself and your students?
 - What will you do to prepare your class overall?
 - What will you do to prepare for your first class meeting?
 - What will you do in your first class meeting?
 - What will you do in your classes daily?
- Questions?
 - Email Don Saucier at saucier@ksu.edu for further questions and/or a copy of this presentation.