

Psychology 1101: What Do You Find When You Redesign?

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2016: “Knighthed” for the G2C Mission

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(Instructor 1)



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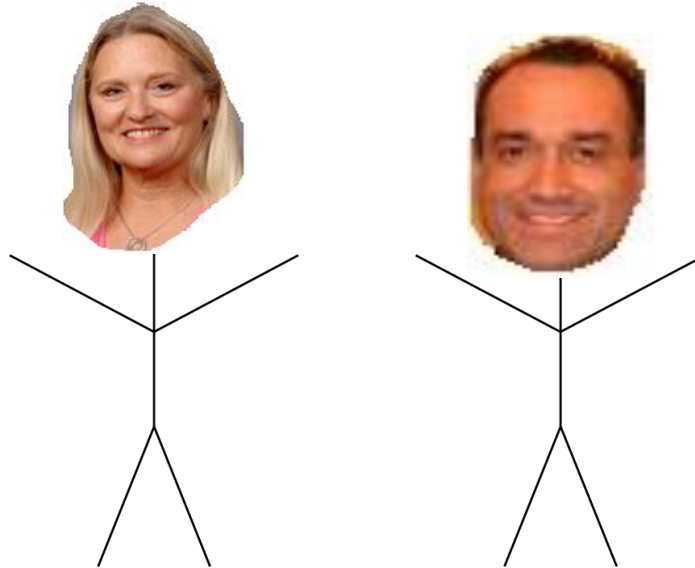
(Instructor 2)



G2C Mission:

Reduce the DWF Rates in PSYC 1101

(with the help of our friends!)



Guiding Principles of Successful Course Redesign

(National Center for Academic Transformation)

- Encourage active learning
- Provide students with individualized assistance
- Include on-going assessment and prompt (automated) feedback

Redesign Plan

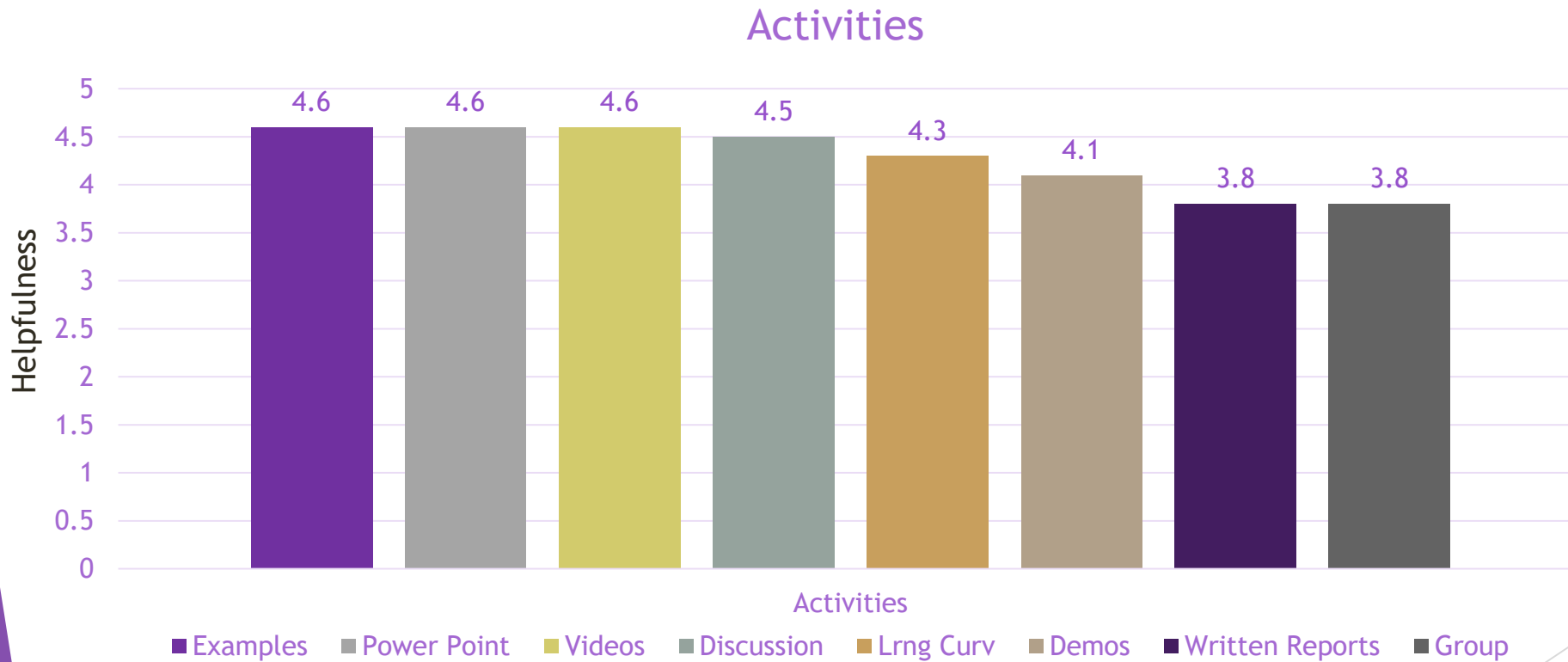
- De-emphasize traditional lecture delivery format
 - ❖ Use in-class activities - at least one per unit - to encourage and enhance student engagement and understanding
- Use active, learner-centered, web-based program - *Learning Curve*
 - ❖ Gives individualized assistance, ongoing assessment, prompt automated feedback
- More affordable textbook

Henrique (2018) studied 7,992 students over 13 years - the most “striking finding was the steady increase (since 2008-2009) in the proportion of students who believe it should not be necessary to read the textbook in order to succeed in the class.”

Sample Activities and Supplemental Materials

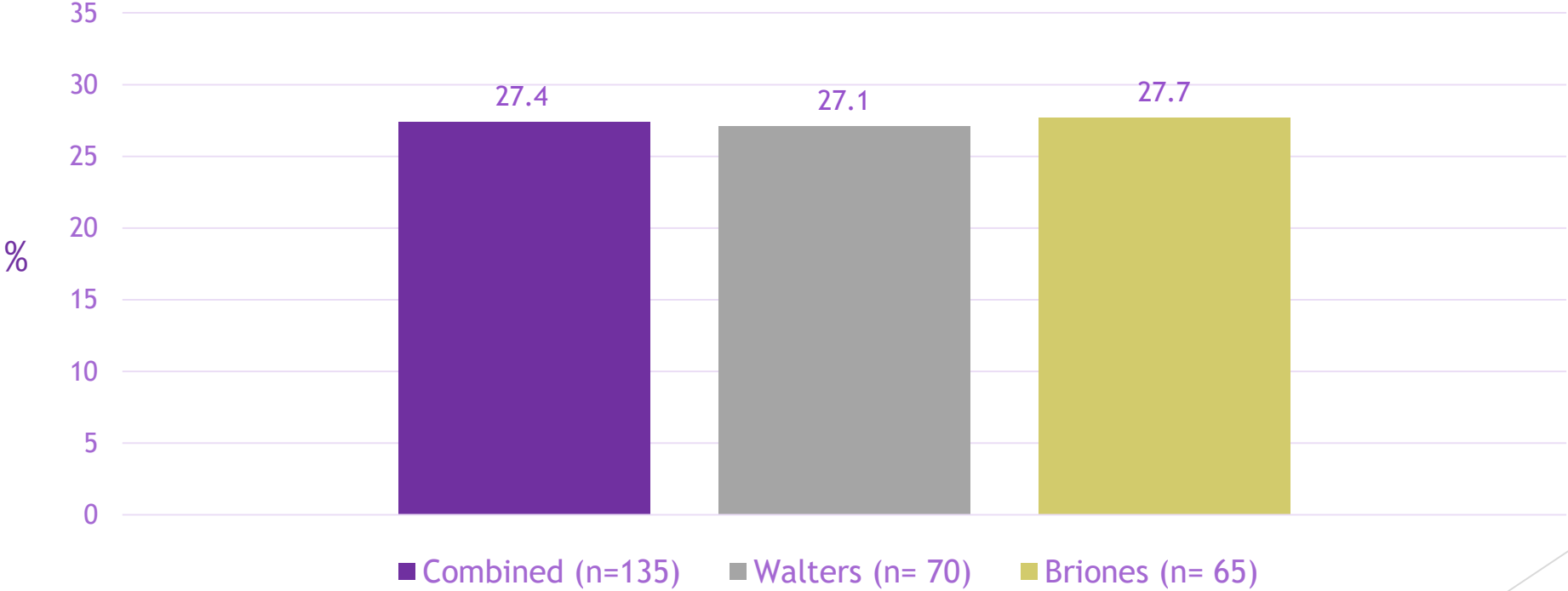
- First Day of Class Icebreaker
- Learning Curve
- Group Activities
- Class Demonstrations (e.g., Classical Conditioning, Memory)
- Big 5 Personality Inventory
- Class Discussion
- Outline / Power Points
- In-class Videos
- Extra Examples by Instructor

Mean Helpfulness Ratings of Activities

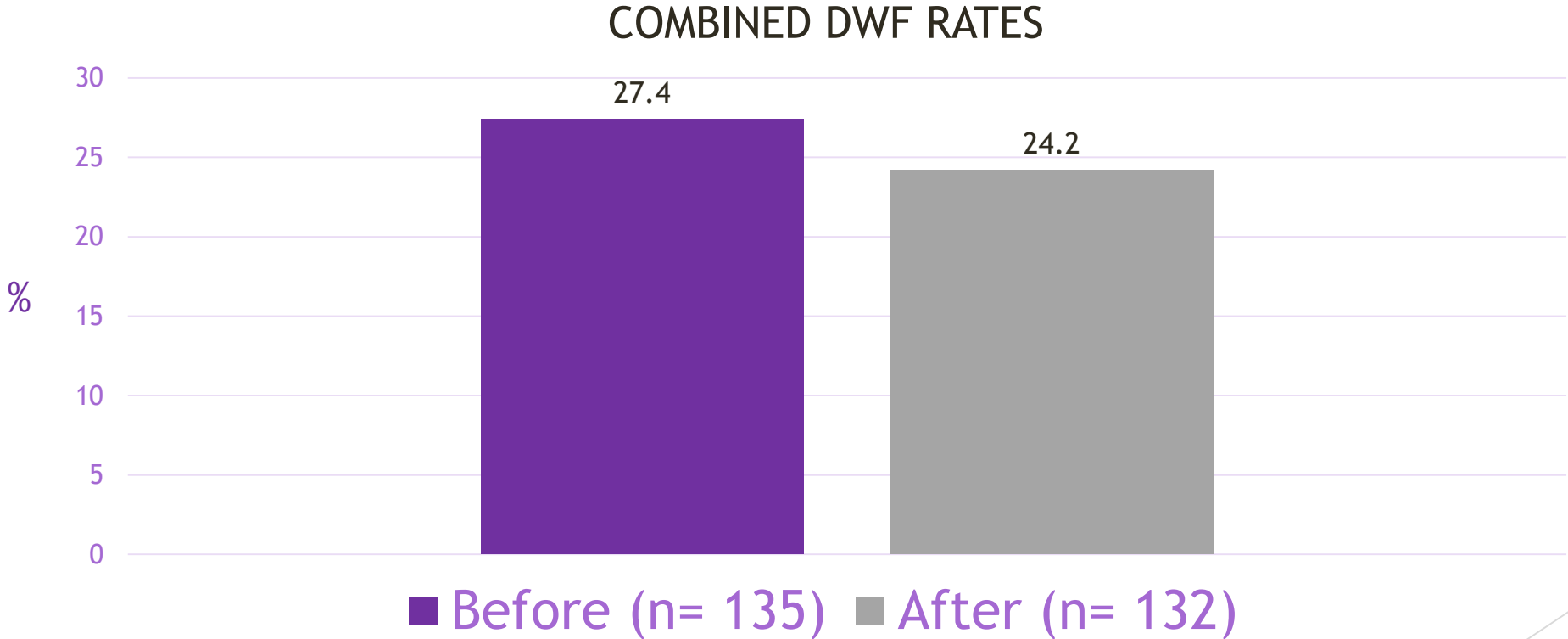


Combined DWF Rates Before Redesign

DWF by Instructor



DWF Rates Before and After Redesign



Number of Students Earning DWF's

$X^2(3)=.526, p=.47, N=267$

Contingency Tables

DWF	Redesign		Total
	No	Yes	
DWF	38	32	70
Pass	97	100	197
Total	135	132	267

It Is What It Is...

(Our First Semester Results - Spring 2017)



DWF: 12.1% (11:00 am)

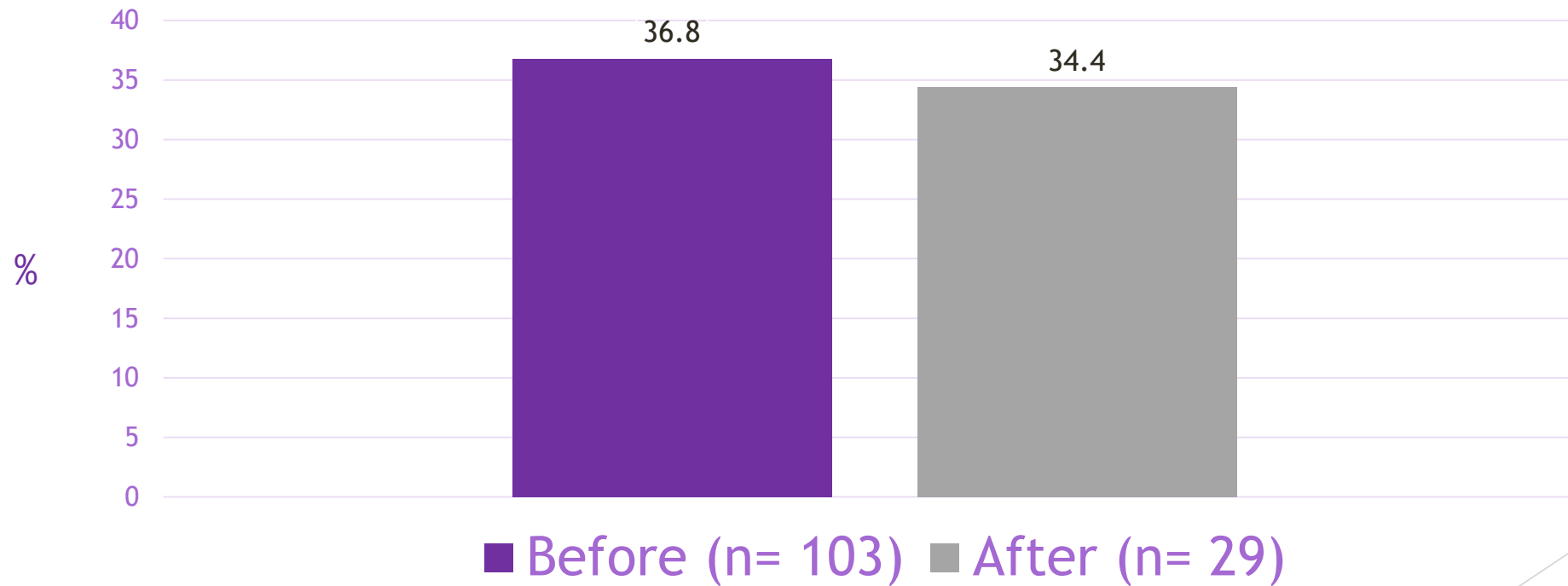


DWF: 34.4% (8:00 am)

Good teaching is working on your teaching... 😊

Do Early Birds Catch The Worm?

DWF rates for 8:00 AM classes



DWF Rates For 8a.m. compared to Non 8a.m. classes

$X^2(3)=8.418, p<.05^*, N=267$

DWF rate for Non 8a.m.=21.2%

DWF rate for 8a.m. sections=35.1%

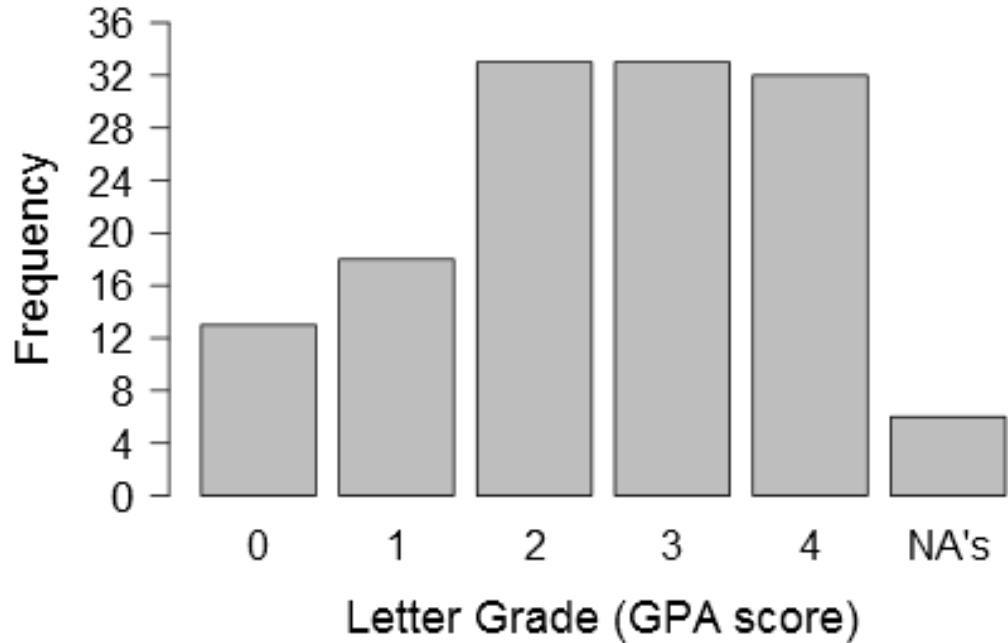
Contingency Tables

DWF	ClassTime				Total
	11:00	12:30	15:30	8:00	
DWF	4	14	18	34	70
Pass	29	54	51	63	197
Total	33	68	69	97	267

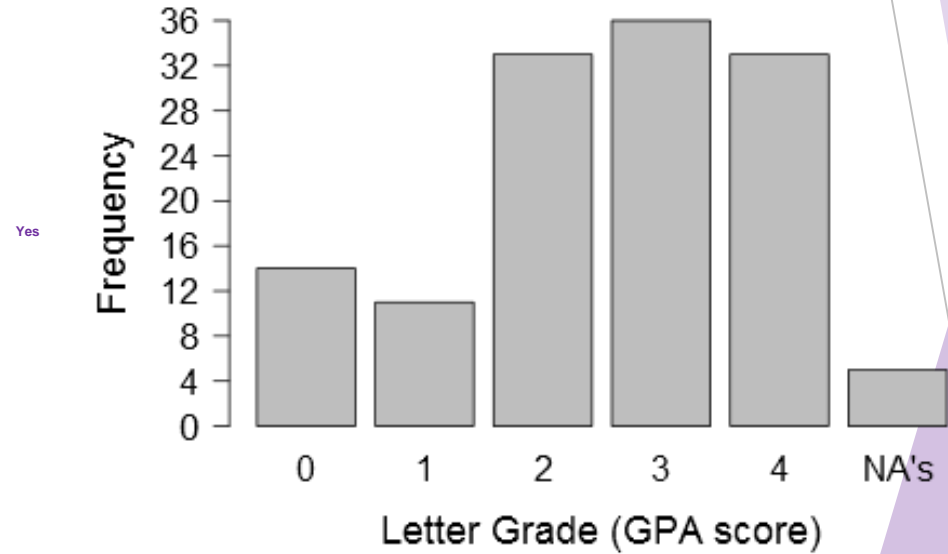
*statistically significant

Grade Distributions Before and After Redesign (Both Instructors)

Before

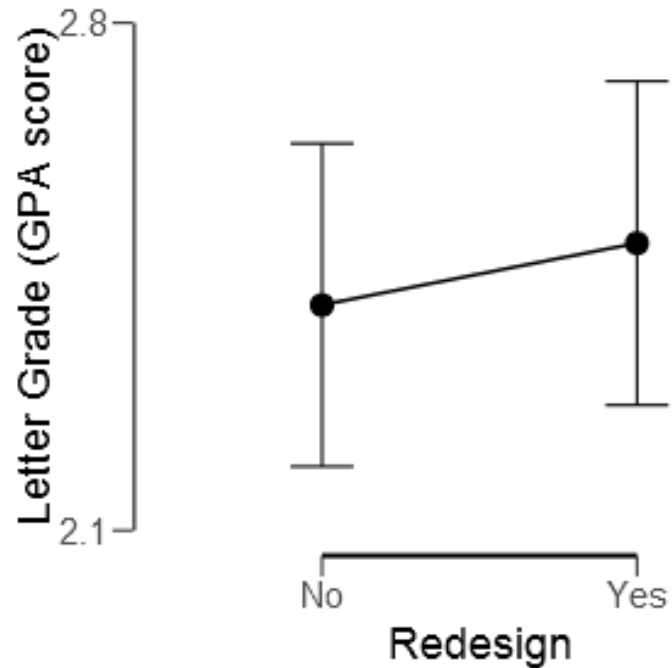


After

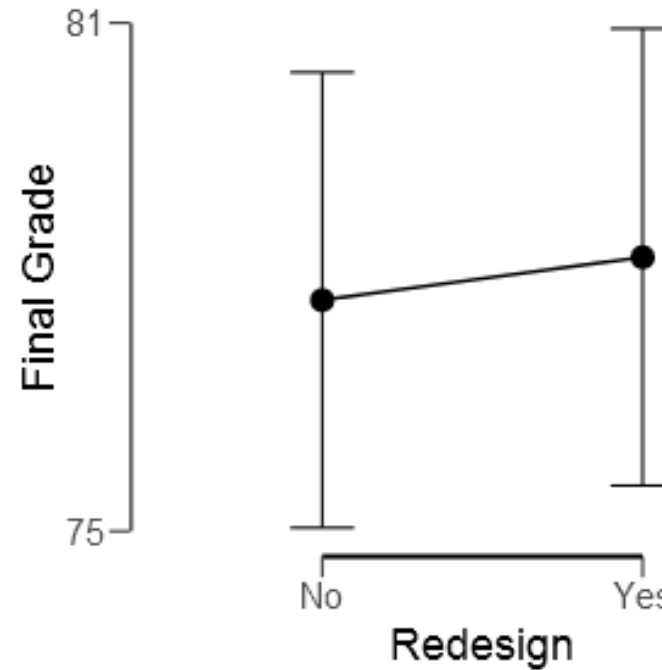


Final Grades Results (Both Instructors)

Final Average Letter Grade (GPA score)
 $t(254)=.54, p=.59, d=.067$



Final Average Numeric Grade
 $t(245)=-.26, p=.79, d=.034$



What We Have Learned

- Although mean DWF rates appeared to be moving in the right direction, no statistical significance was established and the effect size after 2 semesters of redesign was negligible.
- It is not possible to disentangle the effect of each individual component of the redesign at this time nor other confounds such as idiosyncratic instructor effects.
- 8am PSYC 1101 classes have a significantly higher DWF rate than non-8am PSYC classes
 - Non-8am classes have a 14% lower DWF rate than 8am classes compared to 3.2% difference for redesign (advising and scheduling implications).
- Still much work to be done!

Successes 😊

- ▶ Although recent Spring 2018 combined DWF rates appear promising (15.6%, n=45), no inferential statistics have been conducted.
- ▶ Increased faculty conversations about high impact teaching strategies as evidenced by new department colloquium series.
- ▶ New opportunities through MGA's CETL.
- ▶ Expand mindfulness about student success and progression
- ▶ Affordable textbooks for students

Future Research

- Do at-risk students (who could benefit the most from the extra activities) take full advantage of the opportunities?
- Do supplemental activities lead to better test grades or do they simply add more grades to attenuate the weight of tests?
- Do supplemental activities actually decrease grades due to noncompletion?
- Do Teaching Assistants and tutors help at-risk students?

“Success is not final, failure is not fatal, it is the courage to continue that counts.”

- Winston Churchill

Questions?