

# Tracking the Success of Affordable Learning Efforts

OpenCon 2020

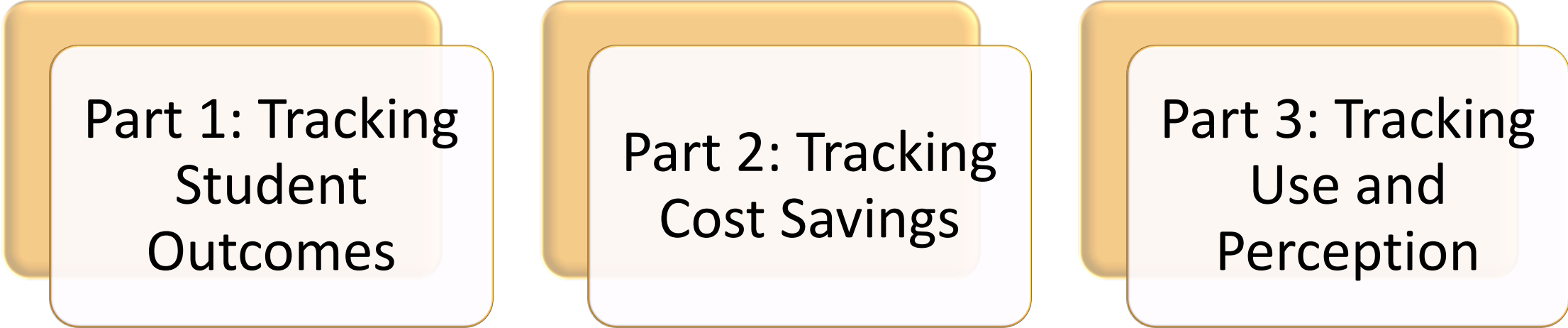
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Part 1: Tracking  
Student  
Outcomes

Part 2: Tracking  
Cost Savings

Part 3: Tracking  
Use and  
Perception

Types of Tracking

Poll

Raise your hand if your institution is currently tracking Affordable Material use, cost savings, and/or student outcomes?

# Part 1: Tracking Student Outcomes

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# Colvard, Watson, and Park Study

“The Impact of Open Educational Resources on Various Student Metrics,” *International Journal of Teaching and Learning in Higher Education*, 2018, Volume 30, Number 2, 262-276.

“While studies focusing on cost savings and student and faculty perceptions have dominated the OER research landscape, there has been less research that has looked at the impact OER have on student learning” (263).

“The purpose of this research, then, was to better understand how courses employing OER impact student success metrics and student academic achievement by disaggregating student performance based upon federally determined financial need (Federal Pell Grant status), ethnicity, and registration status (part-time vs. full-time)” (265).

# Colvard, Watson, and Park Research Questions

- 1) What is the impact of OER textbooks on student academic performance, quantified by evaluating final grades and DFW (D, F, and withdrawal letter grades) rates?
- 2) Does the use of OER textbooks affect students from a low socioeconomic background (quantified by Federal Pell Grant eligibility status) disproportionately compared to students who do not qualify for Federal Pell Grant status?
- 3) Does student performance increase significantly for those from underserved populations when a free OER textbook is used instead of a traditional textbook?

# Colvard, Watson, and Park Methods

“This study evaluated historical student academic performance data (i.e., final grades) for eight different undergraduate courses at the University of Georgia (UGA) from Fall 2010 – Fall 2016. These courses were selected because they adopted OpenStax OER textbooks in place of traditional commercial textbooks. The eight courses in question span a range of disciplines, including science and social science courses” (265)

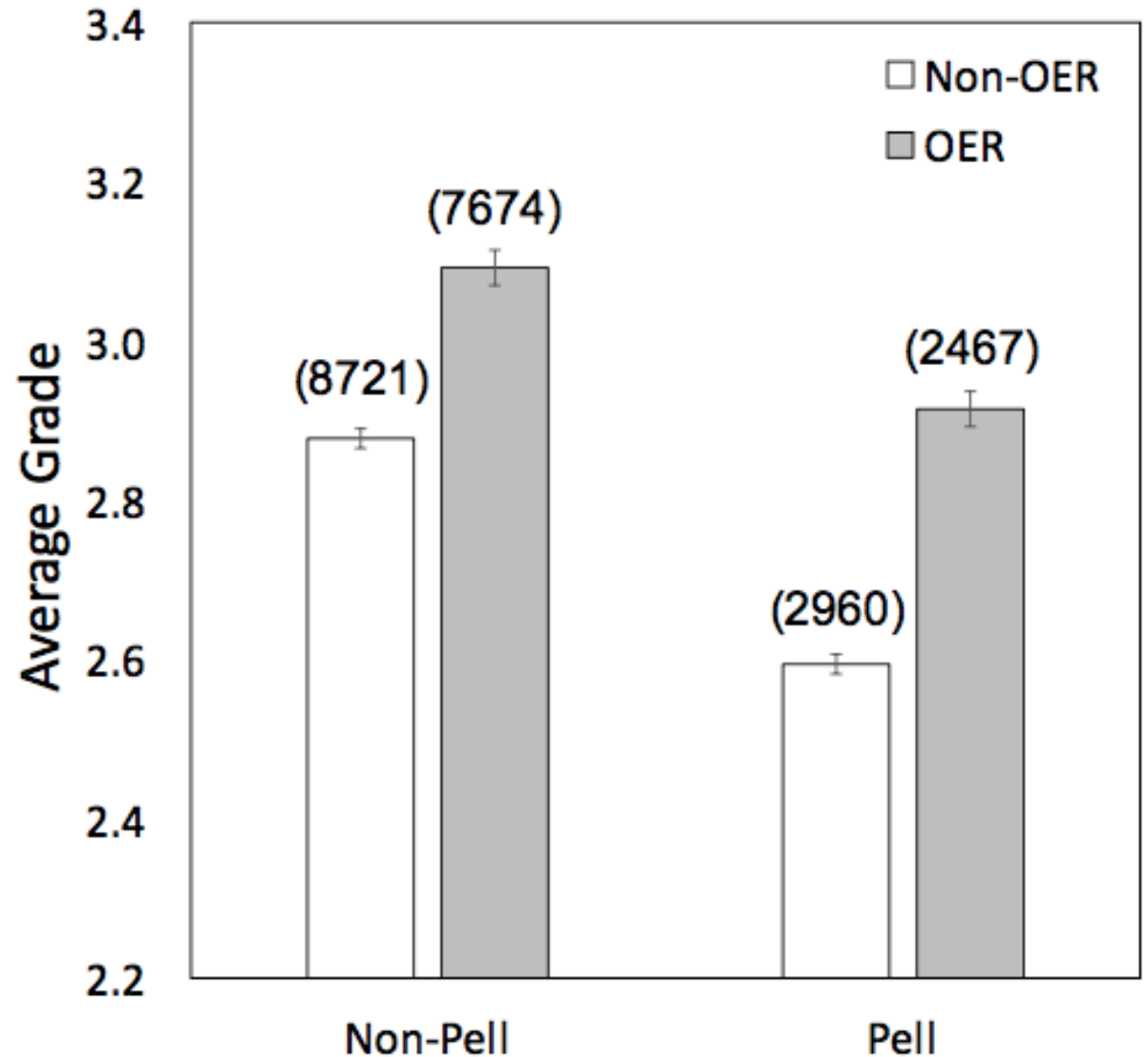
“Only sections of courses taught by the same instructor were considered” (266).

“There were 11,681 students in the group who were in courses using traditional commercial textbooks, and there were 10,141 students in the group who were in courses using free, OER textbooks” (267).



## Colvard, Watson, and Park Results

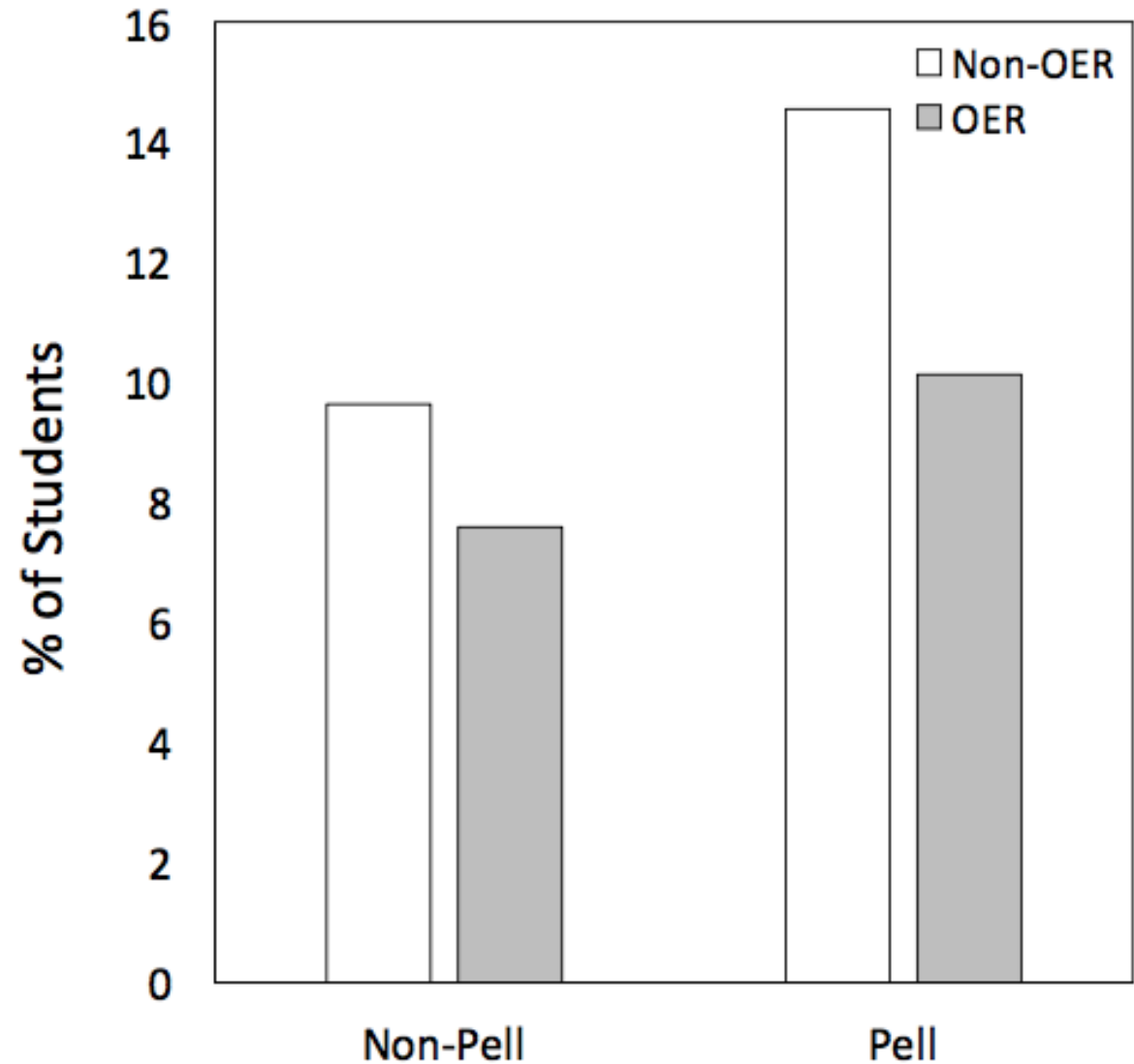
Average grade (Final grade) of students enrolled in courses pre-OER adoption (Non-OER) and post-OER adoption (OER). This analysis compared students that were not recipients of the Federal Pell Grant (Non-Pell) and students that did receive the Federal Pell Grant (Pell). The numbers over each bar represent the total number of students in that respective classification.



**Average Final Grade is higher with OER**

## Colvard, Watson, and Park Results

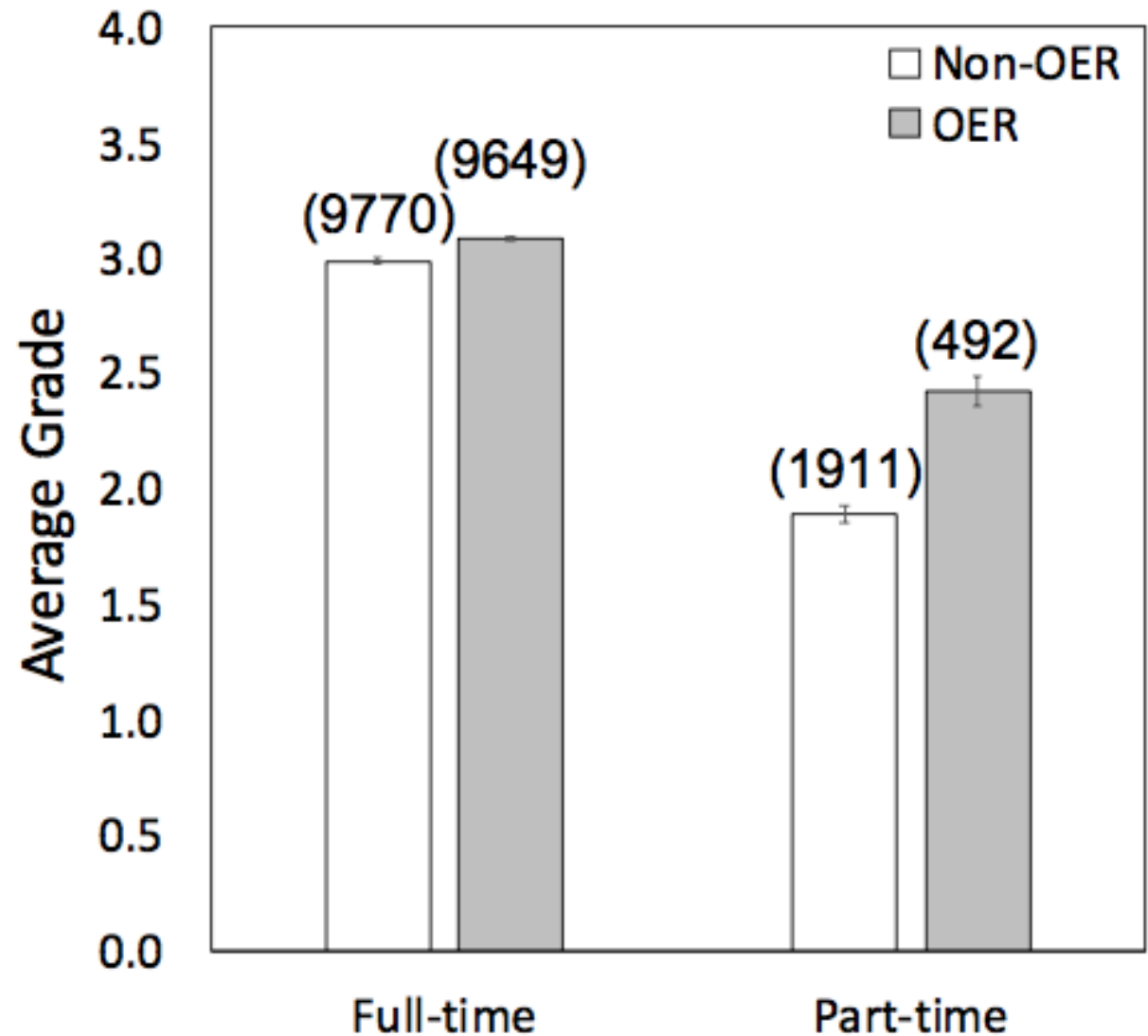
Percent of DFW students comparing Non-Pell and Pell recipients in course pre-OER adoption (Non-OER) and post- OER adoption (OER).



**DFW rate is lower with OER**

## Colvard, Watson, and Park Results

Average grade (Final grade) of students enrolled in courses pre-OER adoption (Non-OER) and post-OER adoption (OER). This analysis compared students enrolled in the university at least 12 credit hours per semester (Full-time) to those students enrolled in at least 6, but no more than 12 credit hours per semester (Part-time). The numbers over each bar represent the total number of students in that respective classification.



**Greater impact for part-time students**

**Find**

Find courses that were taught by the same instructor both before and after transition to OER.

**Collaborate**

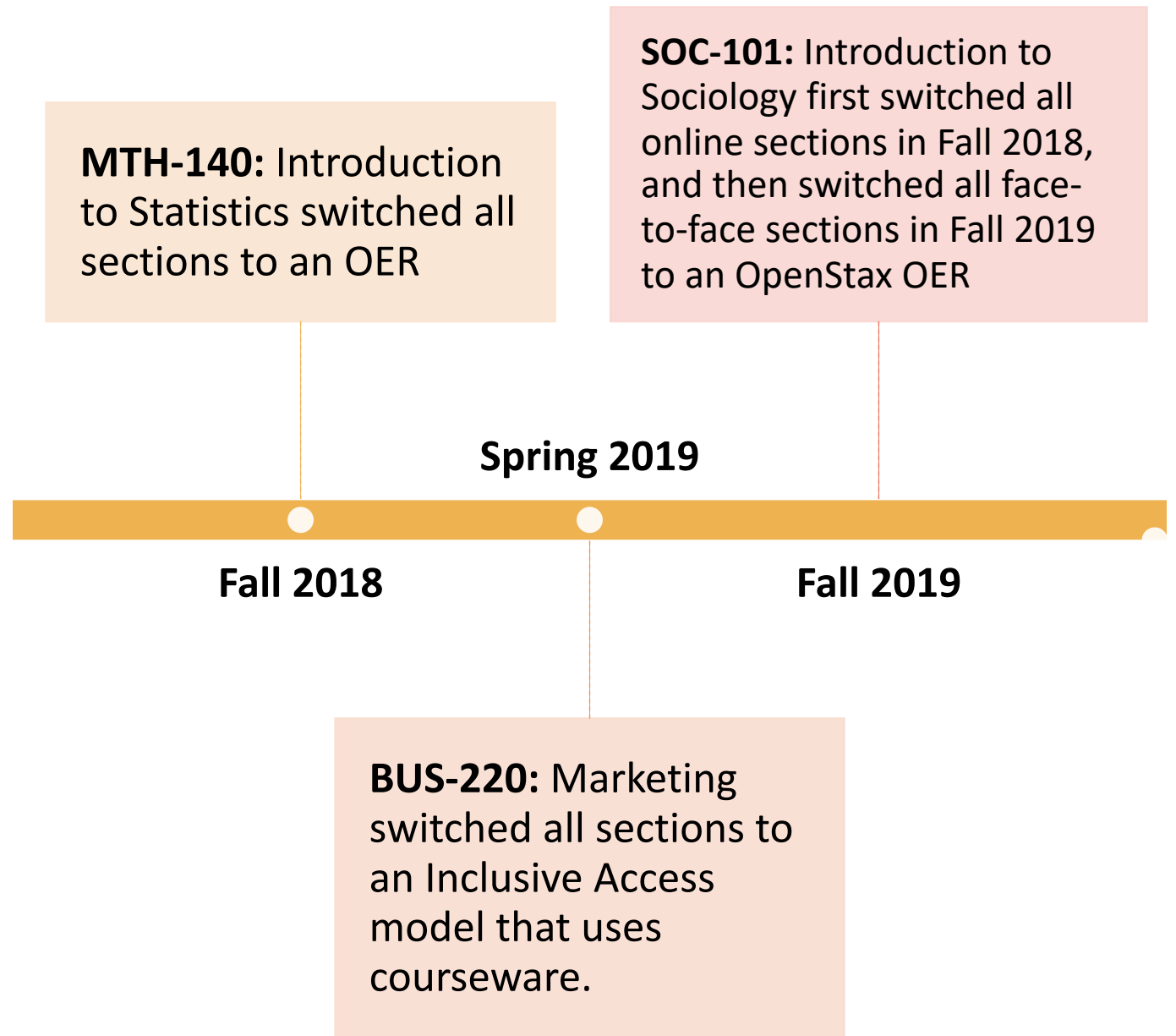
Collaborate with your Office of Institutional Research to gather student data on Pell Eligible/Non-Pell-Eligible, Full-time/Part-time, and anything else you want to measure.

**Compare**

Compare historical data on average final grade and DFW rates before the switch and after the switch.

How to track student outcomes

ODU is currently looking at three courses



# Why we're choosing the DFW rate?

At ODU, we are primarily looking at the rate of D's, F's, and W's rather than final grade.

In part, this will focus our attention on one aspect of student success.

In addition, we have found that having a withdrawal or having to repeat a course because of a D or an F dramatically reduces future retention and graduation potential.

We believe addressing the DFW rate will have more impact on future student success than final grades.

# Method

**First:** Keep all instructors and look at the average DFW rate before and after the switch, going back to Fall of 2015.

- Here, we also can compare online and face-to-face sections.

**Second:** Filter out instructors who did not teach sections both before and after the switch. Keep only the instructors with classes before and after the switch. Average together multiple sections taught by the same instructor in a single semester so that the y-axis on your chart has only one of each semester. Each instructor will have their own chart.

**Third:** Aggregate all instructors from step two to get the average DFW rate for all and only instructors who taught before and after the switch.

<b>First:</b>					
<b>Keep all instructors and look at the average DFW rate before and after 18/FA</b>					
Before	Trad	OL/A			
22.7%	23.3%	16.6%			
After	Trad	OL/A			
21.5%	23.5%	12.2%			

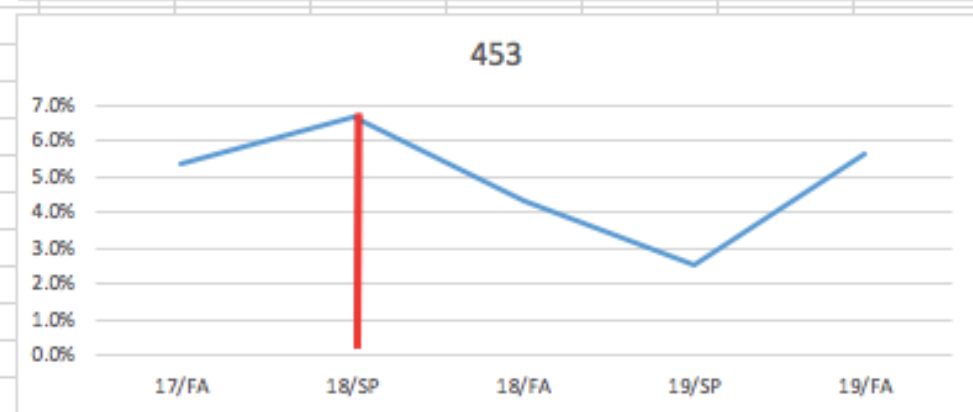
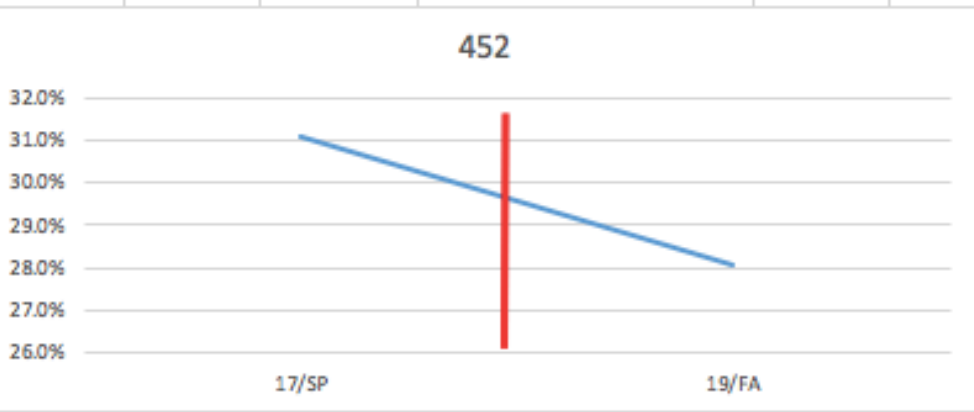
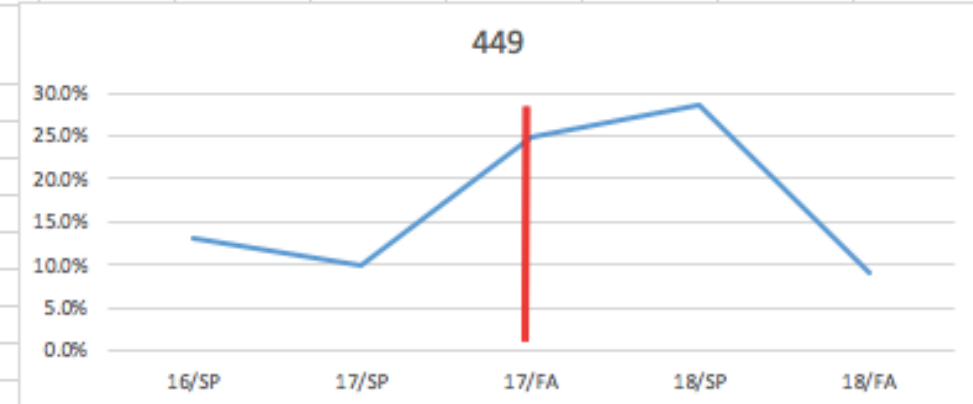
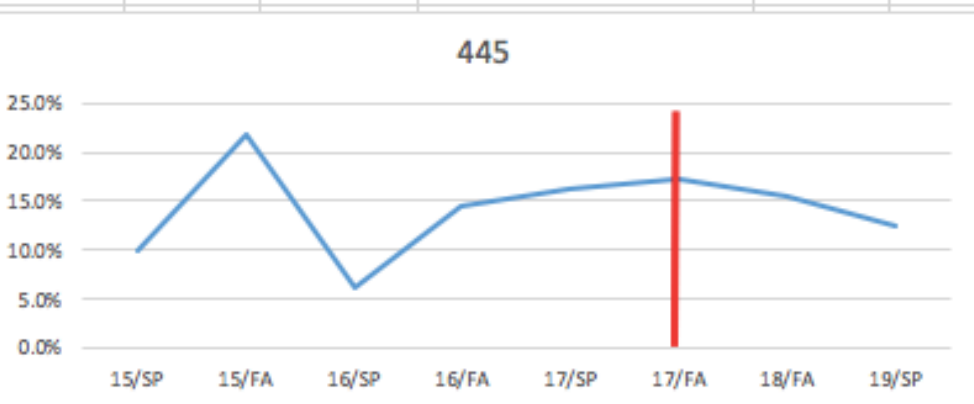
This is only a Sample Course



**Second:**

Keep only instructors with classes before and after 18/FA

Term	% of DFWI Grades	Faculty
15/SP	10.0%	445
15/FA	21.7%	445
16/SP	6.1%	445
16/FA	14.6%	445
17/SP	16.2%	445
17/FA	17.3%	445
18/FA	15.6%	445
19/SP	12.4%	445
16/SP	13.1%	449
17/SP	10.0%	449
17/FA	24.8%	449
18/SP	28.5%	449
18/FA	9.2%	449
17/SP	31.1%	452
19/FA	28.0%	452
17/FA	5.4%	453
18/SP	6.7%	453
18/FA	4.3%	453
19/SP	2.5%	453
19/FA	5.6%	453



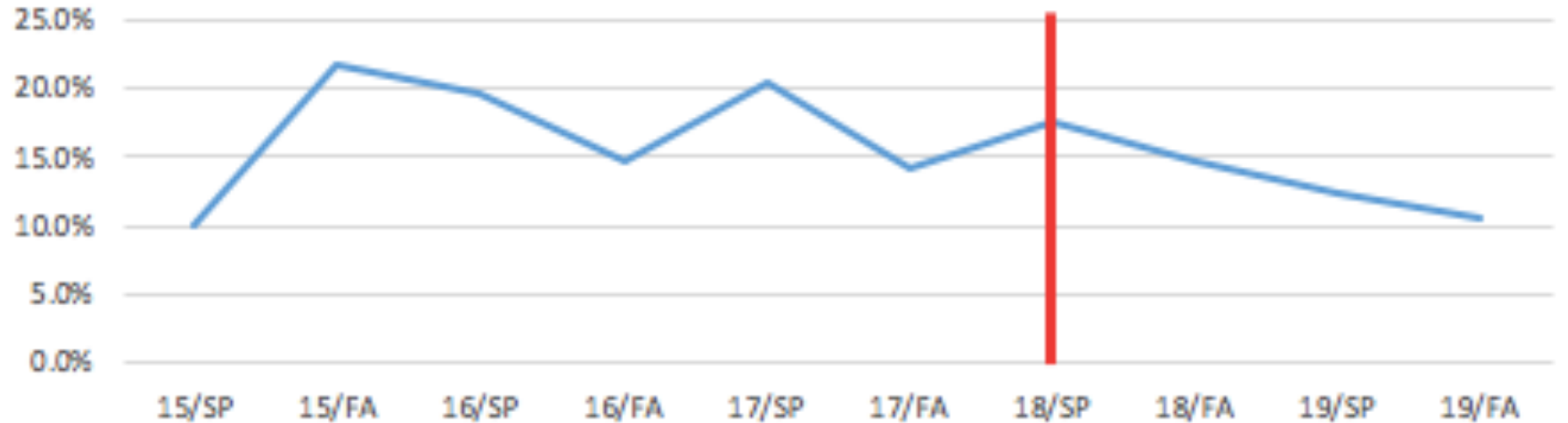
This is only a Sample Course

Third:

Keep only instructors who taught before and after and calculate average DFW rate

<u>Term</u>	<u>DFW</u>
15/SP	10.0%
15/FA	21.7%
16/SP	19.5%
16/FA	14.6%
17/SP	20.3%
17/FA	14.2%
18/SP	17.6%
18/FA	14.8%
19/SP	12.4%
19/FA	10.6%

Average DFW Rate for all Instructors who Taught Before and After Switch



This is only a Sample Course

# How OER can improve pedagogy

Backward Design: start with the objectives.

How will students show they have met those objectives? *By completing assignments.*

How will students be able to successfully complete assignments? *By having access to learning resources.*

# Part 2: Tracking Cost Savings

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# Tracking Cost Savings

Two Methods:

- (1) Pick one number for all courses.
- (2) Use historical data of previously adopted textbook costs.

Tracking Cost  
Savings: One  
Price

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OpenStax method: flat cost  
of \$79.37 for every text

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SPARC/Lumen Learning  
method: flat cost of  
\$116.94 for every text

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North Dakota State Auditor  
Method: range of cost  
from \$71 to \$160

## Tracking Cost Savings: Historical

Calculate savings based on how much the previously adopted textbook costs.

- How much does a textbook cost?
- Do you have access to this information? Easily?
- Will this change in 5 years? 10 years?

# Open Oregon Suggestions

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Whatever you choose is fine.

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Be transparent and consistent, explain here's why we chose this, and here's how we plan to continue doing it this way.

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Frame shift: this is a *representation* of the impact with an estimate.



# ODU's Method

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Average all available published textbook prices for a course and multiply by enrollment.

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Why? We felt that the average of all possible prices gave us the closest estimate, and we are small enough that we have access to textbook adoption information.

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Open to changing in the future.

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Focus: transparent and clear explanations

# ODU Sample Cost Tracking Spreadsheet

Course	Enrollment	Traditional Textbook	New Print Retail Price	Print Used	Print New Rental	Print Used Rental	eBook Buy	eBook Rental (130 days)	Average	OER Textbook Adopted	Savings
SOC-101	35	Ferris	\$105.35	\$79.00	\$71.65	\$49.50	\$51.35		\$71.37	OpenStax	\$2,498
MTH-140	24	Navidi	\$254.35	\$190.75	\$228.90	\$106.85	\$174.85	\$136.70	\$182.07	OpenStax	\$4,369

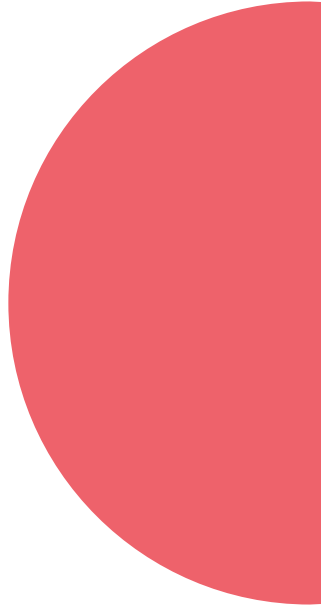
# Part 3: Tracking OER Use and Perceptions

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# Our Biggest Challenge...

How  
to  
know  
who  
is  
using  
what



We've got  
it together  
with  
Inclusive  
Access

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Because IA is delivered through the LMS, we can add a Microsoft Form link to a student survey in the Course Materials module and a hidden link to a faculty survey in the hidden Faculty Resources module.

Because faculty can't just adopt IA materials on their own, it's very easy to Identify faculty using IA.

Because we have complete lists of students and faculty using IA, marketing can use objective measures of success to help us grow.

**Are you  
using OER?**

**Are you  
using OER?**

**Are you  
using OER?**

**Are you  
using OER?**

**Are you  
using OER?**

**The Black  
Hole of OER  
use....**

# One Method: A Faculty Survey

**Demographics**

**Course  
Material Use**

**Cost**

**Electronic vs  
Print**

**Awareness**

**Support**

**Future Use**

# Opportunity to Self-Identify Use

After completing the anonymous survey, faculty will receive a thank you email. In the email, we will include a link for faculty to identify themselves and list any courses currently using Inclusive Access, OERs, or electronic library resources.

This keeps questions about preferences and awareness anonymous while still having the opportunity to retrieve more specific use data.



What methods do you  
use to figure out who is  
using what?

Looking to the Future

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# ODU's Goal for 2020-2021

Currently, we code Inclusive Access courses for students at the time of registration.

Our specific goal is to (1) create a tag for Open Educational Resources that (2) includes messaging about what OERs are and what students can expect, (3) code at least three OER courses in Fall 2020, and (4) be contacted by at least three more faculty asking their courses to be classified as OER for Spring 2021.

Term	Status	Section Name and Title	Order Book from ODU B&N Store
Spring Semester 2020	Open	<a href="#">BUS-220-01 (2450) Principles of Marketing</a>	<a href="#">Inclusive Access Course</a>
Spring Semester 2020	Open	<a href="#">BUS-220-02 (2451) Principles of Marketing</a>	<a href="#">Inclusive Access Course</a>
Spring Semester 2020	Closed	<a href="#">BUS-240-01 (2466) Management &amp; Organiztl Behav</a>	<a href="#">ORDER NOW</a>
Spring Semester 2020	Waitlisted	<a href="#">BUS-240-02 (2467) Management &amp; Organiztl Behav</a>	<a href="#">ORDER NOW</a>
Spring Semester 2020	Open	<a href="#">BUS-250-01 (2468) Legal Environment of Business</a>	<a href="#">Inclusive Access Course</a>
Spring Semester 2020	Waitlisted	<a href="#">BUS-270-01 (2452) Integrated Marketing Communica</a>	<a href="#">Inclusive Access Course</a>
Spring Semester 2020	Open	<a href="#">BUS-279A-01 (2469) CORE:Ldrshp &amp; Common Good</a>	<a href="#">ORDER NOW</a>
Spring Semester 2020	Open	<a href="#">BUS-318-01 (2470) Business and Society</a>	<a href="#">ORDER NOW</a>
Spring Semester 2020	Open	<a href="#">BUS-343-01 (2460) Human Resource Management</a>	<a href="#">Inclusive Access Course</a>
Spring Semester 2020	Open	<a href="#">BUS-479-01 (2471) CORE:Strategic Management</a>	<a href="#">ORDER NOW</a>
Spring Semester 2020	Closed	<a href="#">BUS-497-IN (3614) MedVet Associates, Inc.</a>	<a href="#">ORDER NOW</a>

# SMART Goal Setting

Specific

Measurable

Achievable

Relevant

Time-bound

# Let's set some SMART goals together!

- Find a partner,
- Take five minutes,
- With your partner, create one SMART goal for for next year that will help you track, grow, or promote the success of affordable learning efforts on your own campuses. Be prepared to share your goals with the group.

# Questions?

*We will distribute a copy of this Presentation after the conference.*

## Contact

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