

# WELCOME

## Calculating Cost Savings Associated with OER Implementation

- Please Note: Audio will be broadcast through the speakers on your computer. Chrome and Firefox are the preferred browsers for this broadcast audio webinar. If you are experiencing any difficulty or need assistance contact ReadyTalk at 800-843-9166.
- The webcast will be 60 minutes in length with time allotted for responding to questions (please use chat feature).
- This webinar session will be recorded and archived on MHEC's YouTube channel accessible via [www.mhec.org/oer](http://www.mhec.org/oer). Slides will also be sent as an attachment after the webinar.

# Calculating Cost Savings Associated with OER Implementation

March 26, 2019



# Agenda

1. Introductions and Thanks - Jenny
2. Overview of Webinar and OER Cost Calculations - Jenny
3. OpenStax Calculations – Nicole
4. Lumen Learning Calculations – David
5. State of Oregon – Amy
6. State of North Dakota – Craig
7. Questions

# Your Host



Jenny Parks

Director of Academic Leadership  
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# Guest Speaker



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# Guest Speaker



David Wiley

Chief Academic Officer

Lumen Learning

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# Guest Speaker



Amy Hofer

Coordinator

Statewide Open Education Library Service

OpenOregon

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# Guest Speaker



Craig Hashbarger  
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# OER State Policy Expert and Commentator



Tanya Spilovoy, Ed.D.  
Director of Open Policy  
WCET/WICHE

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# Overview: OER Cost Calculations

- One of the most common questions asked by MHEC state OER teams (and others!)
- Used for accountability and ROI for legislators and grant funders (& other purposes)
- No recommended or preferred methodology
- Varying assumptions
- Varying units of analysis: organization, institution, system, state

# Overview: Webinar Purposes

1. To provide participants with examples of high quality cost savings studies and calculations performed at different levels of analysis, employing varying strategies, and making different assumptions.
2. To provide participants an opportunity to ask presenters questions about the OER cost savings studies and calculations they have performed.

# Overview: Webinar Structure

1. **Nicole Finkbeiner, Openstax:** a large, national level cost savings study conducted several times
2. **David Wiley, Lumen Learning:** a large, national study on how to calculate cost savings associated with OER (stratified, random sample)
3. **Amy Hofer, Openorgeron:** a statewide cost savings study developed by one institution but deployed by many
4. **Craig Hashbarger, ND Auditor's Office:** a statewide cost savings study conducted by one organization using accounting methods



# OpenStax Tracking of Adoptions

- Faculty and institutions self-report adoptions.
  - Faculty verification process (to receive faculty-only ancillaries)
  - Adoption form on our website
  - Institutions reporting adoptions (Institutional Partner Program)
- We enter the information in our Consumer Relationship Management (CRM) tool, which is essentially a database of all of our information and contacts with individuals.
- The CRM calculates the total number of students impacted and cost savings.





# OpenStax Calculations

- Tracking average cost savings across all books allowed for scale.
  - Tracking individually when we had 100 faculty using our books would have been relatively easy, but now over 20,000 faculty use our books!
  - Use the same savings number, no matter which OpenStax book they use.
- Originally we said average savings of \$98.57 based on internal calculations.





# OpenStax Calculations

- We changed to \$79.37 for the 2018-2019 academic year.
  - The U.S. Department of Education's National Center for Education Statistics [published a study in May 2018](#) stating the average undergraduate student spent \$555.60 on required course materials for the academic year.
  - 2015-16 National Postsecondary Student Aid Study (NPSAS:16) Restricted-Use Data File
  - $\$555.60 / 7$  undergraduate average courses per year = \$79.37



# A New Method for Estimating OER Savings

Mo Nyamweya and Nicole Allen, SPARC

David Wiley, PhD, Lumen Learning

<https://sparcopen.org/news/2018/estimating-oer-student-savings/> (narrative)

<https://opencontent.org/blog/archives/5820> (EDA, data, and source code)





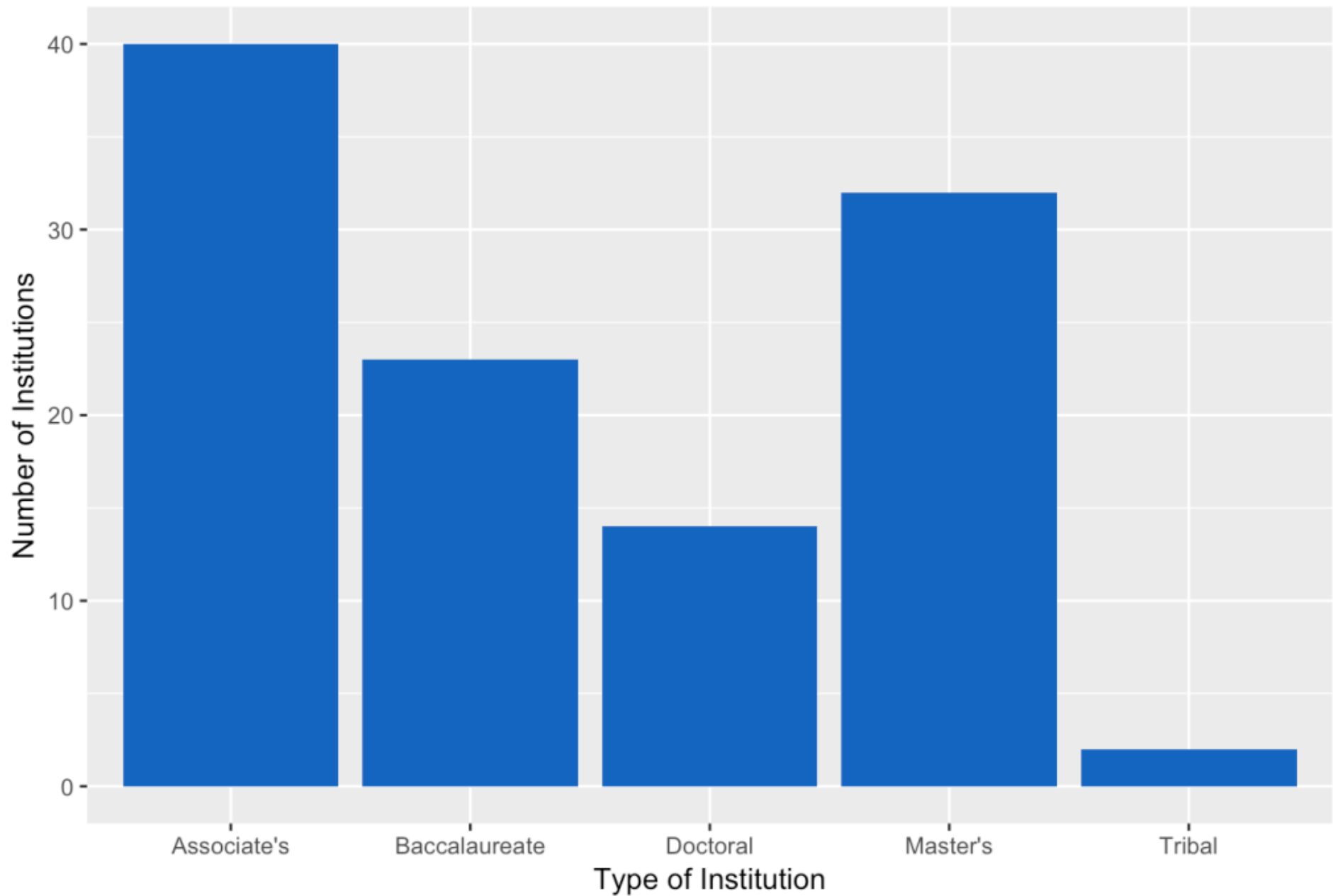
# Methodology

- We drew a stratified random sample, based on simplified Carnegie Classification, of 120 institutions from all Title IV eligible public and private for-profit degree-granting institutions in IPEDS
- Selected 20 high enrolling courses with easily adoptable OER options
- Randomly assigned five courses to each institution (600 data points)
- Using the college bookstore website, we recorded the prices of each available purchasing option—new, used, print rental, digital rental, loose leaf, etc. For courses with no materials listed, we recorded zeros.

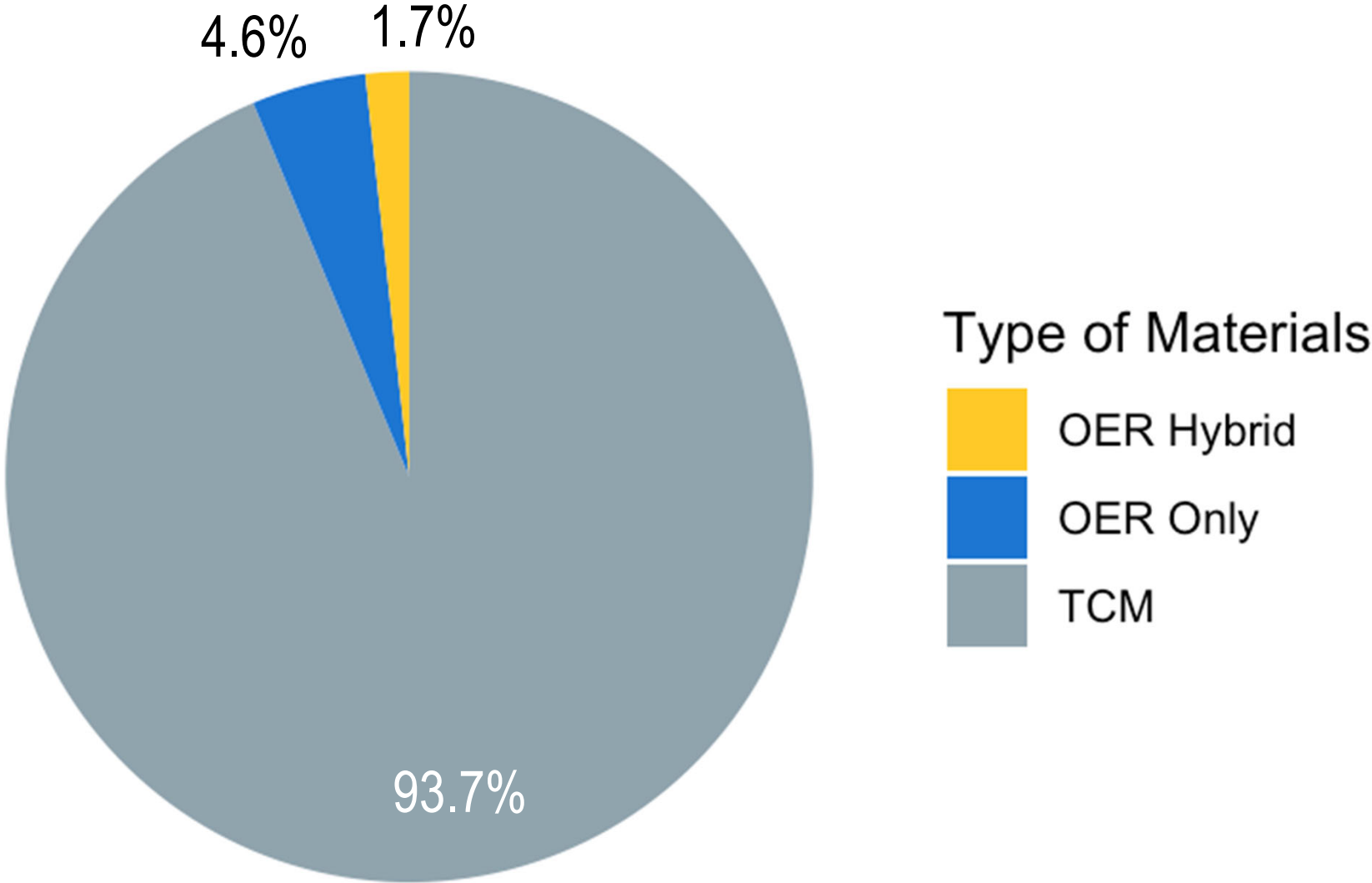
# Methodology

- We acknowledged the wide range of purchasing behavior exhibited by students.
- Rather than multiply each category of purchase by the percentage of students who purchased, we simply took the midpoint between the highest and lowest cost and used this number as our cost figure.
- We acknowledged that many students spend money on OER (e.g., some purchase printed copies). (OER Only)
- We acknowledged that some OER are adopted in conjunction with homework and other online tools. (OER Hybrid)
- Traditionally Copyrighted Materials (TCM)

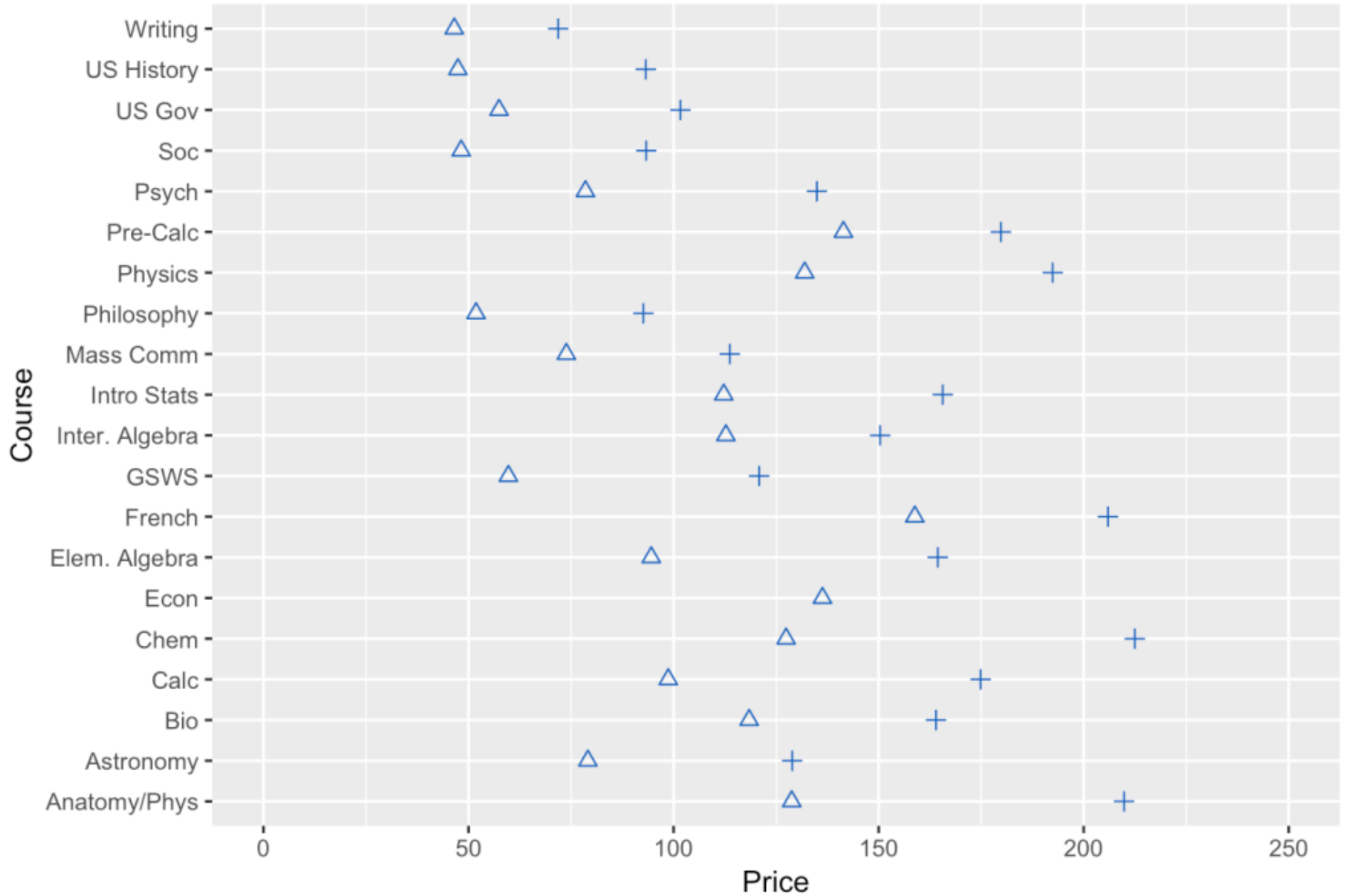
### Types of Institutions Represented in the Data



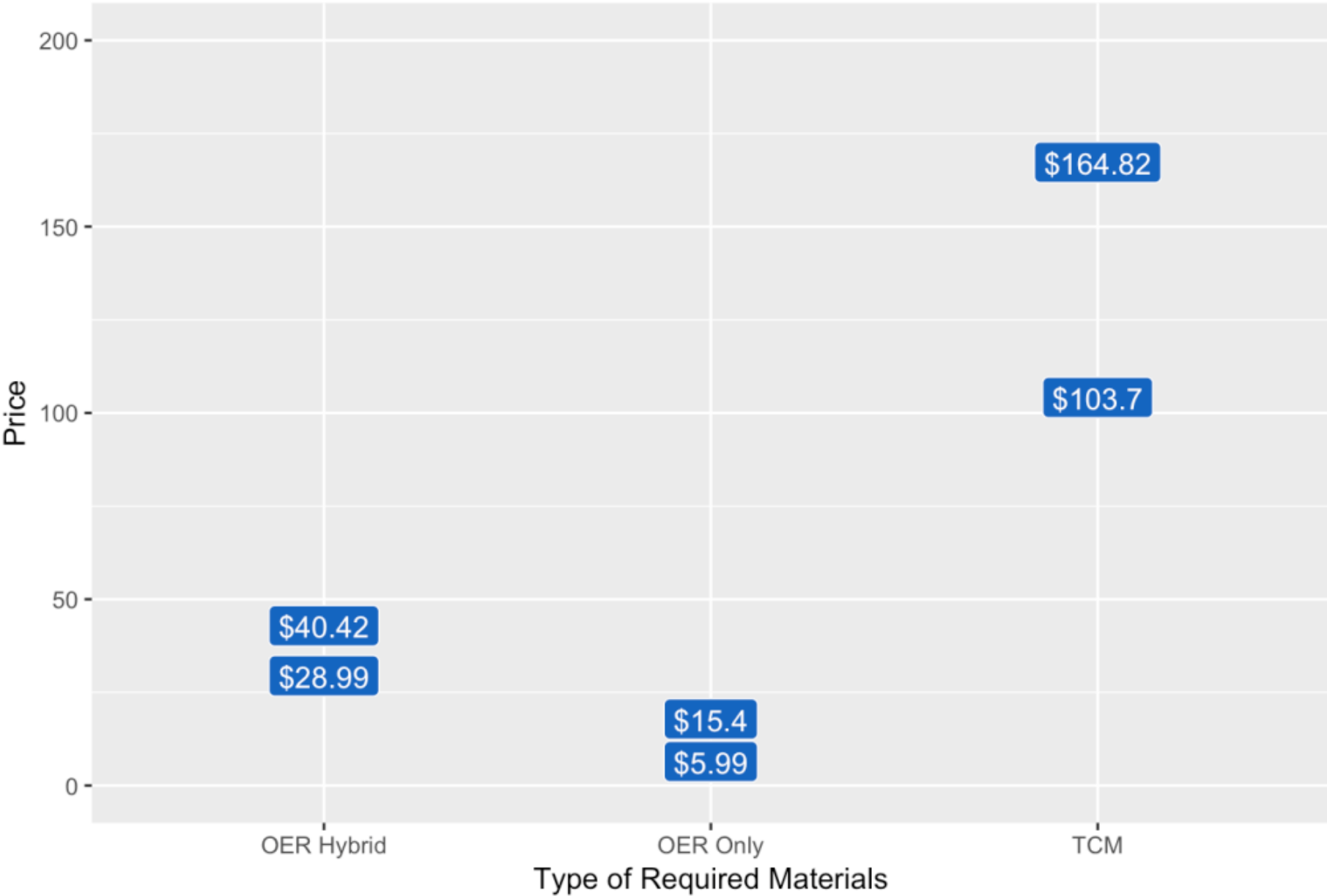
# Rate of Adoption of Different Types of Materials



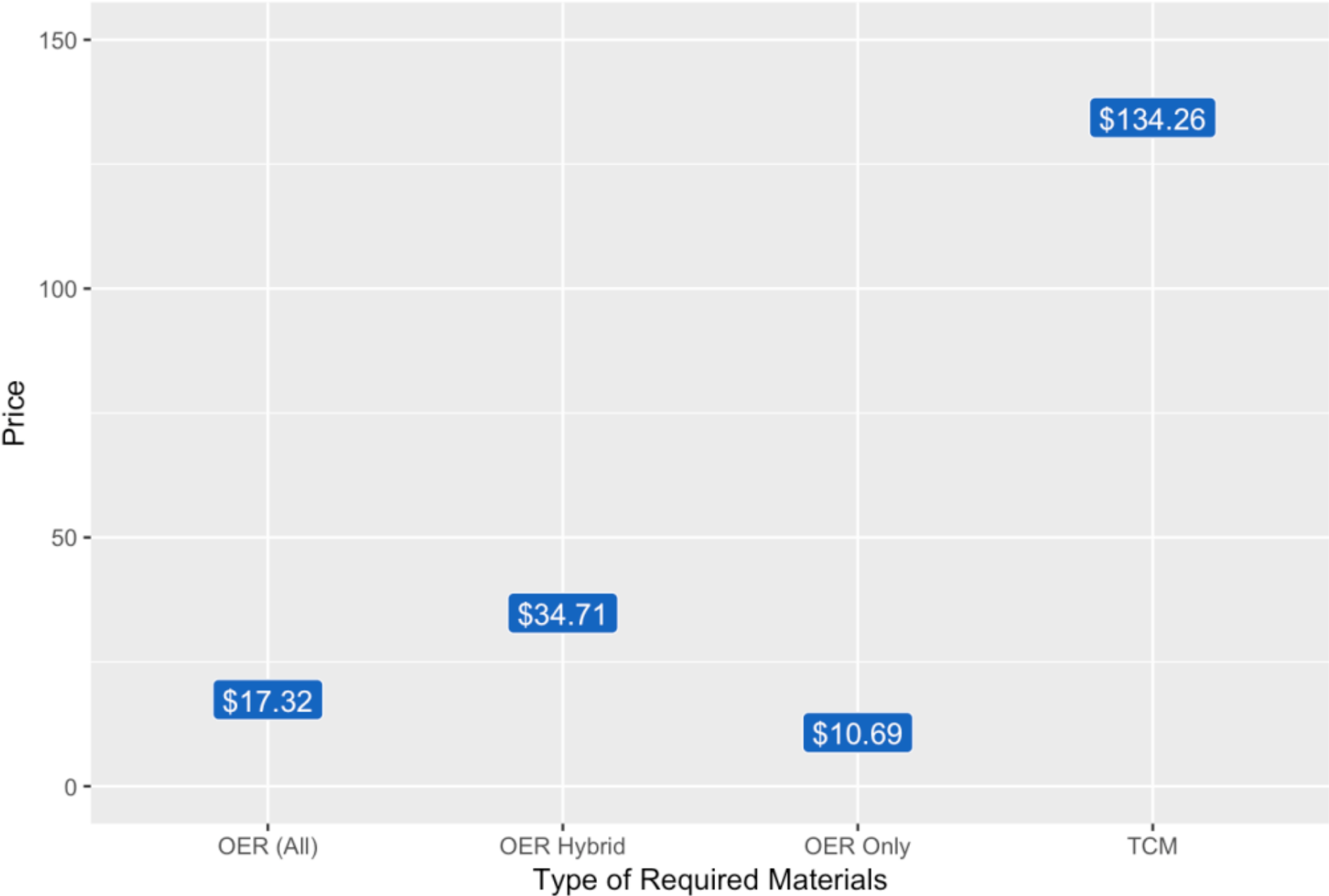
# Average Highest and Lowest Prices by Course



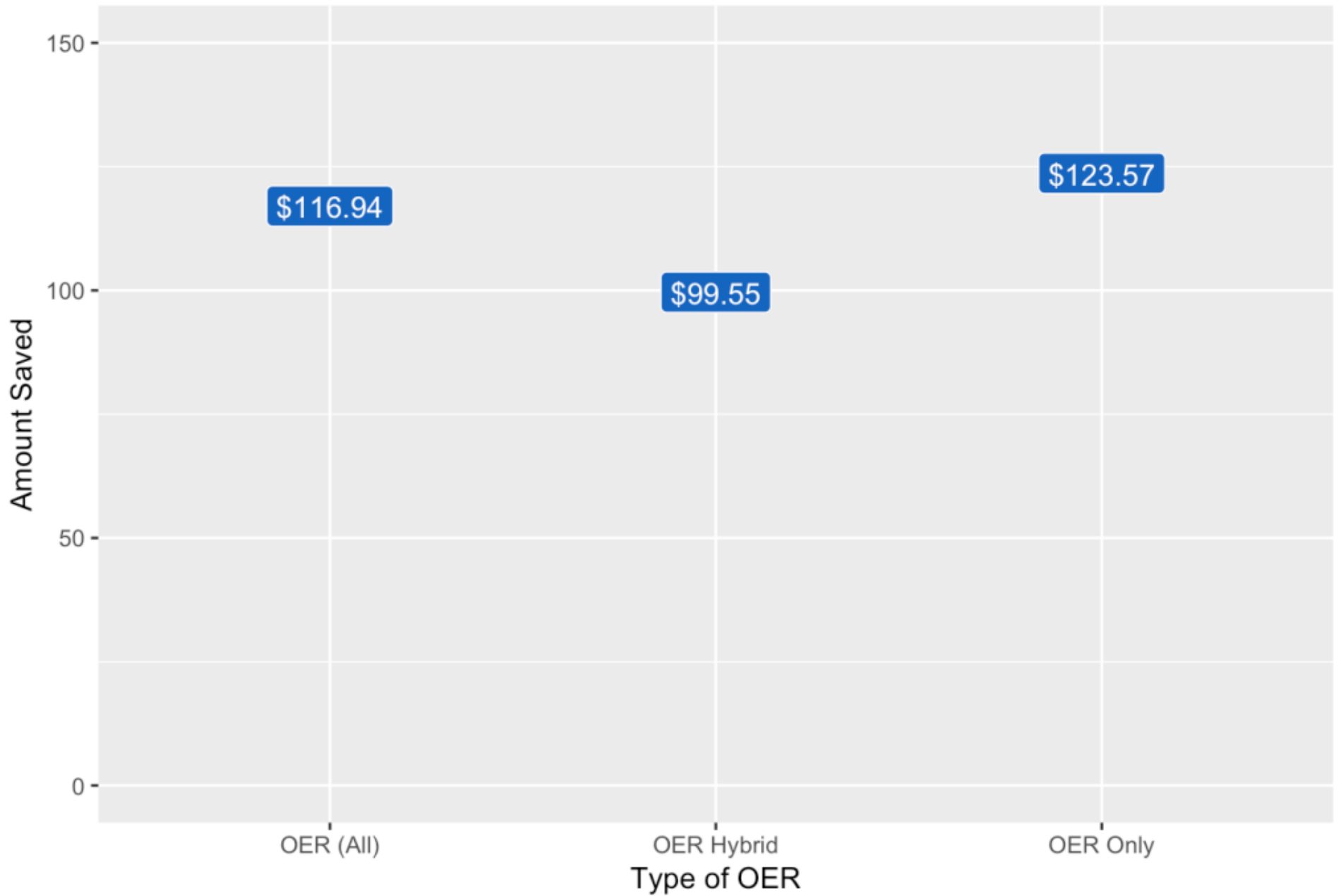
Average Highest and Lowest Prices by Type of Required Materials



Overall Average Prices by Type of Required Materials



# Student Savings by Type of OER







OpenOregon  
Educational Resources

[openoregon.org](http://openoregon.org)

## Keep in mind:

- Data is squishy, so be transparent and consistent when reporting savings.
- Build relationships with the people that manage existing data sources.
- Saving money has a big impact on students, regardless of the method used to calculate the amount.

# Collecting Data

[# of students] x [\$ saved] = [savings estimate]

# Additional Resources

## Templates

- Basic savings estimate for \$0 courses: <https://tinyurl.com/basic-0>
- Maximum potential savings estimate for \$0 courses: <https://tinyurl.com/max-potential-0>
- Basic savings estimate for \$0 and low-cost courses: <https://tinyurl.com/basic-no-low>
- Maximum potential savings estimate for \$0 and low-cost courses: <https://tinyurl.com/max-potential-no-low>
- Basic savings estimate, separate from schedule designation: <https://tinyurl.com/basic-savings-all>
- Maximum savings estimate, separate from schedule designation: <https://tinyurl.com/max-savings-all>

## Further reading/listening

- [Estimating student savings from no-cost/low-cost course materials](#)
- [Archived Webinar: Estimating student savings from no-cost/low-cost course materials](#)
- [Estimated 2017-18 Student Savings in No-Cost/Low-Cost Courses](#)



Office of the  
State Auditor

**Calculating Cost Savings  
Associated  
with OER Implementation**

Craig Hashbarger, Audit  
Manager  
chashbarger@nd.gov  
 /NDStateAuditor

**“We produce  
informative audits  
to improve  
government.”**

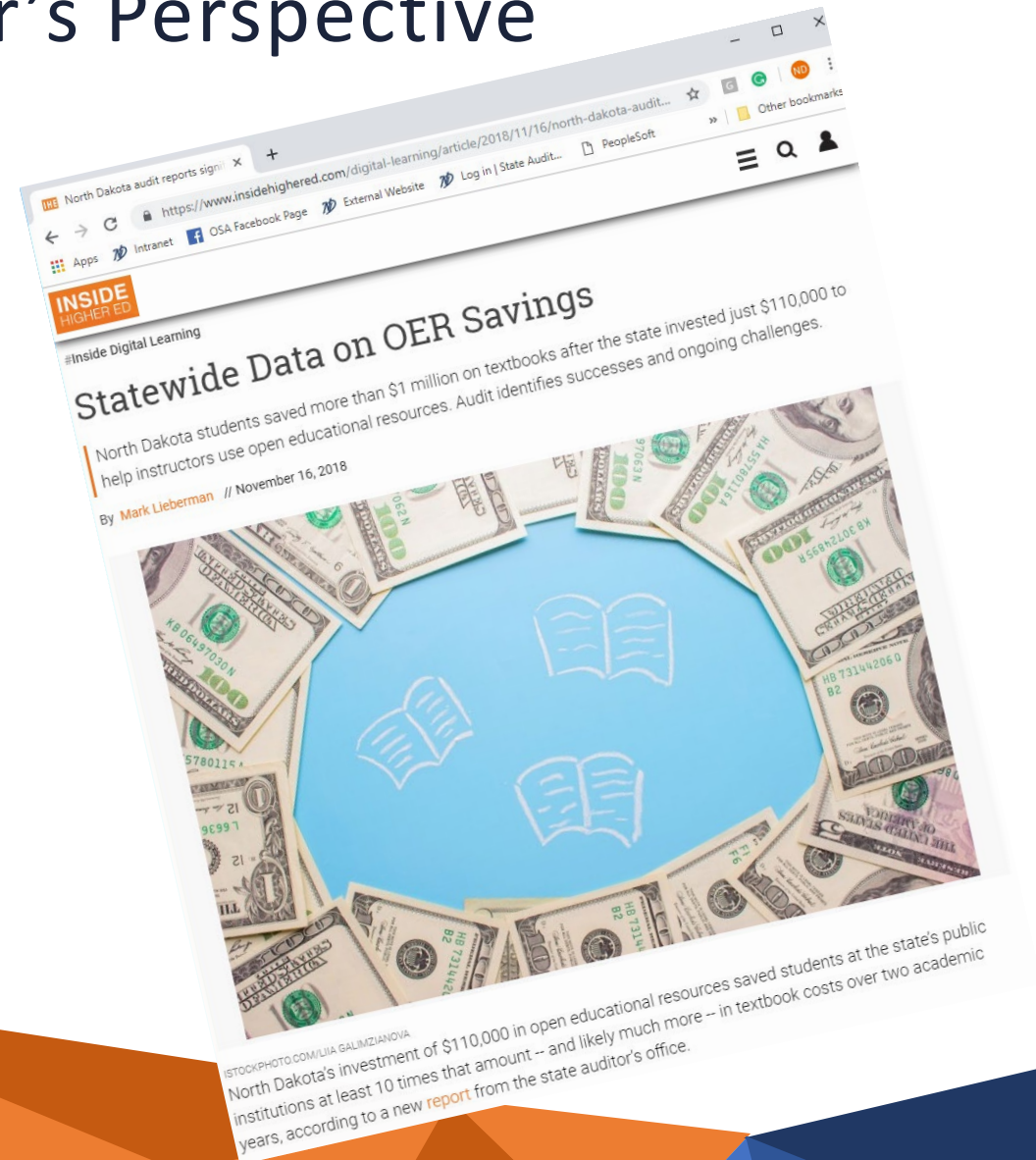


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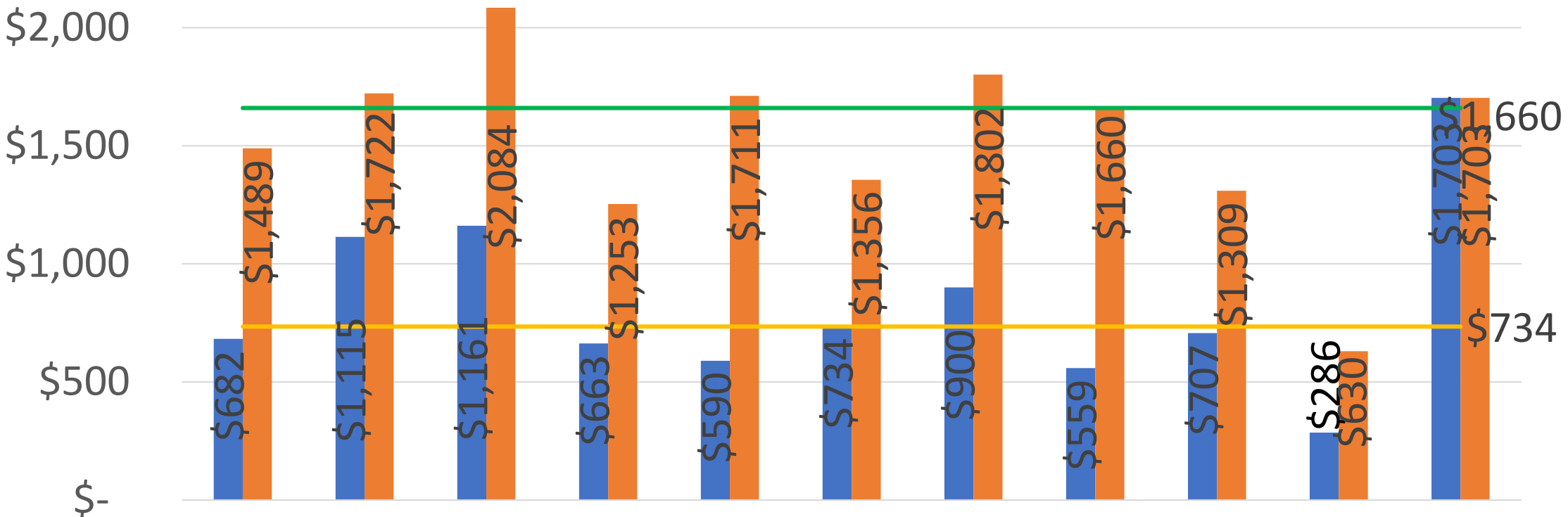
[www.nd.gov/auditor](http://www.nd.gov/auditor)

# OER from an Auditor's Perspective

- Professional auditing standards
- Purpose of our work
  - Identify opportunities for improvement
  - Evaluate use of taxpayer and institutional resources
  - Make recommendations
- Broad audience
- Objective, transparent
- Rely on OER experts (because we aren't!)



### Chart 4: Lowest versus Highest Bookstore Cost by Institution



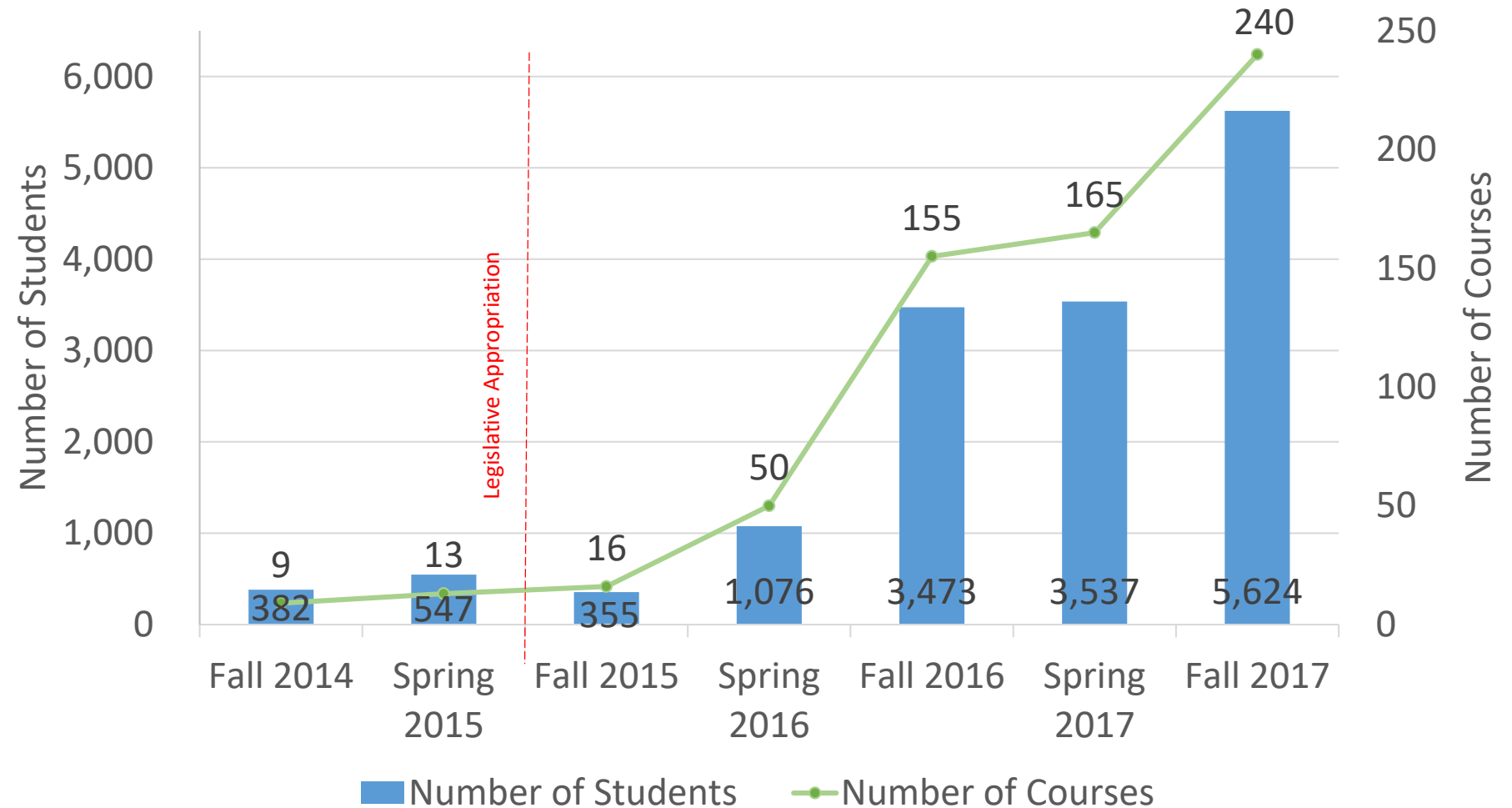
■ Bookstore Lowest Cost  
■ Bookstore New Textbook Cost



# Calculating # of Students Impacted

- Listing of OER courses provided by Provost, VPAA, or designee
- Audited the list
- Obtained student enrollments from university system software

Chart 2: NDUS Students Impacted by OER Courses





Beyond the cost savings...



Interviews and surveys with numerous stakeholders, both sides of OER issue



Acknowledge the “good” and the “bad.”



Identify the incentives and encourage those



Identify the barriers and how they may be overcome

# Questions for the Presenters

Please use the chat feature to submit questions.

# Webinar Follow-up

Please complete the assessment upon conclusion of the webinar.

The webcast and slides will be posted to the MHEC website:

[www.MHEC.org/OER](http://www.MHEC.org/OER)

# OER Contact

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