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# Information Literacy Needs of Engineering Grad Students

Niehof, Jamie

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# Information Literacy Needs of Engineering Grad Students

## → **SURVEY RESULTS**

YOUR ENGINEERING LIBRARIANS:

Leena Lalwani, Paul Grochowski, Jamie Niehof



# WHY CONDUCT THIS SURVEY?

- How are we currently covering Information Literacy?
  - Mostly departmental orientations
  - One-off seminar classes
- What will we learn from the survey?
  - Information about student knowledge
  - Discover student needs
  - Information on what resources we will need to satisfy this demand



# SURVEY LOGISTICS

- Survey Dates: November 6th - 28th, 2017
- Email sent to departmental graduate student groups
- 392 responses / 3,637 CoE graduate student enrollment (10.7% response rate)
- CoE graduate population is 27% of total UM graduate population  
(CoE = 3,637 / UM = 13,415)
- Link to the survey questions: [goo.gl/cMnMFd](https://goo.gl/cMnMFd)

# MASTERS VS. PHD

% response

Masters

150

7.6%

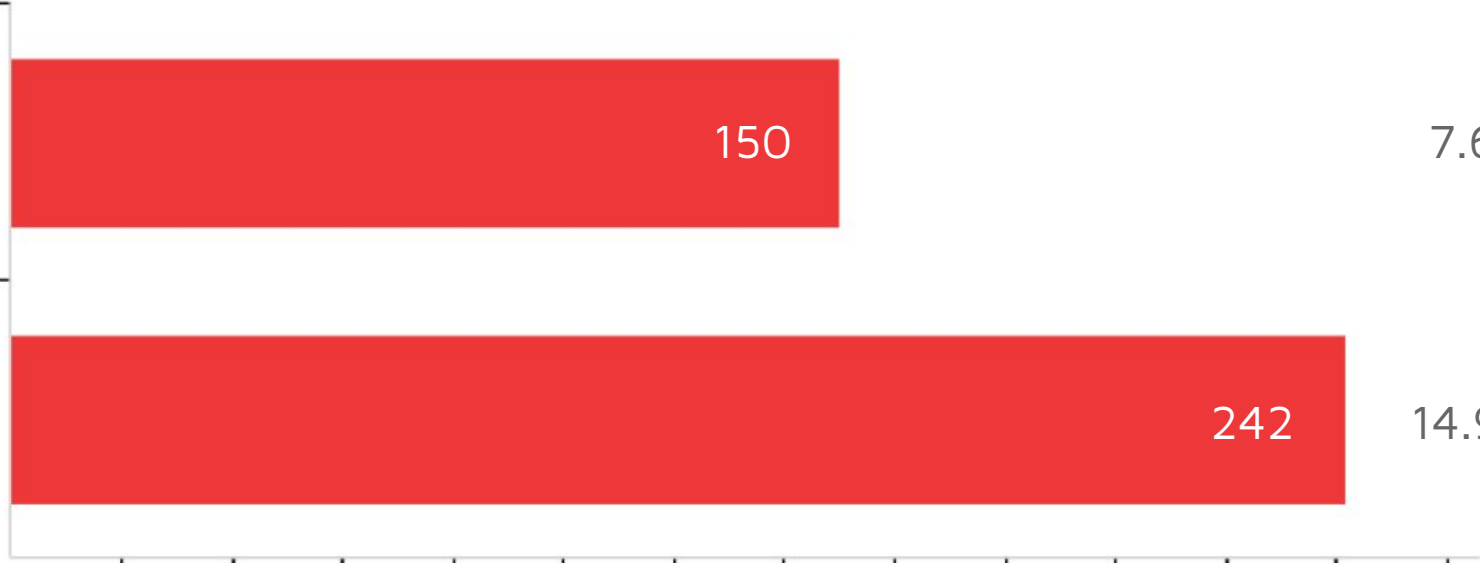
PhD

242

14.9%

0 20 40 60 80 100 120 140 160 180 200 220 240 260

Number of Responses

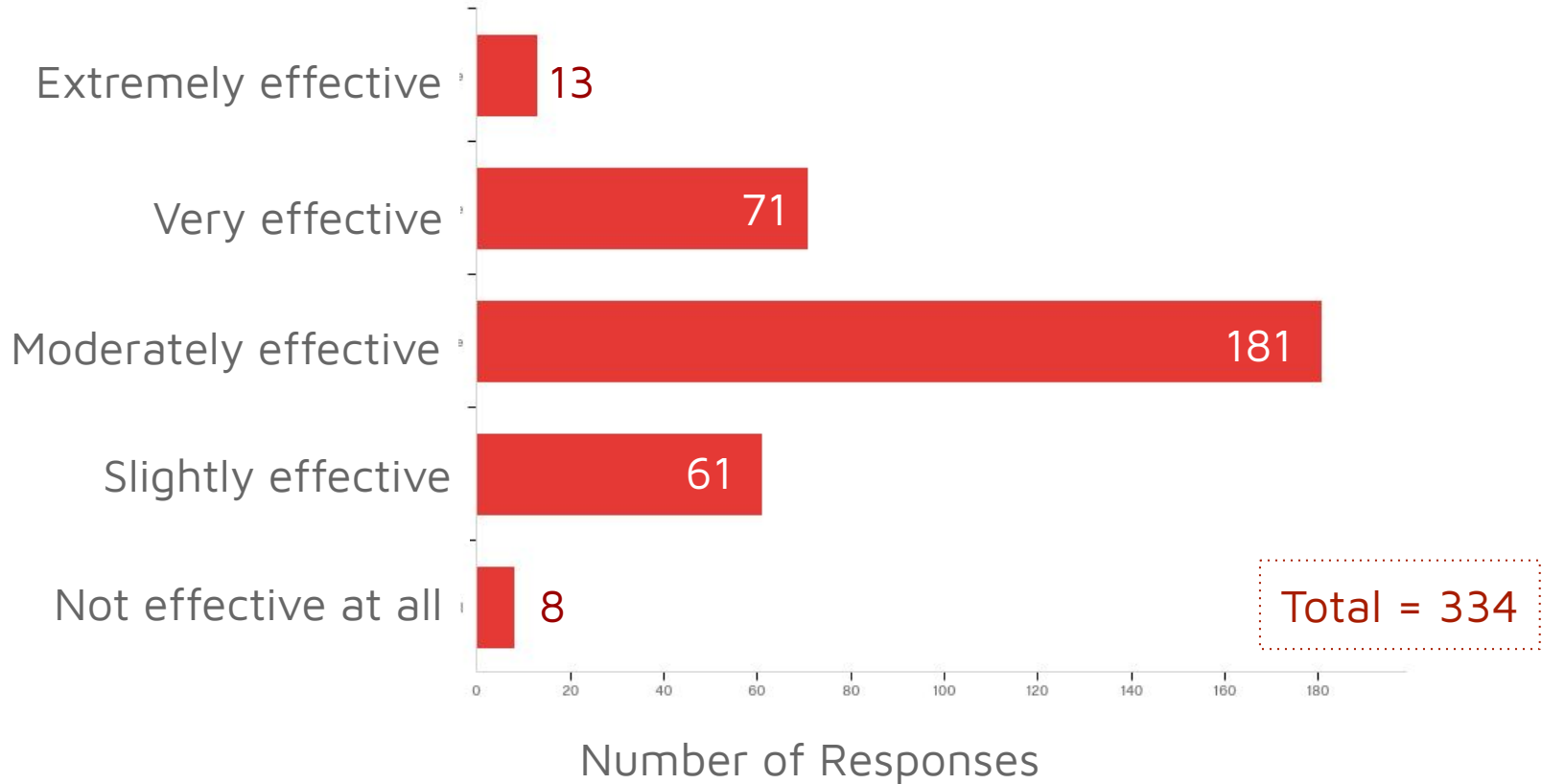




# DEPARTMENT BREAKDOWN

Electrical Eng + Computer Science	82	Chemical Engineering	26
Mechanical Engineering	68	Integrative Systems + Design	24
Civil + Environmental Engineering	38	Climate + Space Sciences Engineering	15
Aerospace Engineering	32	Nuclear Eng + Radiological Sciences	14
Materials Science + Engineering	32	Naval Architecture + Marine Engineering	3
Industrial + Operations Engineering	29	Interdisciplinary Graduate Programs	3
Biomedical Engineering	26		

# How effective are you at literature reviews?





# What databases do you search?

Google Scholar — 305

Web of Science — 99

Scopus — 61

PubMed — 49

Other — 46 .....→

Eng Village INSPEC — 13

Eng Village Compendex — 13

## **OTHER:**

“whatever lib.umich.edu offers”

IEEEExplore

ACM Digital Library

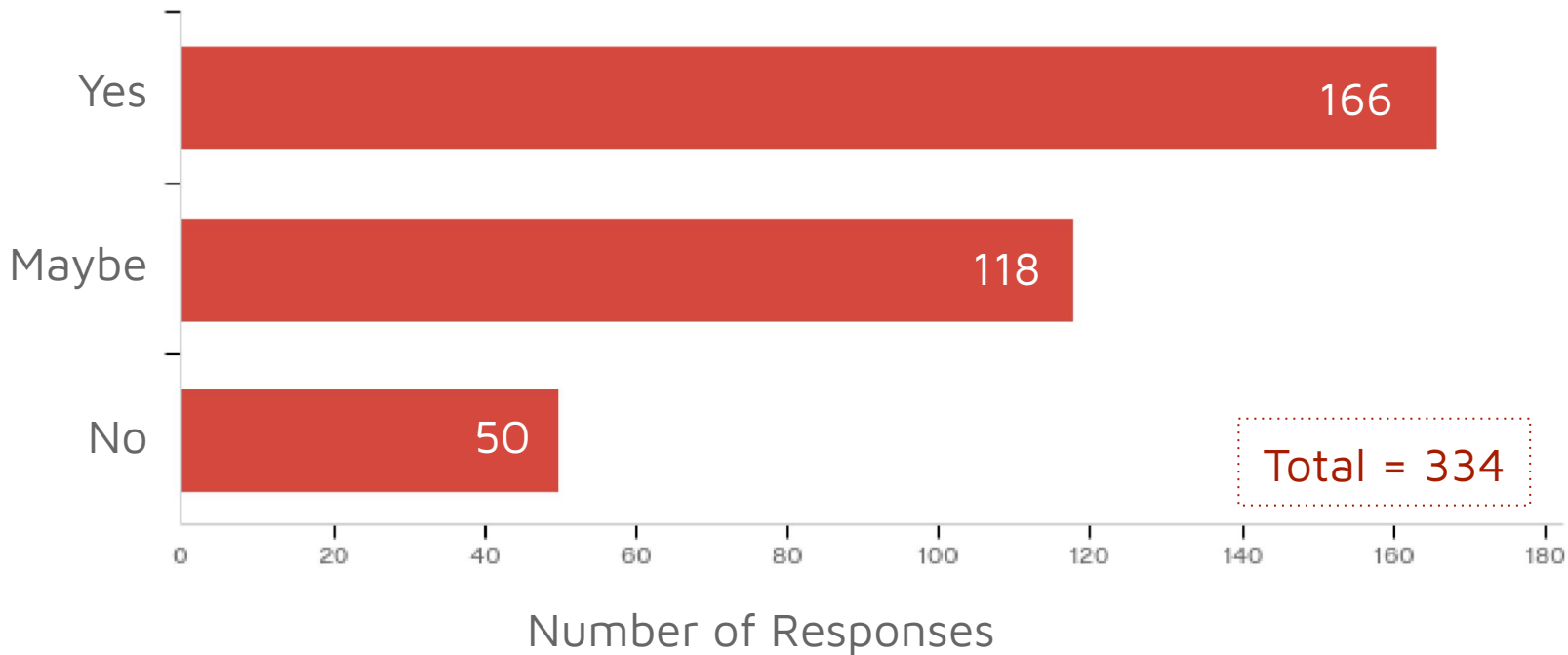
MIRLYN (library’s online catalog)

ScienceDirect

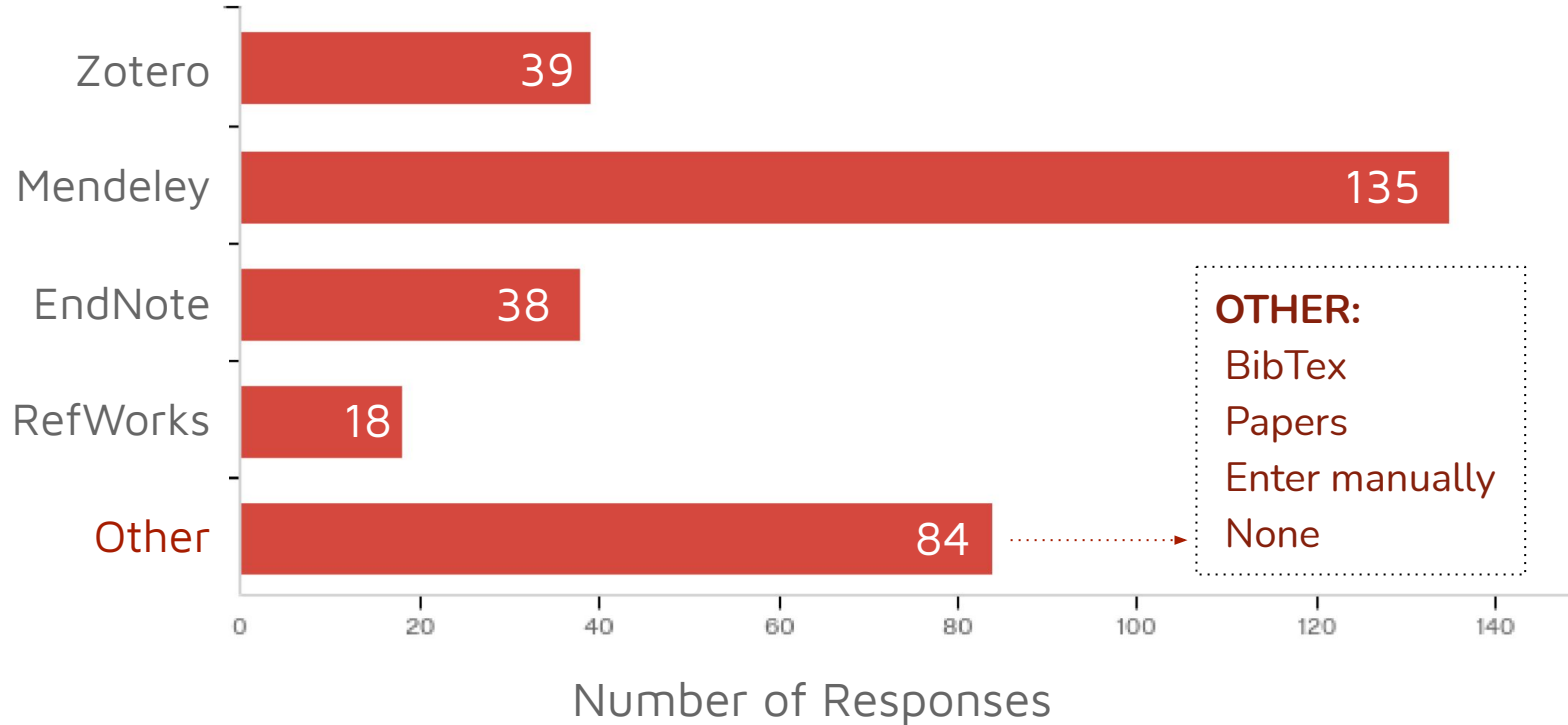
Summon



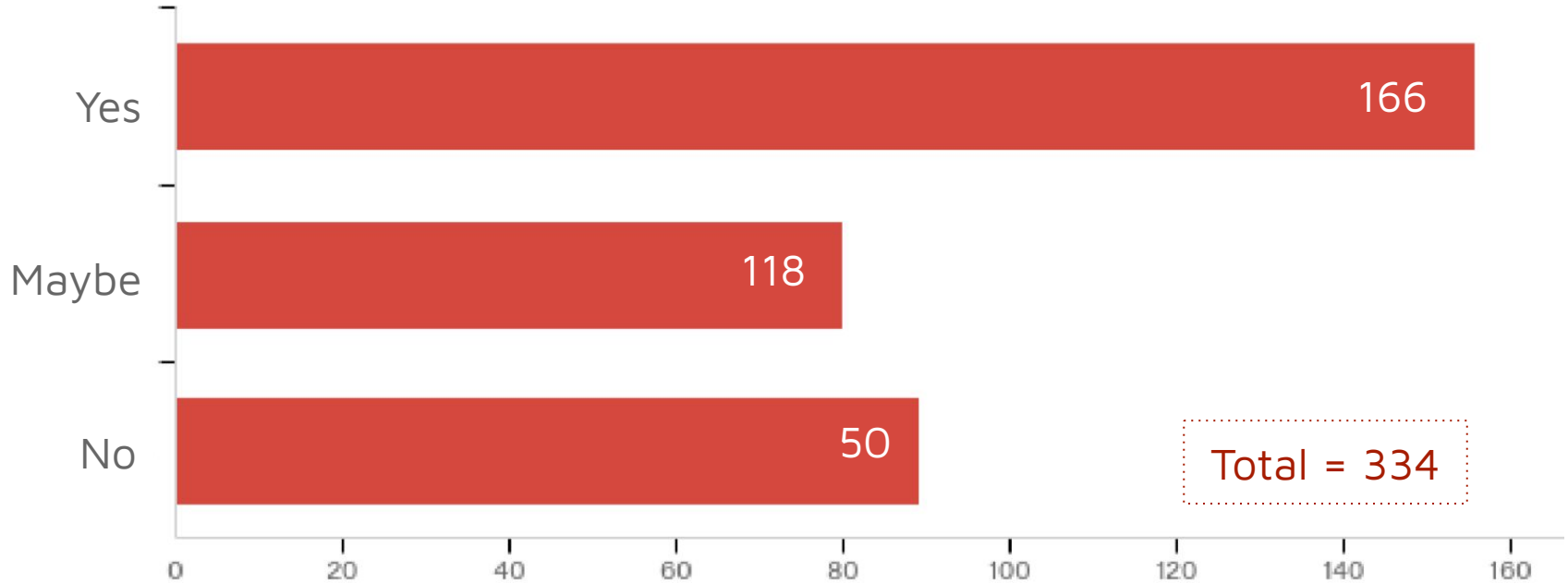
# Want training in searching for literature?



# What do you use for citation management?

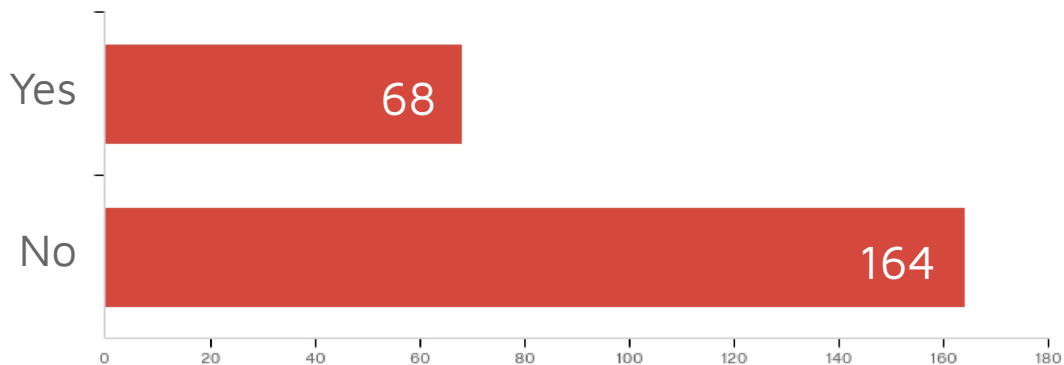


# Want training in citation managers?

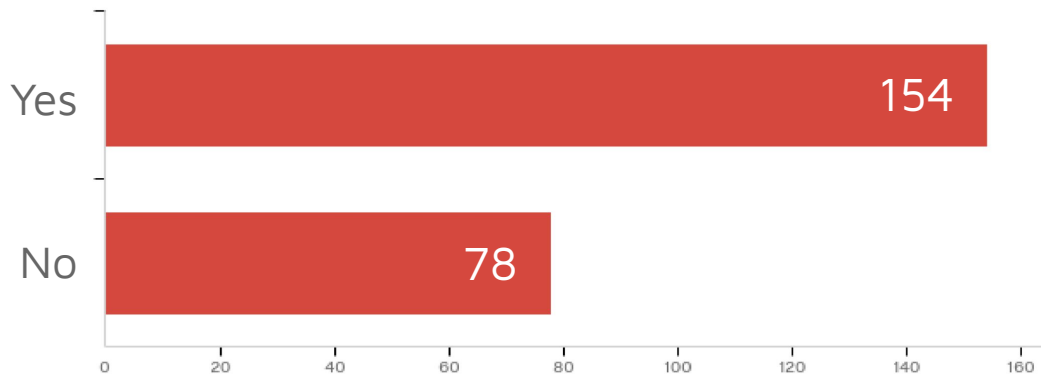


Number of Responses

# Need to find funding for your research?

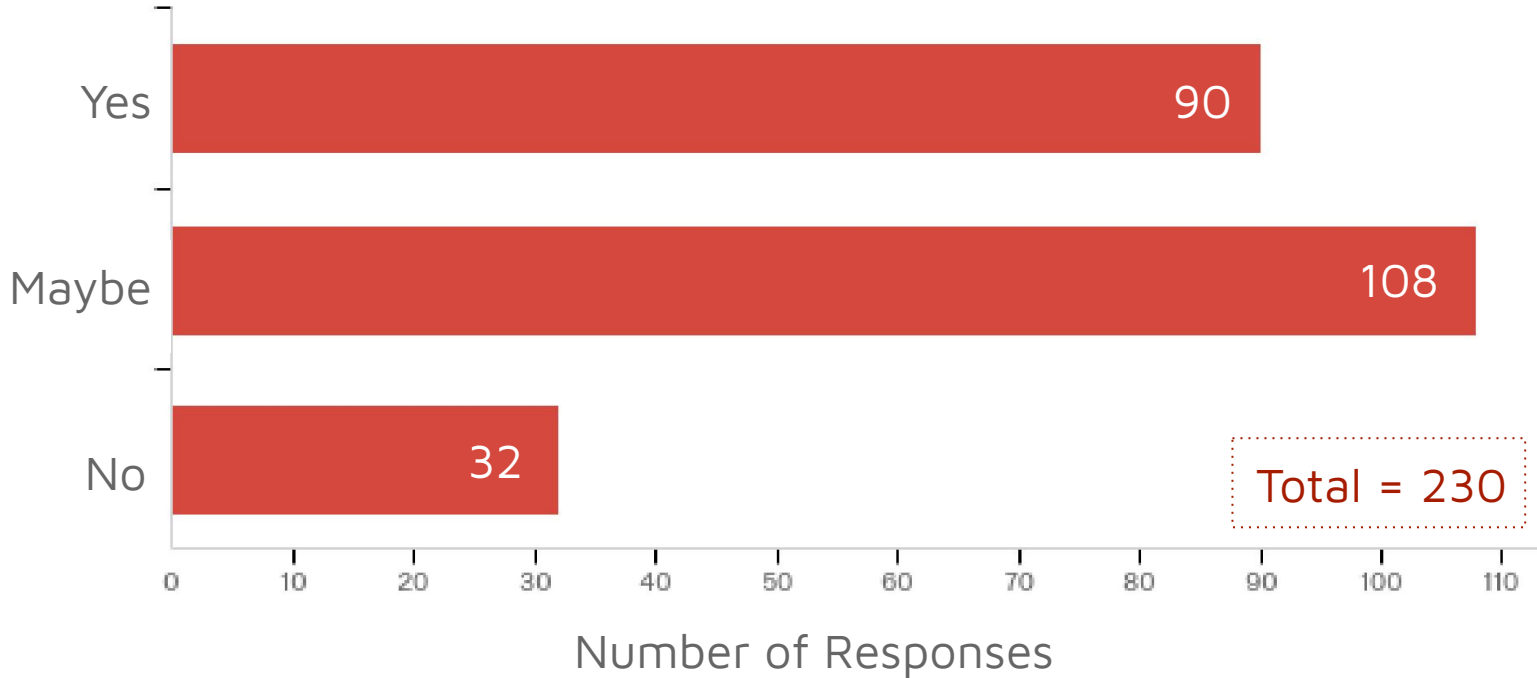


## Want training in finding funding?



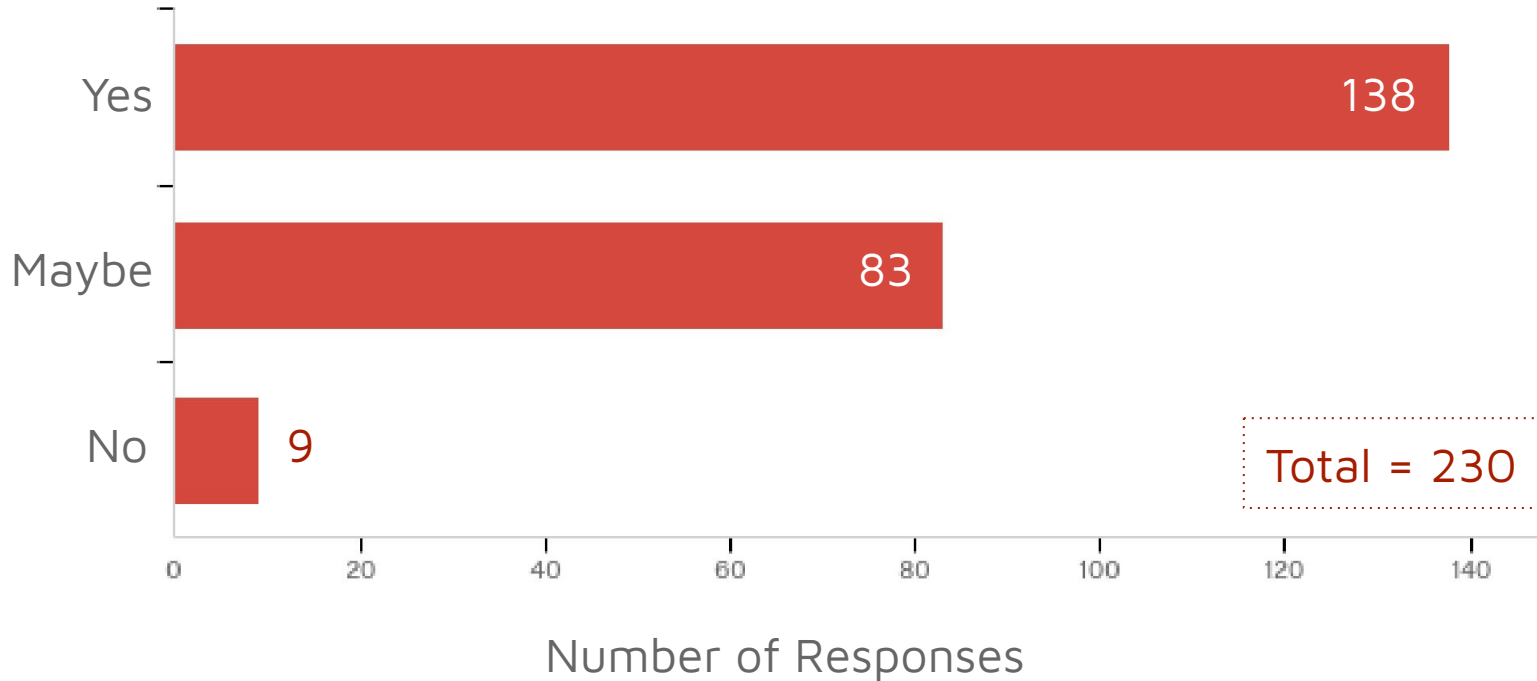


# Confident your research data is saved appropriately?

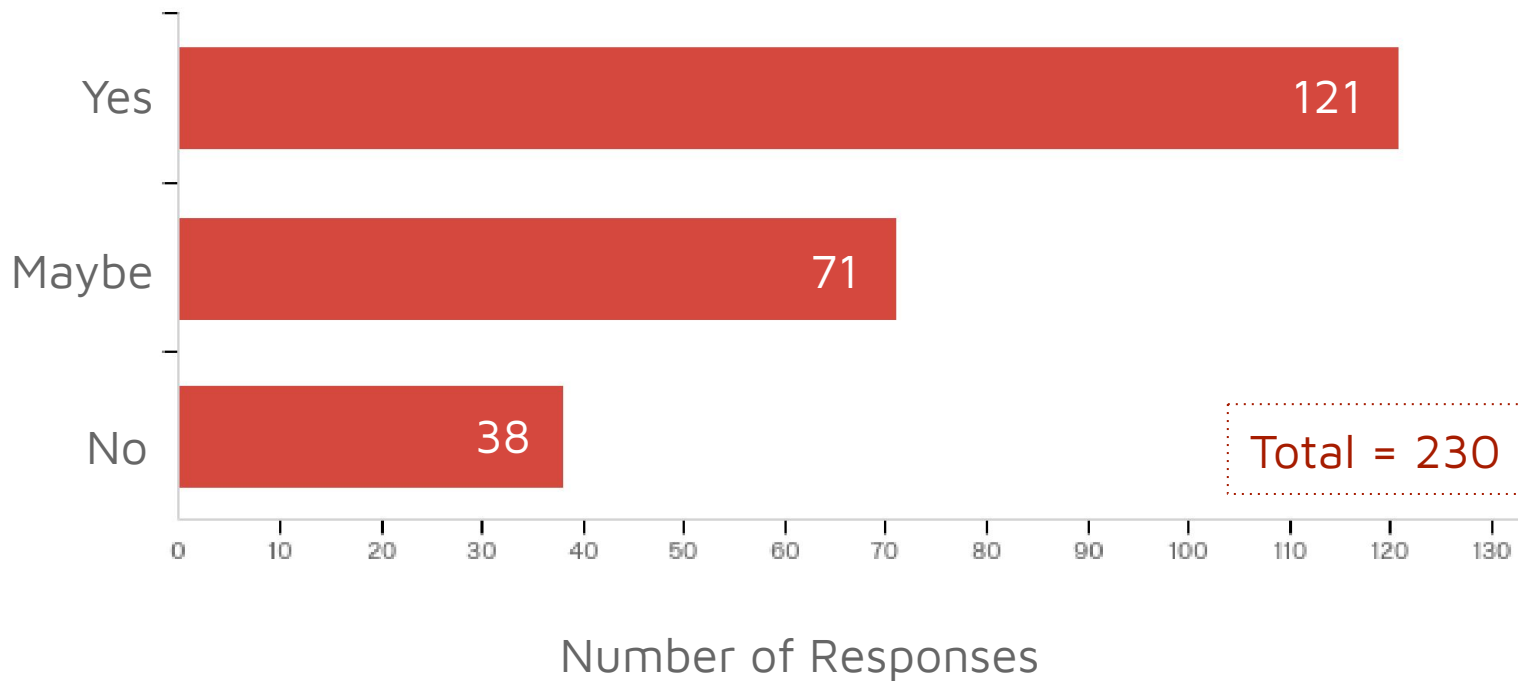




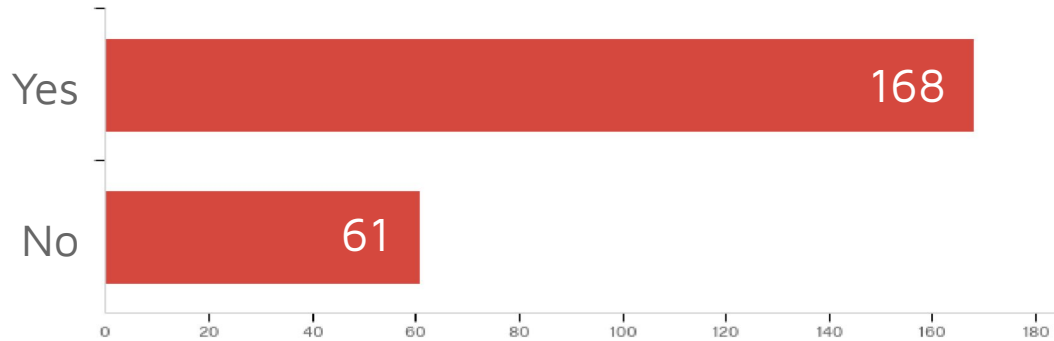
# Confident you can analyze your data effectively?



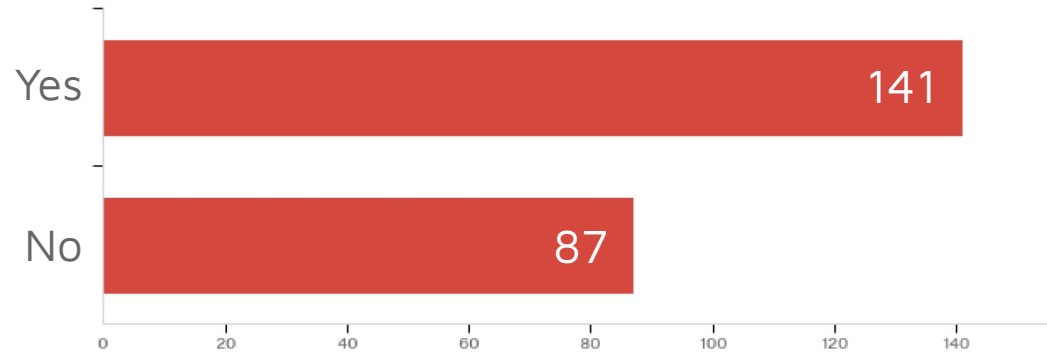
# Want training on how to comply with grant regulations pertaining to data?



# Aware of best journals to publish in?

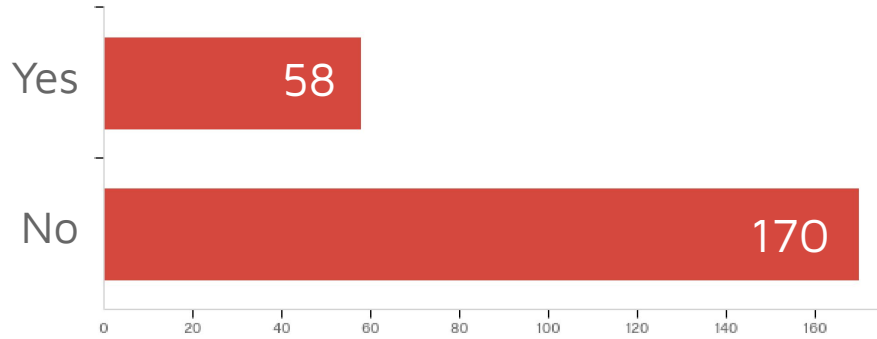


## Want training in finding journals?

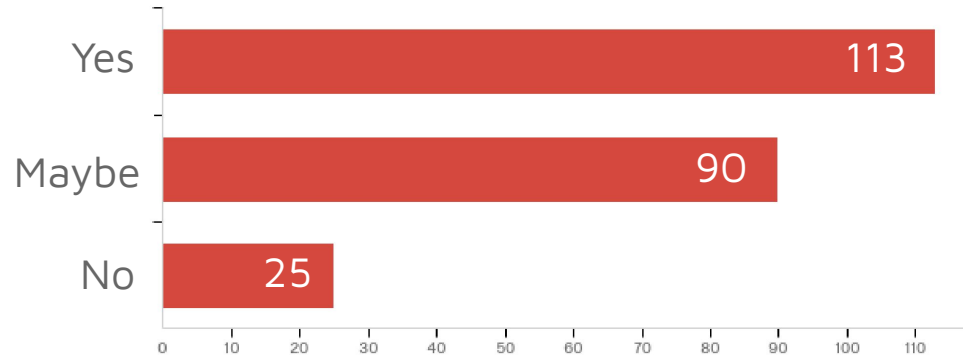




# Aware you can negotiate copyright license when publishing?



## Want training in negotiating copyright?





# Describe research needs not being met

- Access to Articles — 3
- Finding Funding — 2
- Data Management — 3
- Return the Engineering Books to the Duderstadt Center — 5



# Describe research needs not being met

- “Research in fields that I have little or no expertise: how to quickly find the background information I need.”
- “Effective way to store data in a single location.”
- “Finding OLD articles, ie pre-internet. Some journals I need are not online.”
- “Training on how to get out of the research game.”



# Describe research needs not being met

Find a complete list of write-in responses here:

[goo.gl/gjj8Ai](https://goo.gl/gjj8Ai)



## **NEXT STEPS**

- Two focus groups with CoE graduate students
- Share our survey and focus group results with the College of Engineering (CoE) Associate Dean for Graduate Education
- Plan a series of workshops to address student needs
- Present survey and focus group results at 2018 ASEE Annual Conference

The top right corner of the slide features three decorative circles of varying sizes and opacities, all in shades of orange. The largest circle is the most prominent, with two smaller circles positioned above and below it to the right.

**Questions?**

**You have 3 minutes.**