Information Literacy Needs of Engineering Grad Students

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Information Literacy Needs of Engineering Grad Students

SURVEY RESULTS

YOUR ENGINEERING LIBRARIANS:
Leena Lalwani, Paul Grochowski, Jamie Niehof

Public Services Communication Forum | 4 June 2018
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
  \[(\text{CoE} = 3,637 / \text{UM} = 13,415)\]
- Link to the survey questions: goo.gl/cMnMFd
MASTERS VS. PHD

Number of Responses

<table>
<thead>
<tr>
<th></th>
<th>Number of Responses</th>
<th>% response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td>150</td>
<td>7.6%</td>
</tr>
<tr>
<td>PhD</td>
<td>242</td>
<td>14.9%</td>
</tr>
<tr>
<td>Department</td>
<td>Students</td>
<td></td>
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<td>------------------------------------------------</td>
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<td></td>
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<tr>
<td>Electrical Eng + Computer Science</td>
<td>82</td>
<td></td>
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<tr>
<td>Mechanical Engineering</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Civil + Environmental Engineering</td>
<td>38</td>
<td></td>
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<tr>
<td>Aerospace Engineering</td>
<td>32</td>
<td></td>
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<tr>
<td>Materials Science + Engineering</td>
<td>32</td>
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<tr>
<td>Industrial + Operations Engineering</td>
<td>29</td>
<td></td>
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<tr>
<td>Biomedical Engineering</td>
<td>26</td>
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<tr>
<td>Chemical Engineering</td>
<td>26</td>
<td></td>
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<tr>
<td>Integrative Systems + Design</td>
<td>24</td>
<td></td>
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<tr>
<td>Climate + Space Sciences Engineering</td>
<td>15</td>
<td></td>
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<tr>
<td>Nuclear Eng + Radiological Sciences</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Naval Architecture + Marine Engineering</td>
<td>3</td>
<td></td>
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<tr>
<td>Interdisciplinary Graduate Programs</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
How effective are you at literature reviews?

- Extremely effective: 13 responses
- Very effective: 71 responses
- Moderately effective: 181 responses
- Slightly effective: 61 responses
- Not effective at all: 8 responses

Total responses: 334
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?

Yes: 166 responses
Maybe: 118 responses
No: 50 responses

Total: 334 responses
What do you use for citation management?

- Zotero: 39 responses
- Mendeley: 135 responses
- EndNote: 38 responses
- RefWorks: 18 responses
- Other: 84 responses

Other options:
- BibTex
- Papers
- Enter manually
- None
Want training in citation managers?

- Yes: 166
- Maybe: 118
- No: 50

Total = 334
Need to find funding for your research?

- Yes: 68
- No: 164

Want training in finding funding?

- Yes: 154
- No: 78
Confident your research data is saved appropriately?

- Yes: 90 responses
- Maybe: 108 responses
- No: 32 responses

Total responses: 230
Confident you can analyze your data effectively?

- Yes: 138 responses
- Maybe: 83 responses
- No: 9 responses

Total number of responses: 230
Want training on how to comply with grant regulations pertaining to data?

- Yes: 121 responses
- Maybe: 71 responses
- No: 38 responses

Total responses: 230
Aware of best journals to publish in?

- Yes: 168
- No: 61

Want training in finding journals?

- Yes: 141
- No: 87
Aware you can negotiate copyright license when publishing?

- Yes: 58
- No: 170

Want training in negotiating copyright?

- Yes: 113
- Maybe: 90
- No: 25
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, i.e., 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
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
Questions?

You have 3 minutes.