Research Workshop Attendance, Marketing, and Satisfaction

C.M. Curry (STEM Services) and B. Narr (Metrics Coordinator)

2024-08-06

Table of contents

Executive Summary							
Ι	Ov	erall analysis	3				
1	Offe	erings	7				
2	Ma	rketing	9				
	2.1	Executive summary	9				
	2.2	Absolute effectiveness (counts of attendees) by marketing method 2.2.1 Overall counts of attendees by marketing method and reg-	10				
		istration status	10				
	2.3	with at least two words	11				
	2.0	tendance yet unknown)	12				
	2.4	Relative effectiveness in marketing methods	13				
	2.5	Marketing implementation details	14				
		2.5.1 Email detail level and timing	14				
3	Att	Attendance 17					
	3.1	Executive summary	17				
	3.2	Per-workshop attendance by format and request	18				
		3.2.1 Statistical analysis	18				
		3.2.2 Format	19				
		3.2.3 Workshop attendance over time	20				
	3.3	Total people reached	20				
4	Feedback						
	4.1	Executive summary	23				
	4.2	Quantitative questions	23				
5		DO need to clean out NA for variables we test, as it errors in the statistical test (graphs work and just automatically					

	rem	ove)		25
		5.0.1	Do you anticipate that this new knowledge can be applied	
			towards your work?	26
		5.0.2	This workshop was valuable towards your program of study.	
		5.0.3	This workshop was valuable towards your career	27
		5.0.4 5.0.5	This workshop was valuable towards your teaching How do you rate your skills after learning about this work-	28
	5.1	Ovalit	shop topic?	29 30
	0.1	Quant 5.1.1	ative feedback (Wordcloud code)	$\frac{30}{30}$
		5.1.1 $5.1.2$	"What about the workshop needed improvement?"	$\frac{30}{30}$
		5.1.2	"What other workshop topics would interest you?"	30
		5.1.4	"Any other comments?"	30
6	Nan	ne one	aspect of the workshop that you liked.	31
7	Nan	ne one	aspect of the workshop that could be improved.	33
8	Wh	at ath	er workshop topics would interest you?	35
o				
9		se let kshop.	us know any other comments you have about the	37
II	T.	nias		39
11	T	pics		39
10	Top	ics		43
	10.1	Data s	sources	43
11	Con	cepts	of Data-Driven Visualization	45
	11.1	Descri	ptive numbers	45
	11.2	Attend		45
			Over time	45
			By semester	45
	11.3		ting	45
			Over time	45
			By semester	45
	11.4		action	45
			Over time	45
		11.4.2	By semester	45
Te		cal det		47
	Data	source	es and processing	47
	Bool	c info		48

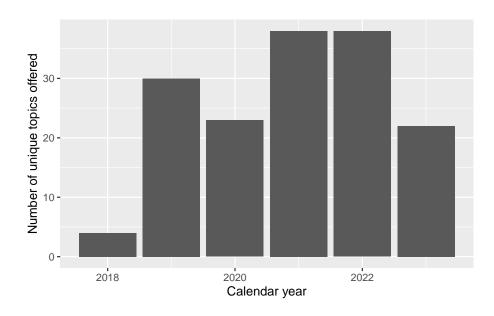
Executive Summary

Part I Overall analysis

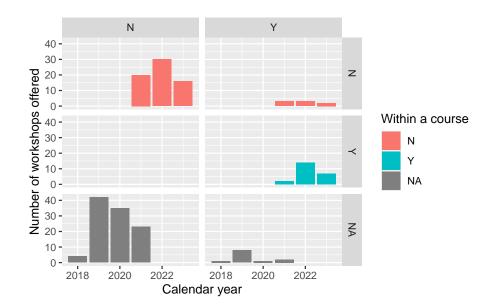
This section covers all workshops combined.

Offerings

The number of distinct topics has declined since 2022, likely due to loss of digital scholarship specialist expertise.



While we offer many scheduled workshops each semester (upper left panel, "Not requested/Regularly scheduled"), we continue to increase our course-based "workshops on request" visits (lower right panel) as well as a low but steady number of out-of-class requested workshops (upper right panel).



Marketing

2.1 Executive summary

Our overall most effective marketing methods are emails, the OU Libraries website, word-of-mouth, and outreach to instructors.

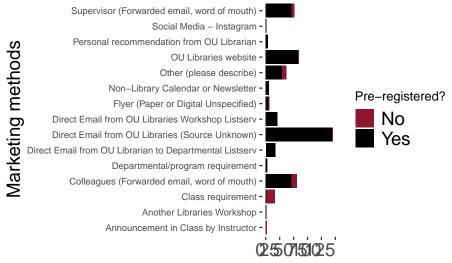
This determination is made by combining what methods bring in high attendee counts (1) and what methods bring the highest ratio of attendance to registration (2).

- 1. The top three marketing methods that bring in the highest counts of attendees who fill out our post-workshop surveys (hereafter, "attendees" and "attendance") are emails, word-of-mouth, and the OU Libraries website
- 2. The marketing methods with the highest response "intensities" (relative proportion of attendees) were class requirements (making liaison outreach to instructors critical), librarians emailing a departmental listserv directly (we have these permissions for at least two STEM departments to my knowledge), and the OU Libraries website.

2.2 Absolute effectiveness (counts of attendees) by marketing method

2.2.1 Overall counts of attendees by marketing method and registration status

These data for people who filled out a post-workshop survey (ie are confirmed to have attended a workshop) and answer the question "How did you hear about this workshop?". They are grouped by pre-registered or not pre-registered (passerby walk-ins, class workshops where registration wasn't required). We do not get 100% completion of surveys.



Number of participants filling out post-workshop

2.2.2 Marketing methods for selection "Other (please describe)" with at least two words

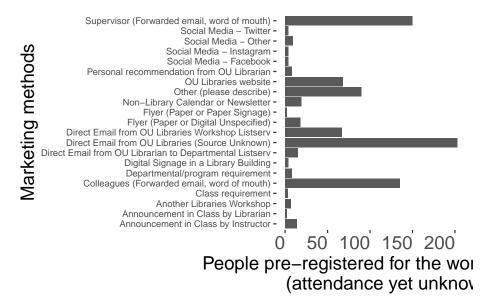
These words suggest that professors, librarians, and previous workshops were included in methods that reached these attendees. Later data cleaning to incorporate emails/professors/word-of-mouth into the existing categories could be useful.

workshop

department claire series
monday dr attended first
learned curry de email
professor writing

2.3 Marketing sources for people who registered for workshops (attendance yet unknown)

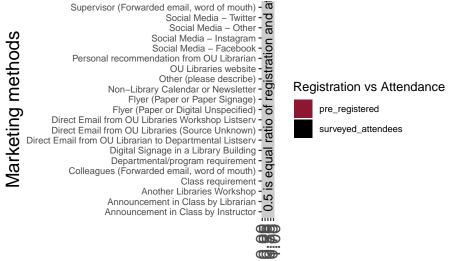
These data are from people who filled out the pre-registration form to attend a workshop. When they filled out this form, we do not know if they will go on to actually attend the workshop. Most of the people in the previous section will have registered, so there is overlap between the datasets, but the post-workshop surveys are anonymous so we cannot connect them directly. The next section shows a broad-level view of the relative effectiveness of methods for people who register vs people who follow through and attend.



2.4 Relative effectiveness in marketing methods

We do not get 100% survey responses at our workshops. However, I wanted to see to see if some marketing methods are proportionately more effective in getting pre-registrants to actually show up at the workshop. The differences are overall statistically significantly different (Chi-squared = 71.5, df =- 20, p < 0.0001).

Below is a chart that represents this visually as a ratio of attendance to preregistrant counts. The vertical beige bar shows approximately where about the same proportion (i.e., 0.5 out of 1, or 50/100) of people who pre-registered (red) ended up actually attending and filling out a survey (black).



Ratio of registration to attendance + survey

A completely red bar indicates that none of the people who completed the preregistration survey later completed a post-workshop survey. It is possible some of those attendees showed up but did not complete the offered post-workshop survey. People who pre-registered and heard about the workshop via Twitter, Facebook, Other Social Media Not Specified, Announcement in Class by Librarian, and paper fliers have this result, suggesting those media may not be resulting in attendees or not resulting in attendees willing to provide feedback.

A completely black bar indicates that pre-registration did not occur but people attended anyways (you see these attendees as the red caps to the black bars in the previous section). This occurred more with people who attended a workshop given in a class ("Class Requirement"; that category suggests either we visited the class, which does not involve LibCal registration, or that the instructor asked people to attend a workshop outside of class). With online workshops requiring pre-registration, we don't necessarily expect any bar to be completely

black (all walk-ins). However, in-person workshops can accept passer-by walk-ins who didn't pre-register or people who saw the event via any other marketing method (again, see the previous section's chart) and just showed up without pre-registering. Zoom workshops could have other registrants also forward the Zoom link.

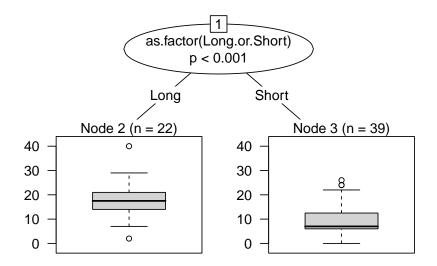
Thus, any method with some black has some attendance, and methods with larger amounts of black indicate relatively stronger responses. Thus, the highest response "intensity" are for class requirements, librarians emailing a departmental listserv directly (we have these permissions for at least two STEM departments to my knowledge), and people who find events by examining the OU Libraries website.

2.5 Marketing implementation details

2.5.1 Email detail level and timing

I used registrants instead of confirmed attendees, because that felt more relevant to the emails, and it was more consistently documented. The factors that were considered here were lead time (how much time between the email and the event) and length of email (long = one that was typed by one of you, short = automated libzoom email). Email length was the deciding factor for number of registrants!

Thus, the time between registration opening and workshop did not affect attendance. As such, CMC proposed we open all workshops at the start of the semester. This change was approved by the committee in slack in Fall 2023 (2023/10/03) to be implemented for the Spring 2024 workshops. We discussed adding a second reminder for already registered participants, but only one reminder is possible using LibCal automated emails. We will now post once advertising the full schedule, and then continue doing the 3-weeks-advertising to remind people again.



Attendance

3.1 Executive summary

Counts of workshop attendance are only influenced by whether a workshop was presented as part of course instruction. Format (virtual, in-person, hybrid) and marketing did not change attendance counts. Even topics (Chapter 10) didn't impact attendance counts.

3.2 Per-workshop attendance by format and request

3.2.1 Statistical analysis

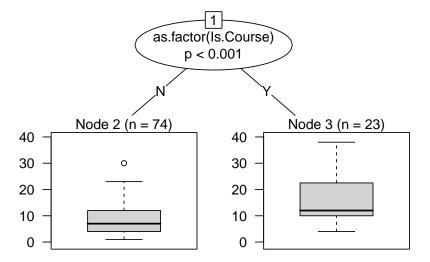
For scheduled workshops, none of the following variables impact attendance numbers in a conditional inference tree analysis.

- format (in person vs virtual vs hybrid)
- academic year (starts in August, goes through July)
- calendar year (starts in January)
- semester (spring, summer, or fall)
- time of day
- workshop topic
- multi-day vs single day scheduling

When we examine all workshops (included on-request visits to classes and on-request workshops), we add the following variables:

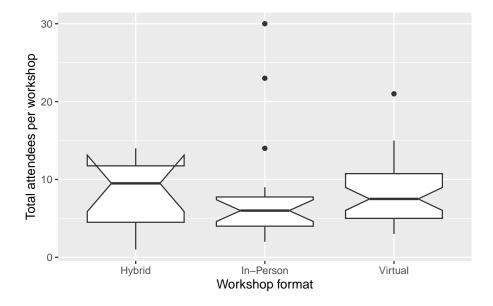
- workshop was in a course
- requested or not
- marketing (had a known three-week advertising period or not)

Whether a workshop was in a course (where students are presumably required to attend) was still the only deciding factor in increased attendance numbers.



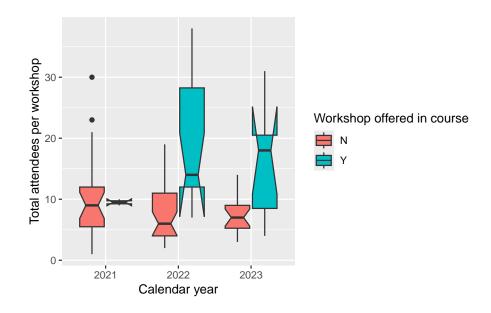
3.2.2 Format

Again, per the conditional inference tree analysis, the workshop format was not significantly different. You can also see this with a different visual analysis using notched box plots. The overlapping "notches" here show that there is no difference between median attendance for scheduled (not on request, not in a class) workshops by format.



3.2.3 Workshop attendance over time

The median number of people at each scheduled workshop has stayed the same per calendar year from 2021-2023. Workshop attendance at courses is higher, presumably because most classes have to reach a certain enrollment to "make".

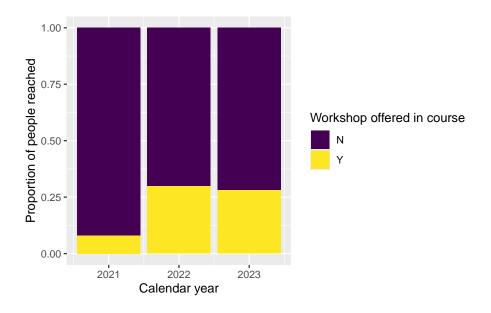


3.3 Total people reached

The total number of people reached has increased from 2021 to 2022, almost completely due to more people reached via courses. We do not have complete 2023 data as of this writing (11/21/2023 CMC).

#	A tibble:	3×3	
	<pre>Is.Course</pre>	`2021`	`2022`
	<chr></chr>	<int></int>	<int></int>
1	N	228	259
2	Y	19	266
3	Total	247	525

The proportion of total people reached each calendar year has increased by courses for 2022-2023 (though 2023 dataset is not fully entered yet).



Feedback

4.1 Executive summary

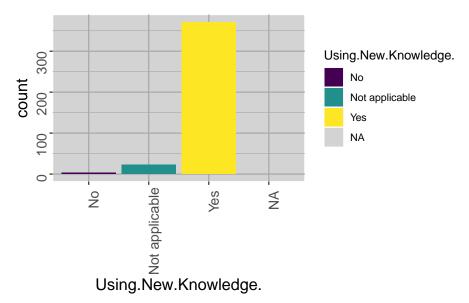
Feedback data show no difference in perception of workshop value by learners among formats (in person, hybrid, or virtual). Qualitative (word-cloud illustrations) feedback are generally positive.

4.2 Quantitative questions

For each question, we examine statistically and graphically (if differences were statistically significant) the rankings divided by instruction format (DSI request 2023/07), request/not, and course/outreach variables. In the future, we may check rankings vs length of course in hours.

TODO need to clean out NA for variables we test, as it errors out in the statistical test (graphs work and just automatically remove)

5.0.1 Do you anticipate that this new knowledge can be applied towards your work?

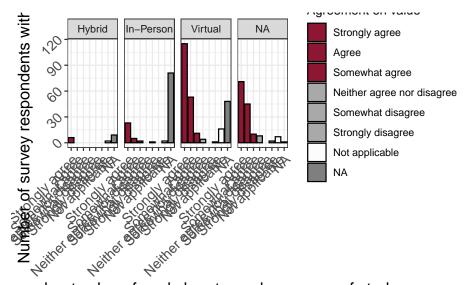


There was no significant difference in perception of learning new knowledge from the workshop among learning formats.

[1] FALSE

5.0.2 This workshop was valuable towards your program of study.

Most participants perceived the workshop as valuable towards their program of study. Interestingly, "disagree" is never chosen by any of our several hundred respondents.



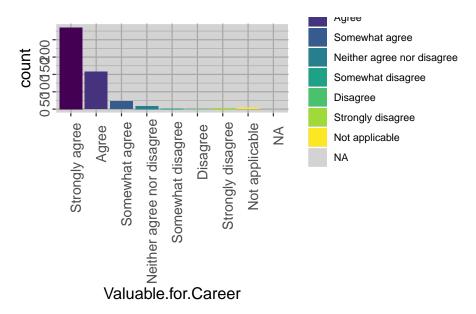
ise about value of workshop towards program of study

There was no difference in perception of the material as "valuable to my program of study" between workshop formats (hybrid, online, or in person).

[1] FALSE

5.0.3 This workshop was valuable towards your career.

Most participants perceived the workshop as valuable towards their career.



There was no difference in perception of the material as "valuable to my career" between workshop formats (hybrid, online, or in person).

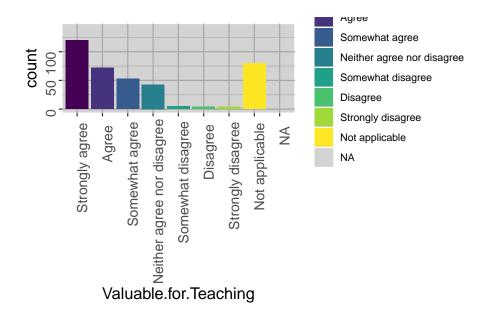
[1] FALSE

There was no difference among career levels (classifications) for perception of value towards their careers.

[1] FALSE

5.0.4 This workshop was valuable towards your teaching.

More respondents felt the workshops were not applicable towards their teaching but were otherwise positive. As our workshops are research focused, this is probably reasonable.

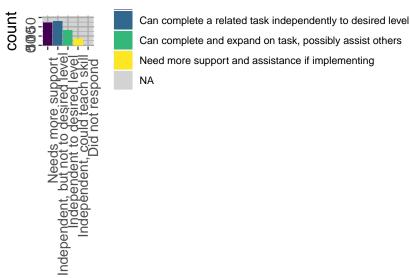


There was no difference in perception of the material as "valuable to my teaching" between workshop formats (hybrid, online, or in person).

[1] FALSE

5.0.5 How do you rate your skills after learning about this workshop topic?

We have a range of skill ratings after the workshop. This could be an area for improvement but could also be dependent on whether we have targeted the right audience with the right level of materials.



te.your.skills.after.learning.abou...

There was no difference in perception of future abilities to use skills from the workshop between formats (hybrid, online, or in person).

[1] FALSE

5.1 Qualitative feedback (Wordcloud code)

- 5.1.1 "What did you like about the workshop?"
- 5.1.2 "What about the workshop needed improvement?"
- 5.1.3 "What other workshop topics would interest you?"

We can examine this wordcloud to see if we need to advertise existing workshops more in addition to having ideas about new ones.

5.1.4 "Any other comments?"

Name one aspect of the workshop that you liked.



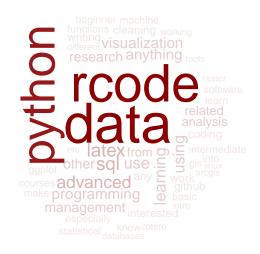
32CHAPTER 6. NAME ONE ASPECT OF THE WORKSHOP THAT YOU LIKED.

Name one aspect of the workshop that could be improved.



34CHAPTER 7. NAME ONE ASPECT OF THE WORKSHOP THAT COULD BE IMPROVED.

What other workshop topics would interest you?



36CHAPTER 8. WHAT OTHER WORKSHOP TOPICS WOULD INTEREST YOU?

Please let us know any other comments you have about the workshop.



38CHAPTER 9. PLEASE LET US KNOW ANY OTHER COMMENTS YOU HAVE ABOUT THE WO

Part II

Topics

These reports are created on request by the instructor for each workshop. Contact Claire or Brianna if you want one for your workshop.

Topics

For aggregate workshop metrics, please read Attendance (Chapter 3), Marketing (Chapter 2) or Feedback (Chapter 4). For an overall description of how many topics and frequencies of offerings, see Offerings (Chapter 1).

10.1 Data sources

We use only scheduled workshops (i.e., not in a course, not on request outside of a course) in these analyses as it has a statistically significant impact on attendance (Chapter 3). We include only workshops with more than four sessions (two years).

Concepts of Data-Driven Visualization

Link to OSF. words(Chapter 10)

11.1 Descriptive numbers

How many times offered per semester, per year. Number of different instructors.

- 11.2 Attendance
- 11.2.1 Over time
- 11.2.2 By semester
- 11.3 Marketing
- 11.3.1 Over time
- 11.3.2 By semester
- 11.4 Satisfaction
- 11.4.1 Over time
- 11.4.2 By semester

Technical details

Data sources and processing

Are available in Data_munging.R

48 Technical details

Book info

This document was created are using the ${\bf quarto}$ package \cite{book} to format this book.