

Research Workshop Attendance, Marketing, and Satisfaction

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4 {r attendance_over_time, echo=FALSE, message = FALSE, warning = FALSE} # plot_helpers <- last_two_years_attendance[last_two_years_attendance\$Request	
%>% # ggplot(mapping = aes(x = as.factor(Calendar.Year),	
# y = helpers/Total.Attendees, #	

<code>fill = Topic)) + # geom_boxplot(notch = TRUE) # plot_helpers</code>	
<code>#</code>	23
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Executive Summary

Part I

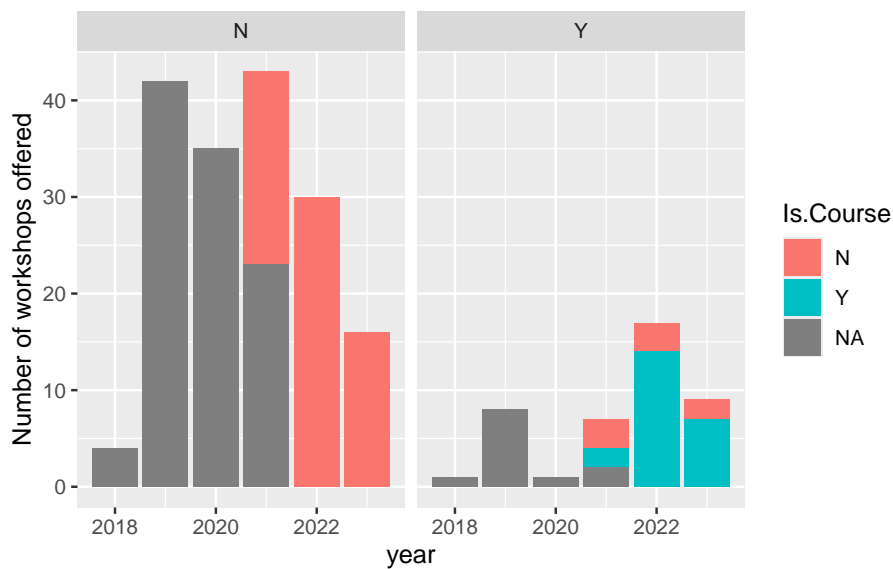
Overall analysis

This section covers all workshops combined.

Chapter 1

Workshop descriptive numbers

We continue to offer more workshops on request (right panel), especially in courses.

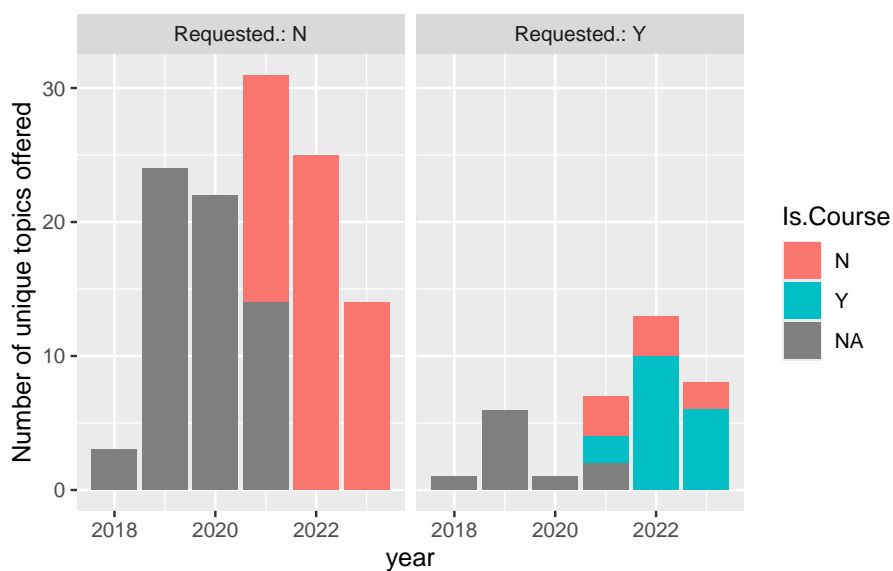


We have increased the number of topics we've brought "on request" to groups and courses. The number of distinct topics has declined in the last academic year, likely due to loss of specialist expertise with staff loss.

```
# A tibble: 30 x 5
# Groups:   year, Semester, Is.Course [20]
```

	year	Semester	Is.Course	Requested.	topics_count
	<int>	<chr>	<chr>	<chr>	<int>
1	2018	Fall	<NA>	N	3
2	2018	Fall	<NA>	Y	1
3	2019	Fall	<NA>	N	12
4	2019	Fall	<NA>	Y	3
5	2019	Spring	<NA>	N	10
6	2019	Spring	<NA>	Y	1
7	2019	Summer	<NA>	N	2
8	2019	Summer	<NA>	Y	2
9	2020	Fall	<NA>	N	11
10	2020	Spring	<NA>	N	8

i 20 more rows



LATER TODO: How many instructors and helpers per semester - BN gather number of helpers from Libraries collaborators + internal notes. later in report will cover helper to attendee ratio. - 11/28/2023 requested BN to request MB to add external helper count

Chapter 2

Marketing

2.1 Executive summary

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

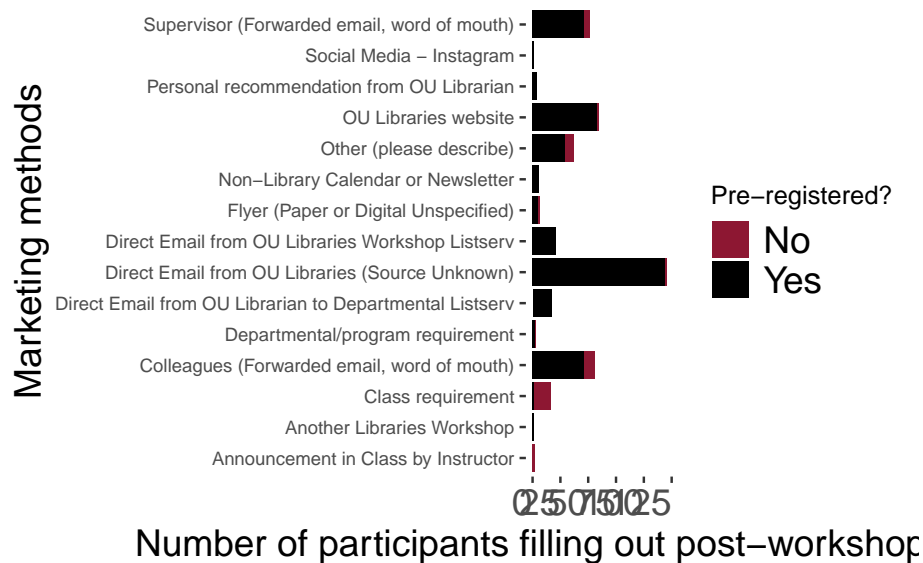
The marketing methods with the highest response “intensities” (relative proportion of attendees) were class requirements (making liaison outreach to instructors critical), librarians emailing a departmental listserv directly (we have these permissions for at least two STEM departments to my knowledge), and the OU Libraries website.

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

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.



2.2. ABSOLUTE EFFECTIVENESS (COUNTS OF ATTENDEES) BY MARKETING METHOD¹¹

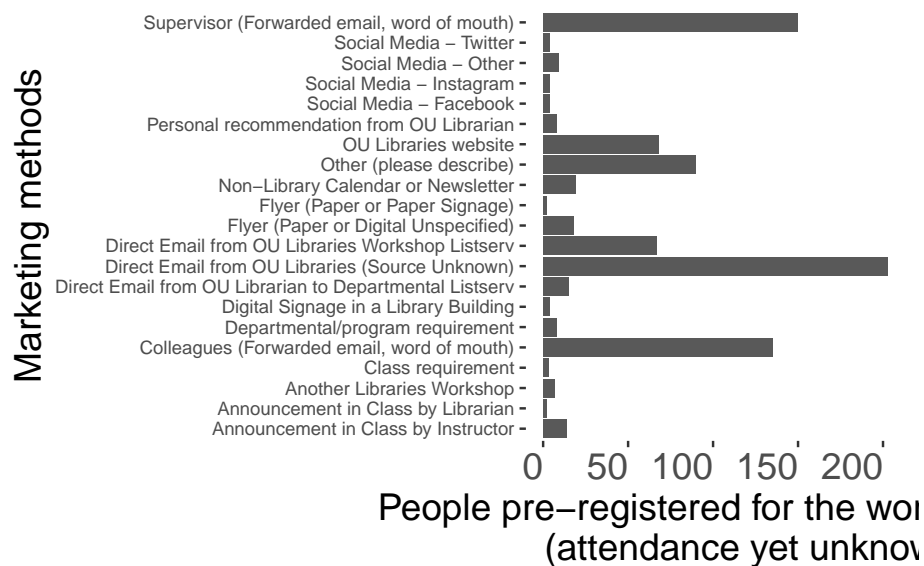
2.2.2 Marketing methods for selection “Other (please describe)” with at least two words

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.



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

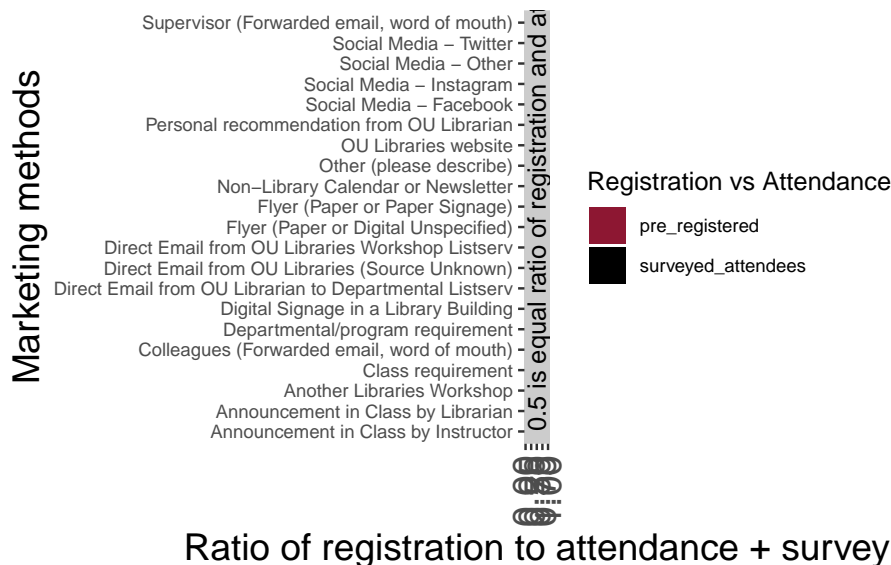
These data are from people who filled out the pre-registration form to attend a workshop. When they filled out this form, we do not know if they will go on to actually attend the workshop. Most of the people in the previous section will have registered, so there is overlap between the datasets, but the 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 pre-registrant 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).



A completely red bar indicates that none of the people who completed the pre-registration 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.

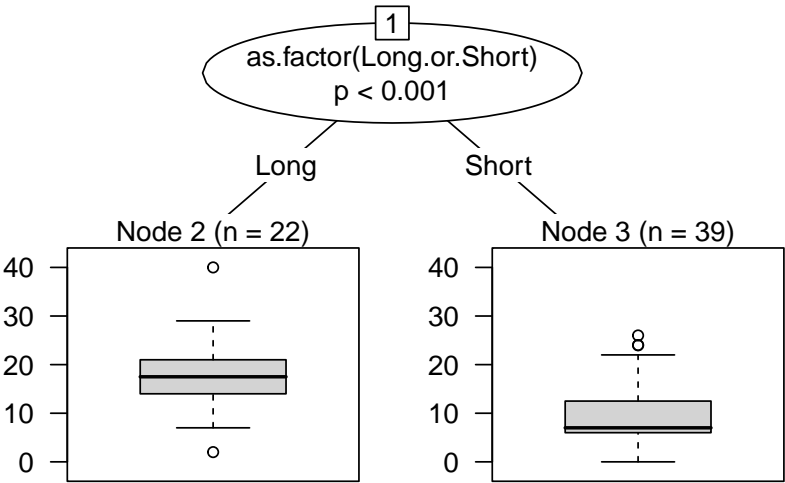
Thus, any method with some black has some attendance, and methods with larger amounts of black indicate relatively stronger responses. Thus, the highest response "intensity" are for class requirements, librarians emailing a departmental listserv directly (we have these permissions for at least two STEM 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.



2.5.2 Registration is a reasonable proxy for attendance

Chapter 3

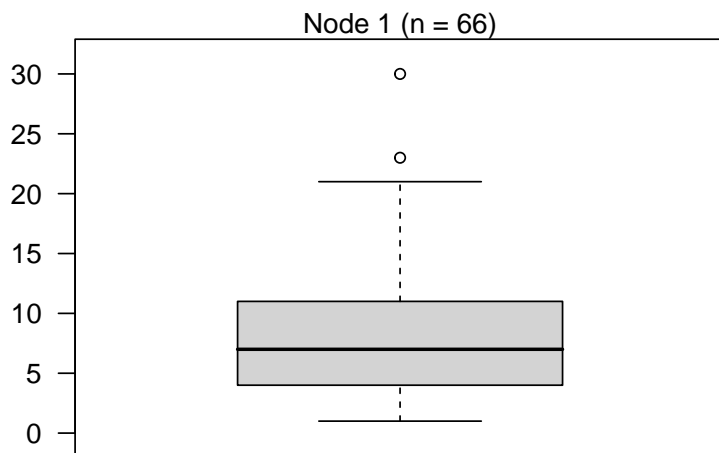
Attendance

3.1 Executive summary

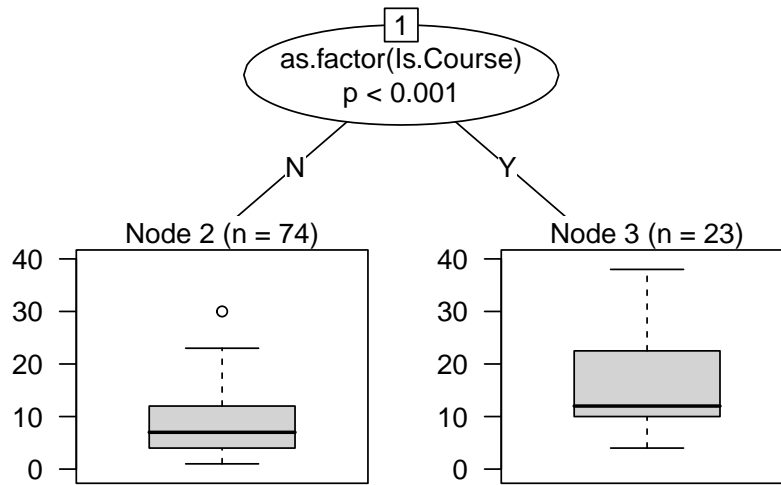
3.2 Workshop attendance by format and request

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, DSI request 2023/07) - academic year - calendar year - semester (spring, summer, or fall) - time of day - workshop topic - multi-day vs single day scheduling

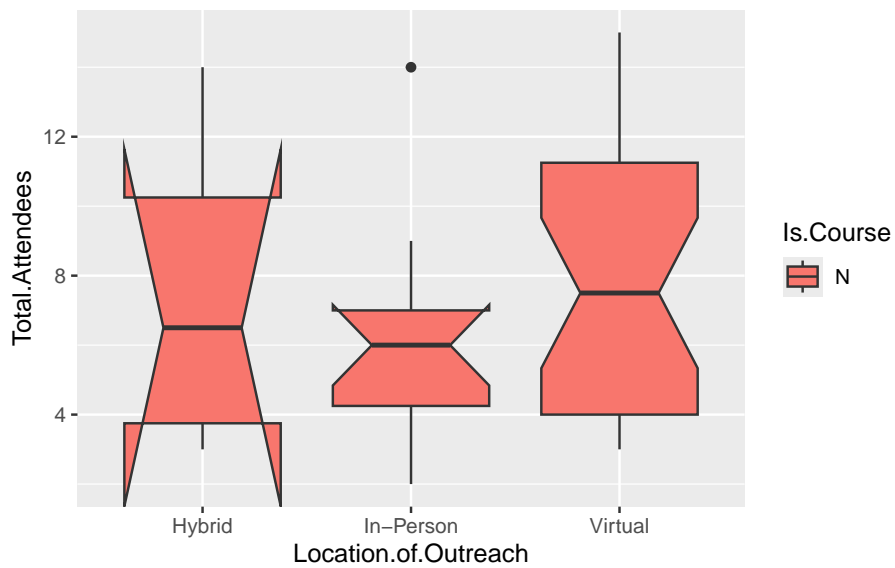


When we include whether a workshop was in a course, requested or not, and had a known three-week advertising period or not, only whether a workshop was in a course was still the only deciding factor in increased attendance numbers.



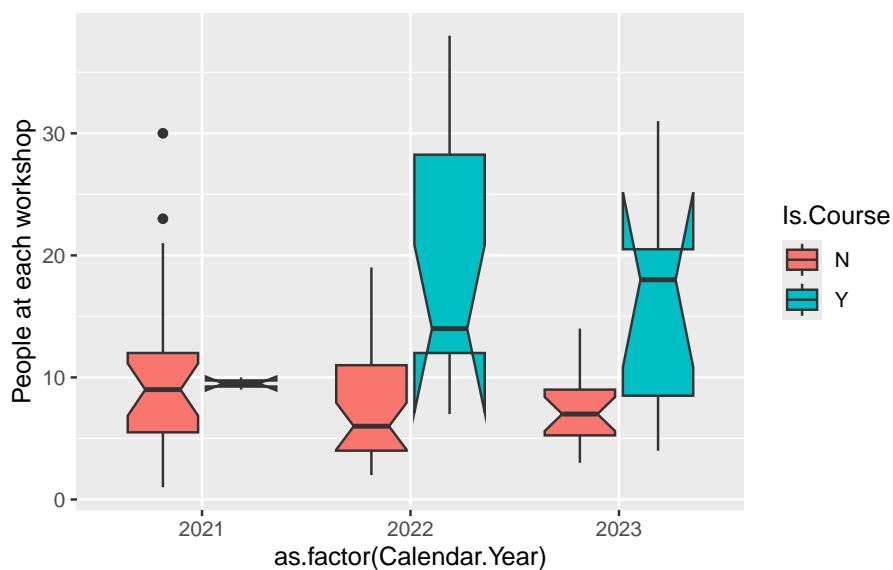
3.2.2 Figures

Format was not significant, but since it was requested, here is the figure.

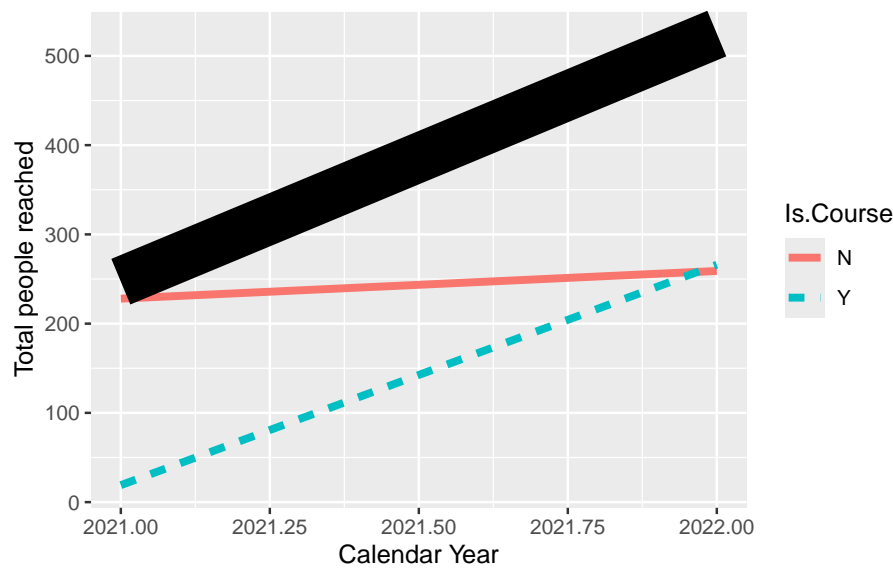


3.3 Workshop attendance over time

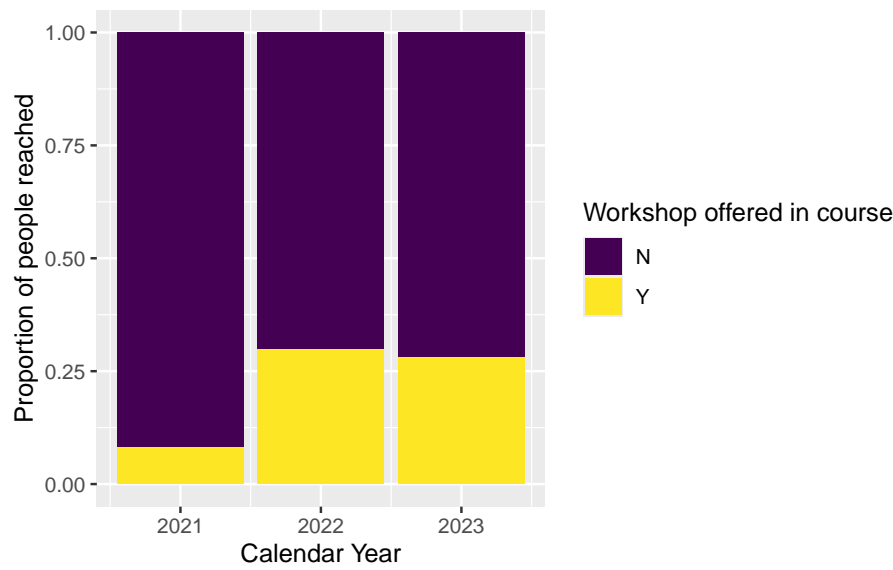
The average number of people at each scheduled workshop has stayed the same per calendar year from 2021-2023. Workshop attendance at courses is higher, presumably because most classes have to reach a certain enrolment to “make”.



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).



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



3.4 Workshop helper load for on-request workshops over time

DSI request 2023/07: - TODO: Libraries personnel to attendance ratios for On Request workshops. which high-helper topics requested more over time and do we have enough data yet, are those increasing.

Chapter 4

```
{r attendance_over_time,
echo=FALSE, message =
FALSE, warning = FALSE} #
plot_helpers <-
last_two_years_attendance[last_two_
%>% # ggplot(mapping =
aes(x =
as.factor(Calendar.Year),
# y
= helpers/Total.Attendees,
#
fill = Topic)) + #
geom_boxplot(notch = TRUE)
# plot_helpers #
```

4.1 Workshop attendance by topic

- DONE BN: modify to show
 - scheduled only
 - not on request
 - workshops with ≥ 4 runs (two years)

4.2 Workshop length vs attendance

4.2.1 length of session

- Low priority: session length vs attendance

4.2.2 Single day over multiple sessions vs two-day workshops

Chapter 5

Workshop feedback

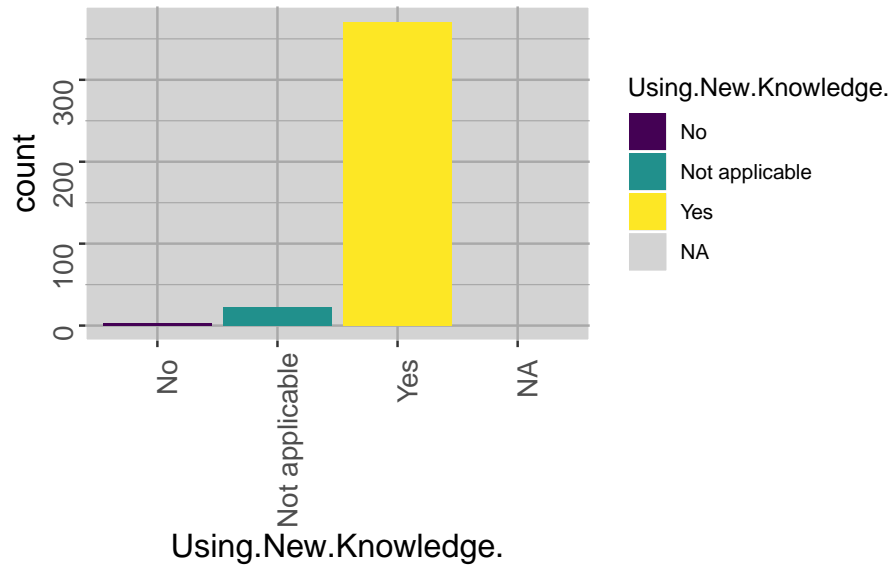
5.1 Executive summary

Tentative results suggest no difference in perception of workshop value by learners among learning formats (in person, hybrid, or online) and generally positive feedback.

5.2 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)

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

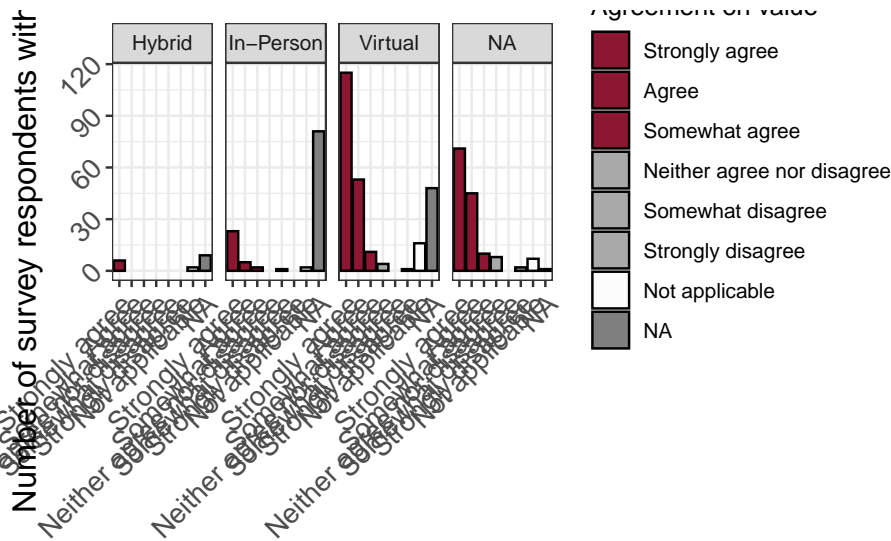


There was no significant difference in perception of learning new knowledge from the workshop among learning formats.

[1] FALSE

5.2.2 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.



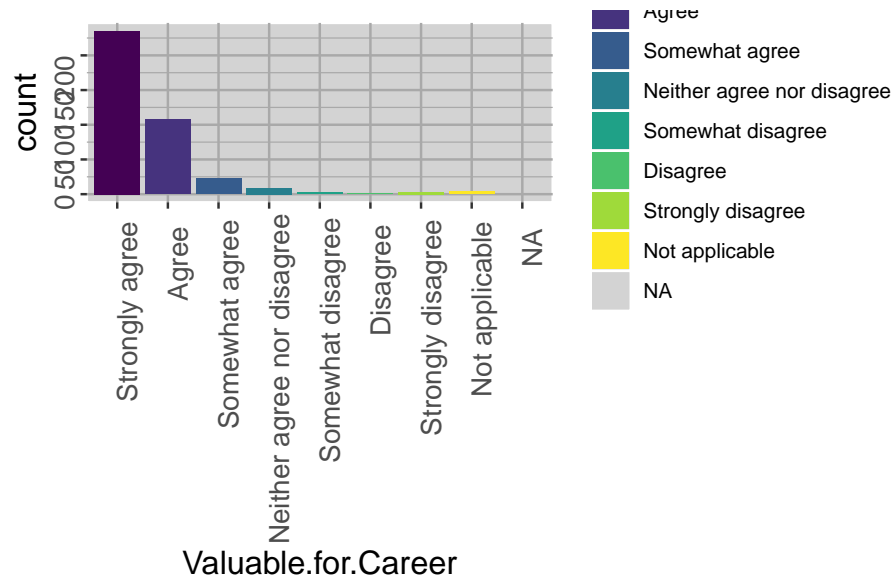
ise about value of workshop towards program of study

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

5.2.3 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).

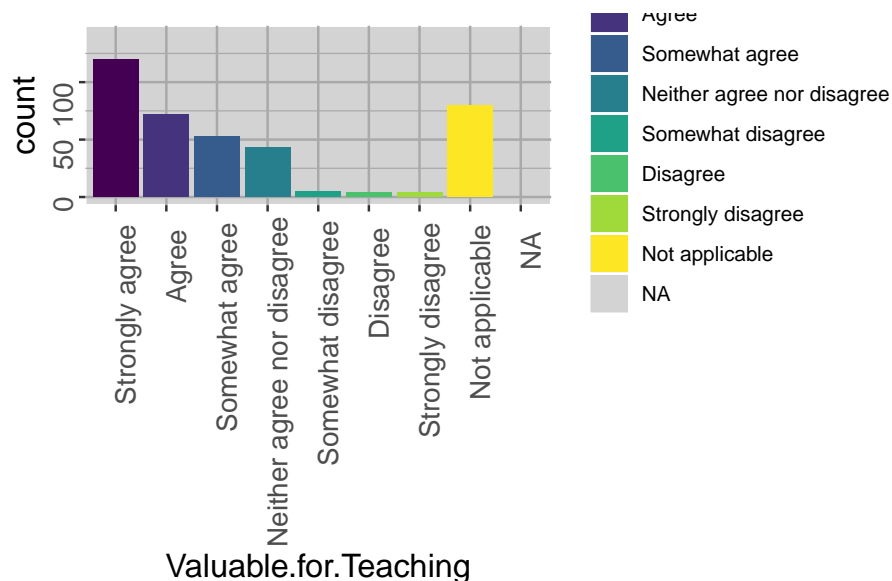
[1] FALSE

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

[1] FALSE

5.2.4 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.

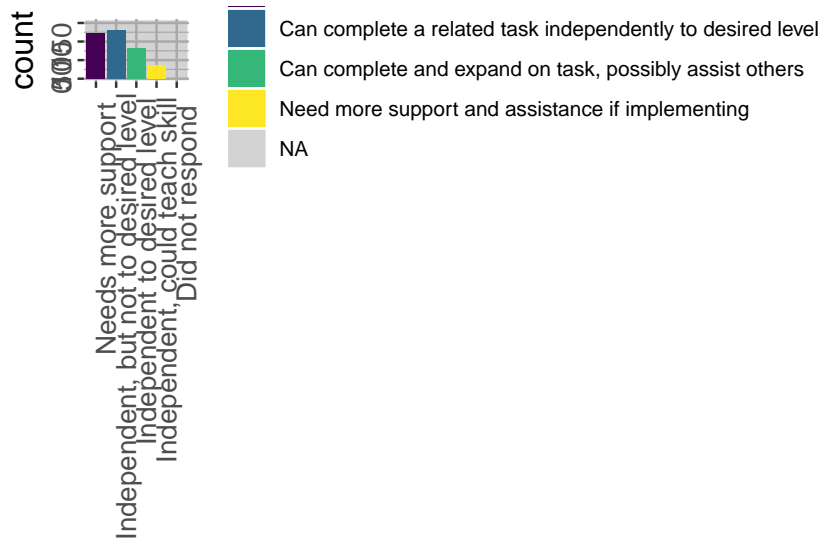


There was no difference in perception of the material as “valuable to my teaching” between workshop formats (hybrid, online, or in person).

[1] FALSE

5.2.5 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

5.3 Qualitative feedback (Wordcloud code)

5.3.1 “What did you like about the workshop?”

5.3.2 “What about the workshop needed improvement?”

5.3.3 “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.

5.3.4 “Any other comments?”

Chapter 6

Name one aspect of the workshop that you liked.



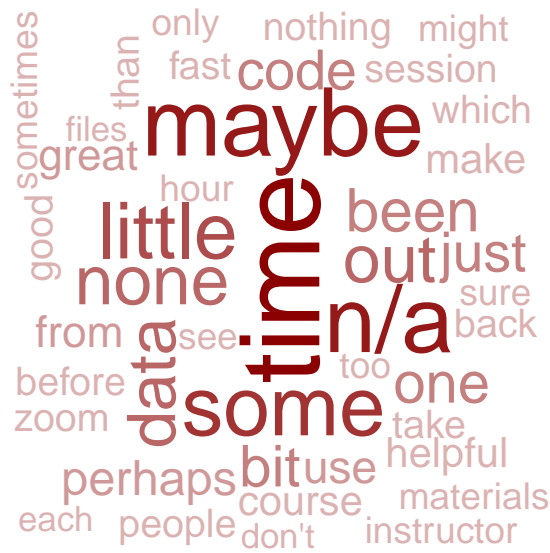
A word cloud of feedback phrases in red text. The words are arranged in a roughly rectangular shape, with some words appearing more frequently or in larger fonts than others. The phrases include: 'data', 'helpful', 'well', 'answer', 'good', 'along', 'instructor', 'hands-on', 'questions', 'examples', 'interactive', 'useful', 'follow', 'work', 'time', and 'use'.

data helpful well
answer good along time
instructor
hands-on
questions use
examples follow work
interactive useful

34CHAPTER 6. NAME ONE ASPECT OF THE WORKSHOP THAT YOU LIKED.

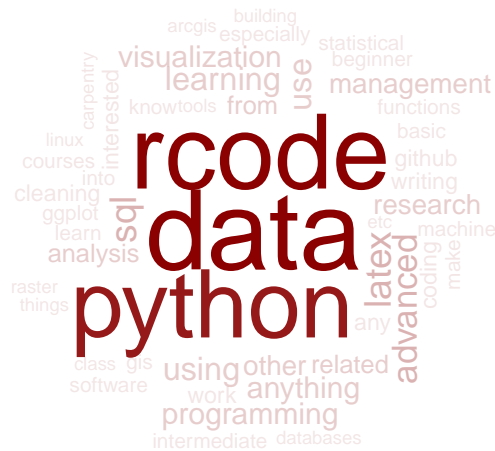
Chapter 7

Name one aspect of the workshop that could be improved.



Chapter 8

What other workshop topics would interest you?



Chapter 9

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



Part II

Per-workshop descriptive statistics

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

Chapter 10

Concepts of Data-Driven Visualization

[Link to OSF.](#)

10.1 Descriptive numbers

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

10.2 Attendance

10.2.1 Over time

10.2.2 By semester

10.3 Marketing

10.3.1 Over time

10.3.2 By semester

10.4 Satisfaction

10.4.1 Over time

10.4.2 By semester

Technical details

Data sources and processing

Are available in `Data_munging.R`

Book info

This document was created are using the **quarto** package [?] to format this book.