STEM Instructor Motivations for Collaborating with Librarians in Instruction

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IUPUI

Take Aways

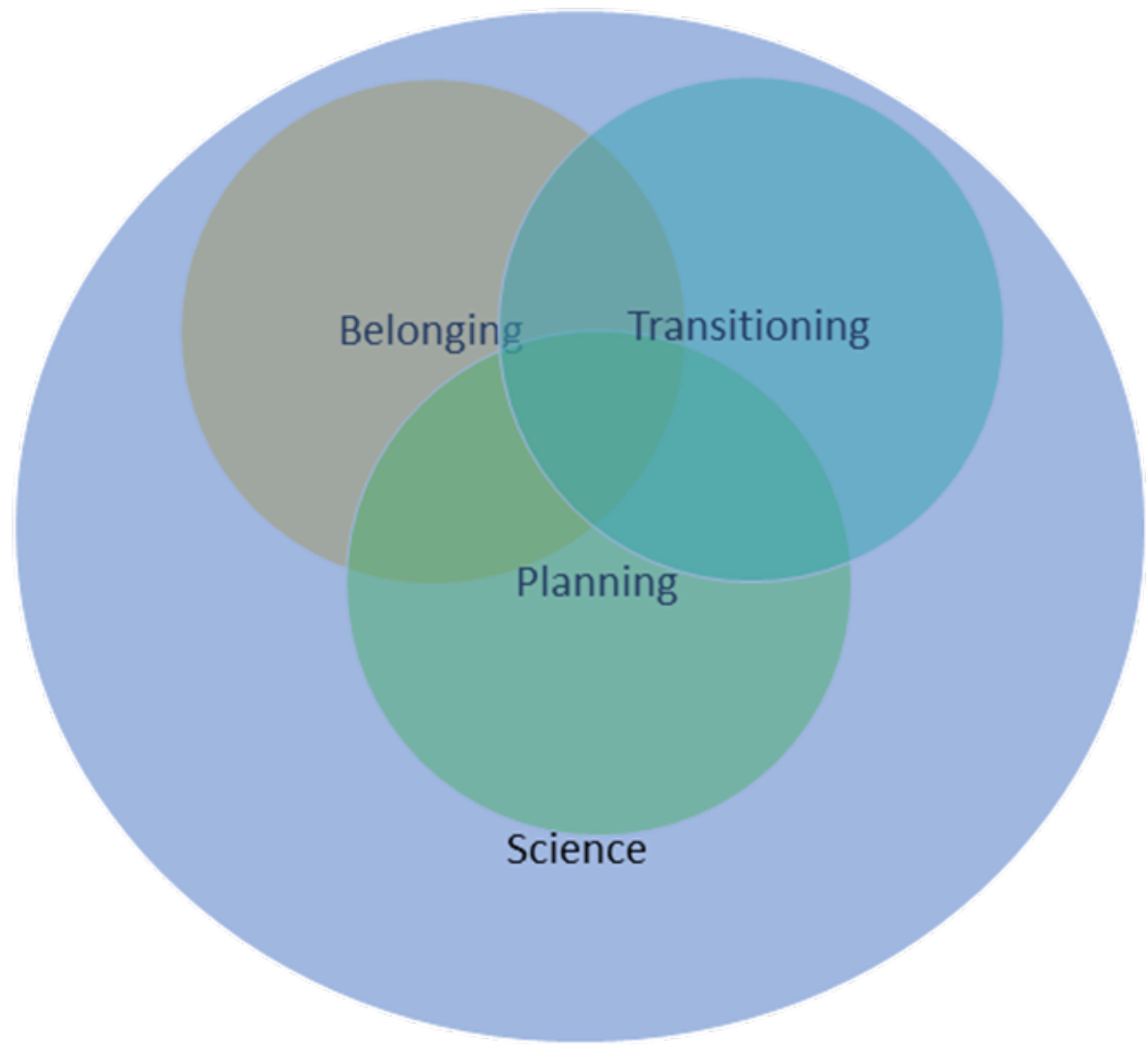What is one thing you can apply to your context/practice?

Institutional Context
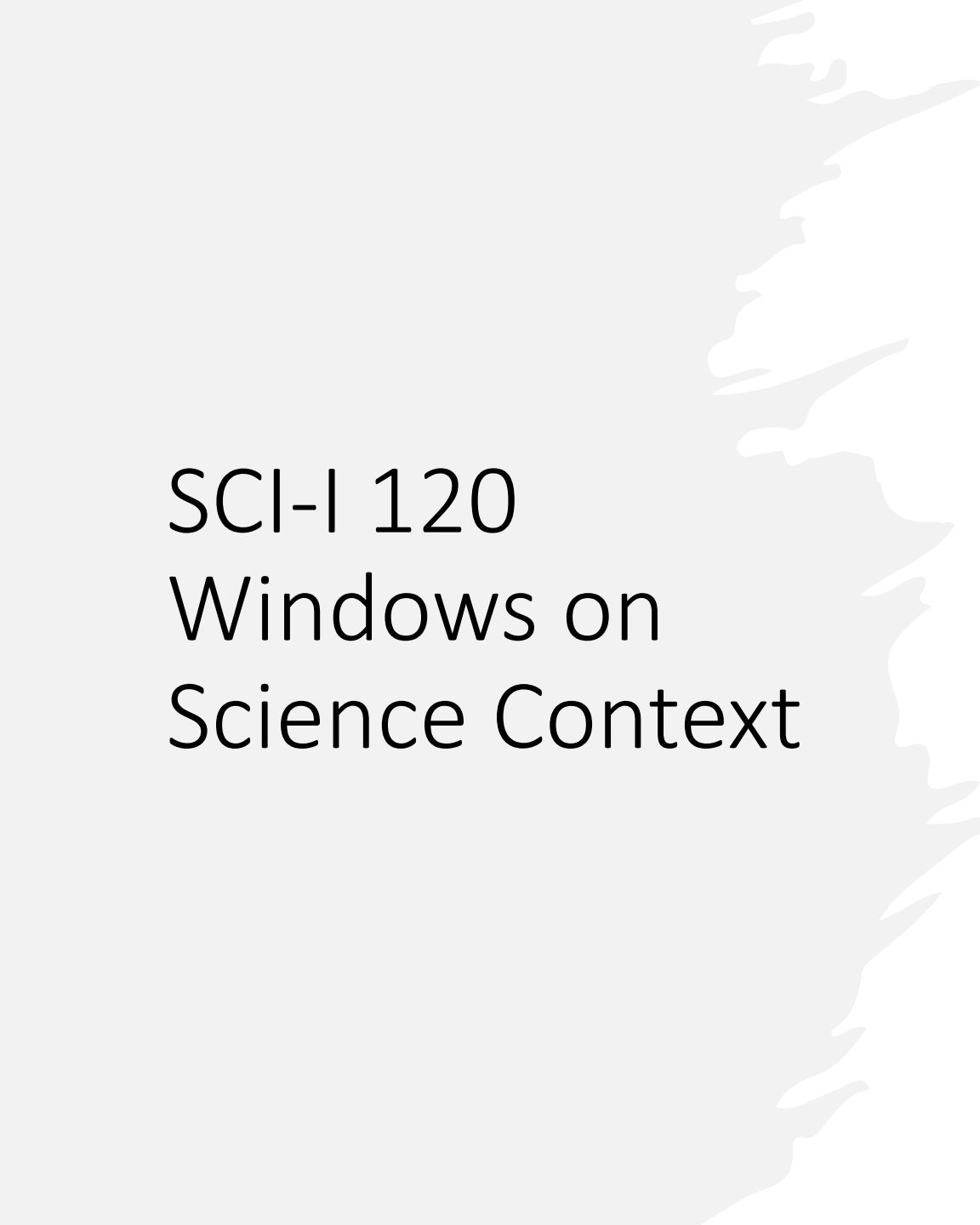
Indiana University
Purdue University
Indianapolis (IUPUI)
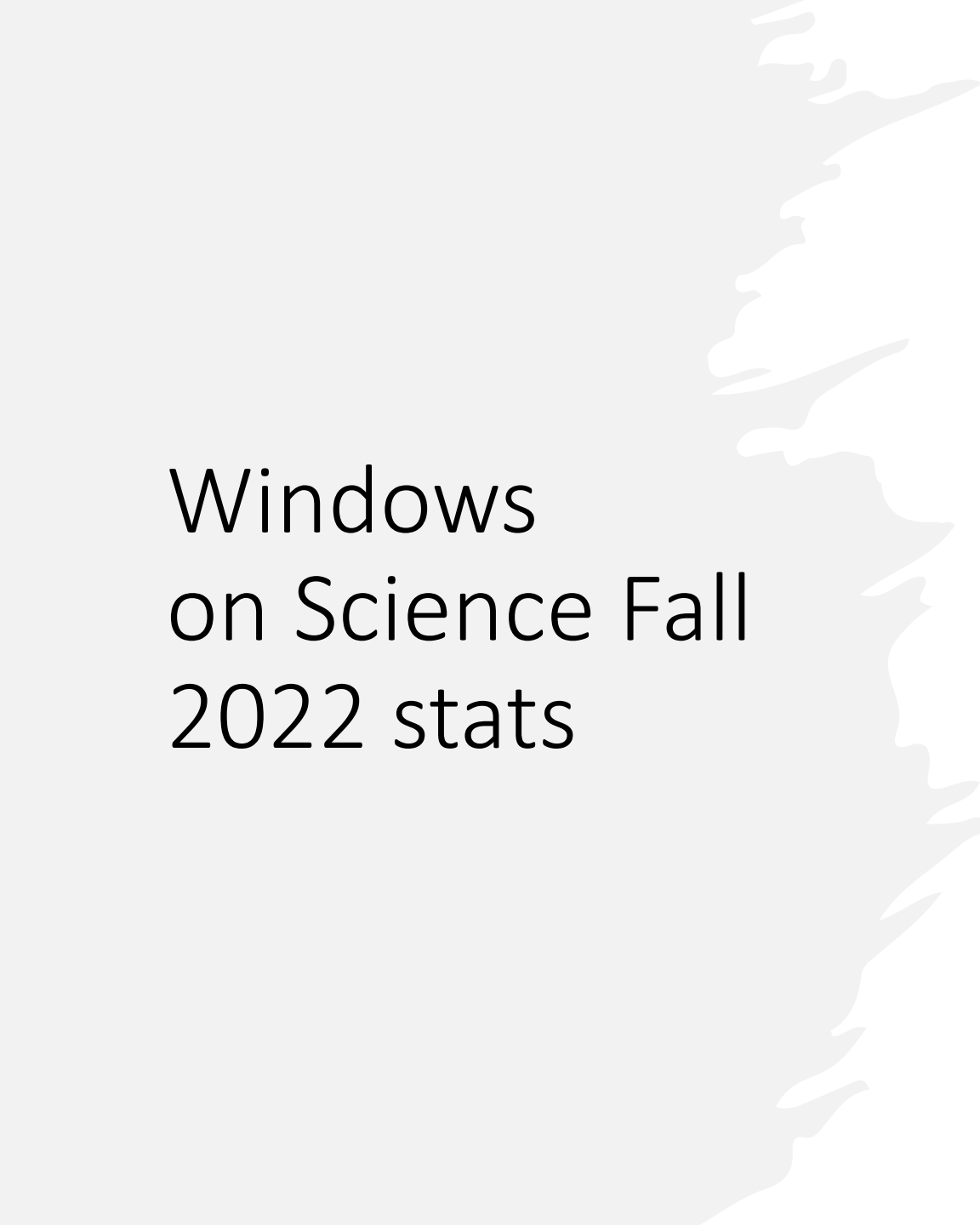
SCI-I 120 Windows on Science

SCI-I 120 Windows on Science Context

- First year seminar courses taught by both University College and degree-granting academic schools
- SCI-I 120 course has shared outcomes but section differences (i.e. general science, major focus, theme, learning community, required service, etc.)
- Updated Learning Outcomes and launched in Fall 2019. Outcomes that include collaboration with library colleagues:
  - Identify campus and science resources for academic success
  - Demonstrate how to evaluate information sources and use academic inquiry tools
- It is required that course included activities and/or assignments related to information literacy and conducting research
- Team approach to course – faculty, mentor, librarian, academic advisor
- Campus changes to first year seminar
- Working group focused on SCI-I 120 and library collaborations in 2021-2022 semester

Windows on Science Fall 2022 stats

- Open to science /pre-science students

- Sections capped at 25 students

- 28 sections offered

- 27 sections included summer bridge component

- 2 sections cross-listed with another academic school

- 584 students enrolled

- Instructors are a mix of faculty (tenure track and teaching, professional staff, and graduate students (most graduate students involved in bridge portion of the course only). All receive small stipend for teaching.

Information Literacy

Thinking critically about information in order to find, evaluate, use, share, and create information ethically and effectively.

The Research

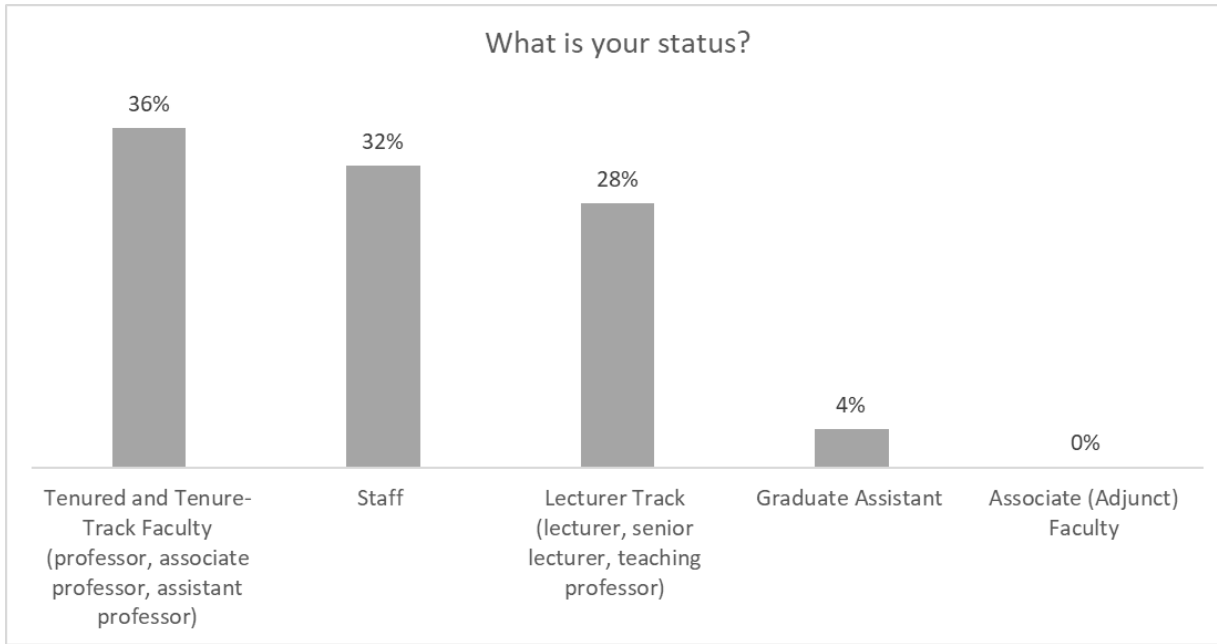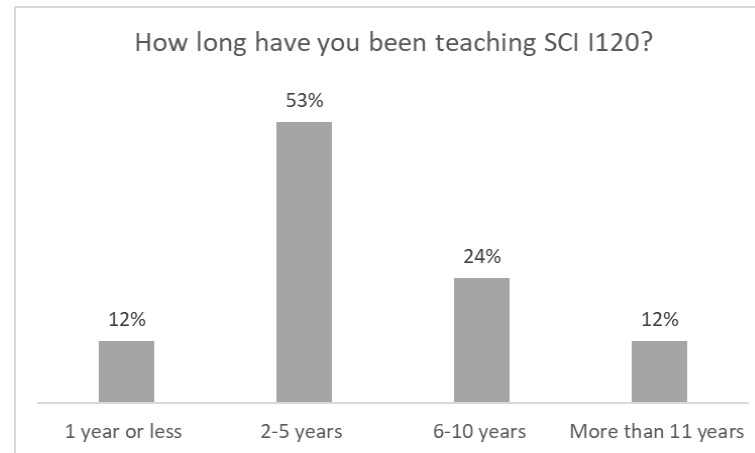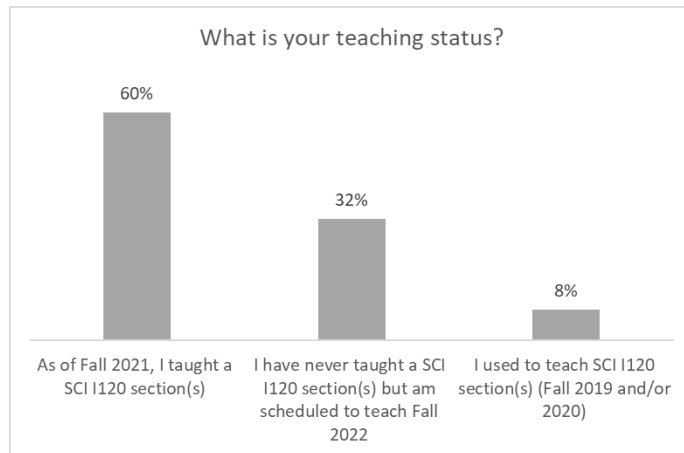# Background and Rationale

Research
Design

Demographics

N=26

What is your status?

Tenured and Tenure-Track Faculty (professor, associate professor, assistant professor)	36%
Staff	32%
Lecturer Track (lecturer, senior lecturer, teaching professor)	28%
Graduate Assistant	4%
Associate (Adjunct) Faculty	0%

What is your teaching status?

As of Fall 2021, I taught a SCI I120 section(s)	60%
I have never taught a SCI I120 section(s) but am scheduled to teach Fall 2022	32%
I used to teach SCI I120 section(s) (Fall 2019 and/or 2020)	8%

How long have you been teaching SCI I120?

1 year or less	12%
2-5 years	53%
6-10 years	24%
More than 11 years	12%

Findings

Qualitative Data

Librarian Collaboration

Do/did you collaborate with librarians in an instructional context in your SCI-I 120 courses?

Yes | No | No response

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Librarian Collaboration

You indicated yes, you collaborate with librarians in an instructional context in your SCI-I 120 courses. Please explain your rationale or motivation for collaborating.

11/26 (about 43%) answered this question.

- One response - they used to work with their assigned librarian but do not anymore since math and physics majors don't really need library services. They used to have Psychology and Biology majors in the class.

- Another said they worked with the library once their first semester while teaching a TLC (themed learning community)
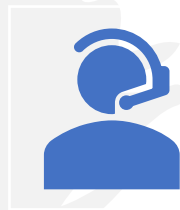
Librarian Collaboration Themes
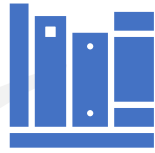
Learn about library resources and how to find/access them

Finding/using/evaluating/ citing quality resources

Information literacy (2)- help students throughout their college years/prepare them for research (one mentioned info lit as a learning outcome for the course)

Contact person/expert for research help, go-to person when they have questions (2)

Encouraged to work with library from past supervisor who taught the class before
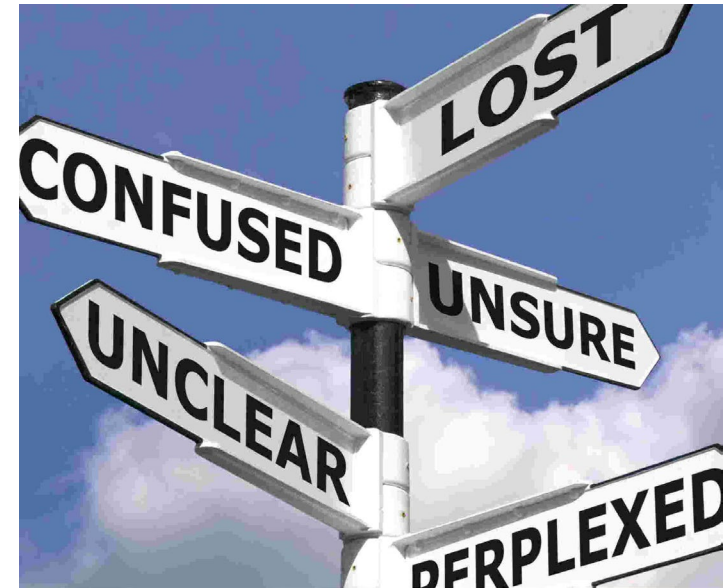
Assign papers/assignment so they (students) can put what they learn into practice/help them complete the assignment (3)

Librarian Collaboration

You indicated no, you do not collaborate with librarians in an instructional context in your SCI-I 120 courses. Please explain your rationale or motivation for not collaborating.
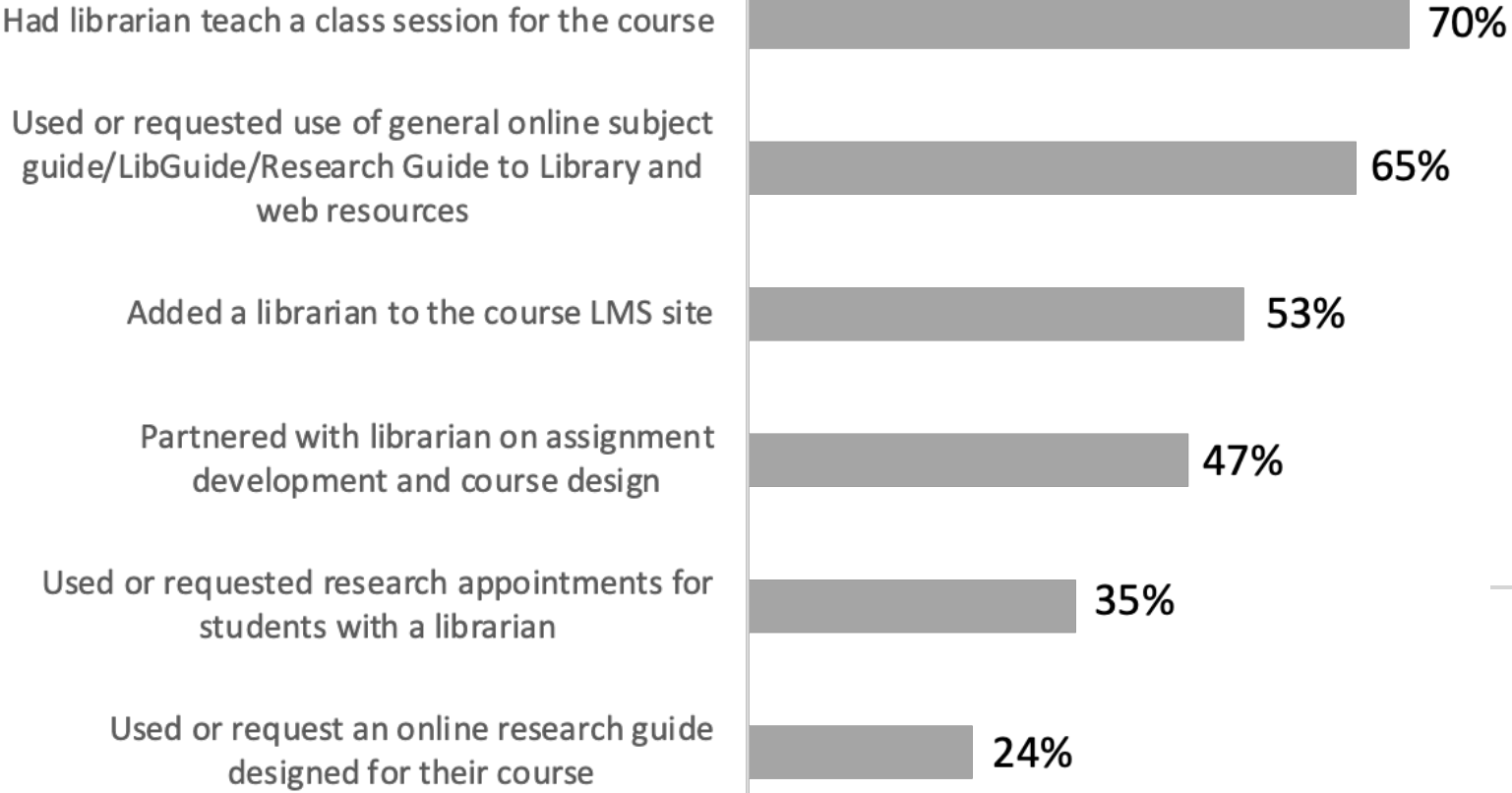
Two responses:

· "My section was entirely focused on students in majors that do not incorporate the library in a significant way. They might have occasional assignments as part of gen ed courses, but the majors' courses use other resources" (has taught class 2-5 years)

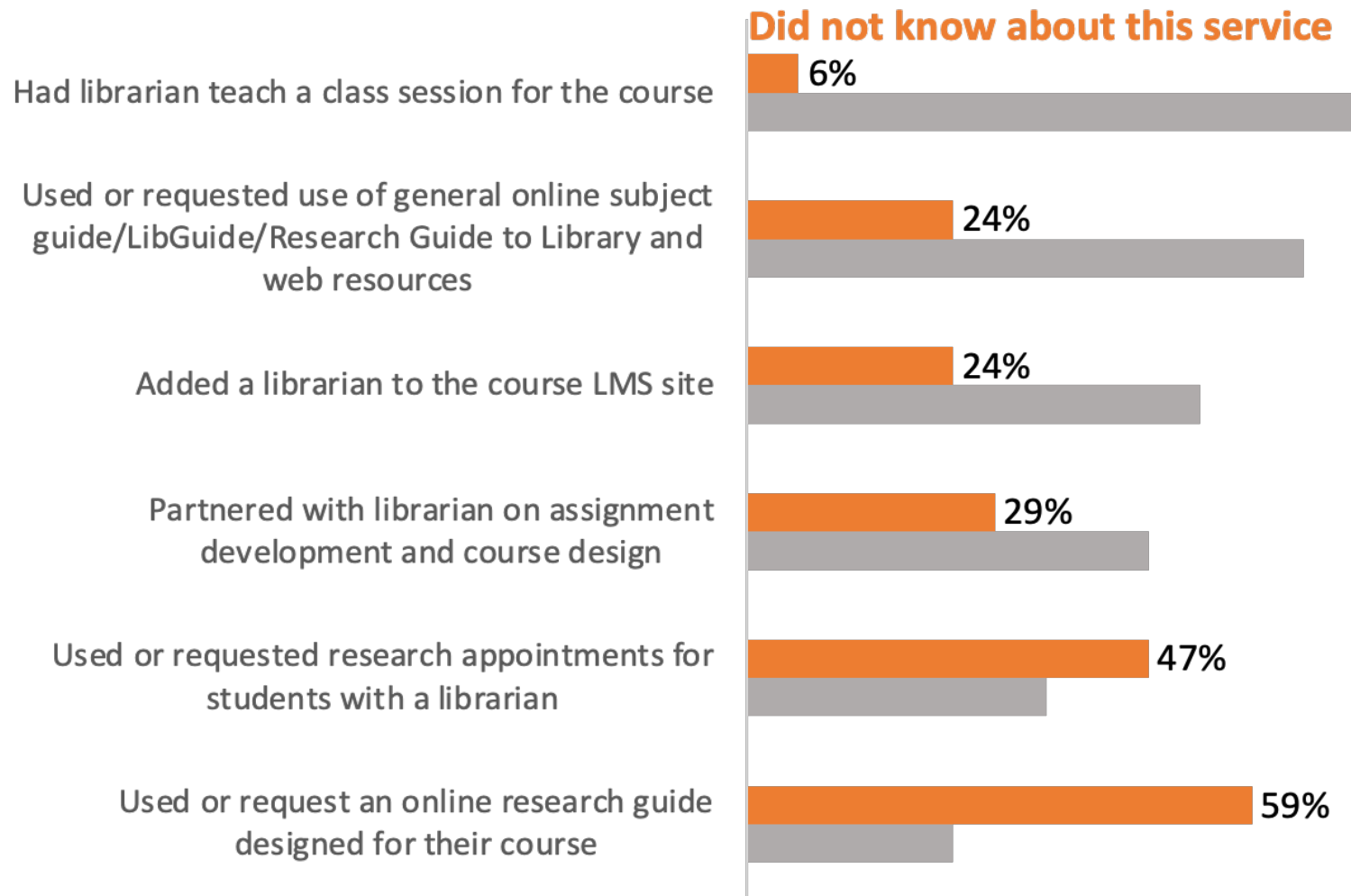· "... didn't really know how to connect" (has taught the class more than 11 years)

Library Services Offered and Utilized

Did not know about this service

Had librarian teach a class session for the course — 6%

Used or requested use of general online subject guide/LibGuide/Research Guide to Library and web resources — 24%

Added a librarian to the course LMS site — 24%

Partnered with librarian on assignment development and course design — 29%

Used or requested research appointments for students with a librarian — 47%

Used or request an online research guide designed for their course — 59%

Library Services Offered but *not* Utilized
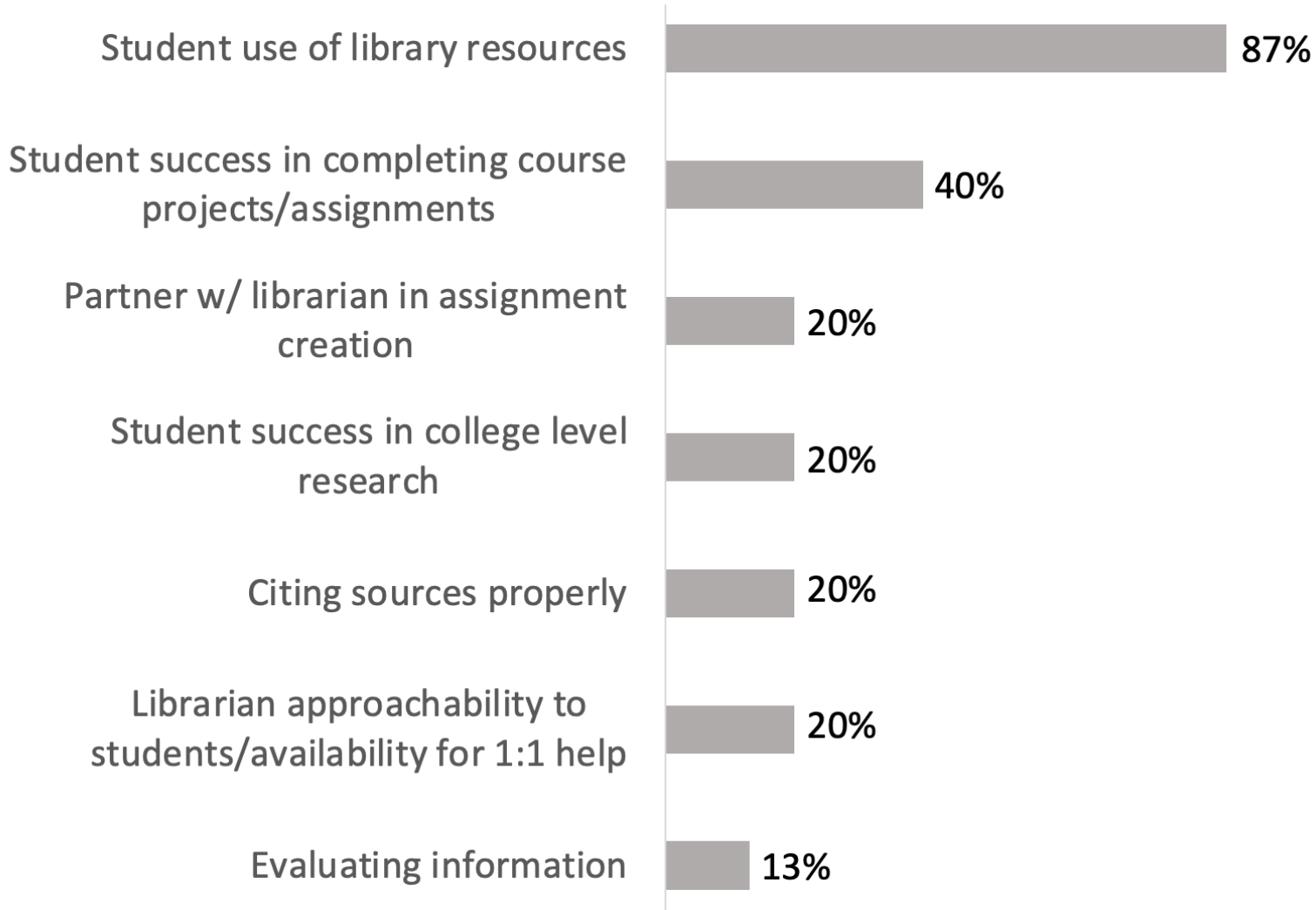
Quotes to illustrate themes, goals for collaboration

Student use of library resources:

- "I see the librarian as a vital asset to the course - they can introduce students to college-level research and help them explore the wide variety of tools and resources available to them."

- "Learn how to use the e-journal site within the library"

Student success in completing course projects/assignments:

- "Use the librarian's knowledge of the library and the resources to better help students with projects in the course as well as throughout undergraduate career."
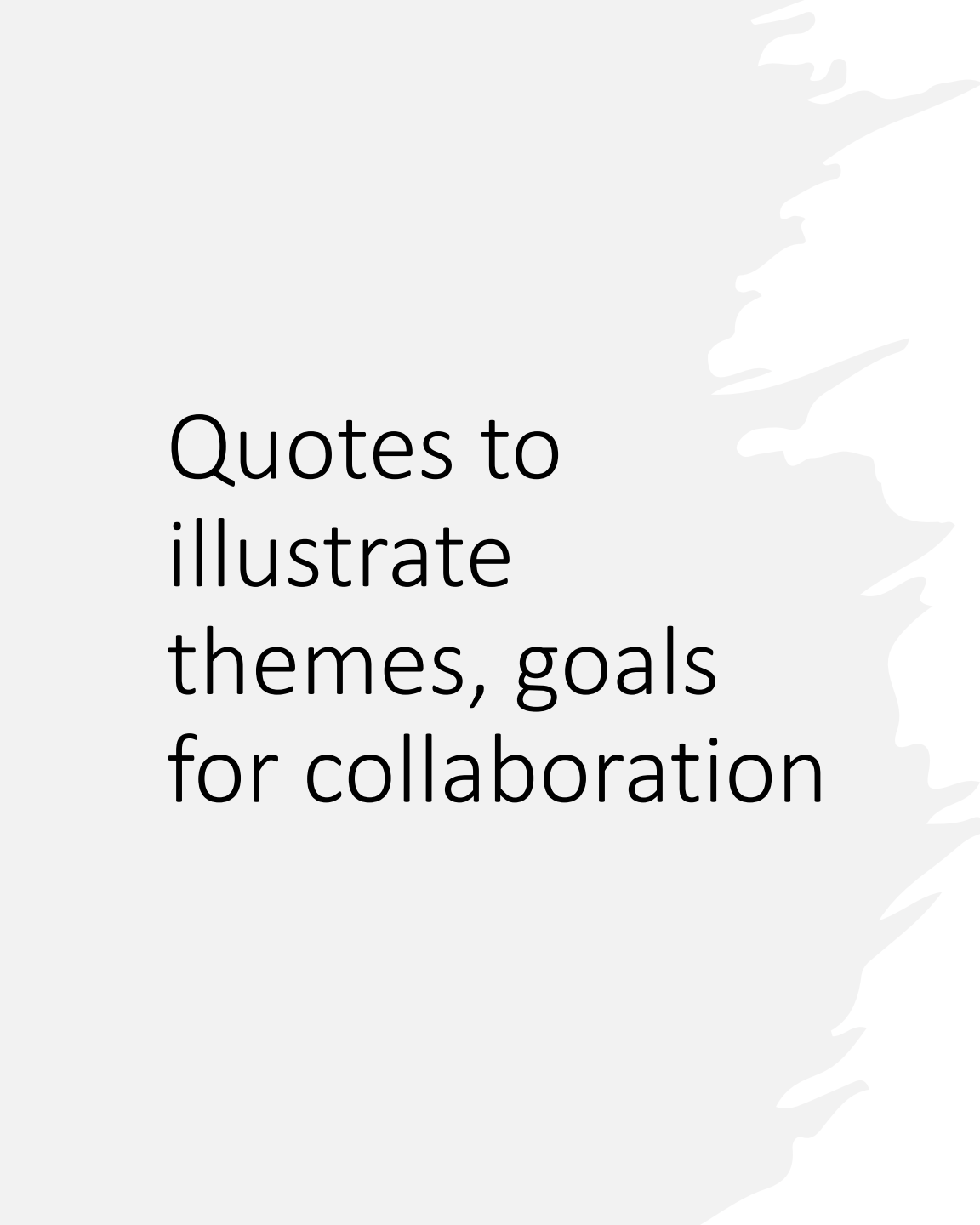
Citing sources properly:

- "to teach them how to use the peer-reviewed literature to cite statements in scientific writing"

Partner with librarian in assignment creation

- "I would also be interested in learning about other ways a librarian can partner with me on integrating resources into certain assignments or connecting one on one with students who need additional support."

Quotes to illustrate themes, goals for collaboration

Evaluating information

- "I also hope the librarian will present to students on how to evaluate credible vs noncredible sources."

Relationship with Librarian

- "I hope to gain as much knowledge as possible from an experienced librarian who can speak to the success and challenges students face. I hope that I can bring in my previous experiences of serving students on other campuses to support the librarians and how to save time by seeking help earlier than later. If others see an area where instructors can better help students and meet a need before it becomes an concern, I want to take that feedback and include it whenever possible."
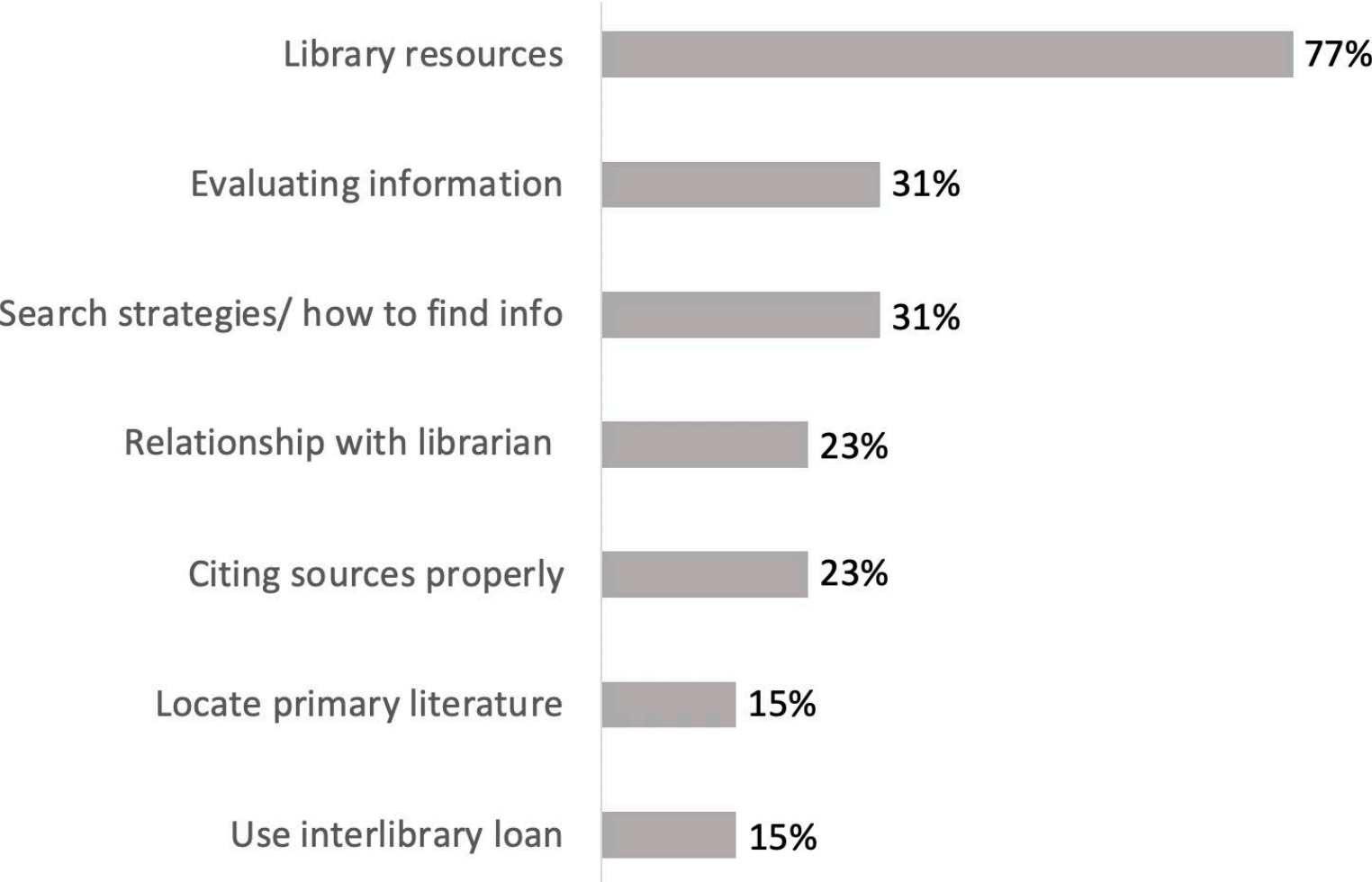
None/nothing written

- "My section was entirely focused on students in majors that do not incorporate the library in a significant way. They might have occasional assignments as part of gen ed courses, but the majors' courses use other resources."

Library resources — 77%
Evaluating information — 31%
Search strategies/ how to find info — 31%
Relationship with librarian — 23%
Citing sources properly — 23%
Locate primary literature — 15%
Use interlibrary loan — 15%

Hopes for Student Learning

Quotes to illustrate themes, hopes for learning

Library resources

- "My learning objectives include being able to describe how to use the library website for both research purposes but also to reserve study rooms, access technology, borrow materials through interlibrary loan, etc. I also want students to understand how to find different kinds of resources (books, journals, etc.) and how to narrow their search within different databases to effectively find the materials they need."

Evaluating information

- "Students now have access to almost infinite amounts of information, but not all of it is helpful, accurate, or useful. I hope that students would learn how to discern how to find and use information; as well as learn how research and fact-checking can be useful in and out of the classroom."

Search strategies/how to find information

- "Learn how to use the e-journal site within the library = learn how to become practiced in finding the information they need within a journal. This can be a very frustrating process."

Quotes to illustrate themes, hopes for learning

Relationship with librarian – feeling comfortable getting support

- "I hope students will learn how to use library research resources and feel comfortable reaching out to their librarian for assistance."

- I hope the students will feel comfortable accessing the library and its resources, and perhaps with specific librarians to reach out to for help.

- "Feel comfortable approaching the subject librarian for future projects."

Citing sources properly

- "Learn how to properly cite journal articles and websites."

- Locate primary literature

- "Use primary literature to evaluate hypotheses, construct a statement for scientific writing"

Most helpful theme quotes

Long-term relationship with librarian

- "I have worked with the same librarian over the last 4 years. This has been incredibly helpful as he knows a little about my class, the assignments that I typically use…,"

Librarian skills and expertise

- "great about presenting the material to the students in a way that is not dry."

- "Using their expertise to teach students about the library and resources. Introduce students to a librarian dedicated to their area of study."

- "I cannot think about a situation where my instructional librarian was not useful. I just wish I had more assignments that incorporate them."

In person visit to library – reserve lab space

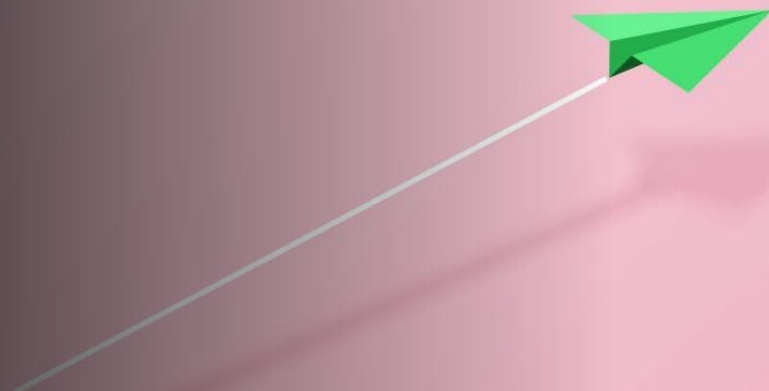- "An in-person visit to the library was most helpful"

Least helpful

- No clear themes – all unique responses
- Variety of answers including:
  - scheduling logistics of assigning librarian to class
  - availability of librarian to attend class
  - presentation style of librarian
  - campus changes to course requirements

Implications

Next Steps/Actions

Take Aways

What is one thing you can apply to your context/practice?

Further Reading

Association of College and Research Libraries. (2016). *Framework for Information Literacy for Higher Education*. https://www.ala.org/acrl/standards/ilframework

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