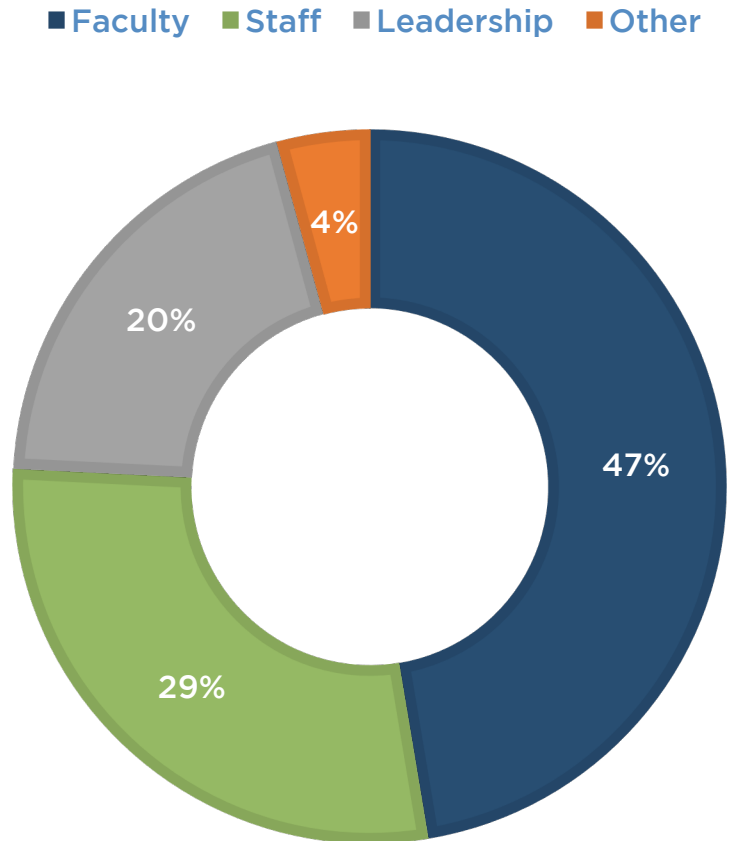


2022 Experiential PBL Benchmark Survey

Click through for results



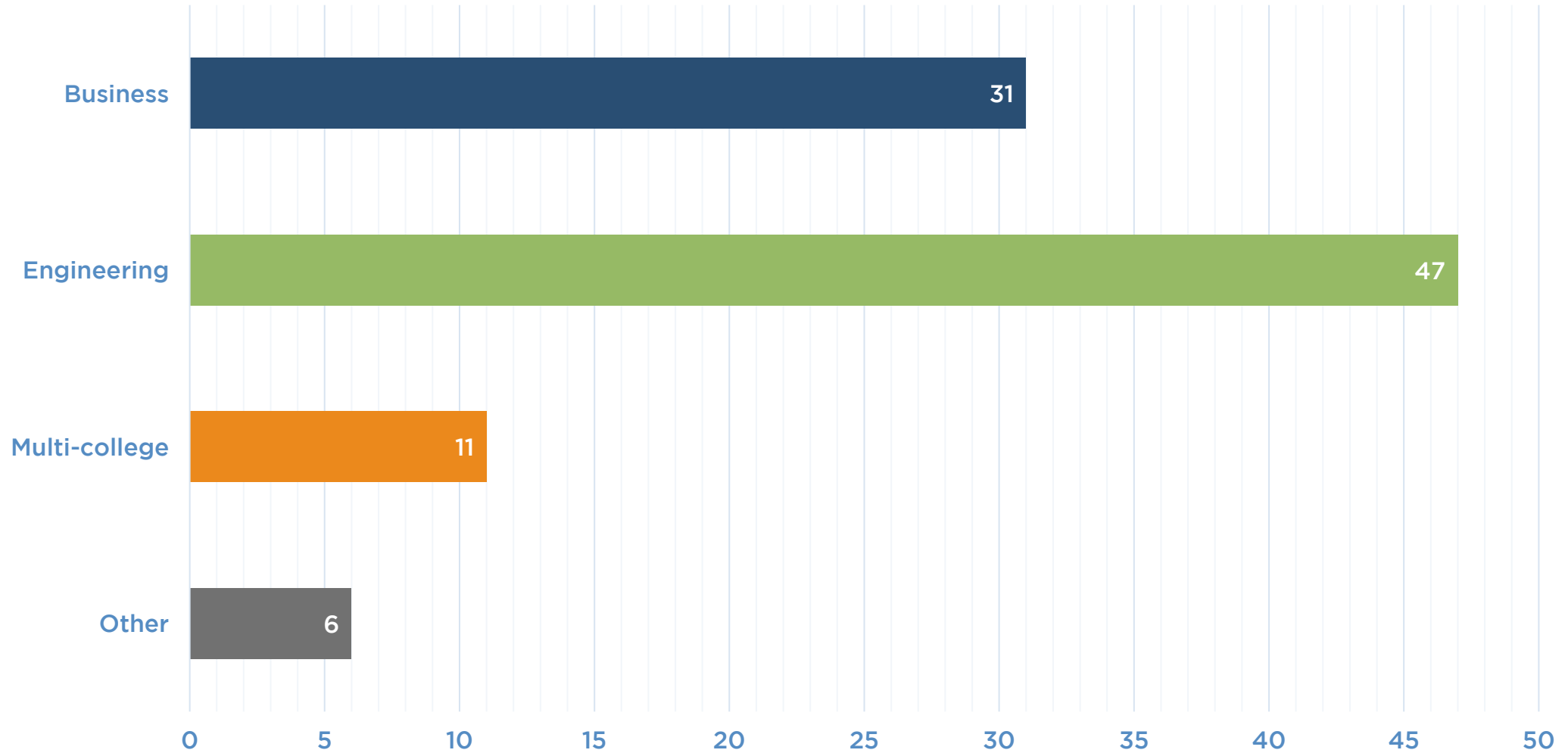
Who Participated?



95
Participants
From
83
Schools

84%
Directly Involved
with Experiential

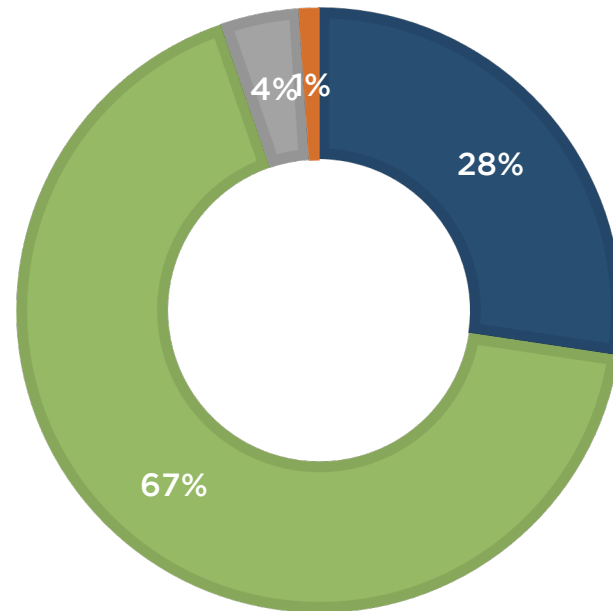
Participant Distribution



Are Live Clients Involved?

ALL DISCIPLINES

- Yes, for all projects
- Yes, for some projects
- No, our projects are internal
- No, we do not use projects

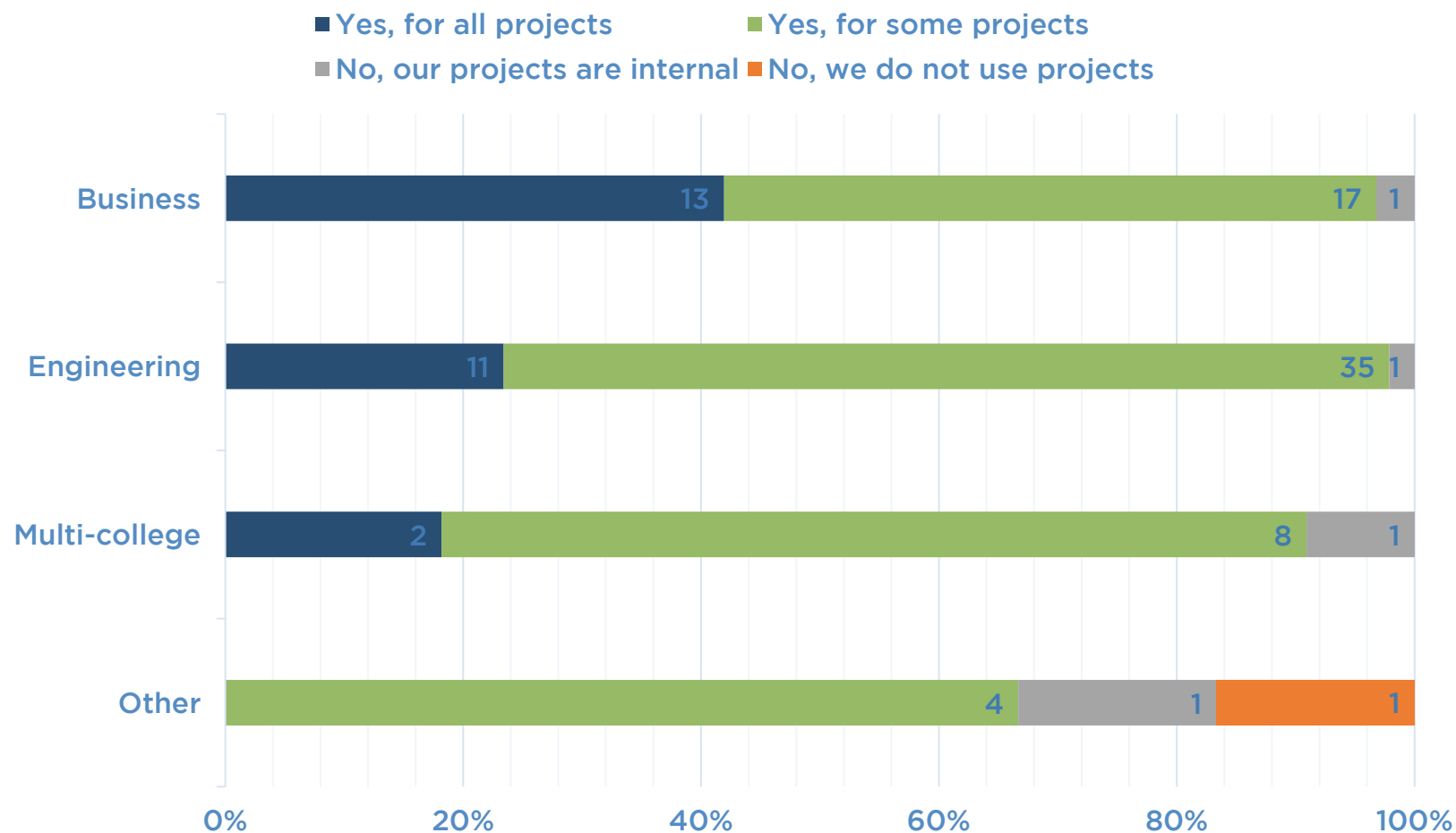


Live Clients Year over Year, All Disciplines

2022		2021
95%	↑	90%

n = 95

Live Client Involvement by Discipline

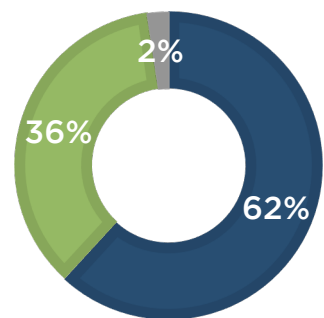


n = 95

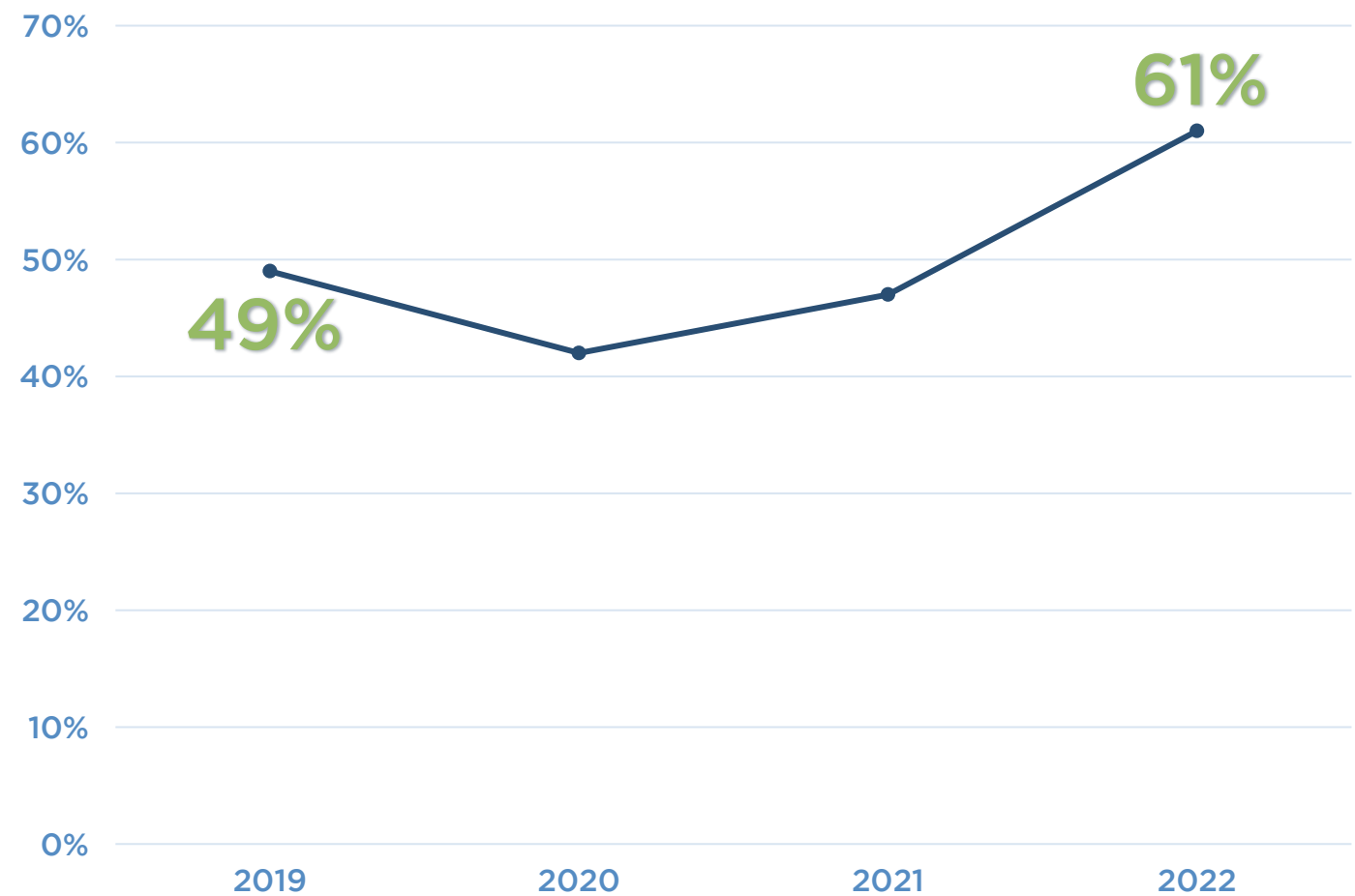
Required Experiential PBL Program?

2022 ALL DISCIPLINES

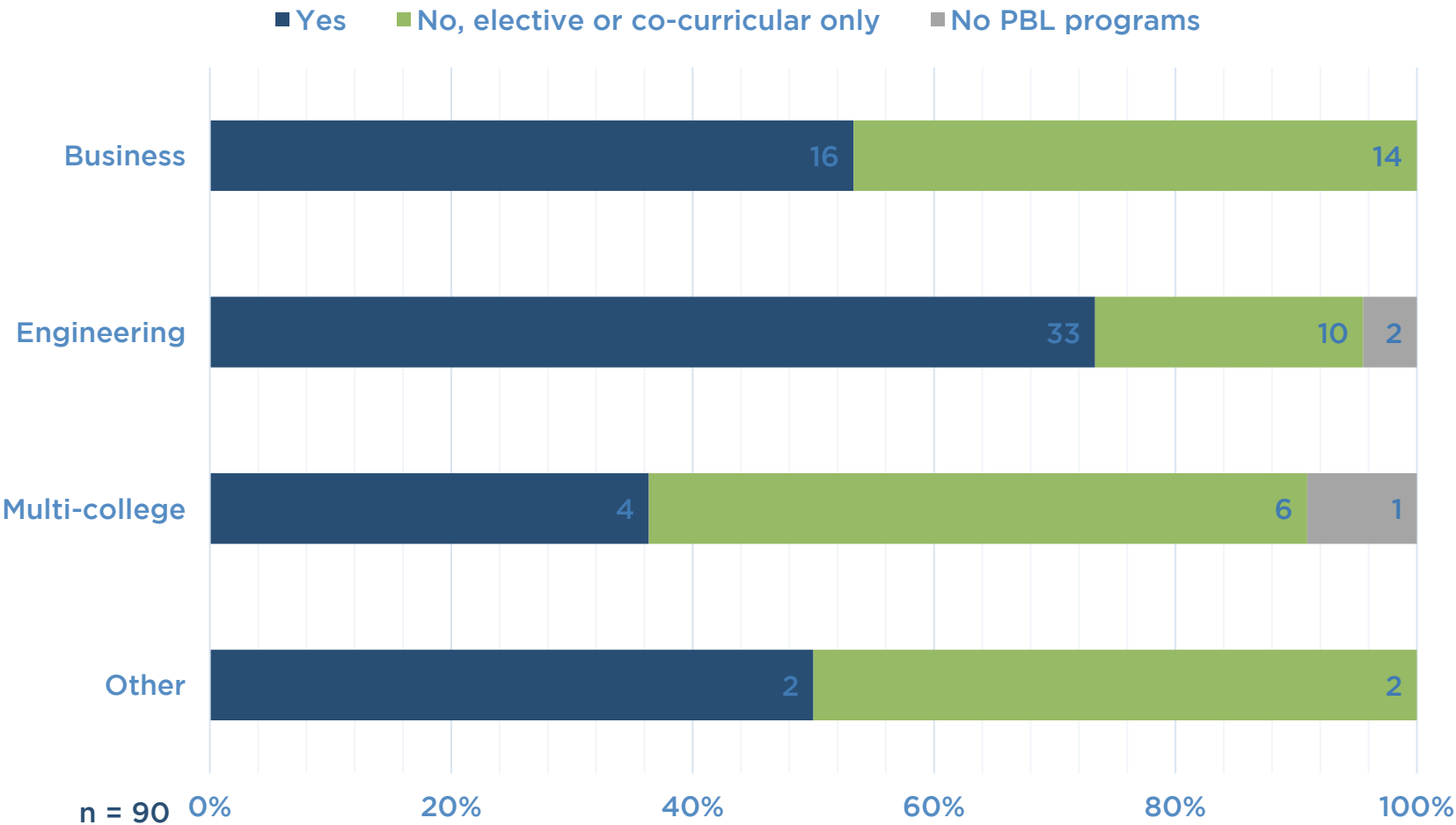
- Yes
- No, elective or co-corrucular only
- No PBL Programs



n = 90



Required Experiential PBL Program?



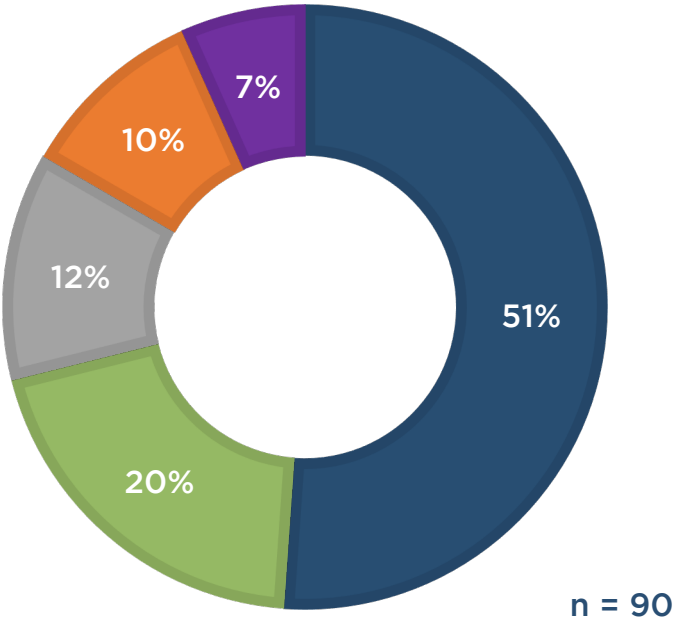
73%
Engineering Programs
Requiring PBL

53%
Business programs
Requiring PBL

Do You Charge a Project Fee?

ALL DISCIPLINES

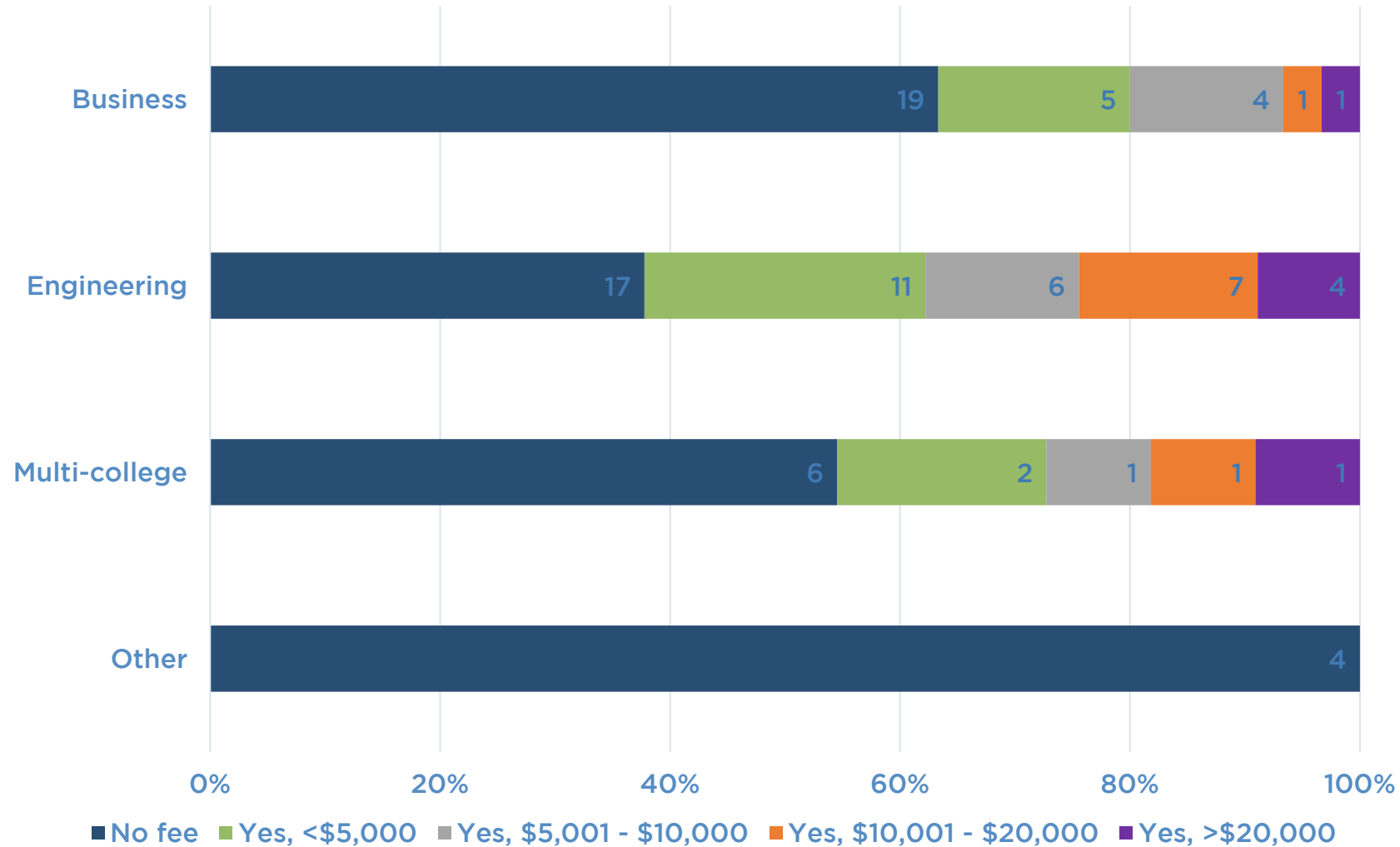
- No fee
- Yes, <\$5,000
- Yes, \$5,001 - \$10,000
- Yes, \$10,001 - \$20,000
- Yes, >\$20,000



Any Fee Year over Year, All Disciplines

2022		2021
49%	↑	37%

Project Fees by Discipline



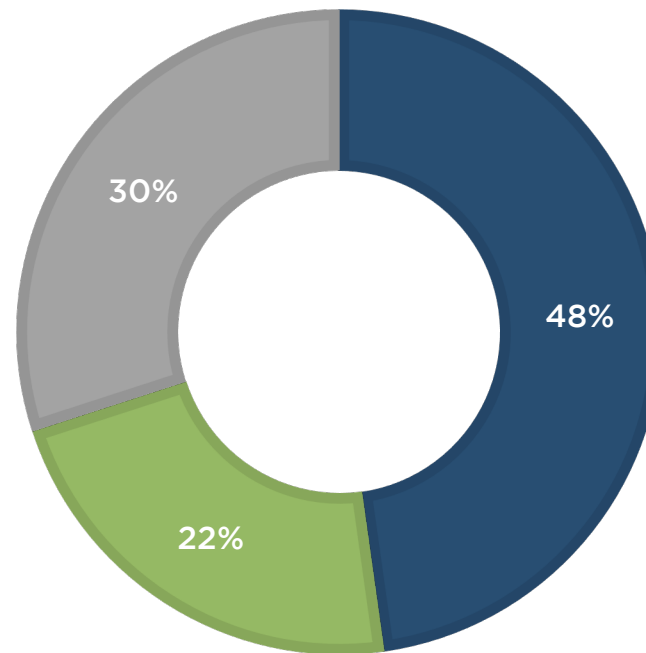
Any Fee Year over Year	
2022	2021
37% Business	33%
62% Engineering	50%

n = 90

Does Your Program Include Multidisciplinary Projects?

ALL DISCIPLINES

■ Yes, within the college ■ Yes, across colleges ■ No

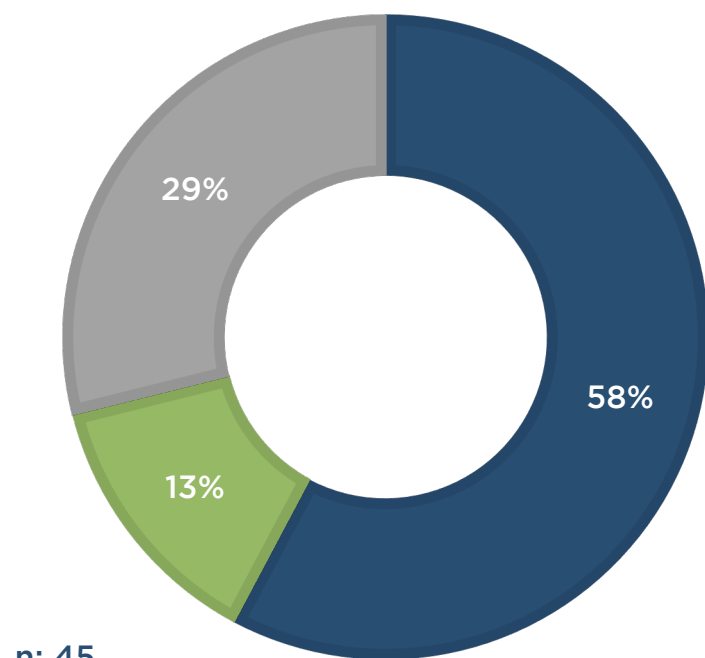


n: 90

Multidisciplinary Projects by Discipline

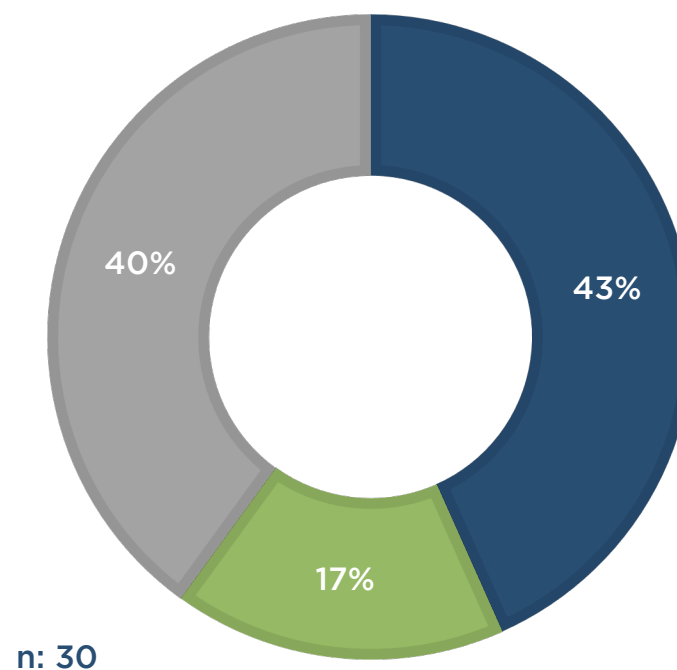
ENGINEERING

■ Yes, within the college ■ Yes, across colleges ■ No



BUSINESS

■ Yes, within the college ■ Yes, across colleges ■ No



Year over Year Trend:

Engineering: **-4%**

Business: **-2%**

2020 was the last year we measured significant change in multidisciplinary (increase).

Experiential Innovations

Incorporating elements of character development and entrepreneurship.

We are launching multidisciplinary and mixed academic program projects.

We have implemented scaffolding of iterative assignments to ensure students get feedback on initial submissions which can then be improved. The assignments are each a part of the final design documentation that is submitted at the end of the project.

Experiential Innovations

Combining engineering skills with business and leadership development.

Sales engineering (partnership between sales and engineering programs)

More intentionality around project matching with student needs.

Orientation lunches for the employer mentors that will work with our student teams. It's helped to set expectations and provide clarification.

Formal Director or Office of Experiential?

Business

63%

n: 30

Multi-college

26%

n: 11

Engineering

40%

n: 45

Overall

48%

n: 90

Year over Year Trend

Business

+23%

Multi-college

-19%

Engineering

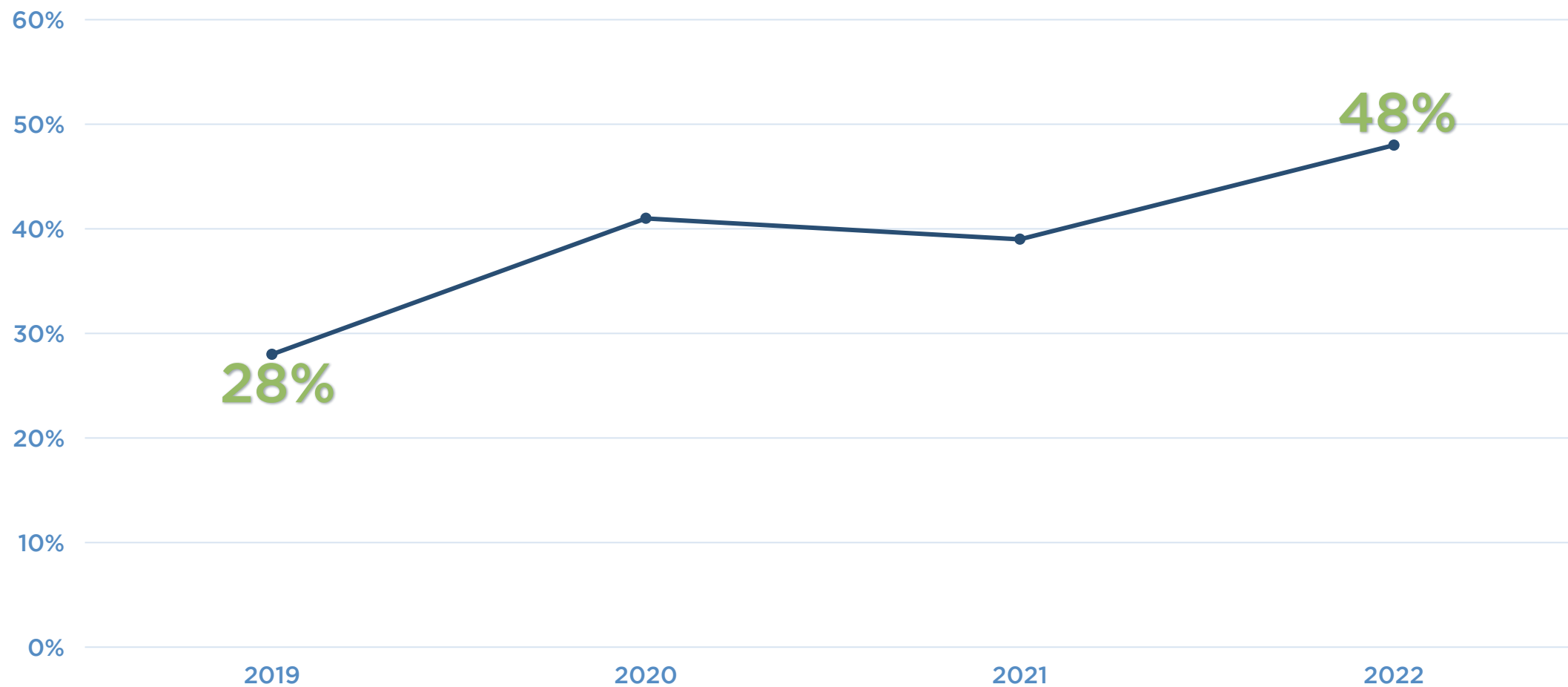
+15%

Overall

+9%

After a major increase in 2020 but pause in 2021, growth in new offices of EL has resumed.

Formal Director or Office of Experiential, Over Time



Where Do Projects Come From?

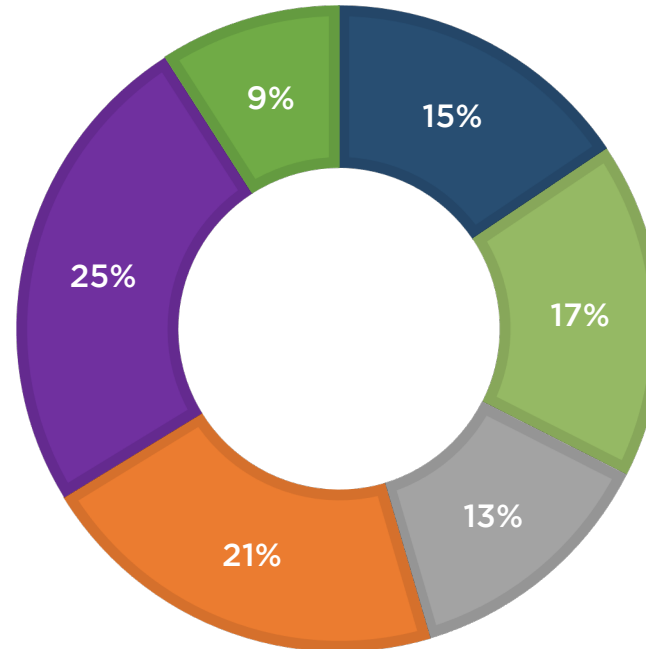
- 1: Faculty referred (-)
- 2: Alumni (-)
- 3: Unsolicited inbound (-)
- 4: Student referred (-)
- 5: Office of experiential (+1)
- 6: Career office (-1)
- 7: Third party project-sourcing service (-)

n: 77

How Many Projects Each Year Within Your College (Not University-Wide)?

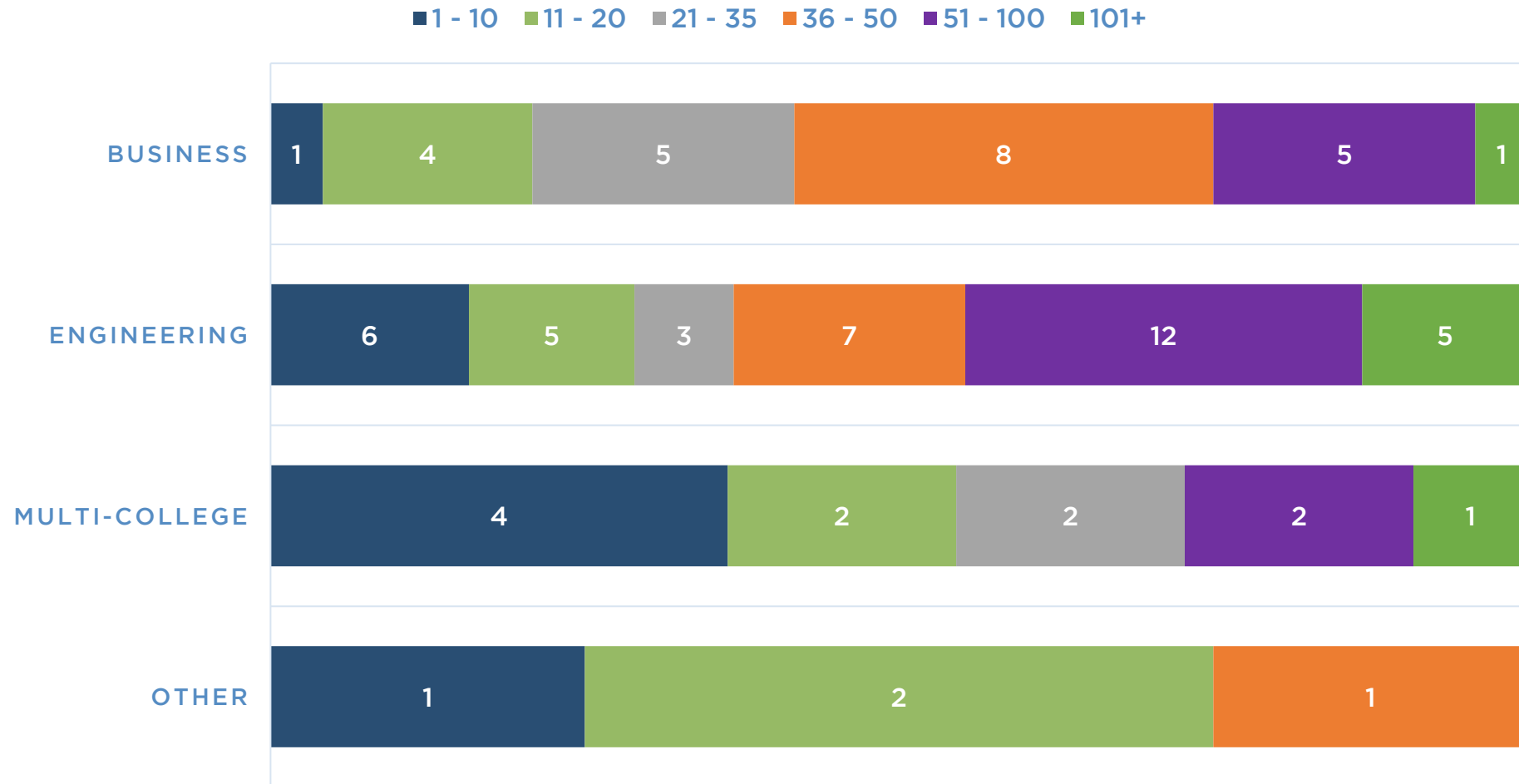
ALL DISCIPLINES

■ 1 - 10 ■ 11 - 20 ■ 21 - 35 ■ 36 - 50 ■ 51 - 100 ■ 101+



n: 77

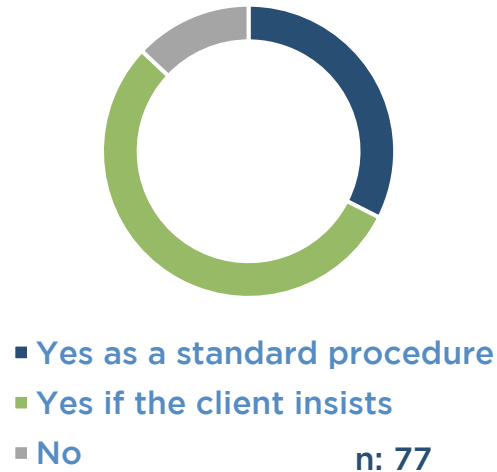
Project Count by Discipline



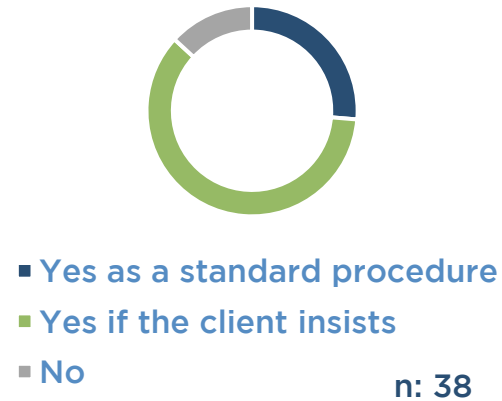
n: 77

Do You Use an NDA?

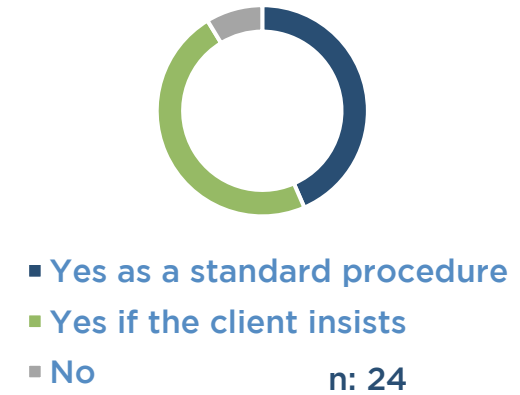
Overall



Engineering



Business



n: 38

n: 24

Multi-college



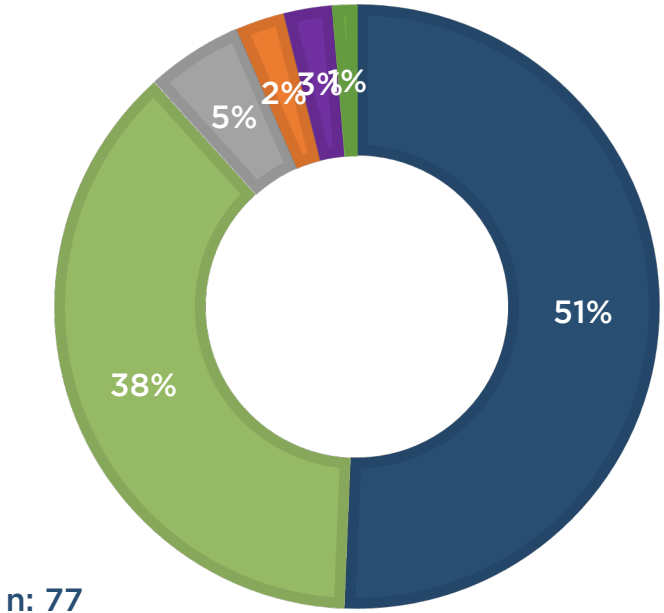
n: 11

Only 13% of programs, across all disciplines, will not use an NDA, even if a client insists

You Feel Your Program Sets Clear Expectations with Project Sponsors

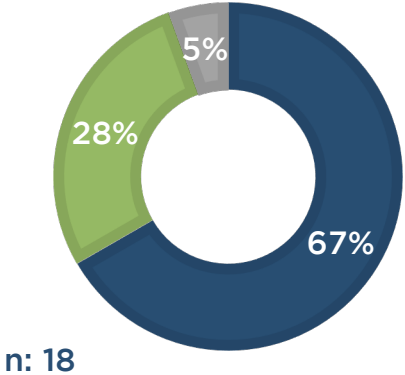
ALL DISCIPLINES

■ Strongly agree ■ Somewhat agree ■ Neutral
■ Somewhat disagree ■ Strongly disagree ■ N/A



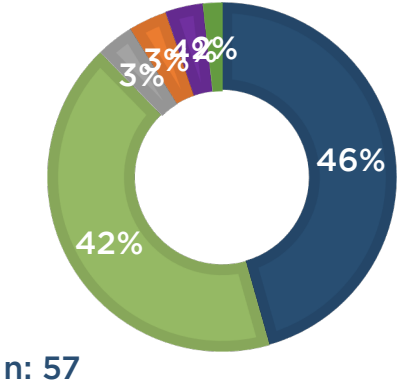
LEADERSHIP

■ Strongly agree ■ Somewhat agree
■ Neutral ■ Somewhat disagree
■ Strongly disagree ■ N/A



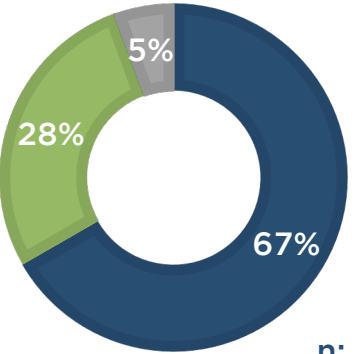
FACULTY & STAFF

■ Strongly agree ■ Somewhat agree
■ Neutral ■ Somewhat disagree
■ Strongly disagree ■ N/A

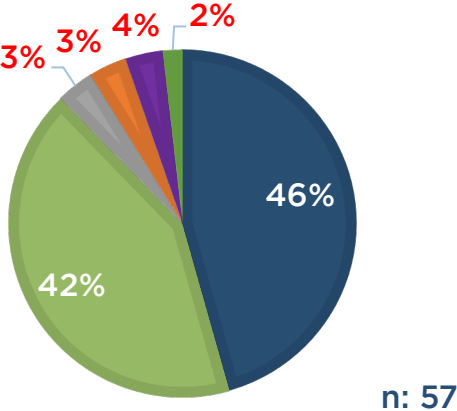


You Feel Your Program Sets Clear Expectations with Project Sponsors

LEADERSHIP



FACULTY & STAFF



! Leadership is the group most confident in project sponsor expectation but the faculty and staff directly involved with experiential are less sure.

Client Expectations Confidence by Discipline

Engineering



■ Strongly agree ■ Somewhat agree
■ Neutral ■ Somewhat disagree
■ Strongly disagree ■ N/A

n: 38

Business



■ Strongly agree ■ Somewhat agree
■ Neutral ■ Somewhat disagree
■ Strongly disagree ■ N/A

n: 24

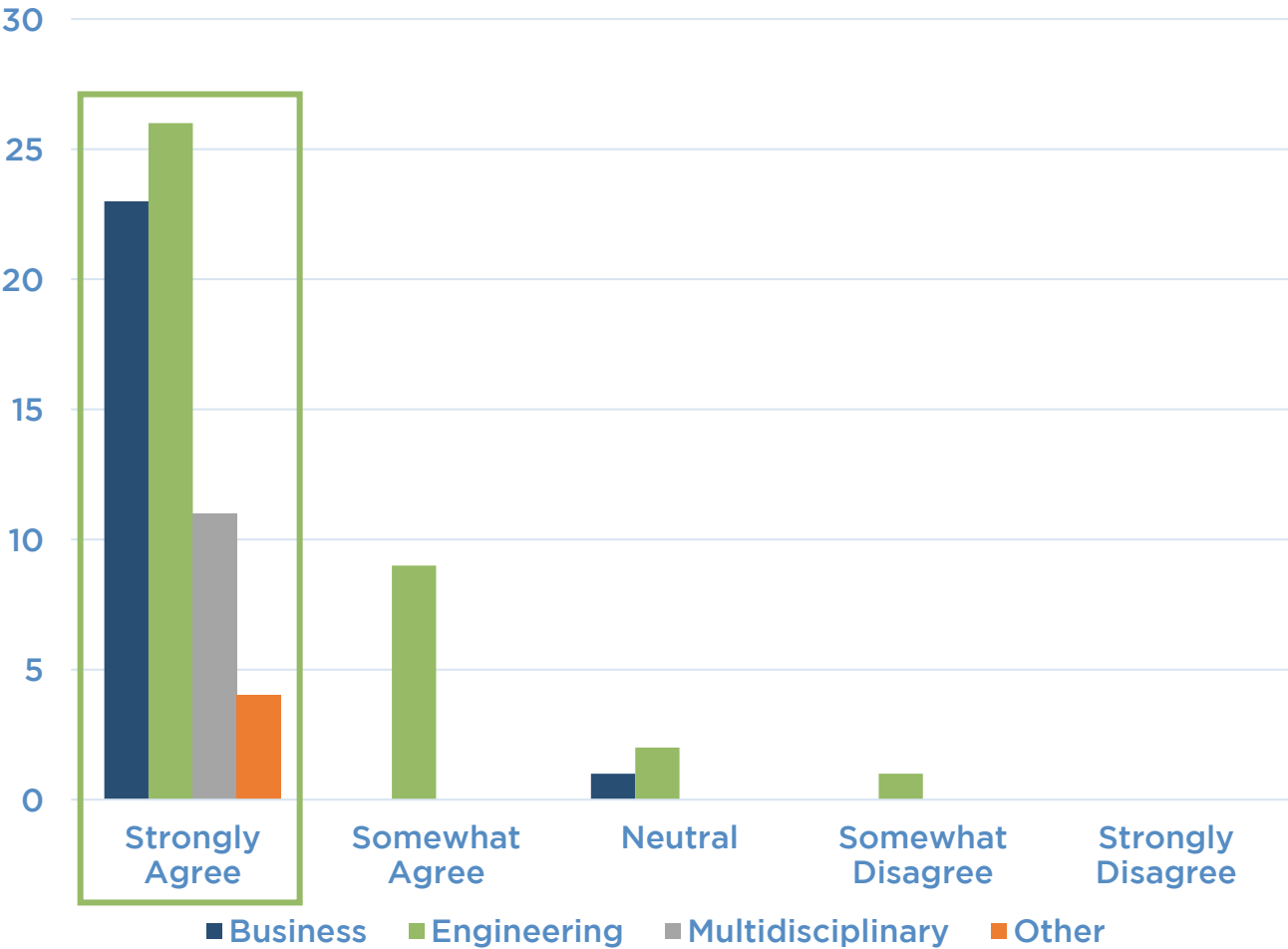
Multi-college



■ Strongly agree ■ Somewhat agree
■ Neutral ■ Somewhat disagree
■ Strongly disagree ■ N/A

n: 11

You Believe Industry Projects in the Classroom are Growing in Importance



n: 77

How Strongly do you Feel Industry Projects Help with Their First Job?

2.8/3 Weighted Average

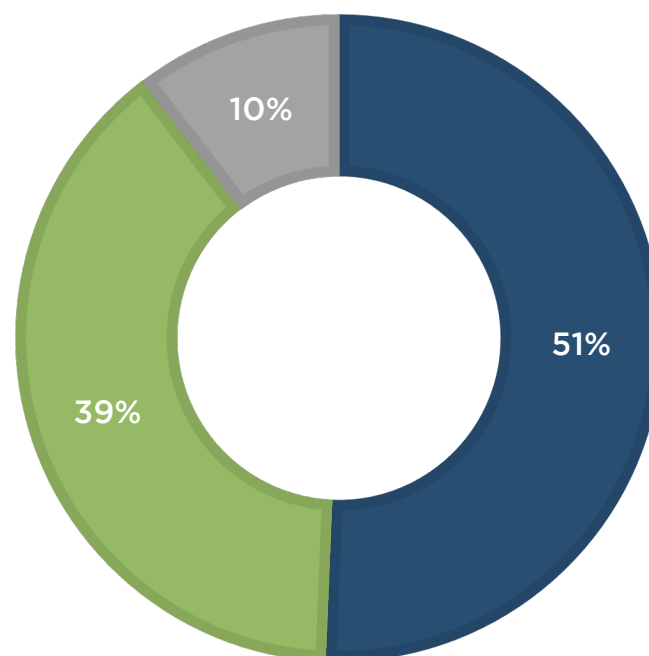


Unchanged Year over Year

Does Your Program Measure Learning Outcomes?

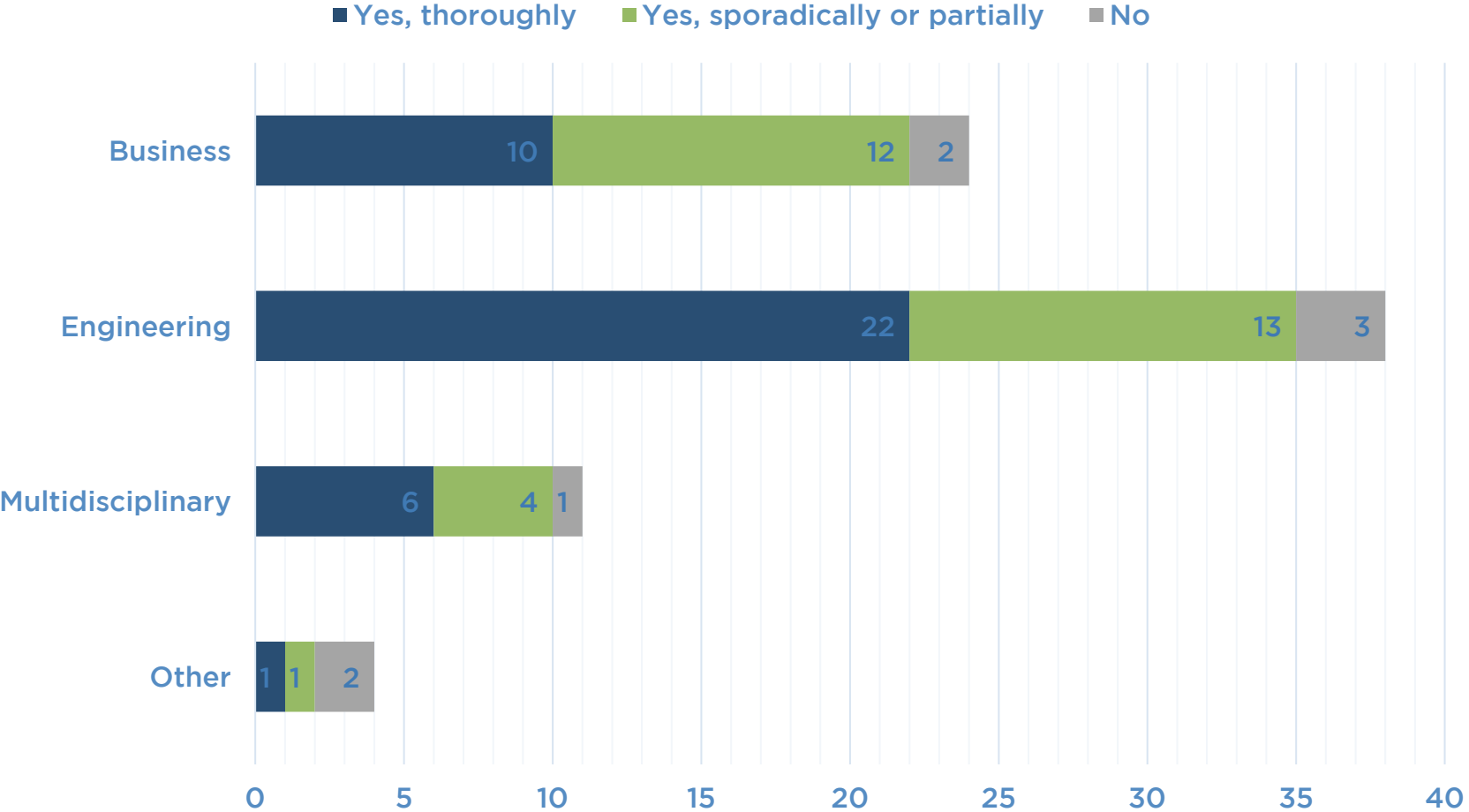
ALL DISCIPLINES

■ Yes, thoroughly ■ Yes, sporadically or partially ■ No



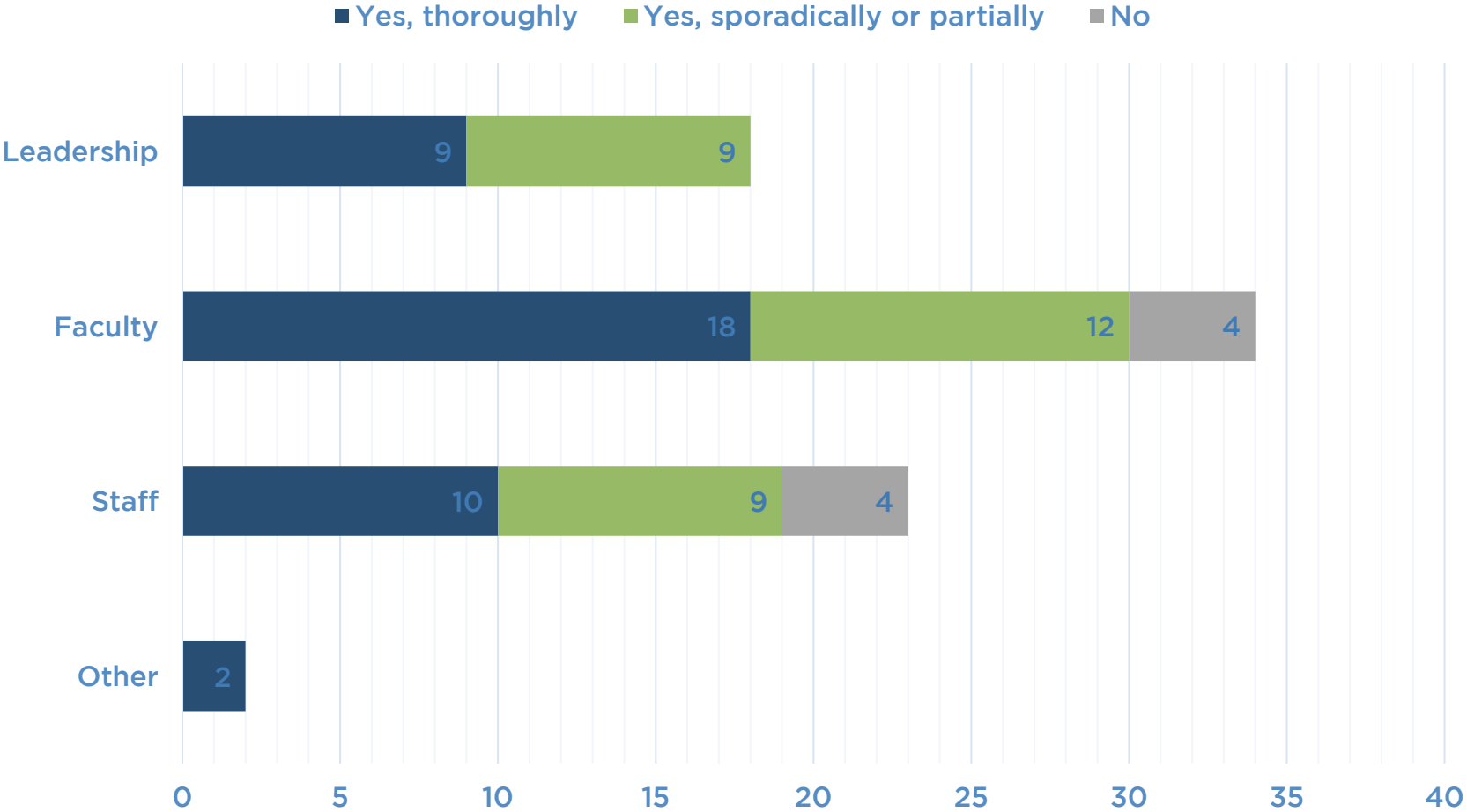
n: 77

Learning Outcomes Measurement



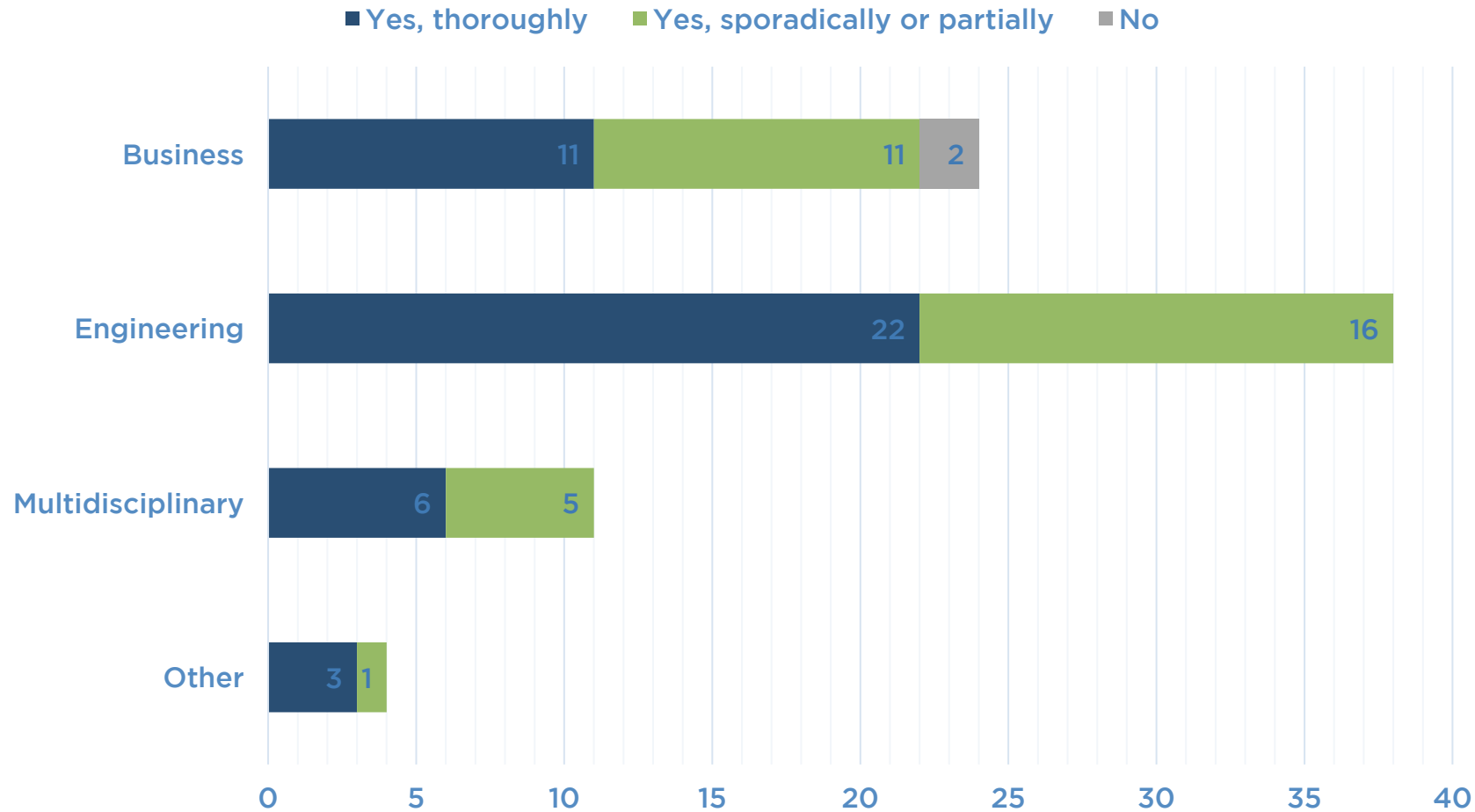
n: 77

Learning Outcomes Measurement



n: 77

Does Your Program Maintain Records of Past Projects, Clients and Student Participation?



Year over Year:
46% -> 55%
Second year in a row of
growth

n: 77

n: 77

Your Biggest Challenges



Finding projects and companies students can get excited about; linking project completion to good career outcomes.



Estimating the level of difficulty for the students and scoping the project. Conveying feeling of ownership to the students.



Finding a balance between students' reaching their learning outcomes and clients getting a meaningful prototype/product out the project within the scope of the student's curricular timeframe and expected learning outcomes.



Unaccounted time for faculty involved, lack of adequate staffing, undervalued by university because engineering is new at the university.

Your Biggest Challenges



Soliciting the projects themselves and getting clients who will spend the time to mentor the teams..



More projects than we can take on.



Getting students to enroll. I would love to grow our program, but every semester it's like pulling teeth to get students to register.



Gaining faculty commitment to lead projects.

Your Biggest Challenges



Getting the word out to students to have them participate.



Gaining faculty commitment to lead projects.



Effective oversight at the college level. Departments and programs have their own policies, procedures, and records.



Effectively managing a portfolio of projects across time.

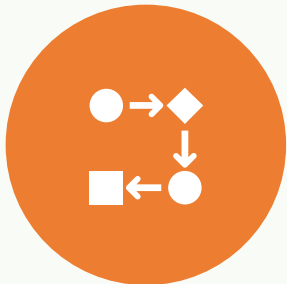
Your Biggest Challenges



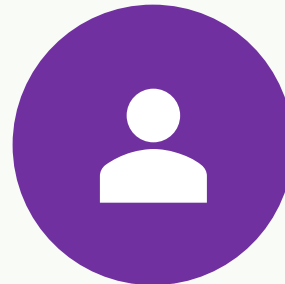
Getting the students to engage initially, but after they are involved, they are fine. Usually lack of initial confidence in knowing enough to carry out the project.



Contracts, they seem to be getting longer and longer.



Matching skills to projects. Also making sure the scope is appropriate.



The lack of a director of experiential learning to strategically coordinate experiential project and to support faculty who wish to incorporate such projects into their courses.

Your Biggest Challenges



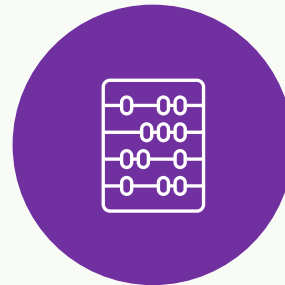
Rapid growth of student enrollment in the CSE department - we have to ramp up the number of projects (are charging less and less, many for free).



Organizations expecting to get high quality projects done for free.



The project has to be important enough to the client to be willing to invest time and share data.



Funding over the long-term and faculty/staff to direct the programs.

Your Biggest Challenges

We have, each year:

1700 students

350 projects

1 faculty member coordinating

What Advice Would You Give?

Set expectations early And help students get comfortable with communicating with their clients.

Ensure you have dedicated faculty and industry mentors that can meet with them regularly.

Establish clear and specific guidelines for what students should learn from working on the project - these are often part of the learning objectives for the PBL course.

Getting students to understand that failure of the project doesn't mean that they themselves have failed is key to guiding students throughout the program.

Alumni are key influencers and allies.

What Advice Would You Give?

Gather information from other programs and determine what works best for you. Everything doesn't make sense for everyone. Don't overdo in the beginning.

Someone needs to be in charge - and it takes time to develop and run an effective program.

Focus efforts on removing barriers to student success rather than micro managing teams.

What Advice Would You Give?

Work with your career center.

Ensure top-down support from the Dean for experiential programs and that a budget line exists to support new initiatives.

In my director role, I also oversee the hackathon program, industry-led workshops, and the corporate relationships to fund those. This has led to a strong networking effect to help recruit more corporate experiential capstone projects.

Scoping projects that can be completed in a semester is very important. Retaining companies for repeat projects really reduced the cost of running the program in both time and money spent on the front end to secure projects.

What Advice Would You Give?

Have University or college-wide buy-in. A team of corporate relations, career services, faculty need to work together to ensure that the program has legs.

Scaffolding the learning for student experience starting with freshman. Include unpacking/reflection after each experience so that the complete learning cycle is achieved.