

# MIT D-Lab Alumni Evaluation

D-Lab Academics, 2002-2017

External Evaluation by Purdue University

Summary of Results

# Evaluation Questions

What did D-Lab alumni **take away** from their experience at D-Lab?

What have they **done** since graduation, and how has D-Lab influenced those actions?

What are D-Lab's **strengths and weaknesses**, from the alumni perspective?

# The Respondents

While the sample was small, it was representative of D-Lab alumni.

- Out of 1194 e-mailed, **114** took the survey (**9.5%**).
- Of these, **77%** completed the full survey.
- Of 24 survey respondents selected, **8** were also interviewed over the phone.

## Respondent Characteristics

**73%** female

**74%** undergrad

**68%** US citizens

**29%** MechE

**46%** D-Lab: Development, **33%** D-Lab: Design

**75%** MIT, **15%** Harvard, **10%** Wellesley

**2002-2017** (recent alumni more common)

# Overall Takeaways

# Goals and Expectations

What did you hope to achieve through your D-Lab experience?

- Tackle global social issues
- Apply engineering knowledge in the developing world context
- Learn design thinking
- Practice community engagement and co-creation
- Cultural immersion
- Gain hands-on experience
- Travel and build global awareness
- Build a network

81% felt they were able to achieve their goals “very much” or “quite a bit.”

# Satisfaction

**93%** were satisfied with their D-Lab experience  
(60% “very satisfied”, 33% “generally satisfied”)

**91%** rated the quality of education at D-Lab as  
above satisfactory  
(64% “very good,” 27% “good”)

# Satisfaction

Alumni attributed their satisfaction to the **opportunities** accessible through D-Lab:

- hands-on experiences
- solving real-world problems
- traveling to a different country
- engaging in intercultural learning
- gaining a global perspective
- understanding practices in development
- practicing what was learned in other engineering classes

“I valued the **camaraderie** at the time. I definitely valued the opportunities to do things more from a **hands-on** perspective, and from a **real-world** perspective.”

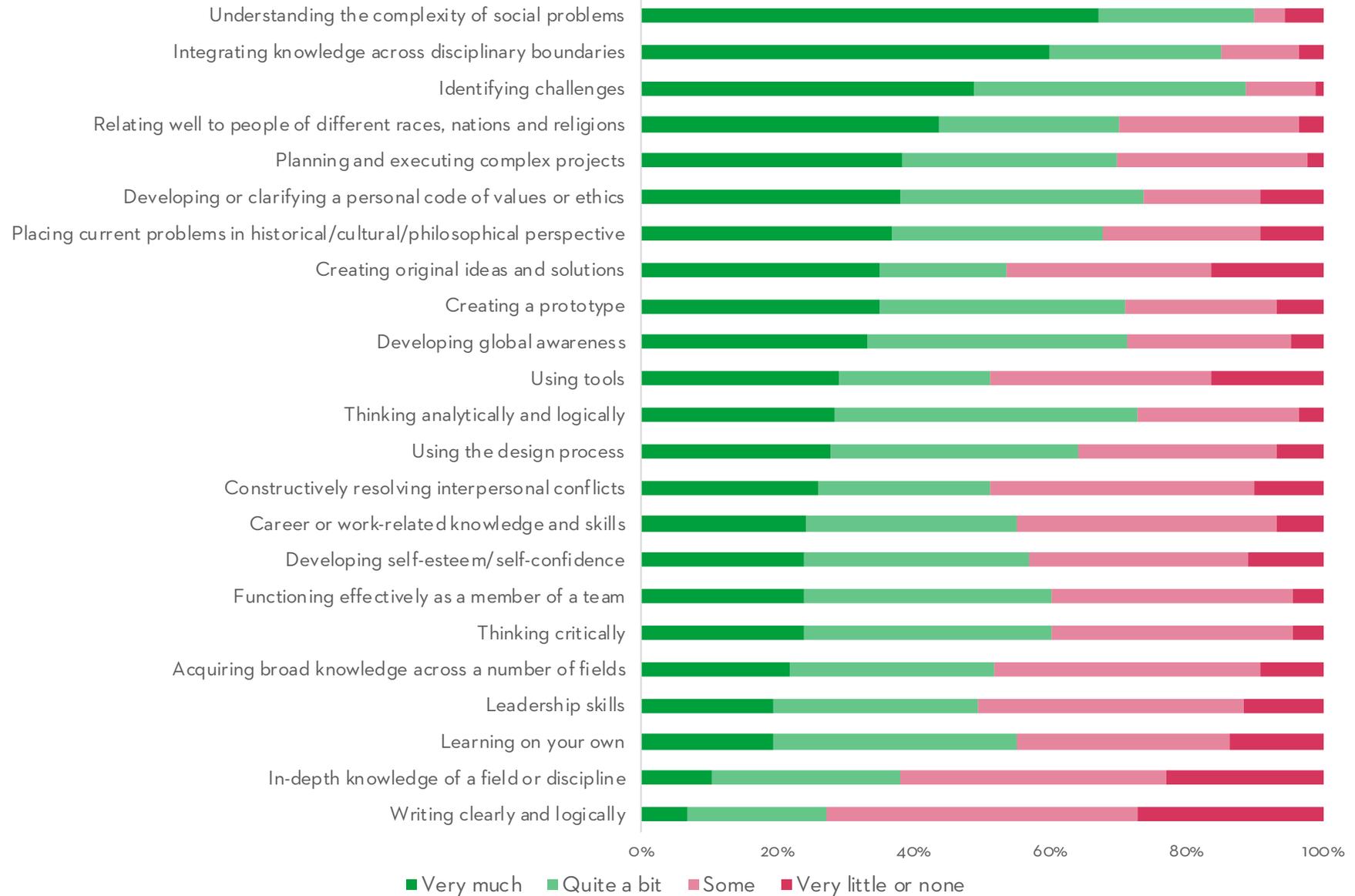
“I think with the **instructors** in D-Lab, you got a lot more **personal attention** in those classes than I was getting in my larger theory classes...So they were real **role models**”

“I value a lot the people there. **The people who work there are really great.**”

“I think a big thing that was really special about the program was having **real connection to people outside of academia**, who are working on engineering design...It was just a platform for exposure to a lot of things **outside of our normal curriculum.**”

# Learning

## To what extent has your experience in D-Lab contributed to your knowledge, skills and personal development in the following areas?



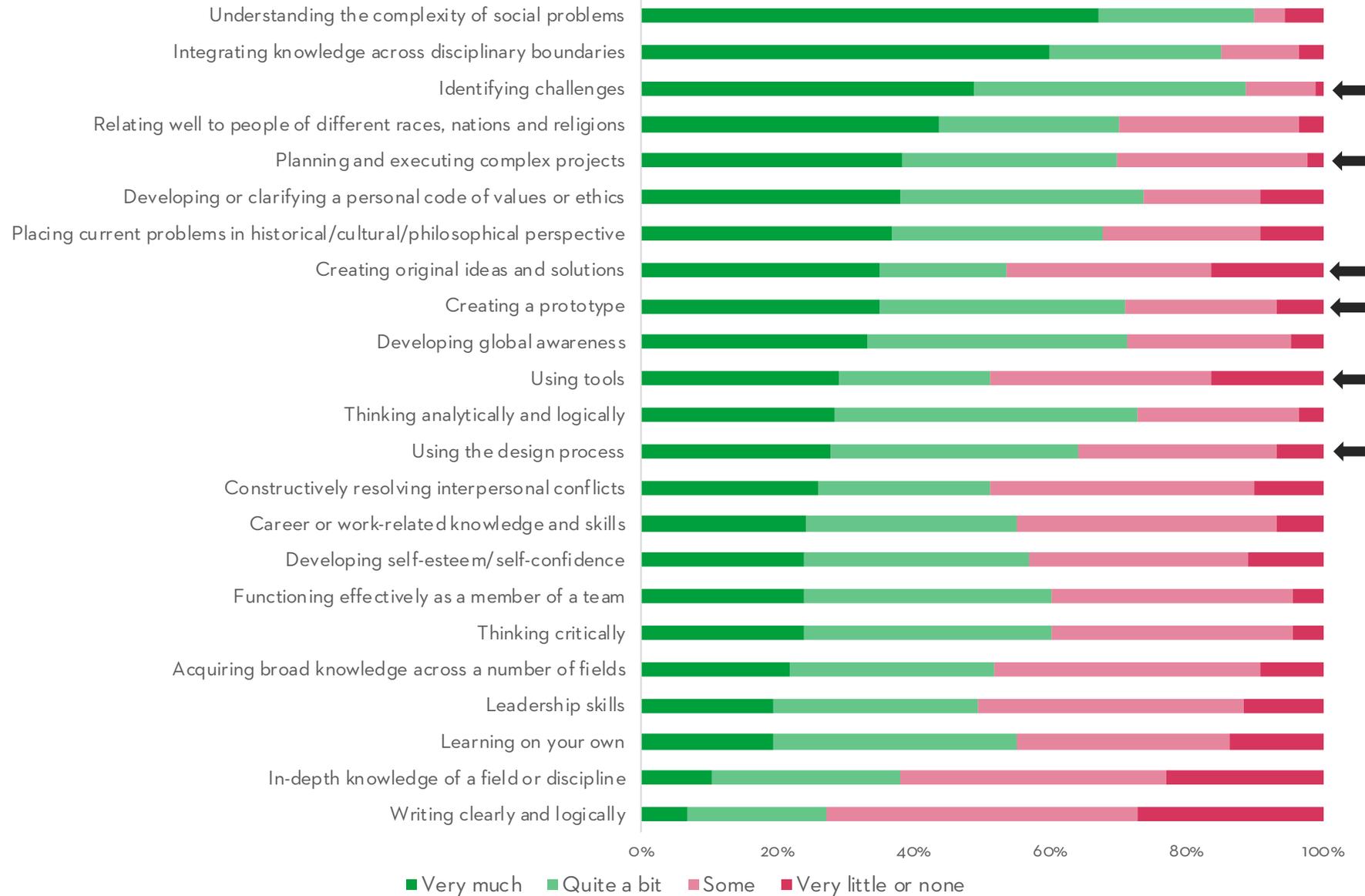
D-Lab builds awareness and a set of values around global social issues.

To what extent has your experience in D-Lab contributed to your knowledge, skills and personal development in the following areas?



D-Lab builds skills in design and problem-solving.

## To what extent has your experience in D-Lab contributed to your knowledge, skills and personal development in the following areas?

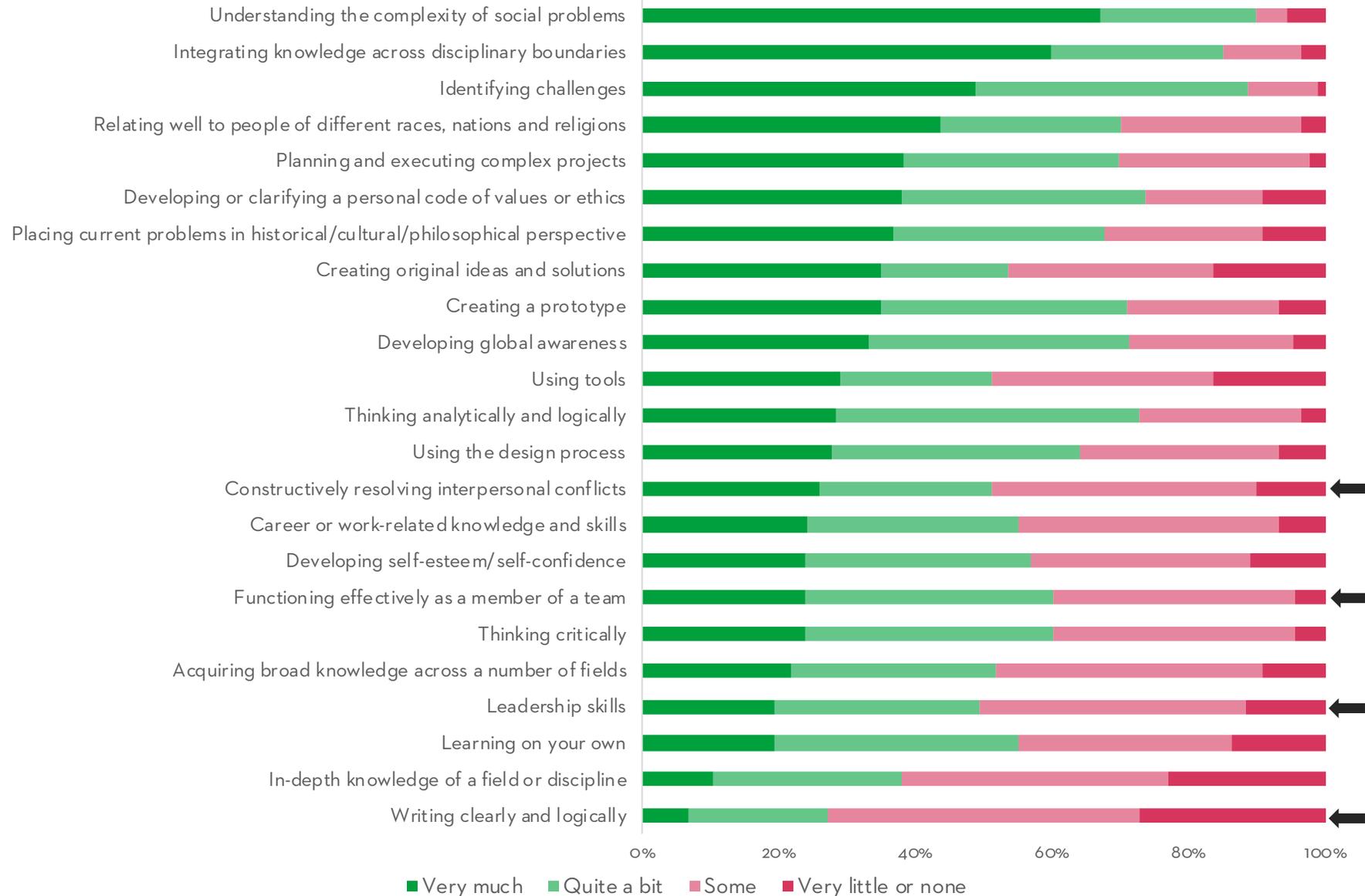


D-Lab's strength is **cross-disciplinary integration** over either depth or breadth of content.

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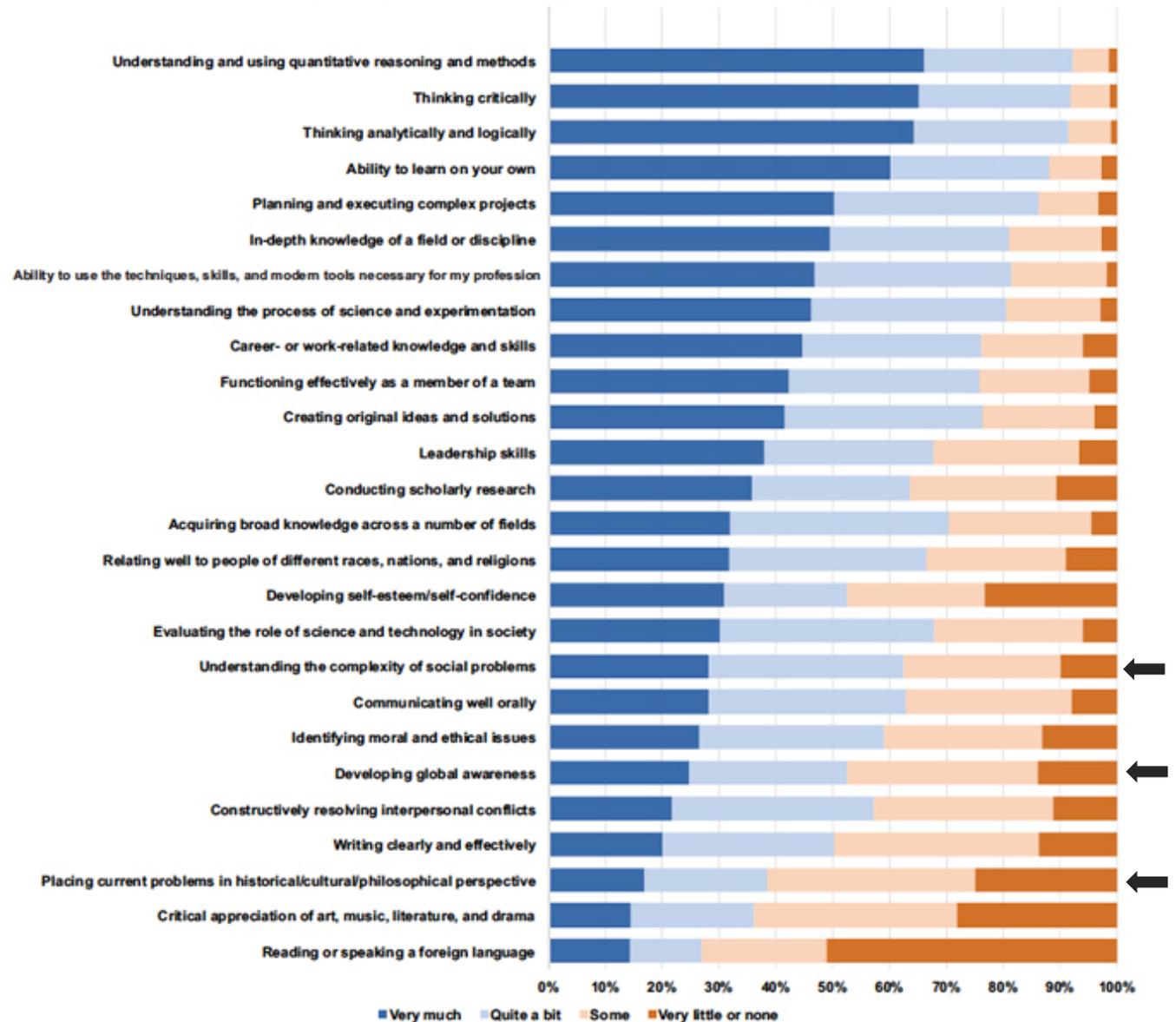


D-Lab could be stronger at building skills in leadership, communication and collaboration.

When you compare these results to the MIT Senior Exit Survey, it appears that D-Lab is strong in a few areas where MIT performs the weakest.

This is especially true in the area of global social awareness.

To what extent has your experience at MIT contributed to your knowledge, skills, and personal development in the following areas?



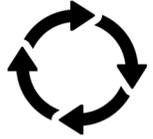
# MIT Overall vs. D-Lab

Percent of students who report that their experience at MIT/D-Lab contributed “Very much” or “Quite a bit” to their knowledge, skills, and personal development in the following areas

	MIT	D-Lab
Placing current problems in historical/cultural/philosophical perspective	38%	71%
Developing global awareness	53%	71%
Understanding the complexity of social problems	62%	90%

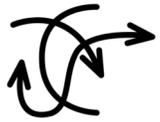
(MIT Senior Exit Survey) (D-Lab Alumni Evaluation)

# Common Themes



## Design Skills

“I valued how they approached the **design process**, it wasn’t something I had seen modeled so explicitly when I was at MIT..... the idea that it’s about users and defining problems and not just about being smarter than the problem.”



## Solving Complex Problems

“Problems are often framed in such a way that it requires people to work together, it requires people to be asking questions because many of the **challenges are difficult** to quantify. **They are not laid out for you nicely** on a piece of paper you have all the information you need. You have to dig around a bit.”



## Community Engagement and Empathy

“At the end of the day the most useful thing coming out of it were the **soft skills**. Especially around effective **community engagement**, building **relationships**, and earning **trust** with stakeholders, which has allowed me to work in a dozen different countries or so at this point. Just be able to not just drop in and tell people what I think they need but actually to really **listen and understand and experience the challenges they face** and try to **work together to come up with solutions** that are more likely to last.”

# Attitude Shifts

96% felt that their attitudes or perspectives had changed as a result of their D-Lab experience.

“Better understanding of **daily life in the developing world**”

“Totally changed how to do **development work** and how to do **user research** - so important to **live the lives of the people you are designing for** rather than doing 'field trips'.

“Development is a lot more **complicated** than I thought.”

“The framework that D-Lab teaches and the emphasis that they place on **understanding and empathizing** is something that is done so much better than any other area or other resource that I've experienced.”

# Future Pathways

# Future Pathways

## Career

**50%** pursued a career in international development or a social impact field.

**41%** pursued a career in product or service design.

**20%** started their own business.

## Education

**35%** pursued studies in international development or social impact.

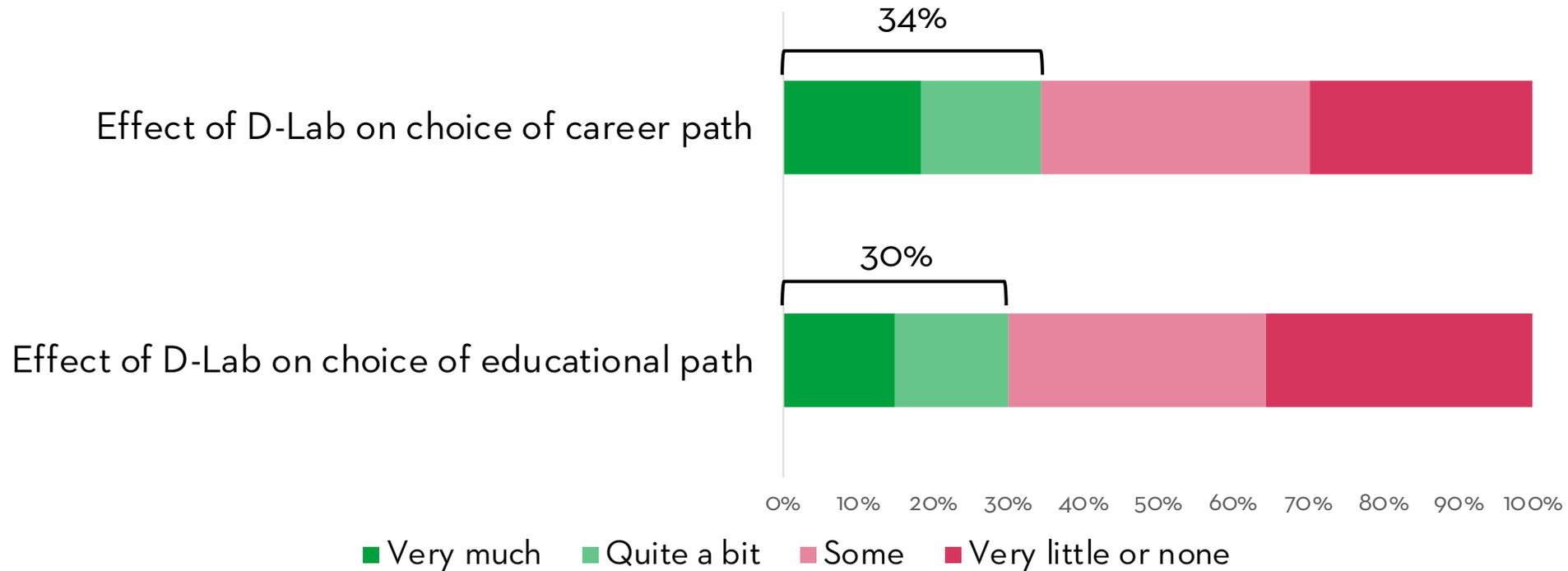
**34%** pursued research in international development or social impact.

**29%** pursued studies in design.

**24%** pursued research in design.

# Future Pathways

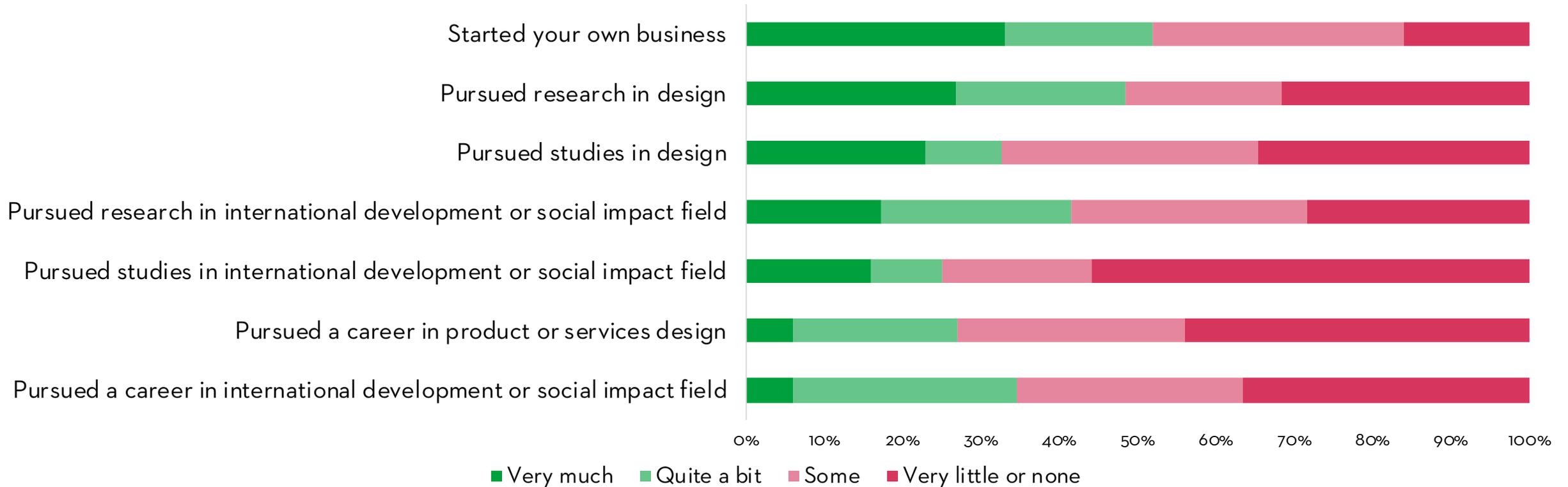
34% of respondents felt D-Lab had a high level of influence on their **career** path.  
30% felt D-Lab had a high level of influence on their **educational** path.



# Future Pathways

D-Lab had the highest amount of influence on the decisions to **start a business** and to **pursue research in related fields**.

### D-Lab's influence on career and educational decisions



# Future Pathways

## Travel and Philanthropy

**70%** traveled to developing countries after graduation.

**67%** made charitable donations to organizations seeking to have social impact.

**67%** lived or worked abroad.

**66%** volunteered in a low-resource community.

## Applying Knowledge

**71%** used something they learned at D-Lab in their work.

**69%** taught something they learned at D-Lab to others.

**30%** got involved with a local design community.

**19%** started a D-Lab-like initiative.

# Strengths and Weaknesses

## D-Lab's Strengths

People at D-Lab

Real-world, hands-on projects

Travel opportunities

Philosophy and outlook

Connection to partners and development experts around the world

Community with like-minded students

## Recommendations for D-Lab

Strengthen teaching around leadership, communication and collaboration

Clarify expectations for projects and potential pathways post D-Lab

Integrate D-Lab across classes and with other courses at MIT

“...the people are always welcoming and willing to provide input and be interested in what you are doing. If I had to boil it down to the thing I most value about D-Lab, I mean it certainly comes down to just being there, like **existing with these awesome people, in a space that promotes collaboration and learning and thinking about these problems.** And that I'm sure just really boils down to the people that D-Lab has recruited or convinced or kidnapped to be a part of what they are doing.”

# Summary Findings

- D-Lab alumni are overwhelmingly **satisfied** with their D-Lab experience. D-Lab's **people, projects** and **global opportunities** seem to have the strongest effect on this high level of satisfaction.
- D-Lab has contributed to alumni's knowledge and skills around **global social issues, design and problem solving**, and **cross-disciplinary integration**. In this first area, it is filling a critical gap at MIT.
- D-Lab has promoted **attitude shifts** around approaches to development, with an emphasis on building relationships and empathy.
- Many D-Lab alumni have gone on to pursue **careers and studies** in both development and design, and D-Lab has had some influence on these choices.
- D-Lab could strengthen its teaching on **leadership, collaboration and communication**, clarify **expectations** and pathways for projects, and **integrate** more fully across classes and with MIT.

# Appendix

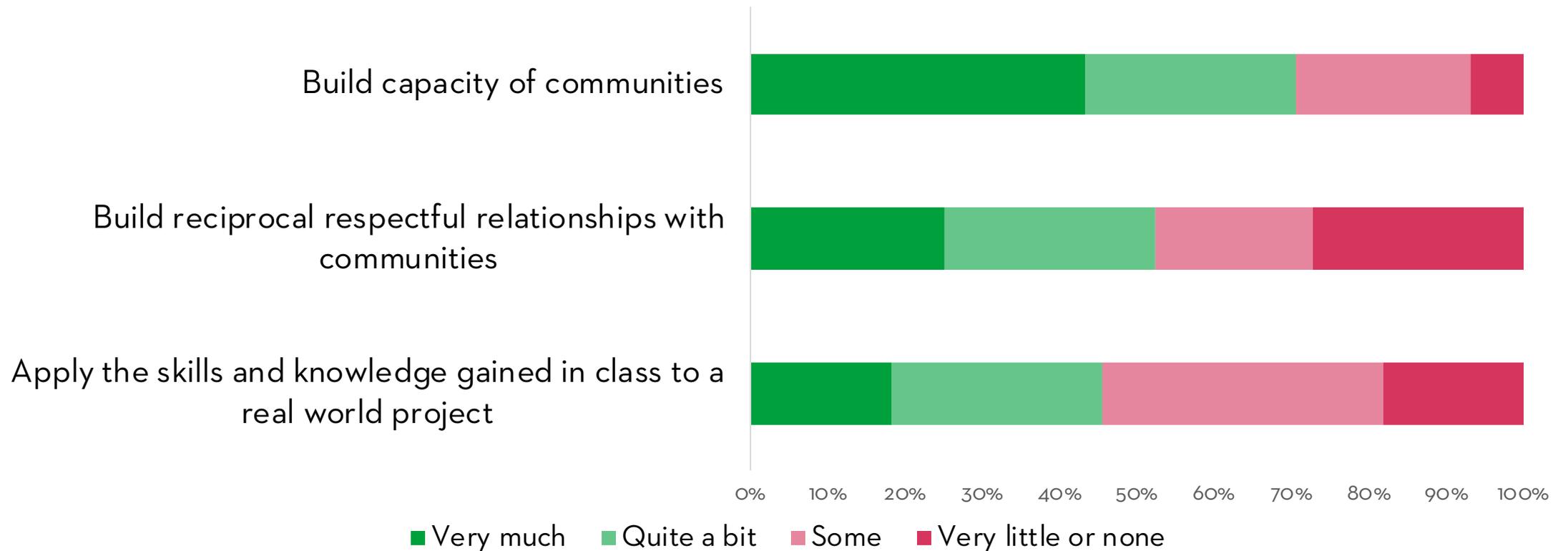
# Satisfaction

How satisfied were you with each of these aspects of your D-Lab experience?



# Achievements

To what extent were you able to achieve the following through D-Lab?



# Quotes: Design Skills

“I think most of my **hands on skills** comes from those D-Lab classes. I mean, a lot of my shop skills, welding skills, all of my fabrication skills, CAD, rapid prototyping, stuff like that, I learned in D-Lab.”

“I valued how they approached the **design process**, it wasn't something I had seen modeled so explicitly when I was at MIT..... the idea that it's about users and defining problems and not just about being smarter than the problem.”

“The only time I really learned, **here's what the design process is**, here's how you go from asking a question to coming up with parameters you need to iterating and prototyping is in D-Lab.”

# Quotes: Complex Problems

“Problems are often framed in such a way that it requires people to work together, it requires people to be asking questions because many of the challenges are difficult to quantify. They are not laid out for you nicely on a piece of paper you have all the information you need. You have to dig around a bit.”

“D-Lab impacted on my critical thinking. Like seeing things from I need to plan a lot of different aspects and manage a lot of different aspects. Then also thinking critically about seeing things that might seem good on the surface might not be really good.”

“I guess in D-Lab: Development class you learn a lot about how easy it is to make mistakes in development and how we have to really do a lot of planning and communication and research to make sure we’re not doing more harm than good.”

“The design classes in D-Lab it’s about identifying constraints and like I said earlier figuring out what the problem you’re trying to solve is. And that’s 90% of my job right now too, is getting everyone to agree on the thing that we’re trying. The actual design work isn’t the hard part, usually. And so being comfortable working within really constrained situations or in really tricky environments, as the sort of first experience was good.”

# Quotes: Community

“I am only choosing careers that I would want to do because it’s good for other people. And I’m able to think more critically of what it means to be good for other people. I think D-lab helped develop it.”

“There were definitely hard skills and you know facts and numbers to remember but at the end of the day the most useful thing coming out of it were the soft skills. Especially around effective community engagement, building relationships, and earning trust with stakeholders, which has allowed me to work in a dozen different countries or so at this point. Just be able to not just drop in and tell people what I think they need but actually to really listen and understand and experience the challenges they face and try to work together to come up with solutions that are more likely to last.”

# Summary Themes (from Purdue report)

