



Aligning Graduate STEM Education with Industry Needs

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R&D Leader, Strategic Recruiting
The Dow Chemical Company
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Advancing performance. Accelerating change.



Key Facts About Dow

2016 Sales of \$48.2 Billion



- Agricultural Sciences
- Performance Materials & Chemicals
- Consumer Solutions
- Performance Plastics
- Infrastructure Solutions

Dow Sites Around the World



Corporate Stats

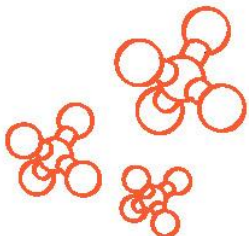
- 2016 Op. EBITDA¹ of \$9.8B
- 2016 Cash Flow from Operations of \$5.5B
- ~56,000 employees
- >7,000 product families
- Sales in 175 countries

1. Operating EBITDA is defined as EBITDA excluding the impact of "Certain Items," where "EBITDA" is defined as earnings (i.e., "Net Income") before interest, income taxes, depreciation and amortization.

Examples of STEM @ Dow

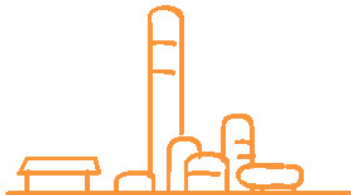
Research & Development

- Develop a process to produce a new molecule
- Innovate new catalysts for improved yield and selectivity



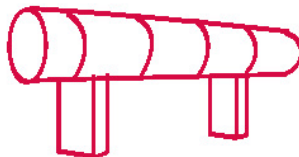
Manufacturing

- Start-up and run the first world scale plant using a new process
- Implement process improvements to reduce waste generation



Engineering & Design

- Develop tools for equipment specification
- Design and build a new cracker



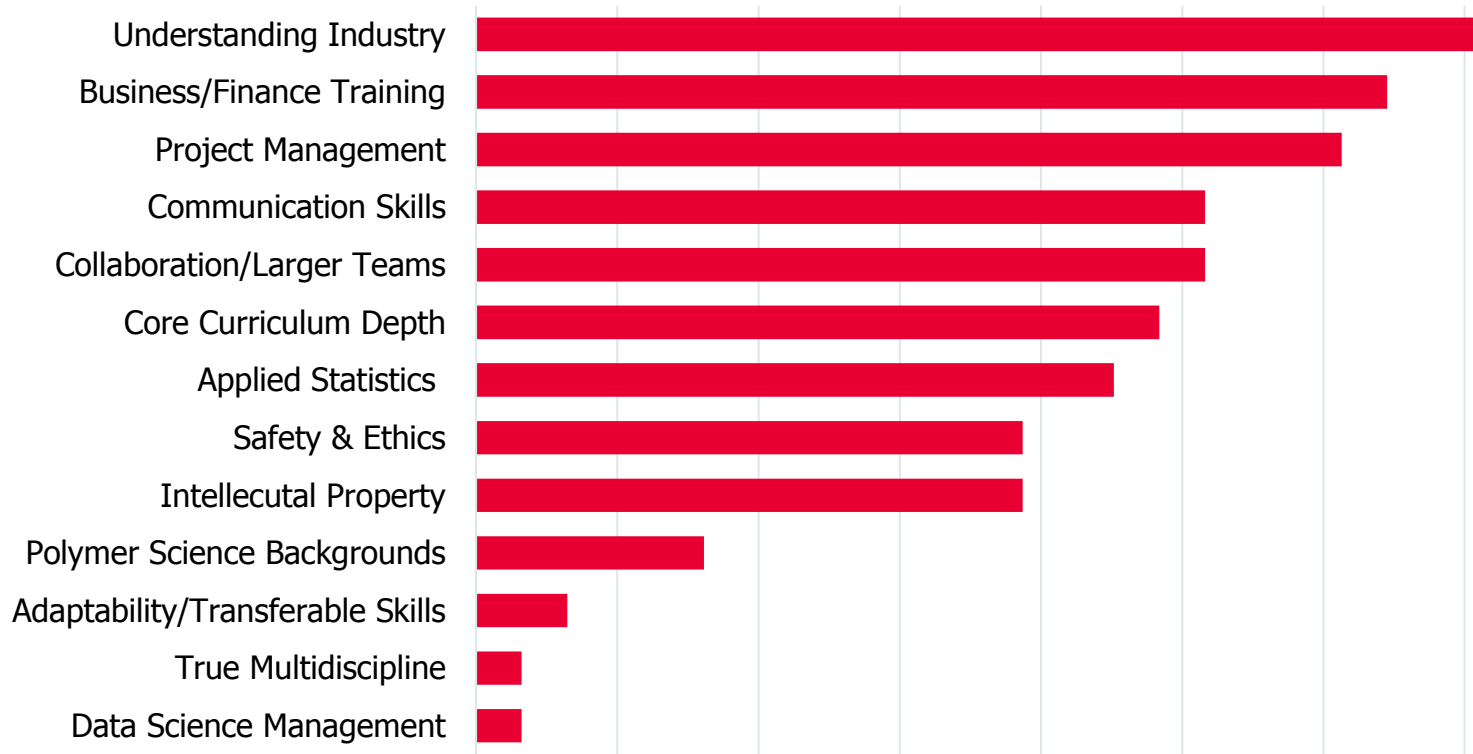
Marketing, Sales, Finance, IT, Supply Chain, Business Management



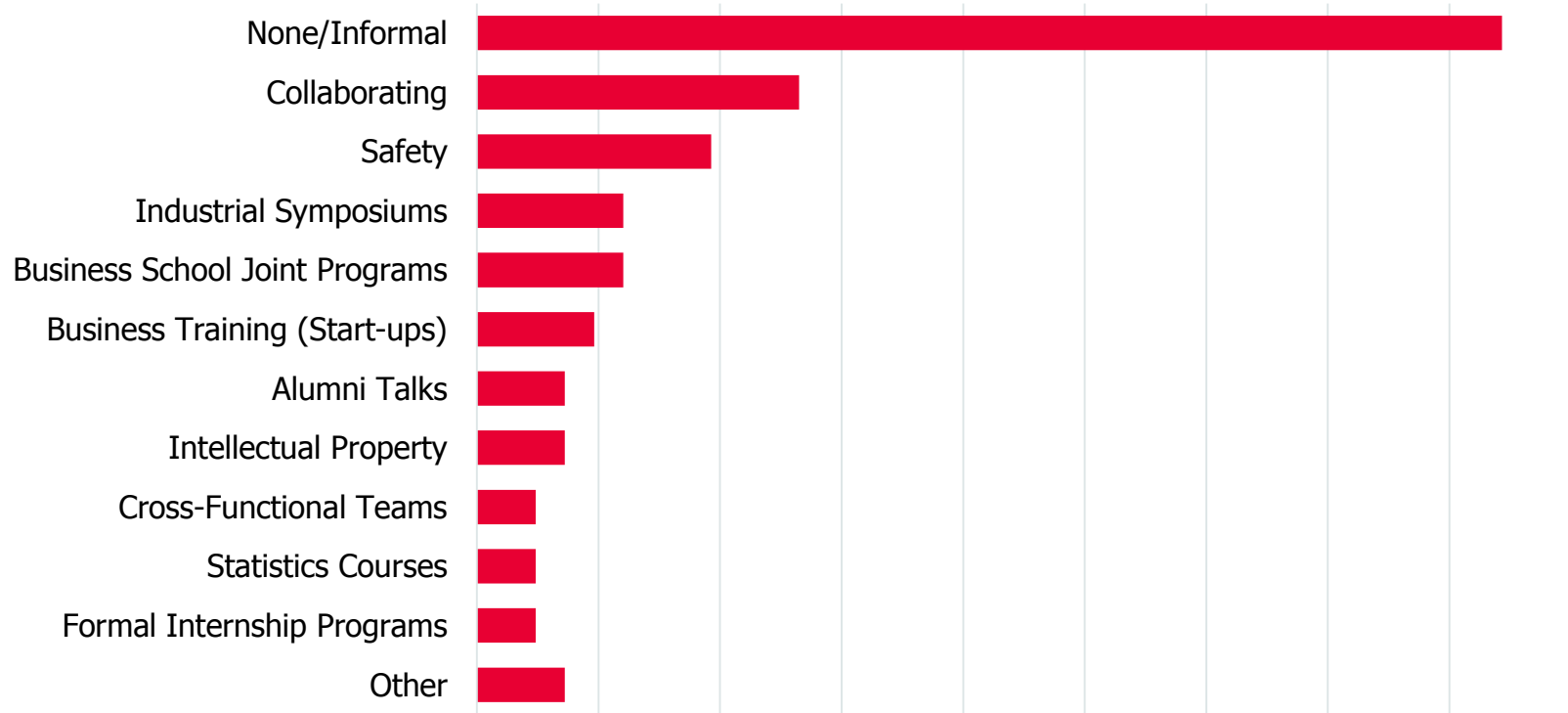
Overview

- Focus on general trends, not specific STEM skillsets
- Survey respondents (75 total) include Dow's:
 - Campus recruiters
 - Hiring managers
 - Recent new hires (2014 hiring year)
- Polled Dow colleagues on:
 - What do you see as current gaps in graduate education for those entering industry R&D?
 - Are you aware of any trends/programs at universities to address these gaps?
 - As a leader/new hire, what topic do you spend most of your time on developing new hires/post-academia?

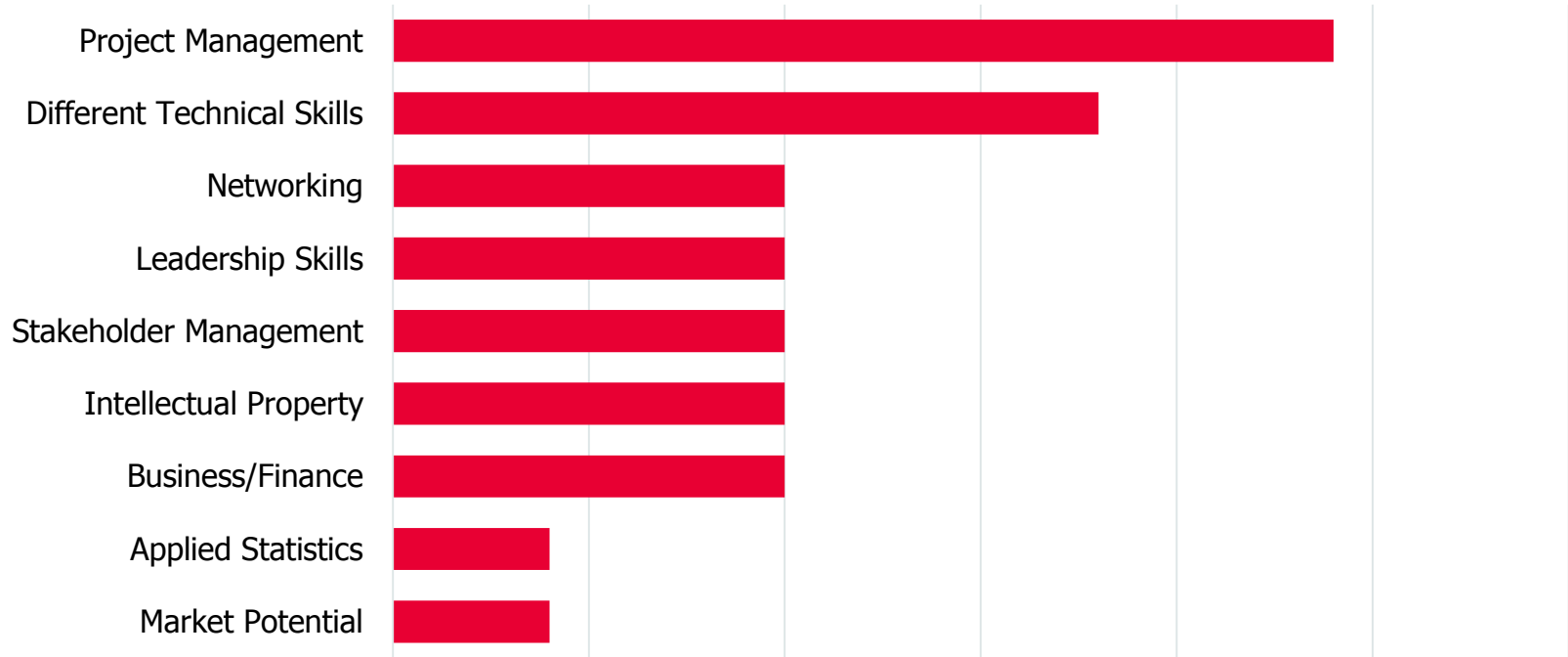
Identified Curriculum Gaps for Graduate Programs



Known Programs to Address Gaps



New Hires: What specific skills did you spend most time developing when joining Dow?



Questions

