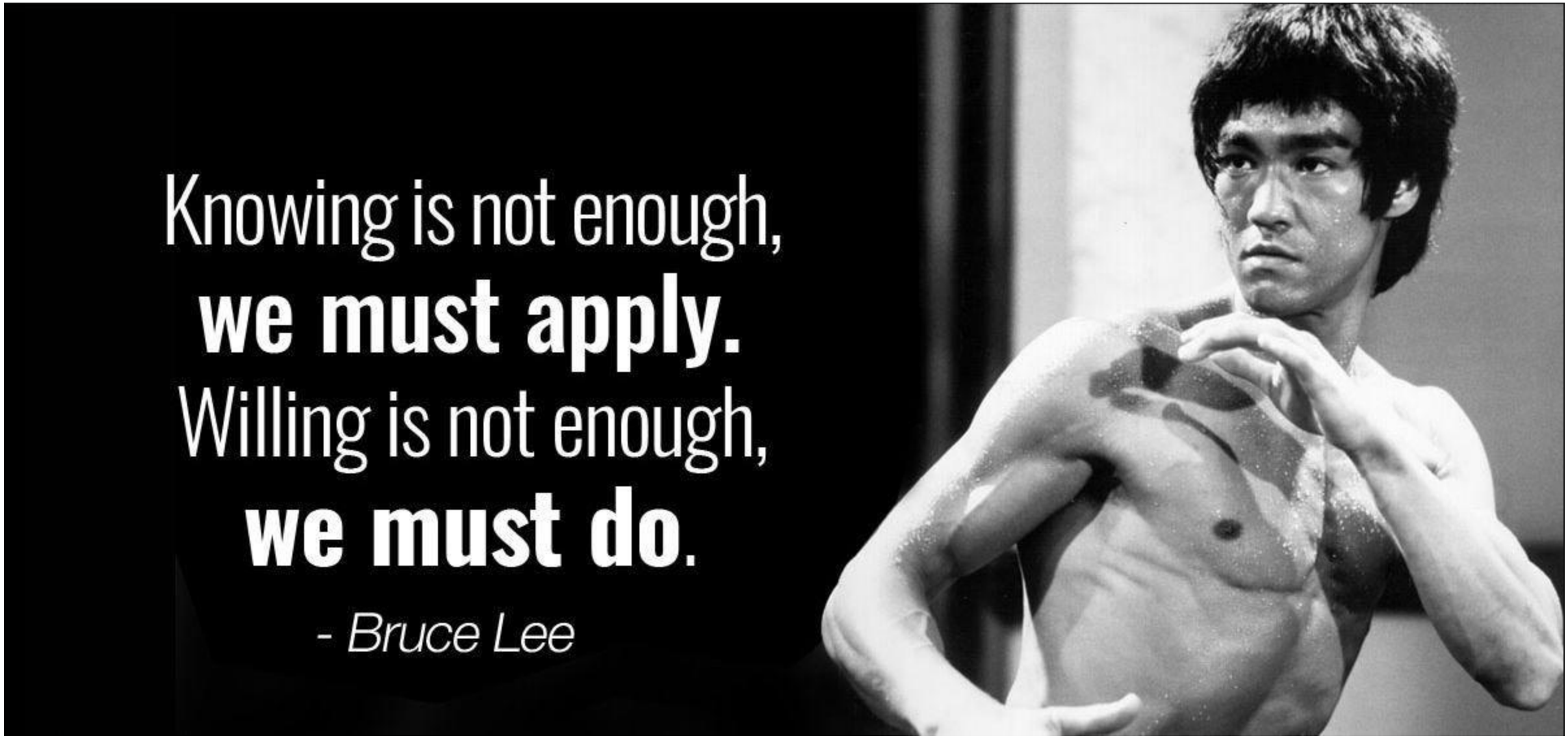
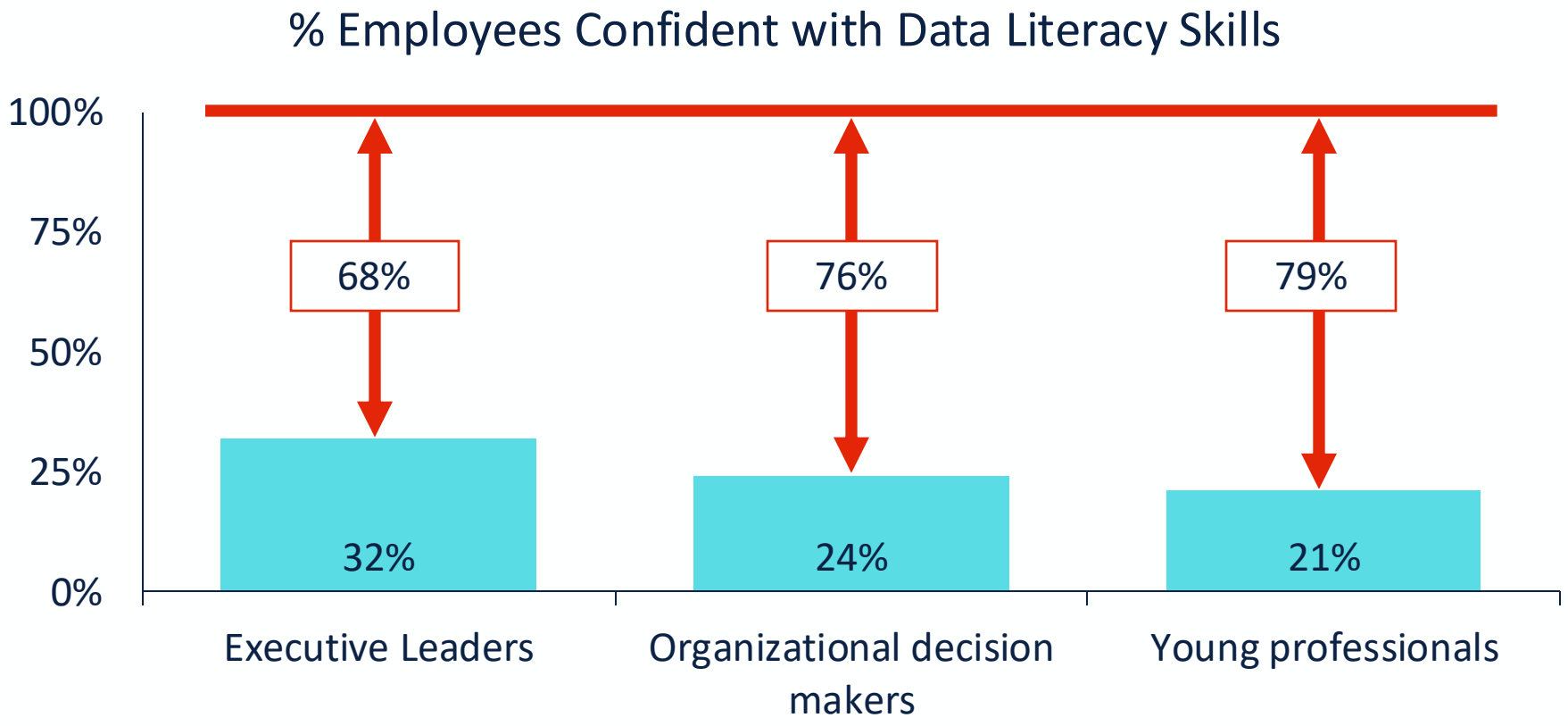
air data & decisions® academy | ASSOCIATION FOR INSTITUTIONAL RESEARCH

Tackling Higher Ed's Data Literacy Challenge:

https://www.airweb.org/dataliteracy


Knowing is not enough,
we must apply.
Willing is not enough,
we must do.
- Bruce Lee

Data Skills Gap in Public Sector Organizations



Reference: Lead with Data: How to Drive Data Literacy in the Enterprise. Qlik. https://www.qlik.com/us/-/media/files/resource-library/global-us/register/analyst-reports/ar-how-to-drive-data-literacy-within-the-enterprise-en.pdf

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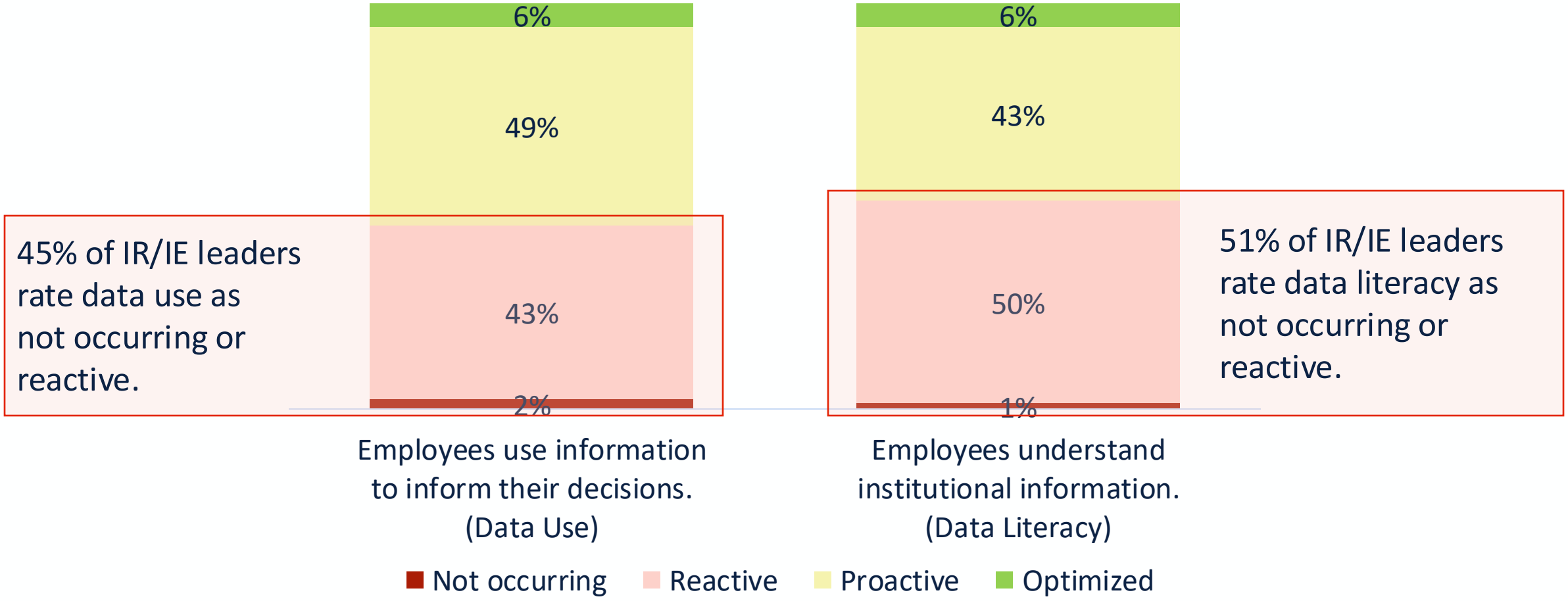
2024 AIR National Survey: Current State of Institutional Data Use and Literacy



Not occurring = No evidence this exists; Reactive = Acting due to immediate situation; Proactive = Sufficiently matured where institution anticipates and works towards future needs; Optimized = Achieved a situation that is as perfect and functional as possible.

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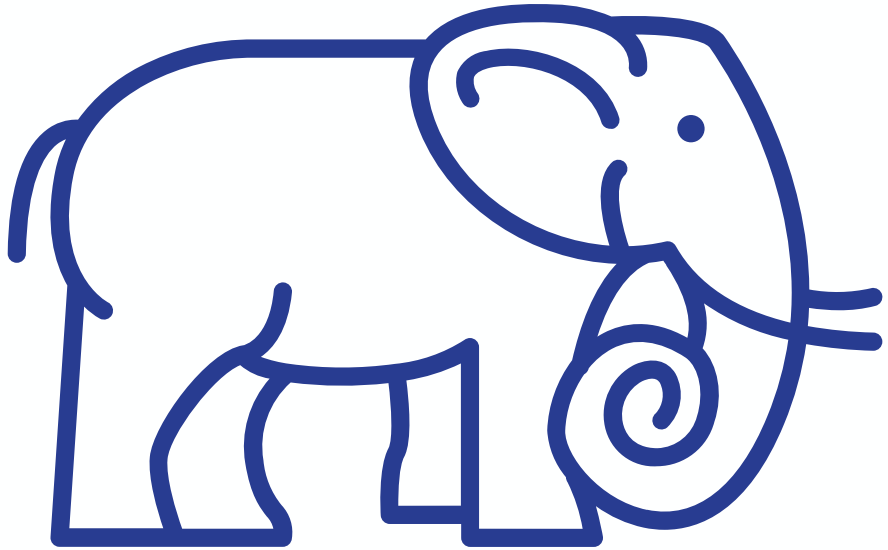
Institutional & Organizational Barriers to Data Literacy

- Siloed data & lack of integrated systems
- Lack of leadership & vision
- Lack of leadership modeling
- Lack of shared language
- Initiative fatigue

Individual Barriers to Data Literacy

- Lack of data literacy training
- Discomfort with “data-driven” accountability
- Varying levels of data aptitude & interests
- Overemphasis on tools instead of understanding
- Data fatigue and information overload

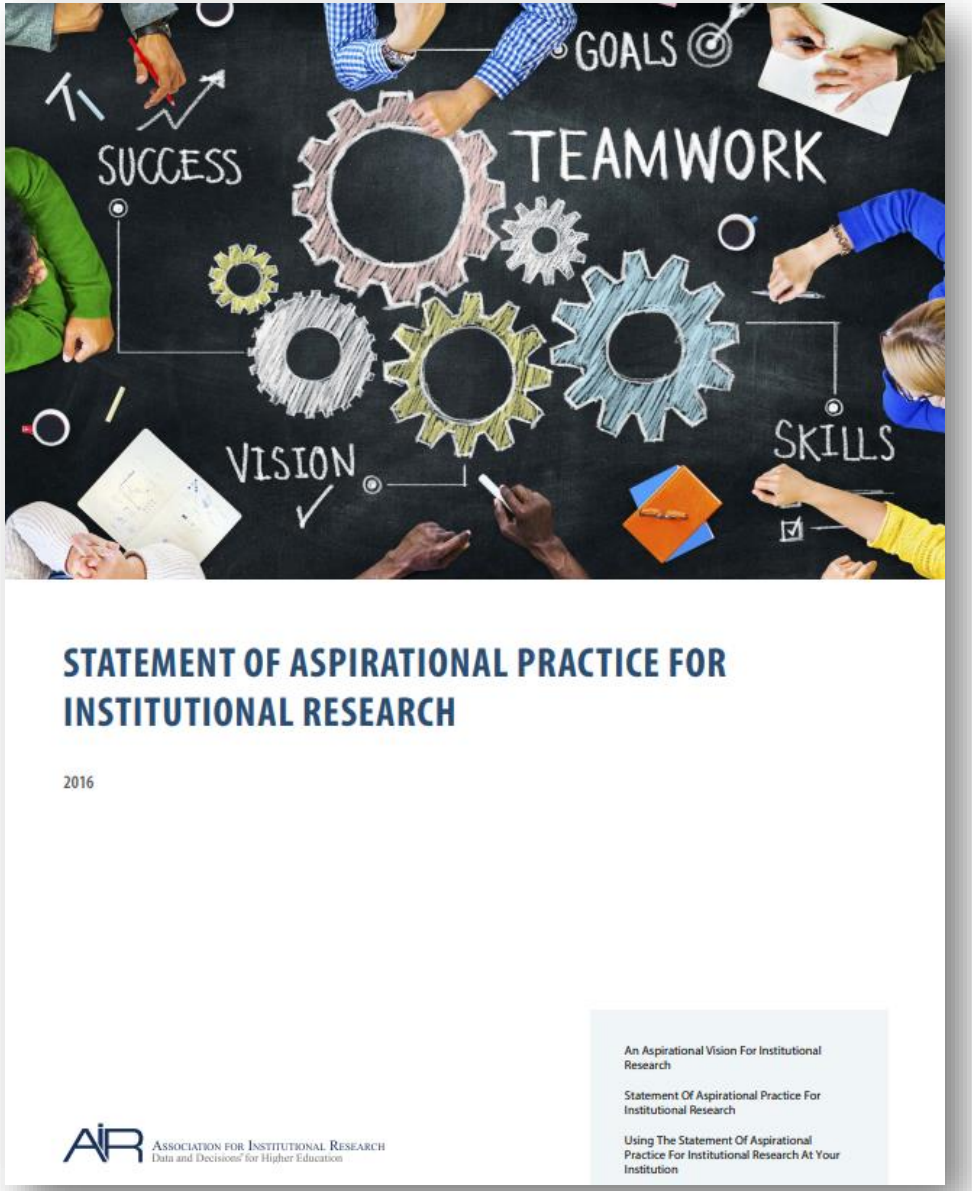
How do you eat an elephant?



AIR's Statement of Aspirational Practice for Institutional Research

"…the reality is that the new role for institutional research is in coaching a wide array of data consumers,…"

"The goal is for data literacy to be as ubiquitous as expectations for writing, speaking, and computer skills."



Reference: https://www.airweb.org/ir-data-professional-overview/a-statement-of-aspirational-practice-for-institutional-research

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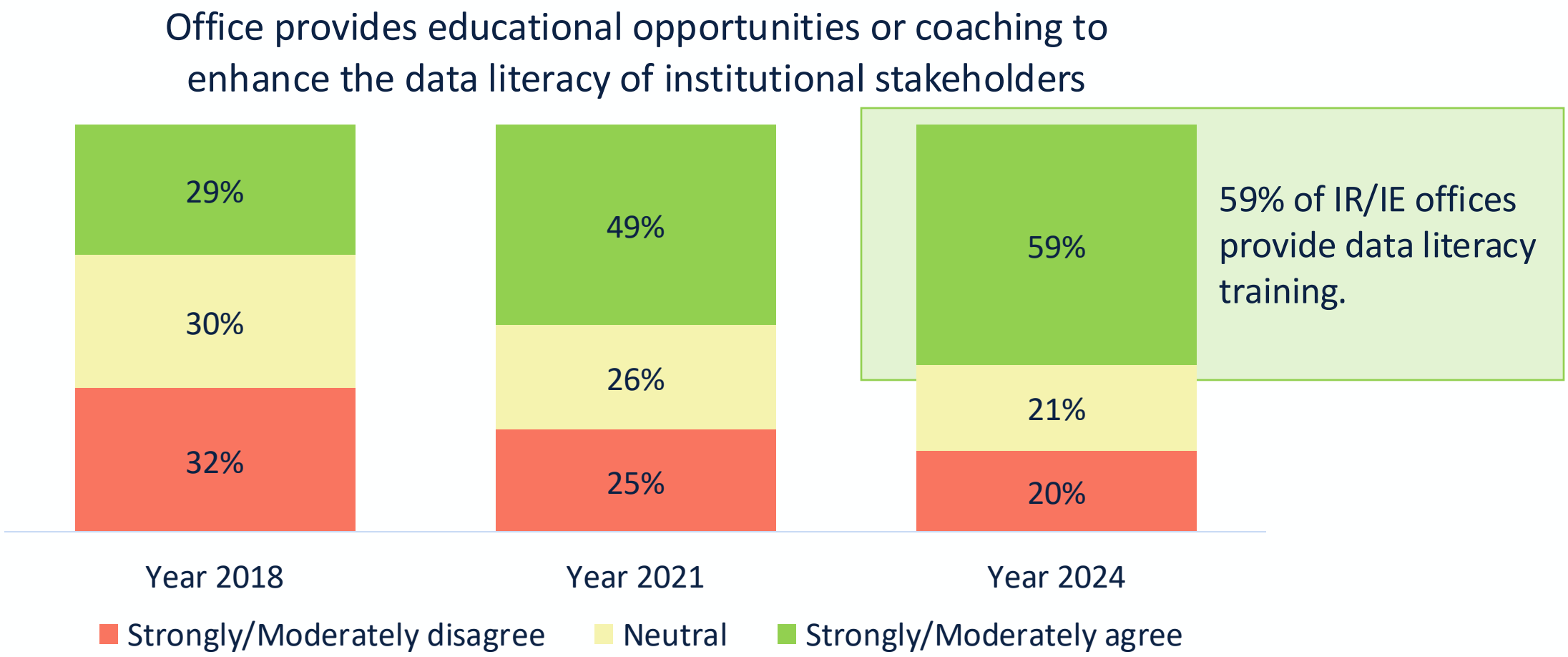
AIR National Survey – Data Literacy Training



Reference: Results from the 2018, 2021, and 2024 AIR National Surveys, www.airweb.org/NationalSurvey

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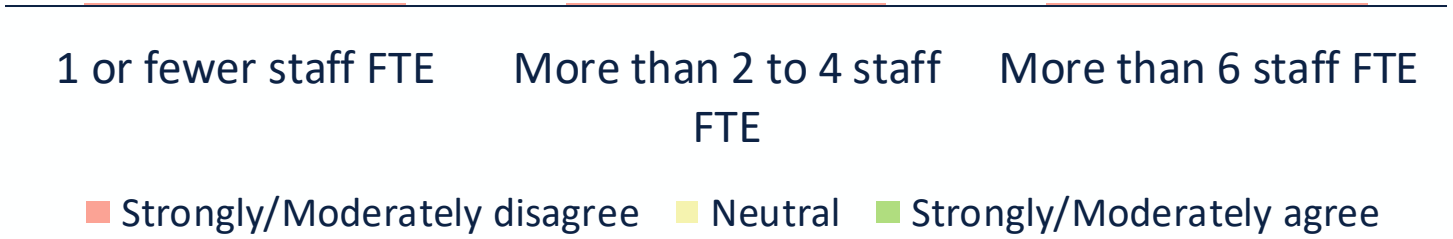
IR/IE Office Provides Educational Opportunities to Enhance Data Literacy of Stakeholders: Small vs. Large Offices



*Reference: 2024 AIR National Survey. www.airweb.org/NationalSurvey ; Statistical mean difference between <1 FTE vs. 6+ FTE - ***p<0.001,*

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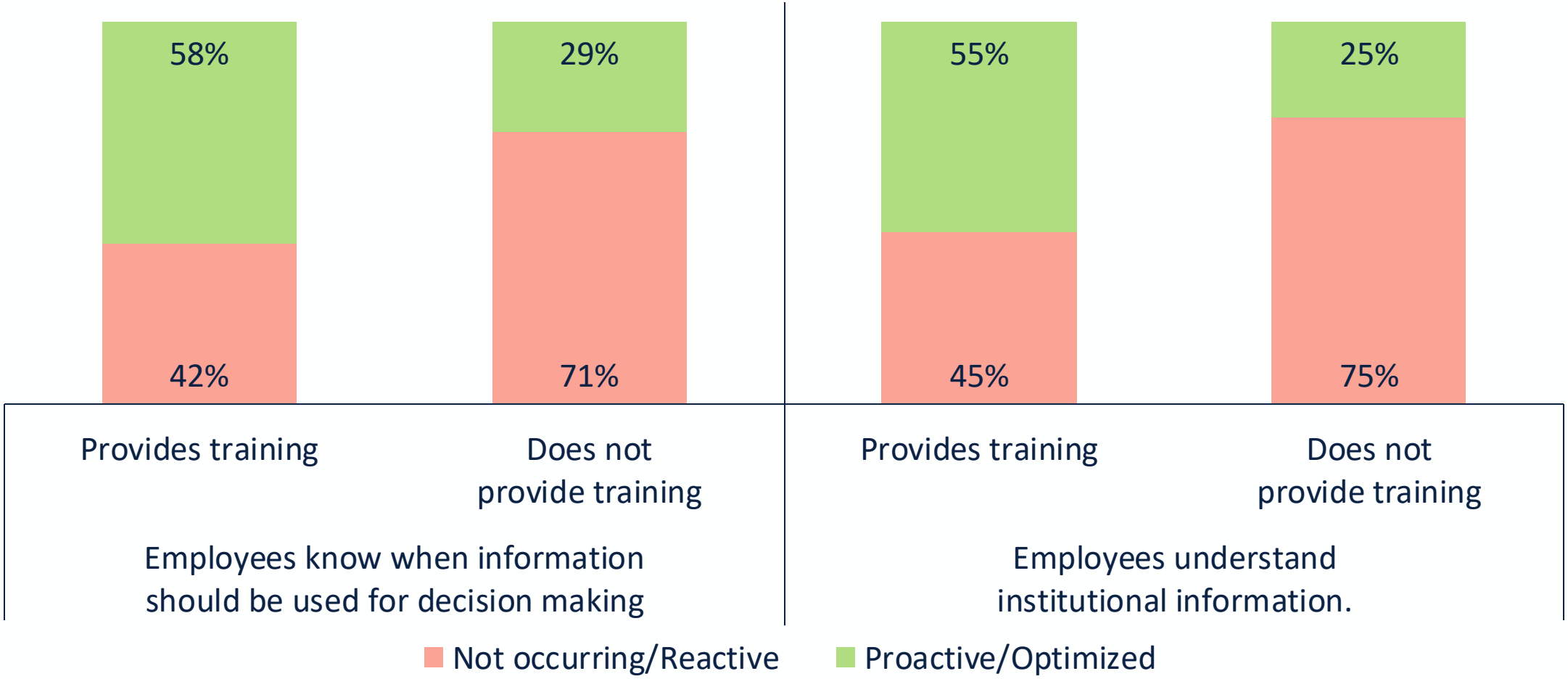
Data Literacy: Differences by Training***



*Reference: 2024 AIR National Survey. www.airweb.org/NationalSurvey ; Statistical mean difference ***p<0.001,*

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One-on-one coaching

Lunch and learns

Courses or programs

One-on-one coaching

Lunch and learns

Courses or programs

Advantages	Challenges

*If you want to **improve data literacy** at your organization or institution, training can't be done once.*

*Training must be **championed** and ingrained into your organizations or institution's culture.*

*But if that **champion** leaves, then the program often **collapse**.*

*AIR wants to help **enhance** your current efforts and offer a more **stable** solution.*

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What is AIR's Approach to Data Literacy?

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Knowledge	**Skills**	**Mindset**	**Habits**
What we know	What we can do	What we think	What we do

Mitigates cognitive biases

Eliminates data elitism;
Promotes data democratization

Humanizes data: Real people are behind those numbers

Promotes success for all Students

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AIR's Data Literacy Institute

12-Week Program

- ***3 cross functional teams**, with up to…*
- ***10 participants per team**, engaging in…*
- ***24 hours of live instruction**, and…*
- ***36 hours of asynchronistic learning** and group activities, for…*
- ***1 purpose**…*

To strengthen institutional connections and expand data literacy.

https://www.airweb.org/dataliteracy

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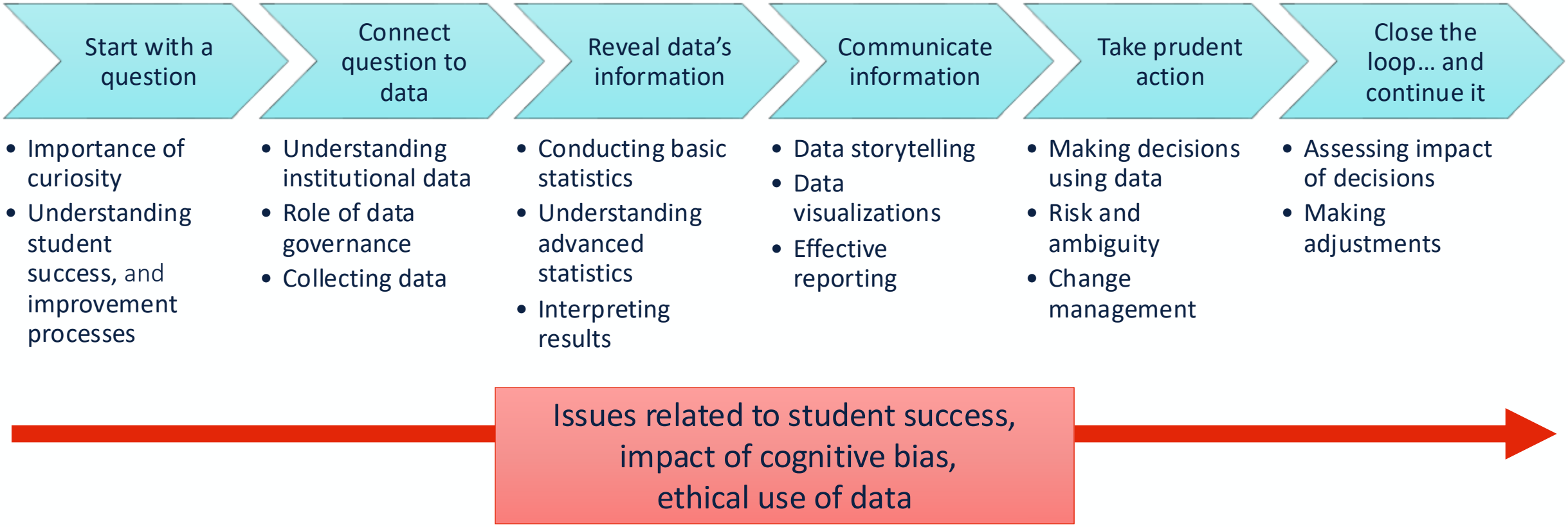
AIR's Data Literacy Institute

Data-Informed Decision-Making Framework



https://www.airweb.org/dataliteracy

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AIR's Data Literacy Institute

Flipped Classroom Model

Pre-meeting

- Watch recorded tutorials
- Participate in discussion board

Live meeting

- Weekly 2-hour Zoom conference call with an instructor
- Content review, discussion, demonstrations, problem solving

Post-meeting

- Weekly assignments focused on completing the Capstone project
- Includes weekly office hours supported by DLI instructor

https://www.airweb.org/dataliteracy

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AIR's Data Literacy Institute

Capstone Projects

Participants are assigned a team for the duration	Collaborate to explore an important student success issue	Write an Executive Summary; Present findings
Not original work	Identify an area of needed improvement	Learn the process to use in future projects.

https://www.airweb.org/dataliteracy

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AIR's Data Literacy Institute

Capstone Projects

Financial Burden Impacts on Student Success	Influence of Faculty Feedback on Student Behaviors and Achievements	Pell-Eligible Graduation Rates
Retention of Students Entering College with No Credits	Retention Rates for Commuter Students	Success 101: Is it Successful?

https://www.airweb.org/dataliteracy

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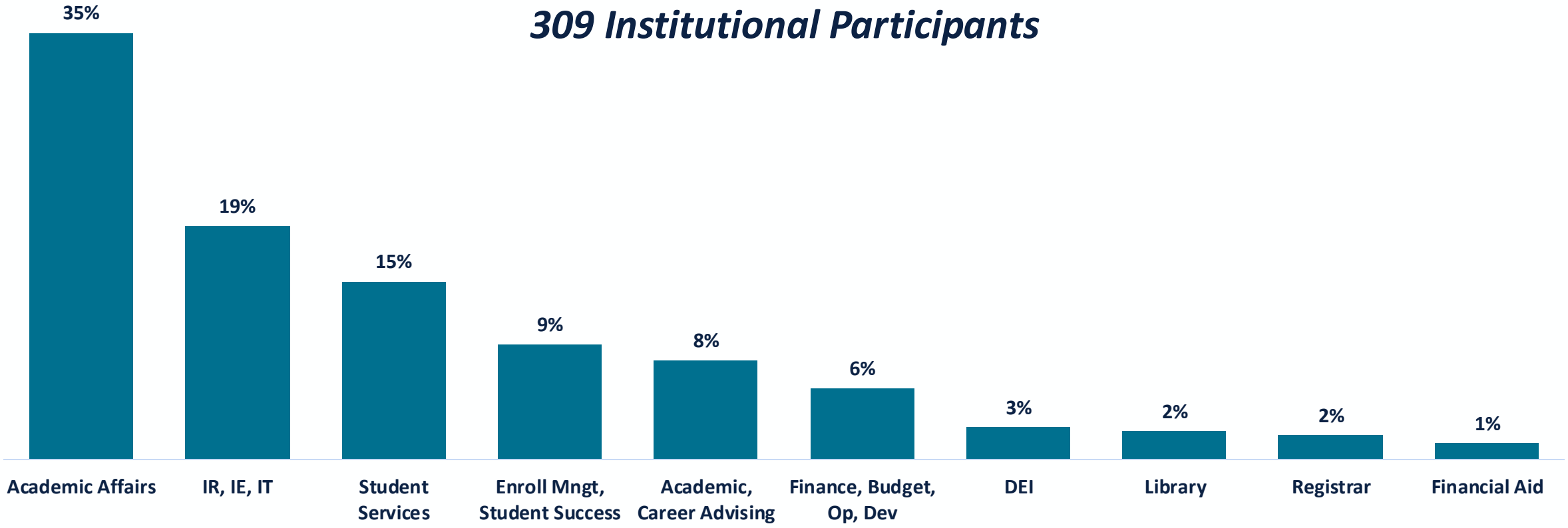
What are the experiences of the participants?

AIR's Data Literacy Institute

Participant Roles

309 Institutional Participants



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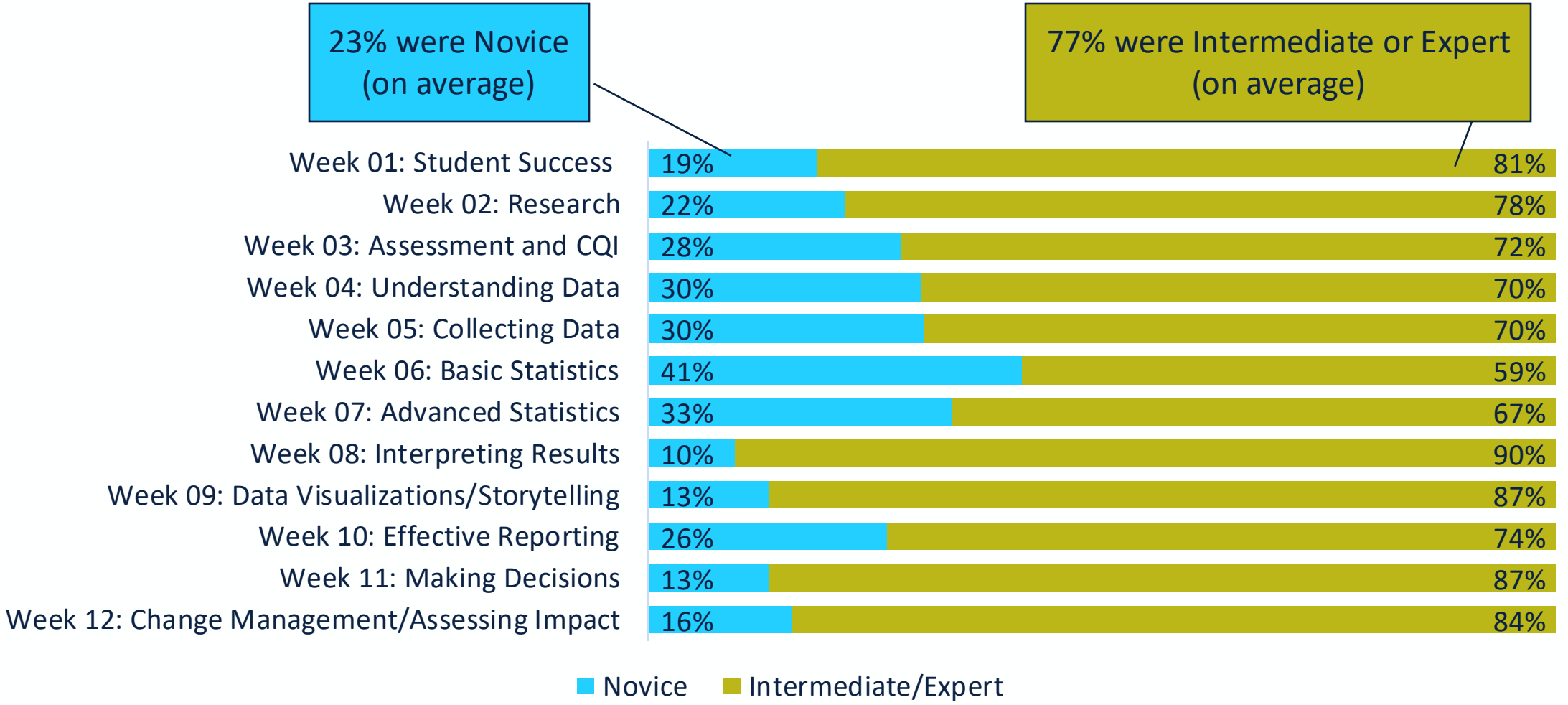
Self-Reported Expertise Prior to Zoom Session (Fall 2024 Cohort)



Data Source: Zoom poll taken immediately following each weekly lecture. Fall 2024 Cohort.

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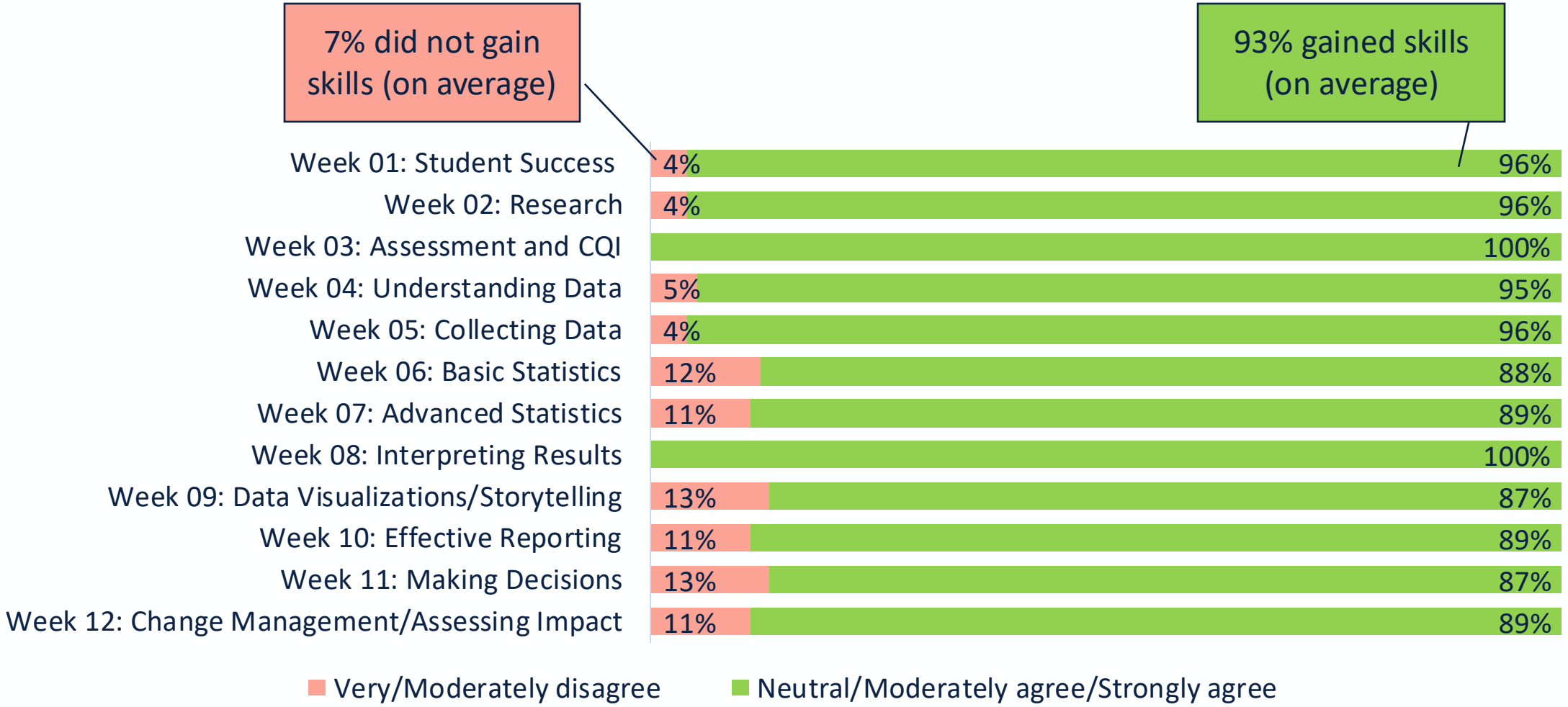
Based on this week's experience, my data literacy skills have improved. (Fall 2024 cohort)



Data Source: Zoom poll taken immediately following each weekly lecture. Fall 2024 Cohort.

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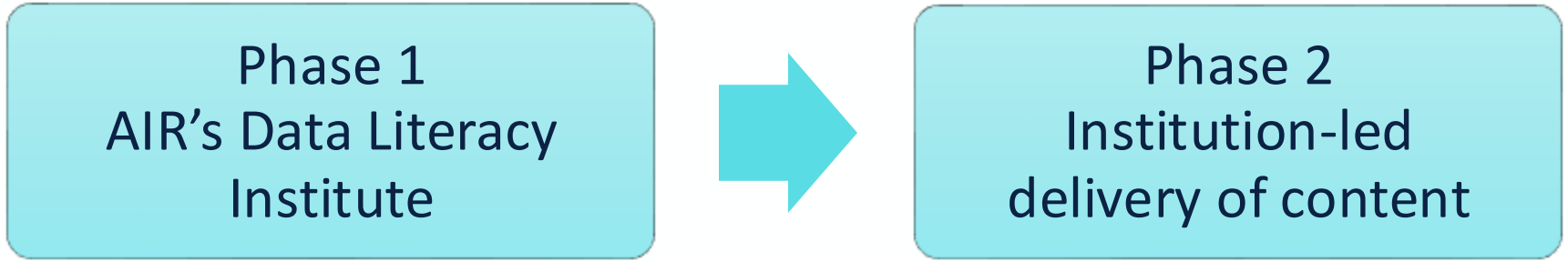
AIR's Long-Term Goal

We want to build a partnership with you.



AIR helps build a culture of data literacy professional development at your institution. Once it is ingrained in the culture, you can make it your own.

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Questions…