

DEFINING AND MEASURING EQUITY, DIVERSITY, & INCLUSION

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ATE PI SURVEY OVERVIEW

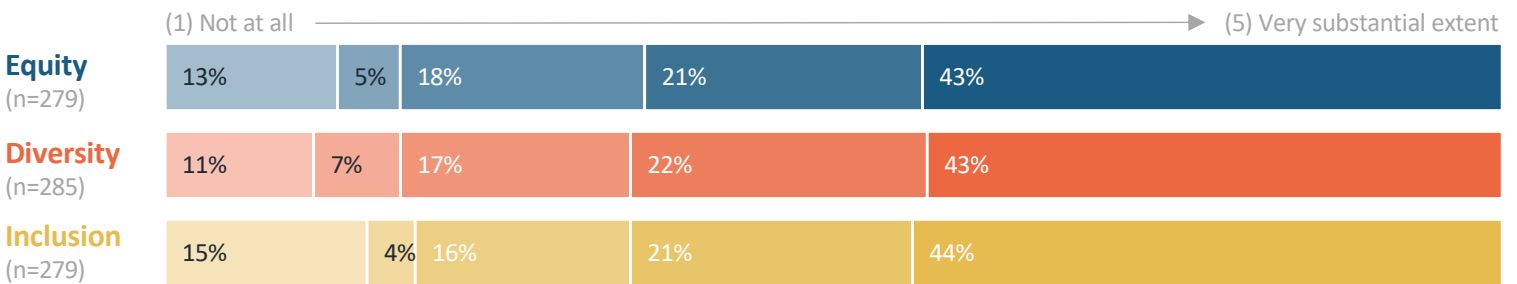
These summary findings are based on the Advanced Technological Education (ATE) Survey conducted in spring 2019. A total of 285 principal investigators (PIs) responded to the questions about how their projects and project evaluations addressed equity, diversity, and inclusion (EDI). Definitions of EDI are provided on the other side of this document.

EVIDENCE AND MEASURES OF EDI

PIs were asked to rate the extent to which their ATE projects engaged in activities to increase EDI on a scale of 1 (*Not at All*) to 5 (*Very Substantial Extent*). They rated the extent to which their evaluations measured EDI using the same scale.

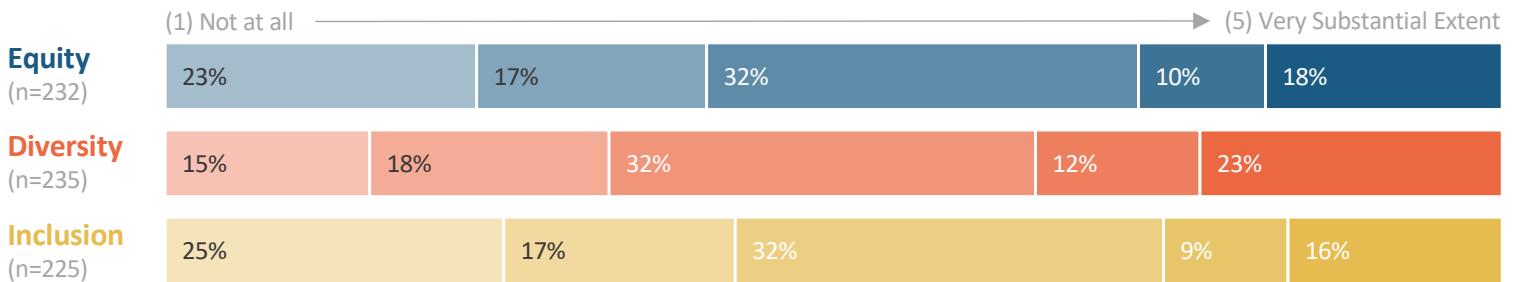
ATE PIs' Ratings of the Extent to Which their Projects Engaged in Activities to Increase EDI

This figure shows PIs' responses about the extent to which their projects directly engaged in activities to increase EDI.



ATE PIs' Rating of the Extent to Which their Evaluations Gathered Evidence Related to EDI

This figure shows PIs' responses about the extent to which their evaluations gathered evidence related to EDI.



EXAMPLES OF HOW EDI IS ADDRESSED in ATE PROJECTS

EQUITY

- Providing additional tutorial services in evening hours and weekends helps students who are working or have family commitments
- Accommodations for students with disabilities are provided

DIVERSITY

- Services are provided for special population students
- Recruitment, curriculum, marketing and outreach for diverse students
 - Women, indigenous, urban, age, ability status, other underrepresented ethnic minorities

INCLUSION

- Programs and activities are intended to make all students welcome to participate
- Designing and implementing new activities and curriculum so all students will feel STEM is for them
- Ensuring workshop and course materials are accessible and examples are bias-free.

ATE EVALUATOR SURVEY OVERVIEW

In summer 2019, 69 evaluators for Advanced Technological Education (ATE) projects responded to a survey about ATE evaluation practices, which included questions about how they evaluate issues related to equity, diversity, and inclusion (EDI). Evaluators were asked to rate the extent to which the ATE projects they evaluated engaged in activities to increase EDI on a scale of 1 (*Not at All*) to 5 (*Very Substantial Extent*). They rated the extent to which their evaluations measured EDI using the same scale. These questions were designed to elicit information about how ATE evaluators conceptualize these constructs and measure them.

EDI DEFINITIONS

Equity: Fair distribution of opportunities to participate and succeed in education for all students.

Diversity: Differences among individuals, including demographic differences such as gender, race, ethnicity, and country of origin.

Inclusion: Processes through which all students are made to feel welcome and are treated as motivated learners.

Source: National Academies of Sciences, Engineering, and Medicine. (2018). *Indicators for Monitoring Undergraduate STEM Education*. Washington, DC: The National Academies Press.

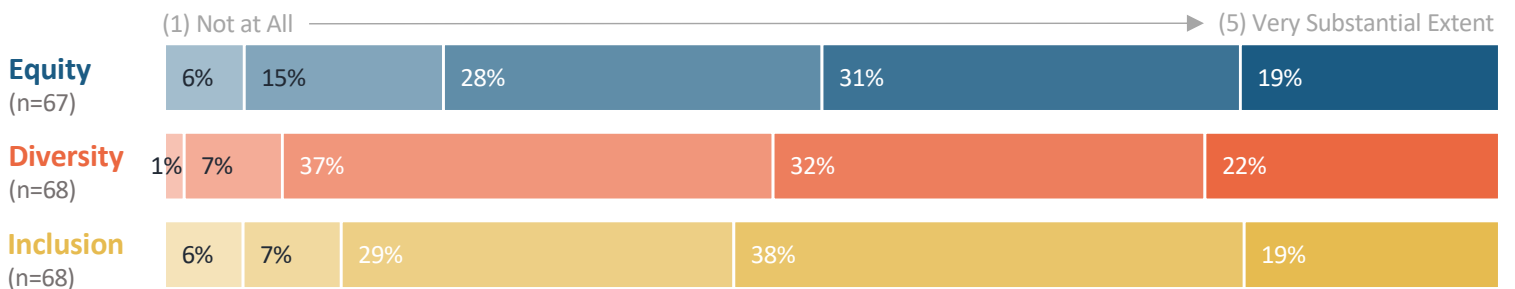
KEY FINDINGS

- **Equity:** The most frequent response about measuring equity was 3 or *Moderate Extent* (n=19). The average of the responses was 2.82 as compared to 3.43 in engaging in activities related to EDI.
- **Diversity:** With regard to measuring diversity, 56 evaluator respondents stated that they measured it from a *Moderate* to *Very Substantial Extent* (82%). The most frequent response was 4 or *Substantial Extent* (n=24).
- **Inclusion:** The average of the responses about measuring inclusion was 2.96, with the most frequent responses being tied for *Moderate Extent* (n=18) and *Substantial Extent* (n=18).

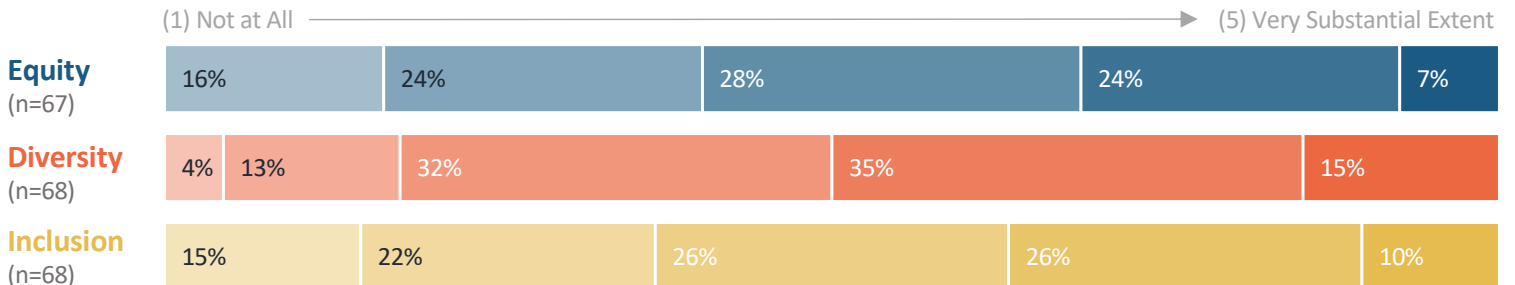
EVIDENCE AND MEASURES OF EDI

Half or more of evaluators reported that the projects they evaluated were engaged in activities designed to increase EDI to a *Very Substantial* or *Substantial Extent*. In contrast, fewer reported that they collected evidence of EDI to that extent.

ATE Evaluators' Ratings of the Extent to Which the ATE Projects they Evaluate Engage in Activities Designed to Increase EDI



ATE Evaluators' Ratings of the Extent to Which their Evaluations Gathered Evidence Related to EDI



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