Identity-Inclusive Computing (IIC) Tenets Survey Results Fall 2023

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Introduction

Computing continues to grapple with long-standing challenges related to diversity, equity, inclusion, and accessibility (DEIA). These persistent issues are partly a result of academic and professional cultures with limited cultural competence that privilege certain identities while marginalizing others [1-2]. Moreover, computing is not a neutral field; it is embedded in the broader social, political, and economic landscape, reflecting and perpetuating power dynamics [3]. While researchers and educators have made considerable efforts to broaden participation in computing [4-6], addressing systemic inequities in both academic and professional spaces remains critical. This work seeks to build on these initiatives by advocating for an approach centered on identity-inclusive computing (IIC) education.

The Alliance for Identity-Inclusive Computing Education (AiiCE) is a cross-sector partnership formed in 2021 to affect systemic change across high school and postsecondary CS education through collective impact [7]. AiiCE's approach to broadening participation in computing decenters K-16 students from identities that are the most minoritized in computing (e.g., by race, ethnicity, gender, ability, and/or socioeconomic status) and instead prioritizes the people, policies, and practices impacting them. Alliance activities are organized into four working groups (referred to as constellations): professional development (PD), curricula & pedagogy, policy, and research. Guided by a steering committee comprised of senior personnel from AiiCE member organizations, activities within each constellation are designed to foster or assess systemic changes in computing education. The Alliance also receives strategic advice from an external advisory board of professionals as well as a student advisory board of graduate and undergraduate students across a range of identities and institutions [8].

In 2022, the AiiCE steering committee developed the IIC Tenets "to guide strategic planning, resource allocation, and collective action to increase the representation, power, and protection of marginalized people in CS" [9]. The Tenets are intended to guide the practices of computing educators, policymakers, and advocates and should be utilized as a framework to guide curricula & pedagogy decisions, as well as the development of PD and policy. Version 1 of the IIC Tenets included only curricula & pedagogy, PD, and policy.

During the development of the Policy Tenets, it was determined that there are clear contrasts between K-12 and postsecondary policy. Thus, Policy Tenets were disaggregated into K-12 and

postsecondary. Throughout this process, feedback was sought from the student advisory board, which provided important information related to postsecondary policy.

Table 1 shows version 1 of the IIC Tenets, which were released in 2023 [9]. We note that this report corresponds to this version of the Tenets. The current version (v2) is available on the AiiCE website (https://identityincs.org/). Note that the IIC Tenets are a living document and will continue to be updated to respond to the computing community's needs.

Table 1: Identity-Inclusive Computing Tenets (Version 1)

Professional Development

PD.1 Definitions of identity (e.g., race, ethnicity, gender, class, sexuality, and disability), intersectionality, oppression, power, and other relevant concepts.

PD.2 Examination of disparities related to identity (racism, sexism, xenophobia, classism, ableism, homophobia, transphobia, and more) and how they're reflected in CS education and the tech industry.

PD.3 Reflection on the current state of identity-inclusive computing in schools, departments, and other institutions.

PD.4 Support for the development of pedagogy and/or practices that lead to anti-oppressive and identity-inclusive spaces.

PD.5 Guidance to develop or adapt identity-inclusive curricula and assessments.

PD.6 Strategies to empower individuals to enact change.

Curricula & Pedagogy

CP.1 Inclusive and equitable CS classroom cultures that are co-created to ensure meaningful learning experiences and a sense of belonging for all students.

CP.2 Pedagogy and curriculum that are aligned to appropriate standards and authentic to students' experiences, interests, and cultures.

CP.3 Student voice, agency, self-determination, and advocacy are valued, encouraged, and incorporated throughout the learning process.

CP.4 Families and communities (including their cultures and assets) are incorporated into the design of learning opportunities.

CP.5 A range of experts who are incorporated into learning opportunities (including researchers and community members).

CP.6 Curricula that address the social legacy of the uneven impacts of CS.

Policy

K-12

KP.1 Definition and prioritization of CS as a "core subject."

KP.2 Adoption of and provision to schools with curriculum and instructional materials that are aligned with identity-inclusive topics and approaches.

KP.3 Assurance during procurement process that hardware & software are accessible.

KP.4 Removal of institutional and access barriers to CS courses and exams.

KP.5 Provision of comprehensive educator preparation and professional development programs that support identity-inclusive pedagogy and practices.

KP.6 Development of local, regional, and state CS education plans that center identity-inclusive computing practices.

KP.7 Development of incentive structures to recruit, prepare, and retain a diverse pool of CS teachers.

Understanding the Computing Community's Use of the Tenets

To better understand how the IIC Tenets are utilized and by whom, AiiCE developed a survey that is administered annually during the fall semester. The original intent was to survey a variety of members of the international computing community at the K-12 and postsecondary levels (including K-16 computer science educators, administrators, policymakers, and advocates), to understand which Tenets are used. However, given the interdisciplinary nature of computing, we quickly recognized the importance of distributing the survey more broadly to include the wider STEM community. Thus, the survey helps to understand who incorporates the IIC Tenets (and at what frequency), barriers preventing incorporation, and other limitations.

This report includes results from the first administration of the survey in the fall 2023 semester. The results serve as a baseline for understanding the incorporation of IIC into computing and the broader STEM communities.

The initial 17-item survey included the following:

- Eleven demographic items related to race/ethnicity, gender, disability status, professional role, geographical location, school or organization type and designation, department, and participation in AiiCE activities (such as attending the Identity & Computing Lecture Series or participating in the Cultural Competence in Computing (3C) Fellows program);
- Three items (representing PD, curricula & pedagogy, and policy) that included each individual Tenet as a sub-item;
- Two items related to the presence of barriers as well as the specific barriers (if present) or other limitations (if not present) to incorporating IIC Tenets; and
- One item for additional information or feedback.

Participants were solicited via recruitment emails to people completing AiiCE PD activities [i.e., K-12 Teacher Policy Committee, Chapter Liaisons, Teacher Inquiry Groups, CS Equity Coaches, Identity-Inclusive Instructors Summit, AiiCE Teaching Assistant PD, and Cultural Competence in Computing (3C) Fellows]; the INCLUDES National Network; and various listservs [e.g., Special Interest Group in CS Education (SIGCSE), Black in Computing, and American Society for Engineering Education (ASEE) listservs: Engineering and Public Policy Division (EPPD); Engineering Ethics Division; Equity, Culture, and Social Justice in Education (ECSJ); Liberal Education/Engineering and Society Division (LEES); Minorities in Engineering Division (MIND); and Women in Engineering Division (WIED)]. While this recruitment strategy reached the broader STEM community, it also limited the participation from non-U.S. participants due to the U.S.-centric nature of the listservs and programs. Future recruitment will seek a broader international audience.

Participants received information detailing the purpose of the study, informed consent form, and survey link. The anonymous survey was distributed via Qualtrics.

Respondent Characteristics

Demographics

Table 2 provides information on respondents' demographic background in terms of race/ethnicity, gender, and disability status.

Table 2: Respondent Demographics

	Count (N = 154)	Percent of Respondents
Race/Ethnicity		
American Indian or Alaska Native	0	0.0%
Asian	23	15.0%
Black or from the African Diaspora	24	15.6%
Latinx/Hispanic	2	1.3%
Middle Eastern or Northern African	5	3.2%
Multiple races (all dominant identities)	3	1.9%
Multiple races (one non-dominant identity)	9	5.8%
Multiple races (two or more non-dominant identities)	7	4.5%
White	74	48.0%
My identity is not listed	1	0.7%
Prefer not to say	6	4.0%
Gender		
Man	60	39.0%
Non-binary	8	5.2%
Woman	77	50.0%
Self-identify	1	0.6%
Prefer not to say	8	5.2%

Identifies as having a disability or chronic condition		
Yes	25	16.2%
No	114	74.0%
Prefer not to say	15	9.7%

Geographic Distribution

Respondents represented eight countries (Afghanistan, Brazil, Cyprus, Hong Kong (S.A.R.), Italy, Nigeria, Sweden, and the U.S.). Figure 1 shows the international geographic distribution of respondents. Those residing in the U.S. represented 34 states, the District of Columbia, and the U.S. Virgin Islands (shown in Figure 2).
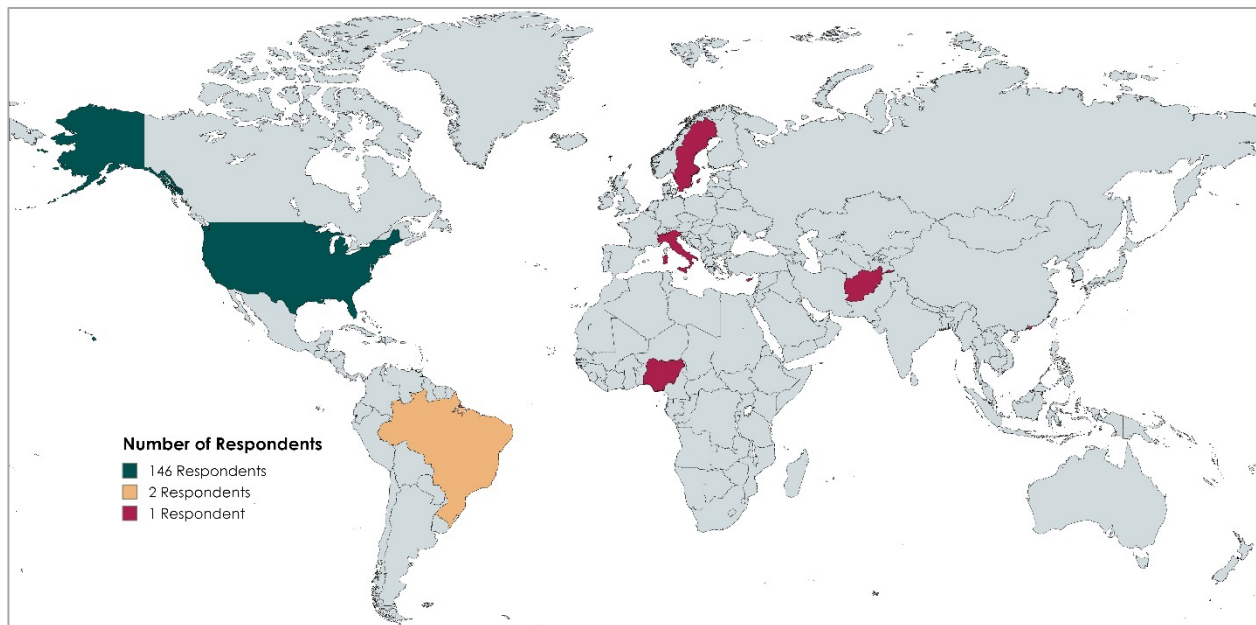
Figure 1: *International geographic distribution of respondents*
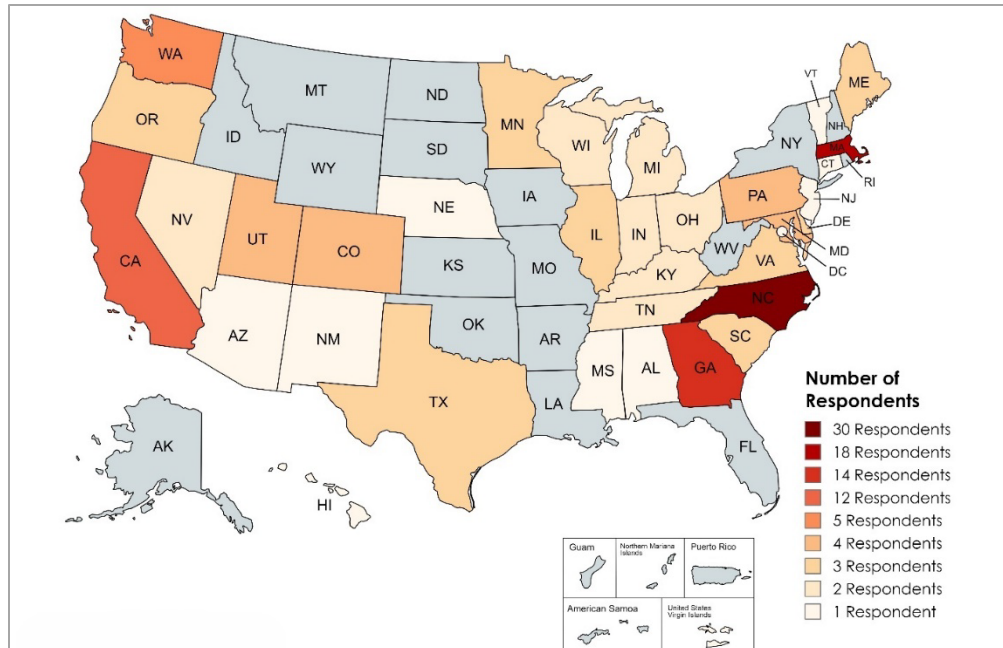
Figure 2: *Geographic distribution of respondents in the U.S.*

Professional Roles and Institution Types

Respondents worked in K-12 and postsecondary-focused roles at educational institutions and organizations, as shown in Figure 3. Figure 4 illustrates the institution/organization types (categorized by public, private, or other). Figure 4 also includes designations [e.g., Asian American- and Native American Pacific Islander-Serving Institution (AANAPISI), Hispanic-Serving Institution (HSI), Historically Black College or University (HBCU), Historically White College or University (HWCU), Tribal College and University (TCU), other postsecondary designation, K-12 school district, K-12 learning center, K-12 school, or other K-12 designation]. Table 3 details the focus of the departments or programs where respondents work.
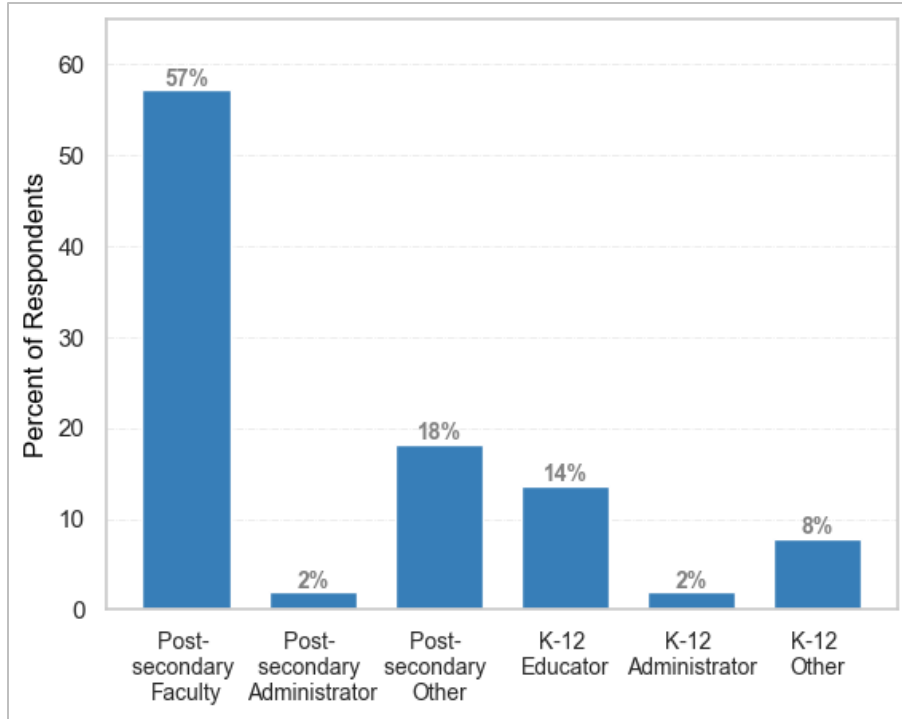
Figure 3: *Respondents' professional roles (N = 154)*
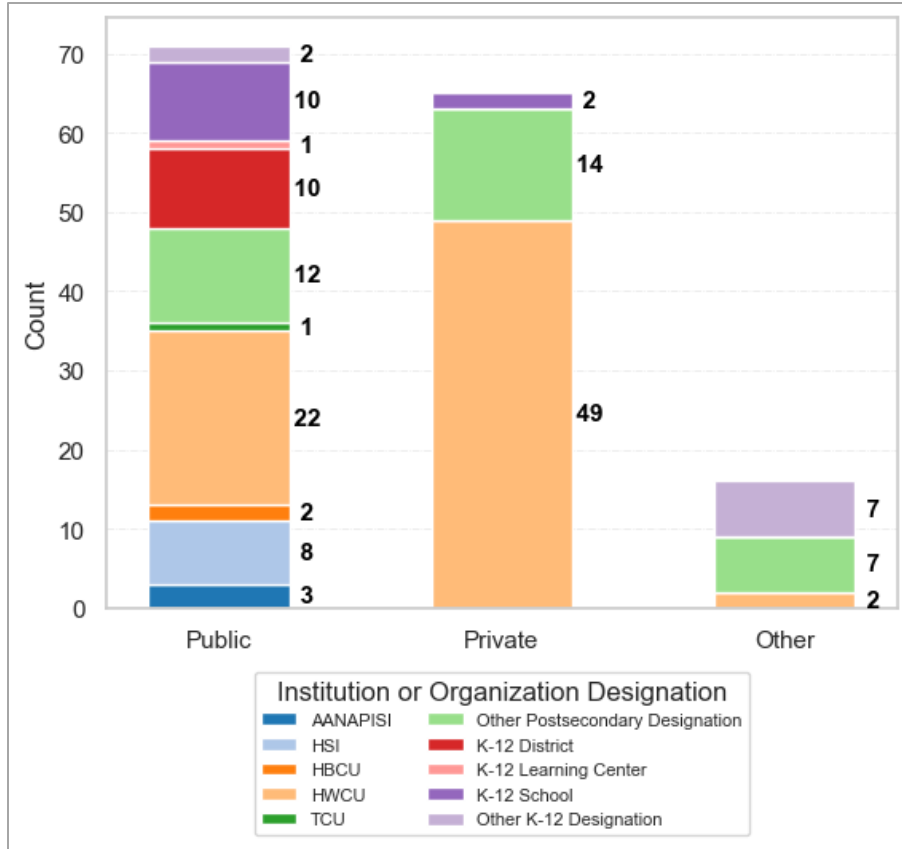
Figure 4: *Repondents' institution or organization type (N = 154)*

Table 3: *Department or Program Focus*

	Count (N = 127)*	Percent of Respondents
Computer Science	106	68.8%
Computer Engineering	3	1.9%
Information Systems	2	1.3%
Information Technology	4	2.6%
Cybersecurity	1	0.6%
Software Engineering	2	1.3%
Other STEM Programs (e.g., Engineering, Biology, Physics, Chemistry, Math)	9	5.8%

*Only some respondents answered this question. The survey indicated that it was intended for those in a postsecondary role, but all respondents saw the question. Thus, some respondents with a K-12 role also answered the question.

AiiCE Participation

Respondents were also asked if they participated in any of the following AiiCE activities:

- o ***AiiCE Teaching Assistant (TA) PD Course***: An online course developed by AiiCE to expose computer science TAs to concepts (such as mindset, emotional intelligence, effective feedback, identity, and belonging) that will help them contribute to a more inclusive, equitable, and supportive learning environment [10].
- o ***Computing Equity Project (CEP):*** Georgia Tech's Constellations Center for Equity in Computing partners with K-12 schools to bring advanced placement (AP) CS courses into schools [11].
- o ***Computer Science Teachers Association Activities:*** Various activities focused on IIC education offered by CSTA include the Chapter Policy Liaisons, identity-inclusive online PD courses, Teacher Policy Committee, Teacher Inquiry Groups, and PD provider summits at the annual CSTA meeting. [12].
- o ***Cultural Competence in Computer (3C) Fellows:*** A two-year, cohort-based, virtual PD program that helps computing faculty, postdoctoral researchers, and graduate students: 1) learn more social science topics (e.g., identity, intersectionality, racism, bias, and discrimination) as well as how these topics manifest in academic environments and technologies [13].
- o ***Identity & Computing Lecture Series:*** Monthly, virtual lecture series on a variety of topics related to identity and computing. Previous topics include the impacts of K-12 computer science policy, experiences of computing students with disabilities, and Critical Race Computational Thinking.
- o ***Identity-Inclusive Instructors Summit:*** Annual workshop that brings together secondary and postsecondary educators to build capacity, knowledge, and skills to support IIC education in high schools and colleges. Participants consider how pedagogical practices, course design, and supportive learning ecosystems can support students from multiple and intersectional identities [14].

Figure 5 shows respondents' participation in AiiCE activities. Some respondents indicated participation in multiple AiiCE activities, thus percentages across all activities sum to greater than 100%.
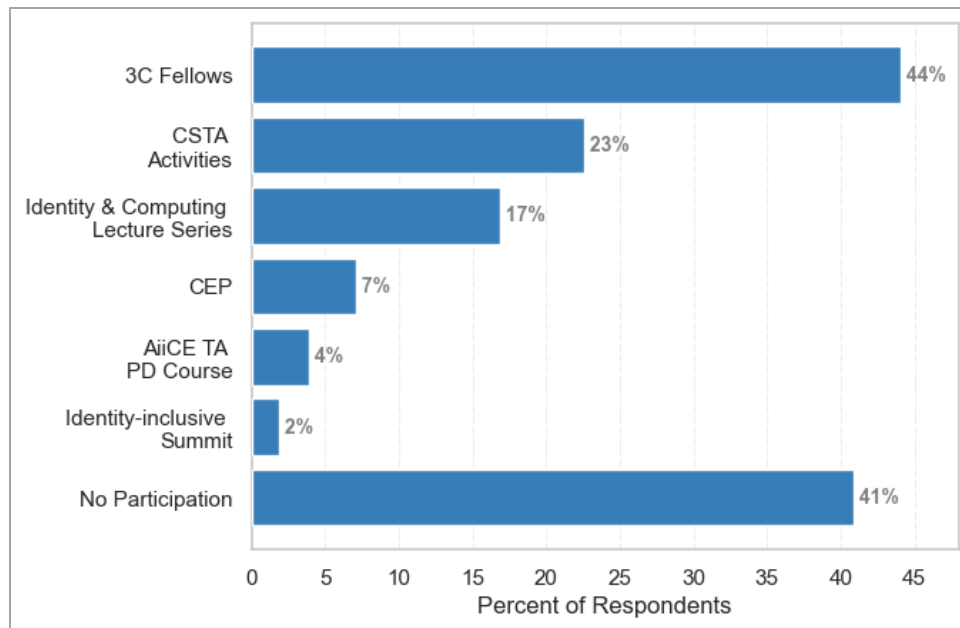
Figure 5: *Respondents' participation in AiiCE activities (N = 154)*

IIC Tenet Use

Respondents were asked to identify which Tenets were incorporated into their work. Those in K-12 roles were shown only the K-12 Policy Tenets, while those in postsecondary roles saw only the Postsecondary Policy Tenets. This section details the overall use of Tenets, who is using them, and where they are applied.

Overall Tenet Use

Table 4 shows the rate of utilization for each Tenet within the four categories (disaggregating K-12 and Postsecondary Policy Tenets; with only 35 respondents responding to K-12 Policy Tenets and 119 responding to Postsecondary Tenets). The most utilized Tenets overall were related to curriculum & pedagogy:

- *Student voice, agency, self-determination, and advocacy that are valued, encouraged, and incorporated throughout the learning process (65%).*
- *Inclusive and equitable CS classroom cultures that are co-created to ensure meaningful learning experiences and a sense of belonging for all students (64%).*

The least utilized Tenets were related to curriculum & pedagogy and postsecondary policy:

- *Families and communities (including their cultures and assets) are incorporated into the design of learning opportunities. (25%).*
- *Institutionalize identity-inclusive computing across multiple courses within department curricula (25%).*

Table 4: *Overall Tenet Utilization*

		Count	Percent
Professional Development Tenets (N = 154)	Definitions of identity (e.g., race, ethnicity, gender, class, sexuality, and disability), intersectionality, oppression, power, and other relevant concepts.	83	53.9%
	Examination of disparities related to identity (racism, sexism, xenophobia, classism, ableism, homophobia, transphobia, and more) and how they're reflected in CS education and the tech industry.	72	46.8%
	Reflection on the current state of identity-inclusive computing in schools, departments, and other institutions.	63	40.9%
	Support for the development of pedagogy and/or practices that lead to anti-oppressive and identity-inclusive spaces.	86	55.8%
	Guidance to develop or adapt identity-inclusive curricula and assessments.	64	41.6%
	Strategies to empower individuals to enact change.	78	50.6%
	No PD Tenet selected	42	27.3%
Curricula & Pedagogy Tenets (N = 154)	Inclusive and equitable CS classroom cultures that are co-created to ensure meaningful learning experiences and a sense of belonging for all students.	99	64.3%
	Pedagogy and curriculum that are aligned to appropriate standards and authentic to students' experiences, interests, and cultures.	82	53.2%
	Student voice, agency, self-determination, and advocacy that are valued, encouraged, and incorporated throughout the learning process.	100	64.9%
	Families and communities (including their cultures and assets) are incorporated into the design of learning opportunities.	39	25.3%
	A range of experts who are incorporated into learning opportunities (including researchers and community members).	66	42.9%
	Curricula that address the social legacy of the uneven impacts of CS.	74	48.1%
	No Curricula/Pedagogy Tenets Selected	29	18.8%
K-12 Policy Tenets (N = 35)	Definition and prioritization of CS as a "core subject."	16	45.7%
	Adoption of and provision to schools with curriculum and instructional materials that are aligned with identity-inclusive topics and approaches.	14	40.0%
	Assurance during procurement process that hardware & software are accessible.	13	37.1%
	Removal of institutional and access barriers to CS courses and exams.	17	48.6%
	Provision of comprehensive educator preparation and professional development programs that support identity-inclusive pedagogy and practices.	15	42.9%
	Development of local, regional, and state CS education plans that center identity-inclusive computing practices.	13	37.1%
	Development of incentive structures to recruit, prepare, and retain a diverse pool of CS teachers.	15	42.9%
	No K-12 Policy Tenets Selected	9	25.7%
Post-Secondary Policy Tenets (N = 119)	Create or improve pathways to discovering, entering, participating in, and completing computing majors.	72	60.5%
	Institutionalize identity-inclusive computing across multiple courses within department curricula.	30	25.2%
	Expand the definition and balance of scholarly work that is valued in computing departments.	50	42.0%

	Recognize and address the oppressive nature (e.g., ableism, elitism, misogyny, and racism) of the hiring, promotion, and tenure processes.	49	41.2%
	Provide comprehensive, IIC-informed professional development for faculty, staff, and teaching assistants (TAs).	33	27.7%
	Regularly solicit and incorporate feedback on department climate from students, faculty, and staff of diverse identities.	57	47.9%
	Identify, implement, and promote a student-centered grievance process that addresses the inequities inherent in existing power structures.	35	29.4%
	No Postsecondary Policy Tenets Selected	28	23.5%

Figure 6 shows the frequency of Tenet use, by area. More than half of the respondents reported using at least three or more Tenets from each of the four areas.
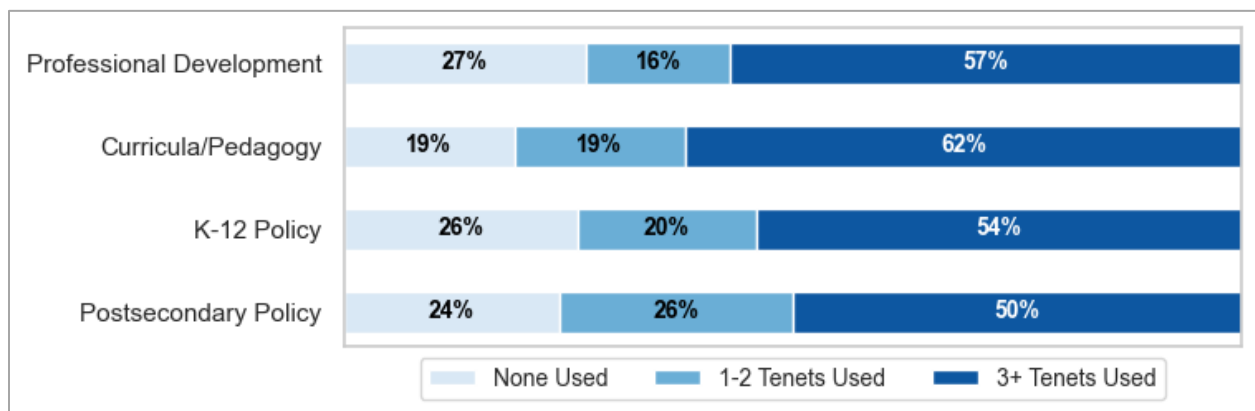
Figure 6: *Frequency of Tenet use, by category (N = 154)*

Professional Development Tenets

Figures 7–11 show PD Tenet use disaggregated by respondents' race/ethnicity, gender, disability status, professional role, and AiiCE participation. Tables 5–7 show PD Tenet use by race and gender; race and disability status; and race and role. Overall, it was observed that:

- There is little variation among the PD Tenets in terms of respondents' race, gender, disability status, and professional role.
- Those who have not participated in any AiiCE activities are slightly more likely to use PD.6 (Strategies to empower individuals to enact change).
- Each PD Tenet was most commonly used by white women. Black women were the second most likely to use PD.2, PD.3, and PD.6, while white men were the second most likely to use the remaining PD Tenets.
- White respondents who do not have a disability or chronic condition were most likely to use each PD Tenet.
- Each PD Tenet was most likely to be used by white or Asian respondents in postsecondary roles. K-12 respondents utilizing the PD Tenets were most likely to be Black or white.
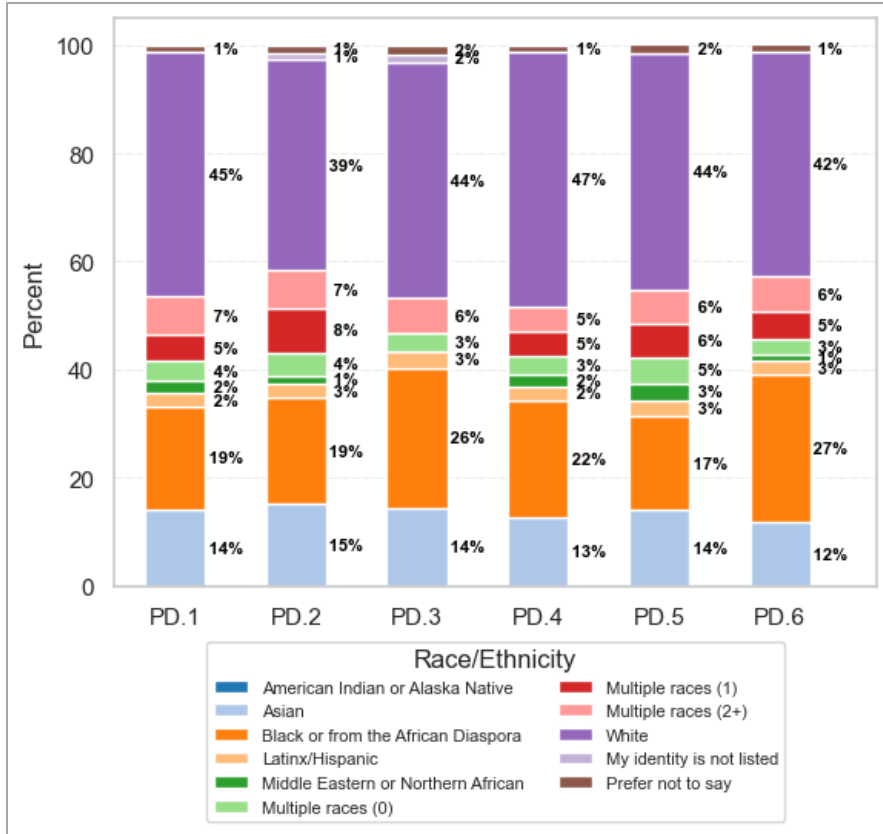
Figure 7: *PD Tenet use by race/ethnicity (N = 154)*
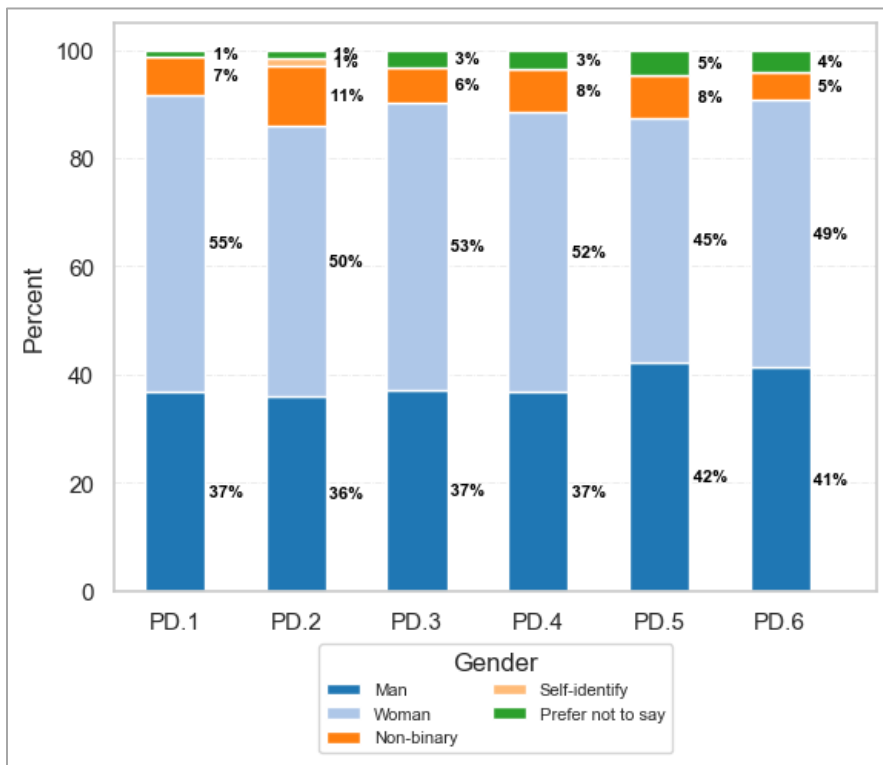
Figure 8: *PD Tenet use by gender (N = 154)*
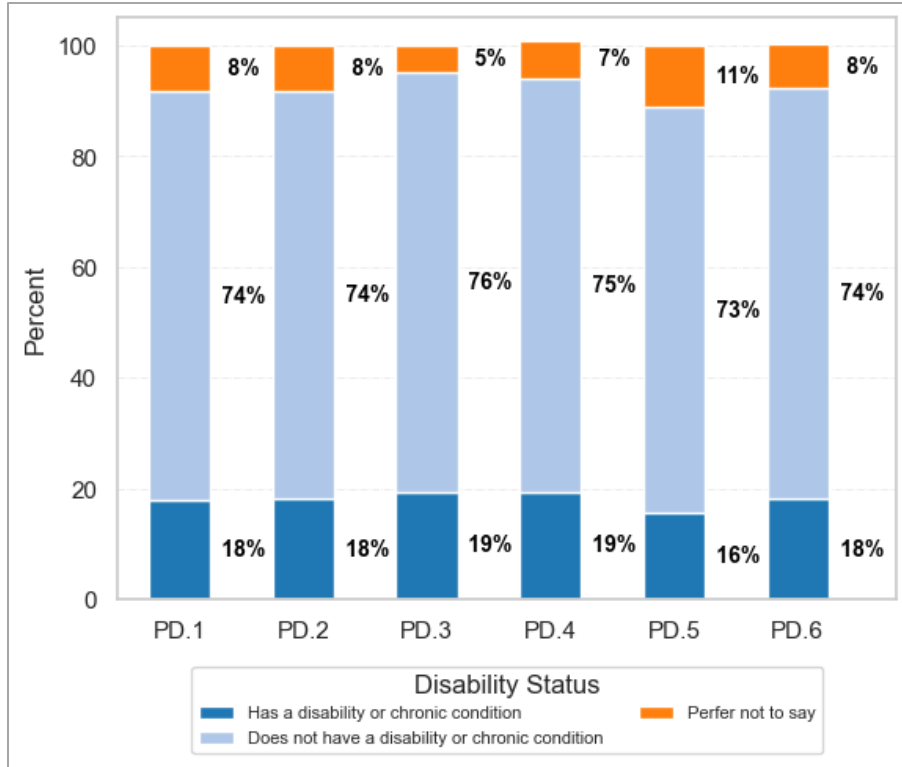
Figure 9: *PD Tenet use by disability status (N = 154)*
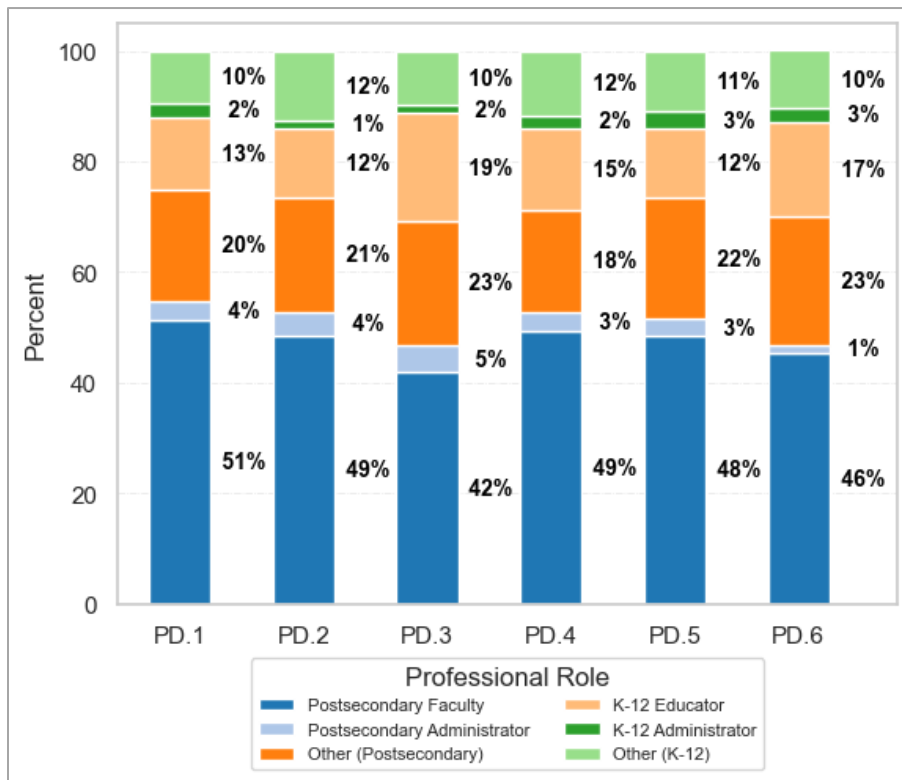
Figure 10: *PD Tenet use by professional role (N = 154)*
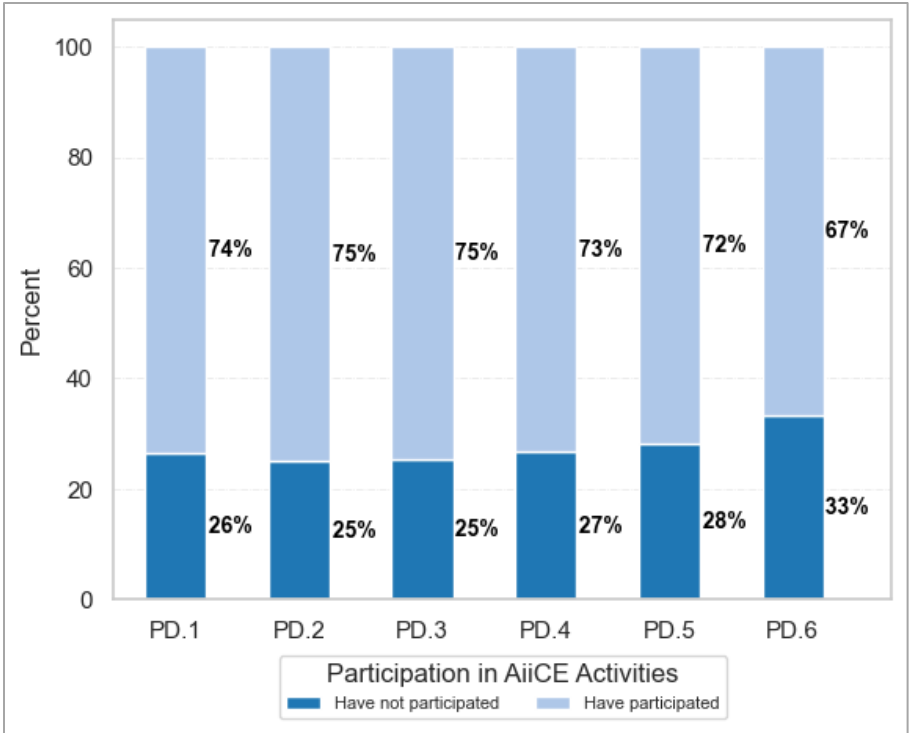
Figure 11: *PD Tenet use by AiiCE Participation (N = 154)*

Table 5: *Number of Respondents Using PD Tenets, by Race and Gender*

	PD.1				PD.2				PD.3			
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	7	5	0	0	7	3	1	0	7	2	0	0
Black or from the African Diaspora	6	10	0	0	5	9	0	0	6	10	0	0
Latinx/Hispanic	1	1	0	0	1	1	0	0	1	1	0	0
Middle Eastern or Northern African	1	1	0	0	1	0	0	0	0	0	0	0
Multiple races (0)	1	2	0	0	1	2	0	0	0	2	0	0
Multiple races (1)	1	2	1	0	2	2	1	0	0	0	0	0
Multiple races (2+)	1	3	2	0	1	2	2	0	1	2	1	0
White	13	22	3	0	8	16	4	0	8	15	3	0
My identity is not listed	0	0	0	0	0	1	0	0	0	1	0	1
Prefer not to say	0	0	0	1	0	0	0	1	0	0	0	1

	PD.4				PD.5				PD.6			
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	7	2	1	1	6	1	1	1	6	2	0	1
Black or from the African Diaspora	8	11	0	0	6	5	0	0	8	13	0	0
Latinx/Hispanic	1	1	0	0	1	1	0	0	1	1	0	0
Middle Eastern or Northern African	1	1	0	0	1	1	0	0	1	0	0	0
Multiple races (0)	1	2	0	0	1	2	0	0	0	2	0	0
Multiple races (1)	1	2	1	0	3	1	0	0	3	1	0	0
Multiple races (2+)	1	1	2	0	1	1	2	0	2	2	0	0
White	12	25	3	0	8	17	2	1	11	17	1	1
My identity is not listed	0	0	0	1	0	0	0	0	0	0	3	0
Prefer not to say	0	0	0	1	0	0	0	1	0	0	0	1

Table 6: *Number of Respondents Using PD Tenets, by Race and Disability Status*

	PD.1			PD.2			PD.3		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	10	2	0	9	2	0	9	0
Black or from the African Diaspora	2	14	0	2	12	0	2	14	0
Latinx/Hispanic	2	0	0	2	0	0	2	0	0
Middle Eastern or Northern African	0	2	0	0	1	0	0	0	0
Multiple races (0)	1	2	0	1	2	0	0	2	0
Multiple races (1)	0	4	0	0	5	1	0	0	0
Multiple races (2+)	2	3	1	1	3	1	1	2	1
White	8	27	3	6	21	1	6	20	1
My identity is not listed	0	0	0	1	0	0	1	0	0
Prefer not to say	0	0	1	0	0	1	0	0	1

	PD.4			PD.5			PD.6		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	9	2	0	6	2	0	7	2
Black or from the African Diaspora	2	17	0	1	10	0	3	18	0
Latinx/Hispanic	2	0	0	2	0	0	2	0	0
Middle Eastern or Northern African	0	2	0	0	2	0	0	1	0
Multiple races (0)	1	2	0	1	2	0	0	2	0
Multiple races (1)	0	4	0	0	4	0	0	4	0
Multiple races (2+)	1	2	1	1	2	1	2	2	1
White	10	29	2	5	21	2	7	23	2
My identity is not listed	0	0	0	0	0	0	0	0	0
Prefer not to say	0	0	1	0	0	1	0	0	1

Table 7: *Number of Respondents Using PD Tenets, by Race and Professional Role*

	PD.1		PD.2		PD.3	
	K-12 Roles	Postsecondary Roles	K-12 Roles	Postsecondary Roles	K-12 Roles	Postsecondary Roles
American Indian or Alaska Native	0	0	0	0	0	0
Asian	2	10	2	9	0	9
Black or from the African Diaspora	10	6	9	5	11	5
Latinx/Hispanic	0	2	0	2	0	2
Middle Eastern or Northern African	0	2	0	1	0	0
Multiple races (0)	0	3	0	3	0	2
Multiple races (1)	0	4	1	5	0	0
Multiple races (2+)	2	4	1	4	1	3
White	7	31	6	22	7	20
My identity is not listed	0	0	0	1	0	1
Prefer not to say	0	1	0	1	0	1

	PD.4		PD.5		PD.6	
	K-12 Roles	Postsecondary Roles	K-12 Roles	Postsecondary Roles	K-12 Roles	Postsecondary Roles
American Indian or Alaska Native	0	0	0	0	0	0
Asian	1	10	1	8	0	9
Black or from the African Diaspora	13	6	7	4	14	7
Latinx/Hispanic	0	2	0	2	0	2
Middle Eastern or Northern African	0	2	0	2	0	1
Multiple races (0)	0	3	0	3	0	2
Multiple races (1)	1	3	1	3	0	4
Multiple races (2+)	1	3	1	3	2	3
White	9	32	7	21	7	25
My identity is not listed	0	0	0	0	0	0
Prefer not to say	0	1	0	1	0	1

Curricula & Pedagogy Tenets

Figures 12–16 show Curricula & Pedagogy Tenet use, disaggregated by race/ethnicity, gender, disability status, professional role, and AiiCE participation. Tables 8–10 show Curricula & Pedagogy Tenet use by race and gender; race and disability status; and race and role. Overall, it was observed that:

- There is little variation among the Curricula & Pedagogy Tenets in terms of respondents' race/ethnicity.
- CP.3 was more likely to be used by men, and CP.6 was more likely to be used by those who have a disability or chronic condition.
- CP.4 was less likely to be used by postsecondary faculty but more likely to be used by respondents in other postsecondary roles or K-12 educators.
- CP.4 was more likely to be used by those who have not participated in AiiCE activities.
- Each Tenet was most used by white women and men. However, more Black women reported using CP.1 and CP.3 than other Tenets.
- Each Tenet was most used by white respondents without a disability or chronic condition. Respondents with a disability or chronic condition were more likely to use CP.6, while CP.4 was the least used by this group.
- Each Tenet was most likely to be used by white respondents in a postsecondary role or Black respondents in a K-12 role.
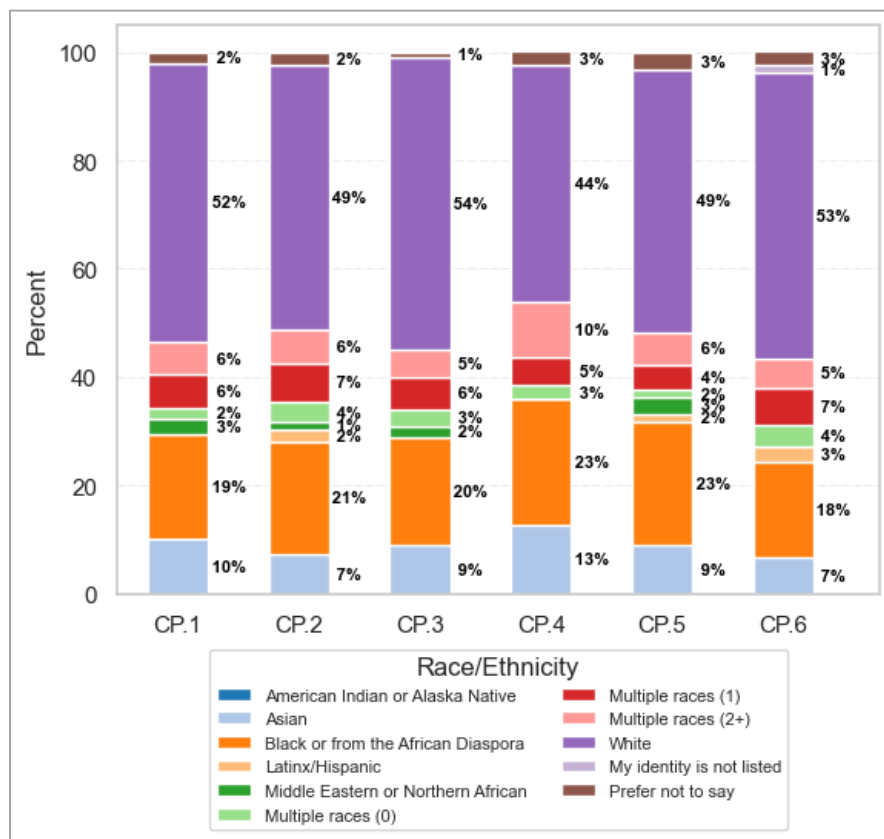
Figure 12: *Curricula & Pedagogy Tenet use by race/ethnicity (N = 154)*
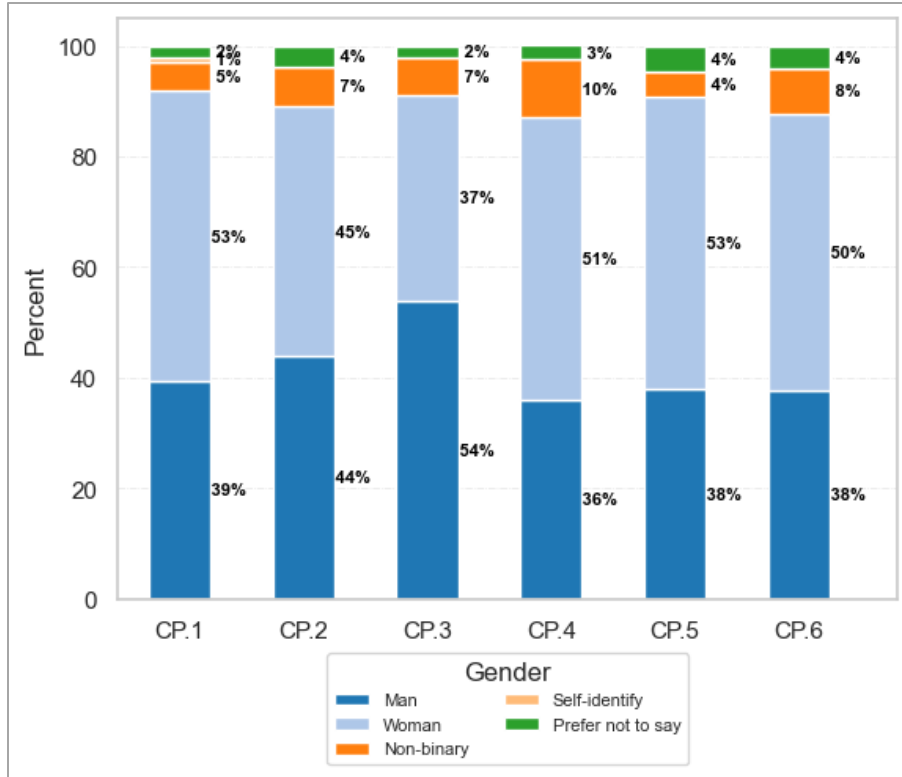
Figure 13: *Curricula & Pedagogy Tenet use by gender (N = 154)*
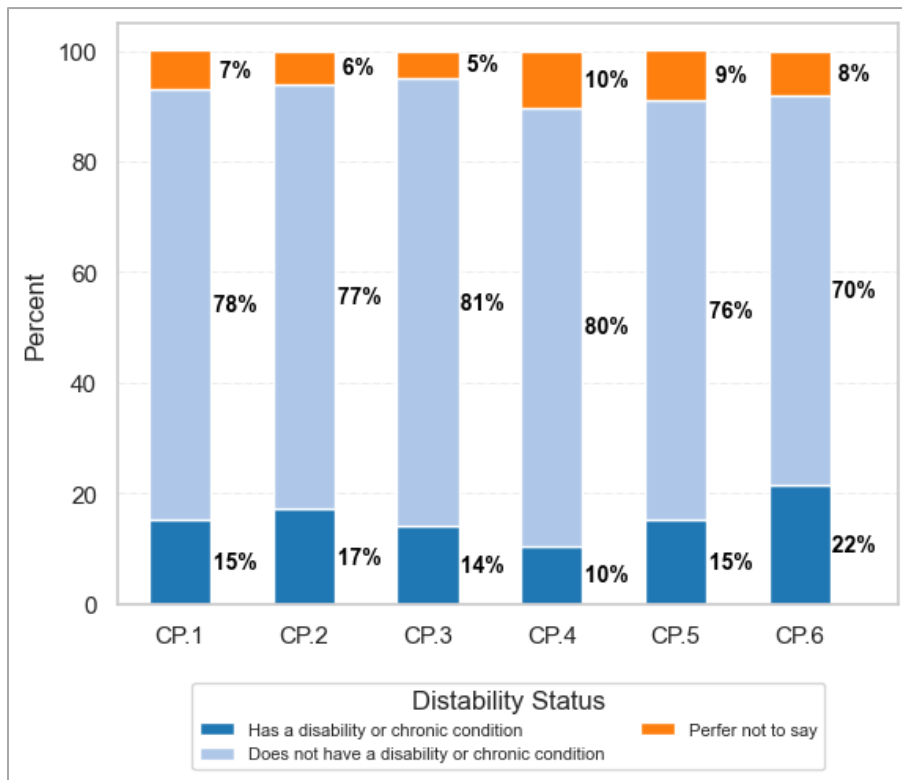
Figure 14: *Curricula & Pedagogy Tenet use by disability status (N = 154)*
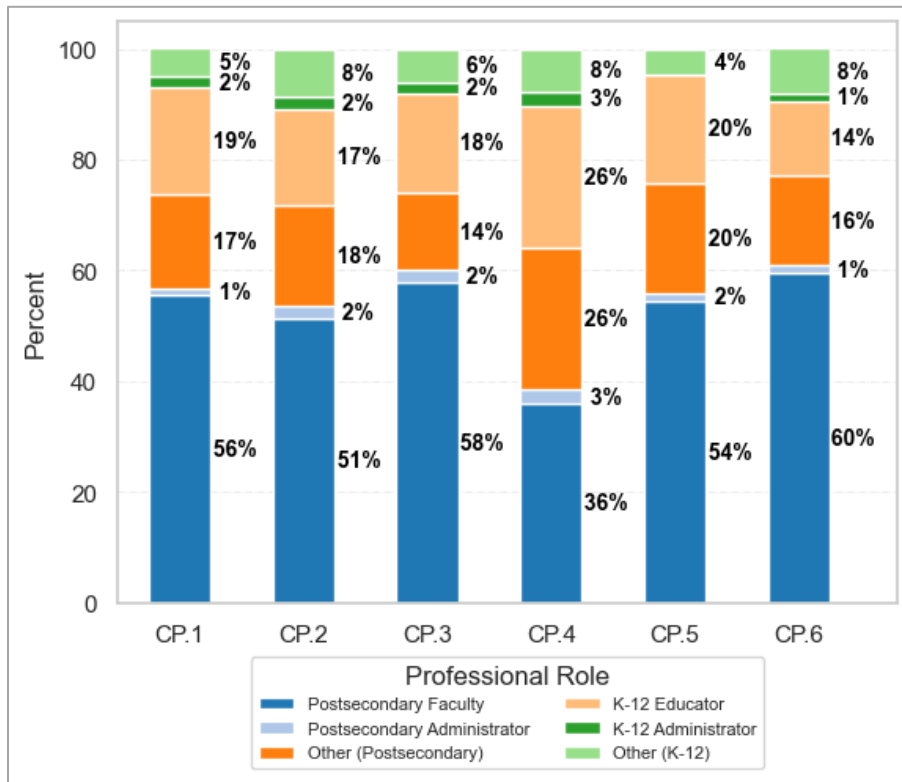
Figure 15: *Curricula & Pedagogy Tenet use by professional role (N = 154)*
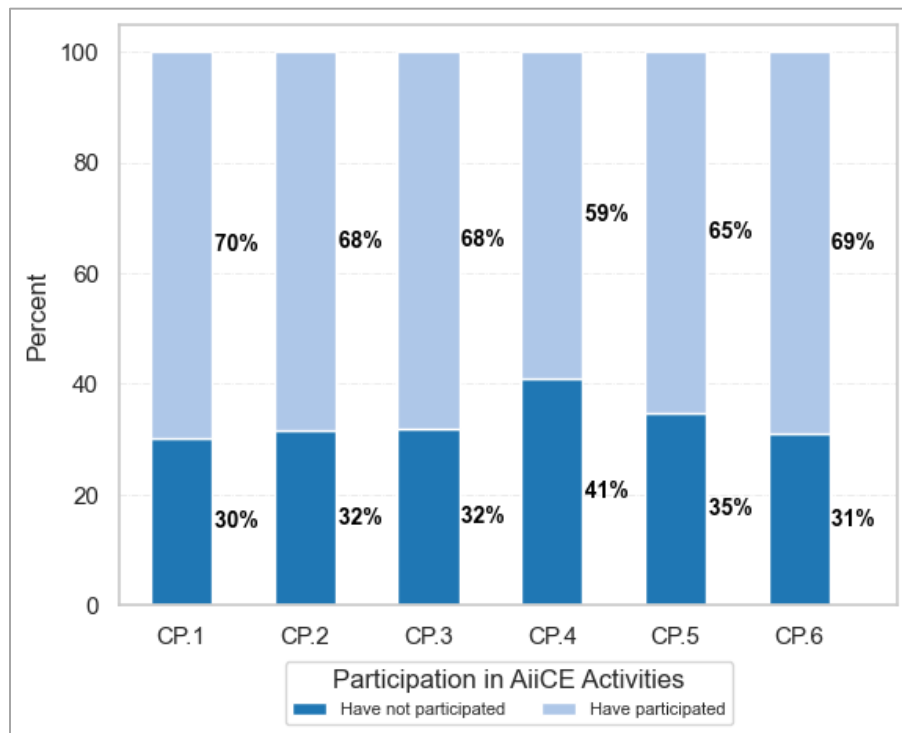
Figure 16: *Curricula & Pedagogy Tenet use by AiiCE participation (N = 154)*

Table 8: Number of Respondents Using Curricula & Pedagogy Tenets, by Race and Gender

	CP.1				CP.2				CP.3			
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	5	3	1	0	4	1	1	0	5	3	1	0
Black or from the African Diaspora	6	14	0	0	8	9	0	0	6	14	0	0
Latinx/Hispanic	0	0	0	0	1	1	0	0	0	0	0	0
Middle Eastern or Northern African	1	1	0	0	1	0	0	0	1	1	0	0
Multiple races (0)	1	2	0	0	1	2	0	0	1	2	0	0
Multiple races (1)	3	2	1	0	4	2	0	0	3	2	1	0
Multiple races (2+)	1	2	2	0	1	2	2	0	1	2	2	0
White	20	30	3	0	16	20	3	1	20	30	3	1
My identity is not listed	0	0	0	1	0	0	0	0	0	0	0	0
Prefer not to say	0	0	0	1	0	0	0	2	0	0	0	1

	CP.4				CP.5				CP.6			
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	3	1	1	0	2	3	1	0	3	1	1	0
Black or from the African Diaspora	4	5	0	0	6	9	0	0	5	8	0	0
Latinx/Hispanic	0	0	0	0	1	0	0	0	1	1	0	0
Middle Eastern or Northern African	0	0	0	0	1	1	0	0	0	0	0	0
Multiple races (0)	0	1	0	0	0	1	0	0	1	2	0	0
Multiple races (1)	1	1	0	0	1	2	0	0	2	2	1	0
Multiple races (2+)	0	2	2	0	2	2	0	0	1	2	1	0
White	6	10	1	0	12	17	2	0	15	20	3	1
My identity is not listed	0	0	0	0	0	0	0	0	0	1	0	0
Prefer not to say	0	0	0	1	0	0	0	2	0	0	0	2

Table 9: *Number of Respondents Using Curricula & Pedagogy Tenets, by Race and Disability Status*

	CP.1			CP.2			CP.3		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	9	1	0	5	1	0	8	1
Black or from the African Diaspora	2	17	0	2	15	0	2	18	0
Latinx/Hispanic	0	0	0	2	0	0	0	0	0
Middle Eastern or Northern African	0	3	0	0	1	0	0	2	0
Multiple races (0)	0	2	0	1	2	0	1	2	0
Multiple races (1)	0	5	1	0	6	0	0	6	0
Multiple races (2+)	2	3	1	1	3	1	1	3	1
White	11	38	2	8	31	1	10	42	2
My identity is not listed	0	0	0	0	0	0	0	0	0
Prefer not to say	0	0	2	0	0	2	0	0	1

	CP.4			CP.5			CP.6		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	4	1	0	4	2	0	3	2
Black or from the African Diaspora	1	8	0	2	13	0	2	11	0
Latinx/Hispanic	0	0	0	1	0	0	2	0	0
Middle Eastern or Northern African	0	0	0	0	2	0	0	0	0
Multiple races (0)	0	1	0	0	1	0	1	2	0
Multiple races (1)	0	2	0	0	3	0	0	5	0
Multiple races (2+)	0	3	1	1	2	1	1	2	1
White	3	13	1	6	25	1	9	29	1
My identity is not listed	0	0	0	0	0	0	1	0	0
Prefer not to say	0	0	1	0	0	2	0	0	2

Table 10: Number of Respondents Using Curricula & Pedagogy Tenets, by Race and Role

	CP.1		CP.2		CP.3	
	K-12 Roles	Postsecondary Roles	K-12 Roles	Postsecondary Roles	K-12 Roles	Postsecondary Roles
American Indian or Alaska Native	0	0	0	0	0	0
Asian	1	9	1	5	1	8
Black or from the African Diaspora	14	5	12	5	15	5
Latinx/Hispanic	0	0	0	2	0	0
Middle Eastern or Northern African	0	3	0	1	0	2
Multiple races (0)	0	2	0	3	0	3
Multiple races (1)	1	5	1	5	1	5
Multiple races (2+)	2	4	1	4	1	4
White	8	43	8	32	8	46
My identity is not listed	0	0	0	0	0	0
Prefer not to say	0	2	0	2	0	1
	CP.4		CP.5		CP.6	
	K-12 Roles	Postsecondary Roles	K-12 Roles	Postsecondary Roles	K-12 Roles	Postsecondary Roles
American Indian or Alaska Native	0	0	0	0	0	0
Asian	0	5	0	6	0	5
Black or from the African Diaspora	8	1	10	5	9	4
Latinx/Hispanic	0	0	0	1	0	2
Middle Eastern or Northern African	0	0	0	2	0	0
Multiple races (0)	0	1	0	1	0	3
Multiple races (1)	1	1	0	3	1	4
Multiple races (2+)	0	4	1	3	1	3
White	8	9	5	27	6	33
My identity is not listed	0	0	0	0	0	1
Prefer not to say	0	1	0	2	0	2

K-12 Policy Tenets

To understand who is using the K-12 Policy Tenets, Figures 17–21 show each Tenet by race/ethnicity, gender, disability status, professional role, and AiiCE participation. Tables 11 and 12 show K-12 Policy Tenet use by race and gender, as well as race and disability status. Overall, it is observed that:

- All seven Tenets were primarily used by Black respondents, with most respondents identifying as Black women.
- More than half of the respondents using Tenets KP.1 through KP.5 are women, whereas the majority of those using KP.6 and KP.7 are men.
- Nearly all respondents who use the K-12 Policy Tenets do not have a disability or chronic condition. However, a few respondents with a disability or chronic condition indicated using KP.1, KP.3, KP.4, and KP.7.
- All seven Tenets are primarily used by K-12 educators and those who have participated in AiiCE activities.
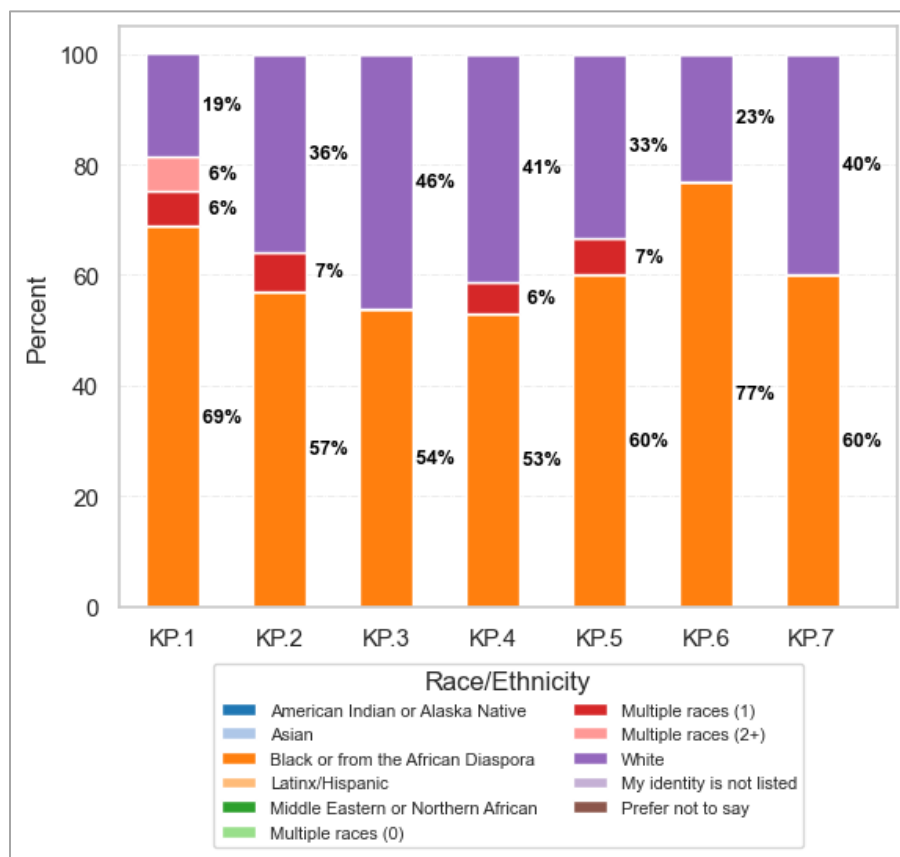

Figure 17: *K-12 Policy Tenet use by race/ethnicity (N = 35)*
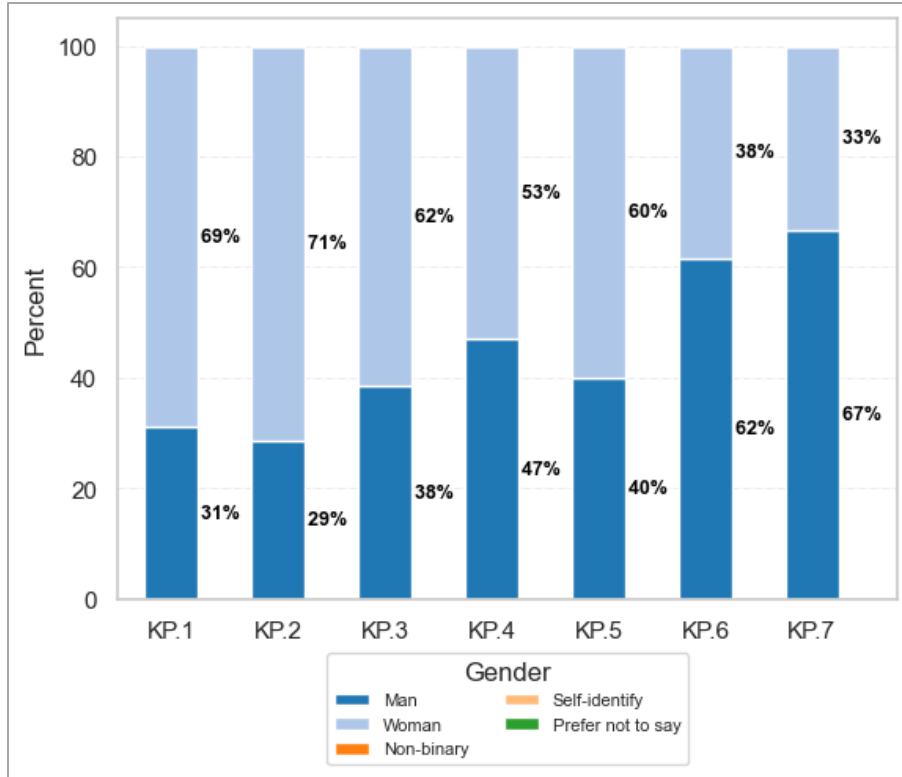
Figure 18: *K-12 Policy Tenet use by gender (N = 35)*
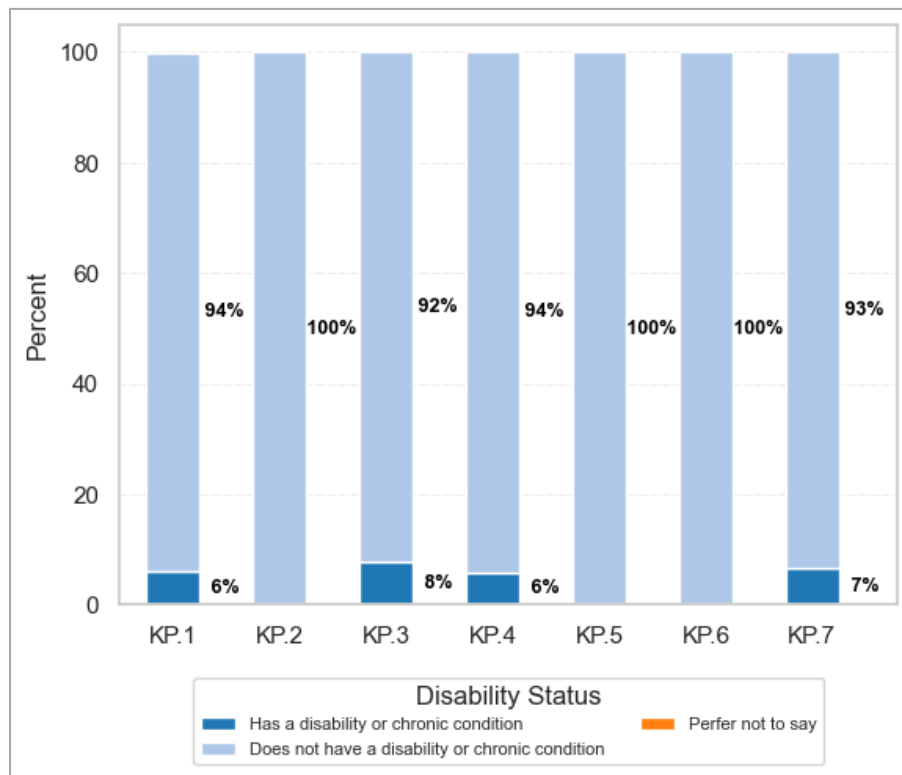

Figure 19: *K-12 Policy Tenet use by disability status (N = 35)*

Figure 20: *K-12 Policy Tenet use by professional role (N = 35)*

Figure 21: *K-12 Policy Tenet use by AiiCE participation (N = 35)*

Table 11: Number of Respondents Using K-12 Policy Tenets, by Race and Gender

	KP.1				KP.2				KP.3			
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0	0	0	0
Black or from the African Diaspora	3	8	0	0	2	6	0	0	3	4	0	0
Latinx/Hispanic	0	0	0	0	0	0	0	0	0	0	0	0
Middle Eastern or Northern African	0	0	0	0	0	0	0	0	0	0	0	0
Multiple races (0)	0	0	0	0	0	0	0	0	0	0	0	0
Multiple races (1)	1	0	0	0	1	0	0	0	0	0	0	0
Multiple races (2+)	0	1	0	0	0	0	0	0	0	0	0	0
White	1	2	0	0	1	4	0	0	2	4	0	0
My identity is not listed	0	0	0	0	0	0	0	0	0	0	0	0
Prefer not to say	0	0	0	0	0	0	0	0	0	0	0	0

	KP.4				KP.5				KP.6				KP.7			
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black or from the African Diaspora	5	4	0	0	4	5	0	0	4	6	0	0	4	5	0	0
Latinx/Hispanic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Middle Eastern or Northern African	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multiple races (0)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multiple races (1)	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Multiple races (2+)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	2	5	0	0	1	4	0	0	1	2	0	0	1	5	0	0
My identity is not listed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prefer not to say	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 12: *Number of Respondents Using K-12 Policy Tenets, by Race and Disability Status*

	KP.1			KP.2			KP.3		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Black or from the African Diaspora	0	11	0	0	8	0	0	7	0
Latinx/Hispanic	0	0	0	0	0	0	0	0	0
Middle Eastern or Northern African	0	0	0	0	0	0	0	0	0
Multiple races (0)	0	0	0	0	0	0	0	0	0
Multiple races (1)	0	1	0	0	1	0	0	0	0
Multiple races (2+)	1	0	0	0	0	0	0	0	0
White	0	3	0	0	5	0	1	5	0
My identity is not listed	0	0	0	0	0	0	0	0	0
Prefer not to say	0	0	0	0	0	0	0	0	0

	KP.4			KP.5			KP.6			KP.7		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0	0	0	0
Black or from the African Diaspora	0	9	0	0	9	0	0	10	0	0	9	0
Latinx/Hispanic	0	0	0	0	0	0	0	0	0	0	0	0
Middle Eastern or Northern African	0	0	0	0	0	0	0	0	0	0	0	0
Multiple races (0)	0	0	0	0	0	0	0	0	0	0	0	0
Multiple races (1)	0	1	0	0	1	0	0	0	0	0	0	0
Multiple races (2+)	0	0	0	0	0	0	0	0	0	0	0	0
White	1	6	0	0	5	0	0	3	0	0	5	0
My identity is not listed	0	0	0	0	0	0	0	0	0	0	0	0
Prefer not to say	0	0	0	0	0	0	0	0	0	0	0	0

Postsecondary Policy Tenets

Figures 22–26 show Postsecondary Policy Tenet use by race/ethnicity, gender, disability status, professional role, and AiiCE participation. Tables 13 and 14 show Postsecondary Policy Tenet use by race and gender as well as race and disability status. Overall, it is observed that:

- White respondents were more likely and Black respondents were less likely to use PP.1, compared to the other Tenets.
- There is little variation among the Postsecondary Policy Tenets in terms of gender and disability status.
- Respondents in other postsecondary roles (i.e., not faculty or administrative roles) were more likely to use PP.2, PP.5, and PP.7.
- Respondents who use PP.4 were more likely to have participated in AiiCE activities than those using other Tenets, while those who use PP.7 were less likely to have participated in AiiCE activities.
- More white men and women used PP.1 and PP.6, compared to the other Tenets. Asian men were most likely to use PP.1.
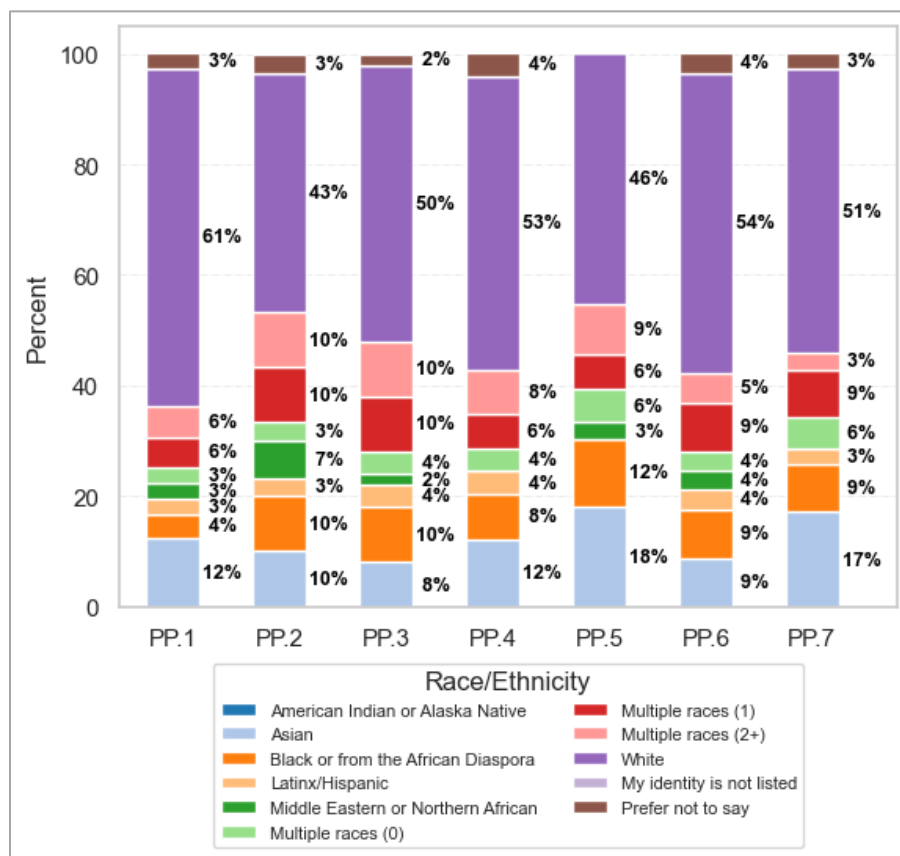
Figure 22: *Postsecondary Policy Tenet use by race/ethnicity (N = 119)*
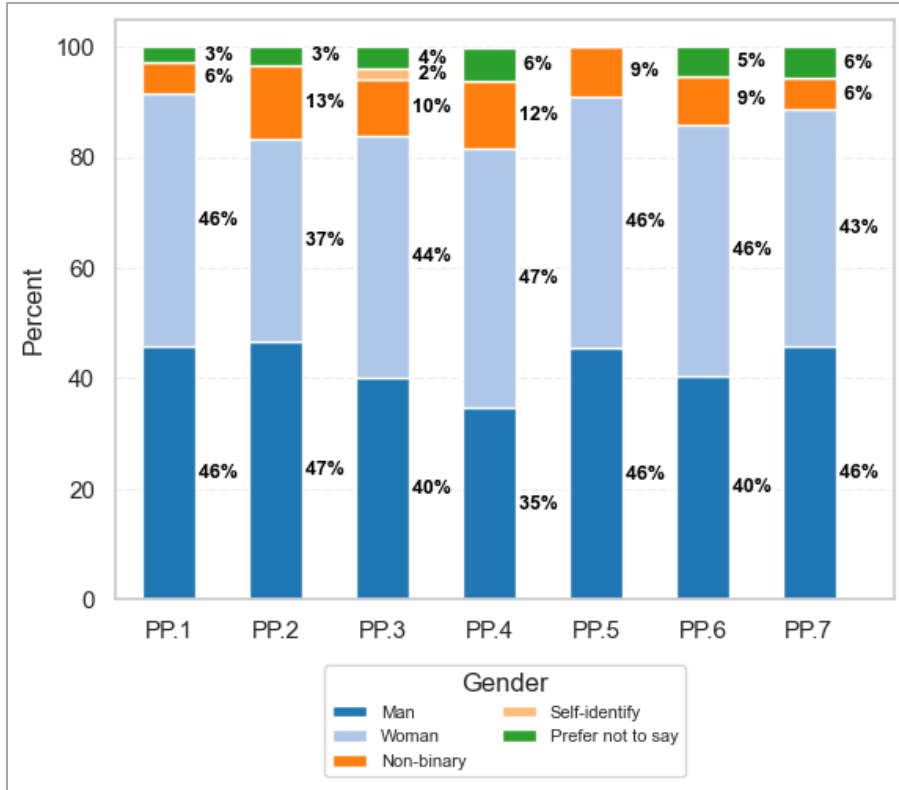
Figure 23: *Postsecondary Policy Tenet use by gender (N = 119)*
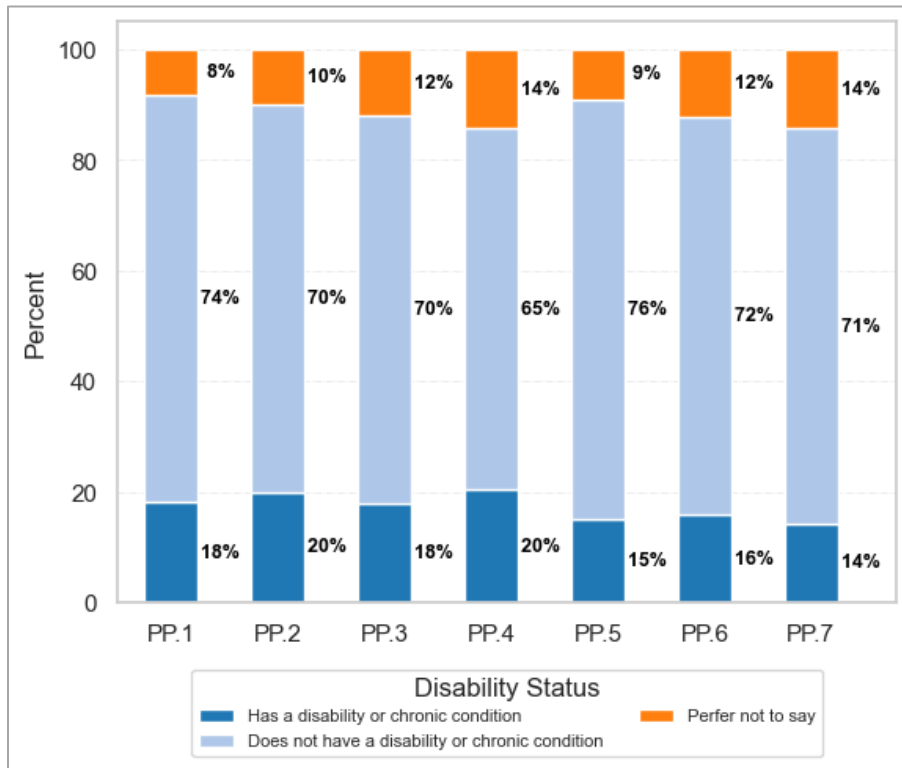
Figure 24: *Postsecondary Policy Tenet use by disability status (N = 119)*
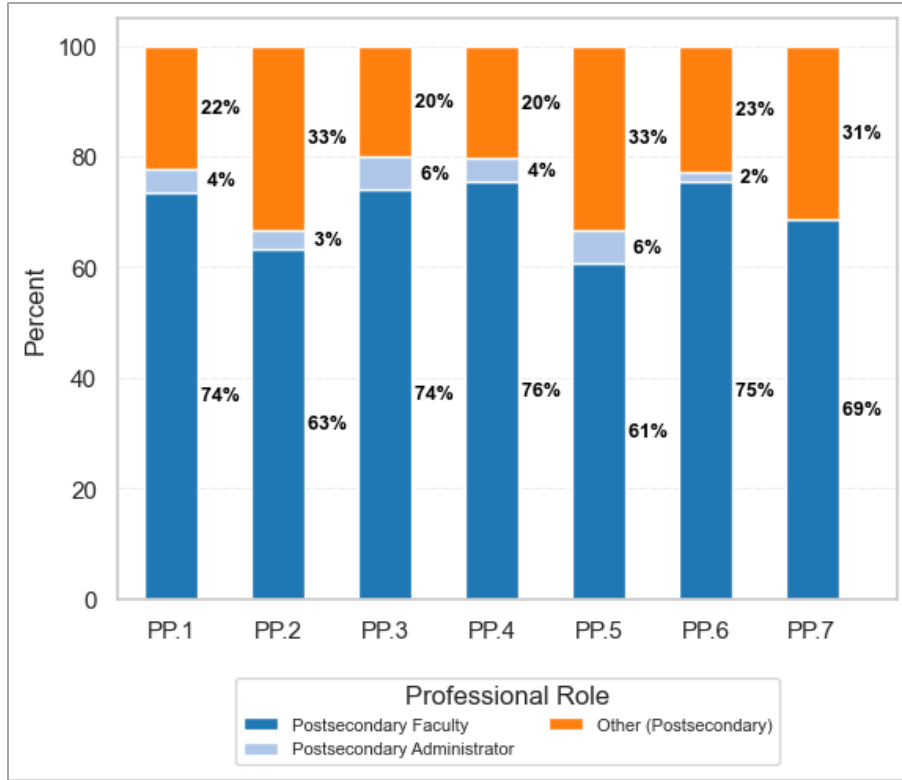
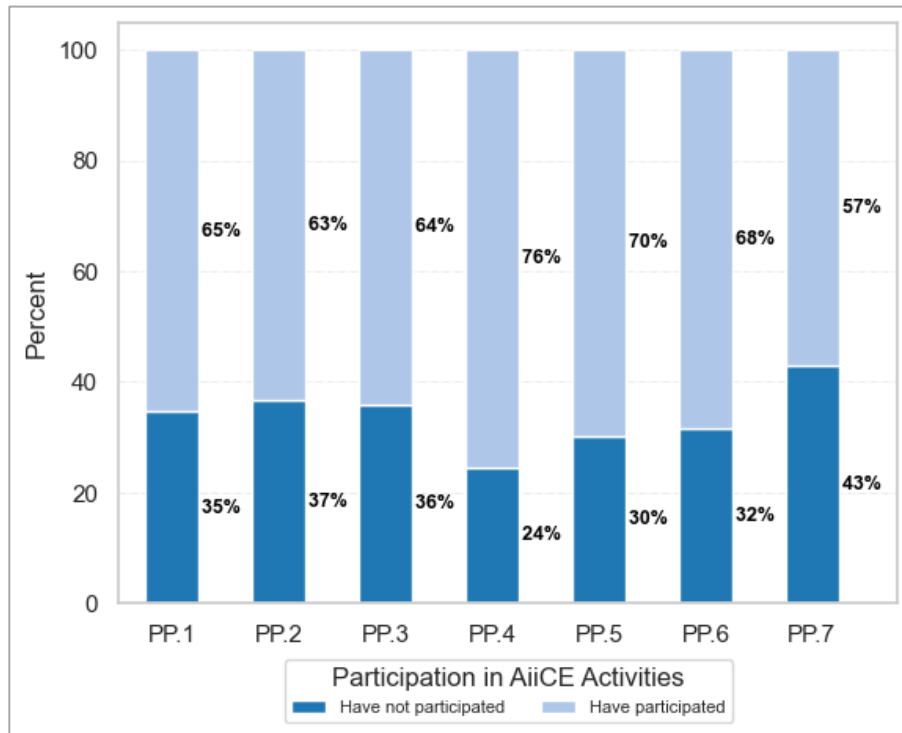***Figure 25:*** *Postsecondary Policy Tenet use by professional role (N = 119)*

Figure 26: *Postsecondary Policy Tenet use by AiiCE participation (N = 119)*

Table 13: *Number of Respondents Using Postsecondary Policy Tenets, by Race and Gender*

	PP.1				PP.2				PP.3			
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	6	3	0	0	2	1	0	0	3	1	0	0
Black or from the African Diaspora	2	1	0	0	1	2	0	0	2	3	0	0
Latinx/Hispanic	1	1	0	0	1	0	0	0	1	1	0	0
Middle Eastern or Northern African	0	2	0	0	0	2	0	0	0	1	0	0
Multiple races (0)	1	1	0	0	0	1	0	0	1	1	0	0
Multiple races (1)	1	3	0	0	1	2	0	0	1	2	1	0
Multiple races (2+)	1	1	2	0	0	1	2	0	1	2	2	0
White	20	21	2	1	9	2	2	0	11	11	2	1
My identity is not listed	0	0	0	0	0	0	0	0	0	0	0	0
Prefer not to say	1	0	0	1	0	0	0	1	0	0	0	1

	PP.4				PP.5				PP.6				PP.7			
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	3	1	1	1	4	2	0	0	2	1	1	1	3	1	1	1
Black or from the African Diaspora	2	2	0	0	2	2	0	0	2	3	0	0	1	2	0	0
Latinx/Hispanic	1	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0
Middle Eastern or Northern African	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0
Multiple races (0)	1	1	0	0	0	2	0	0	1	1	0	0	1	1	0	0
Multiple races (1)	0	2	1	0	1	1	0	0	2	3	0	0	2	1	0	0
Multiple races (2+)	0	2	2	0	0	1	2	0	0	1	2	0	0	1	0	0
White	9	14	2	1	8	6	1	0	14	15	2	0	8	9	1	0
My identity is not listed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0y
Prefer not to say	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	1

Table 14: *Number of Respondents Using Postsecondary Policy Tenets, by Race and Disability Status*

	PP.1			PP.2			PP.3		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	9	0	0	3	0	0	4	0
Black or from the African Diaspora	1	2	0	1	2	0	2	3	0
Latinx/Hispanic	2	0	0	1	0	0	2	0	0
Middle Eastern or Northern African	0	2	0	0	2	0	0	1	0
Multiple races (0)	1	1	0	0	1	0	1	1	0
Multiple races (1)	0	4	0	0	3	0	0	4	1
Multiple races (2+)	0	3	1	0	2	1	0	4	1
White	9	32	3	4	8	1	4	18	3
My identity is not listed	0	0	0	0	0	0	0	0	0
Prefer not to say	0	0	2	0	0	1	0	0	1

	PP.4			PP.5			PP.6			PP.7		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	4	2	0	6	0	0	3	2	0	4	2
Black or from the African Diaspora	2	2	0	2	2	0	2	3	0	1	2	0
Latinx/Hispanic	2	0	0	0	0	0	2	0	0	1	0	0
Middle Eastern or Northern African	0	0	0	0	1	0	0	2	0	0	0	0
Multiple races (0)	1	1	0	0	2	0	1	1	0	1	1	0
Multiple races (1)	0	3	0	0	2	0	0	5	0	0	3	0
Multiple races (2+)	0	3	1	0	2	1	0	2	1	0	0	1
White	5	19	2	3	10	2	4	25	2	2	15	1
My identity is not listed	0	0	0	0	0	0	0	0	0	0	0	0
Prefer not to say	0	0	2	0	0	0	0	0	2	0	0	1

Barriers and Limitations

Respondents were also asked about barriers that limit their ability to advocate for or incorporate the IIC Tenets into classroom or department policies and practices (Figure 27). Approximately one-third of respondents indicated that barriers are present (31%), may be present (33%), or are not present (36%).
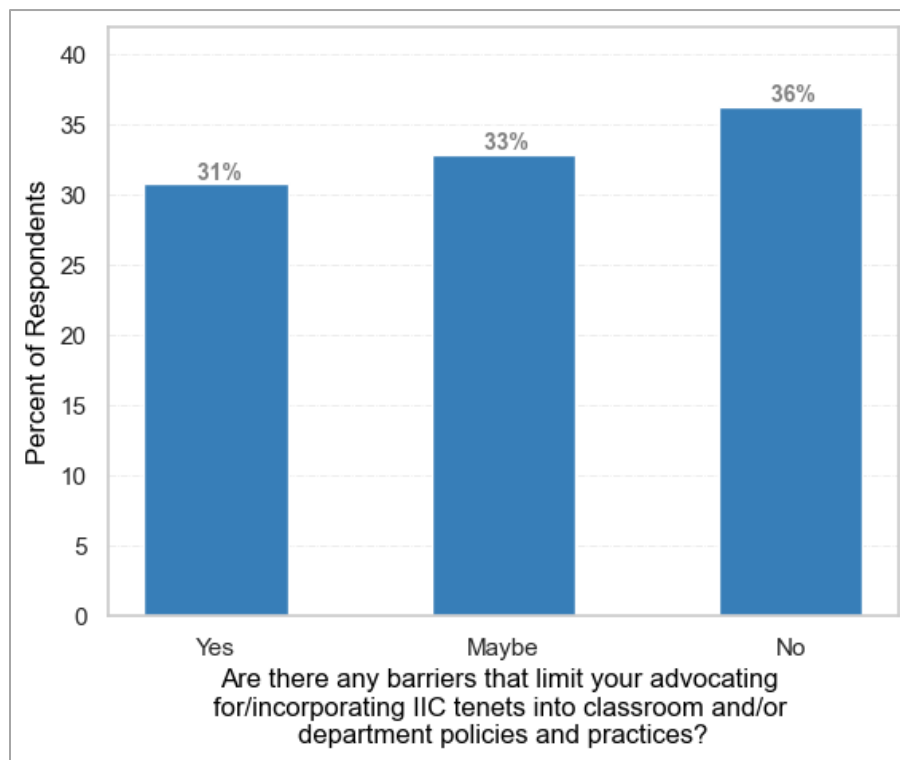

Figure 27: Presence of barriers (N = 146)

Presence of Barriers

Those responding "yes" or "maybe" when asked if any barriers limit IIC Tenet use (n = 93) were asked to select specific barriers present. Figure 28 shows the distribution of barriers identified. Approximately 37% of respondents indicated that local, state, or organizational policies limit their use of the Tenets; 30% were unsure how to incorporate the IIC Tenets; 29% were concerned about retaliation; and 28% did not feel knowledgeable enough about the Tenets. Approximately 36% of respondents also noted other barriers, including: lack of resources; pushback from supervisors, organizations, or institutions; lack of support; and activities not recognized for promotion and tenure. In the words of five respondents:

- *Resources (funds, staffing) are being cut that would normally support this.*

- *Larger organization pushback (outside of the CS unit I'm a part of).*

- *Climate and the internal politics around higher levels of change beyond the classroom (policy, etc.). I am not in a position where I have much leverage at higher levels, but I do advocate and take space for them as able.*

- *Lack of wide support for doing the work to implement these policies.*

- *I am pre-tenure and these activities are not rewarded in annual reviews.*
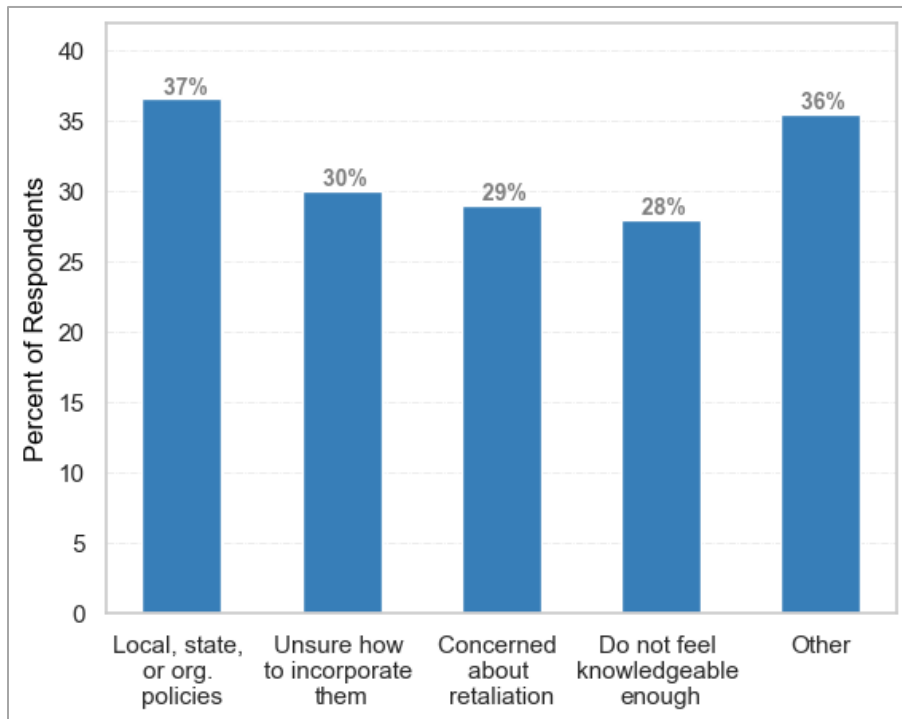
Figure 28: *Barriers to using IIC Tenets (N = 93)*

Figures 29–34 show specific barriers, disaggregated by race/ethnicity, gender, disability status, location, professional role, and AiiCE participation. Tables 15 and 16 display specific barriers, disaggregated by race and gender as well as by race and disability status. Overall, it was observed that:

- The majority of respondents who were unsure about how to incorporate the Tenets (53%), concerned about retaliation (58%), or felt they lacked knowledge (68%) were white.
- Black respondents are more likely to be affected by local, state, or organizational policies, compared to the other barriers.

- White and Middle Eastern or North African respondents are more likely to not feel knowledgeable enough about these topics, in comparison to the other barriers. Additionally, no Black respondents reported a lack of knowledge as a barrier.
- Women most often reported local, state, or organizational policies as a barrier. Non-binary respondents most often reported uncertainty on how to incorporate the Tenets and other barriers.
- Respondents with a disability or chronic condition were far more concerned about possible retaliation.
- Respondents across the U.S. experienced barriers, with those in the Northeast more likely to be unsure of how to incorporate the Tenets or concerned about retaliation. Local, state, and organizational policies were most likely to be a barrier for those in the Southeast.
- More than half of the respondents reporting barriers were in postsecondary roles. However, K-12 respondents were more likely to be hindered by local, state, or organization policies or a lack of knowledge.
- Most respondents who reported a specific barrier do not have a disability or chronic condition.
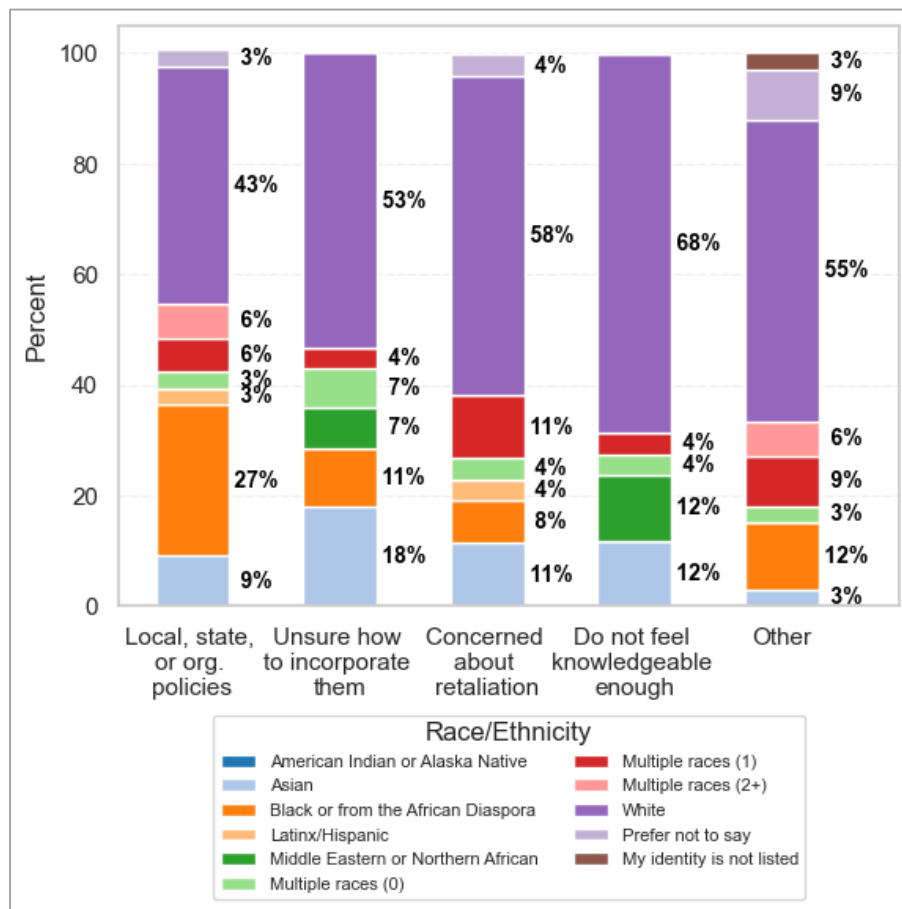
Figure 29: Barriers by race/ethnicity (N = 93)
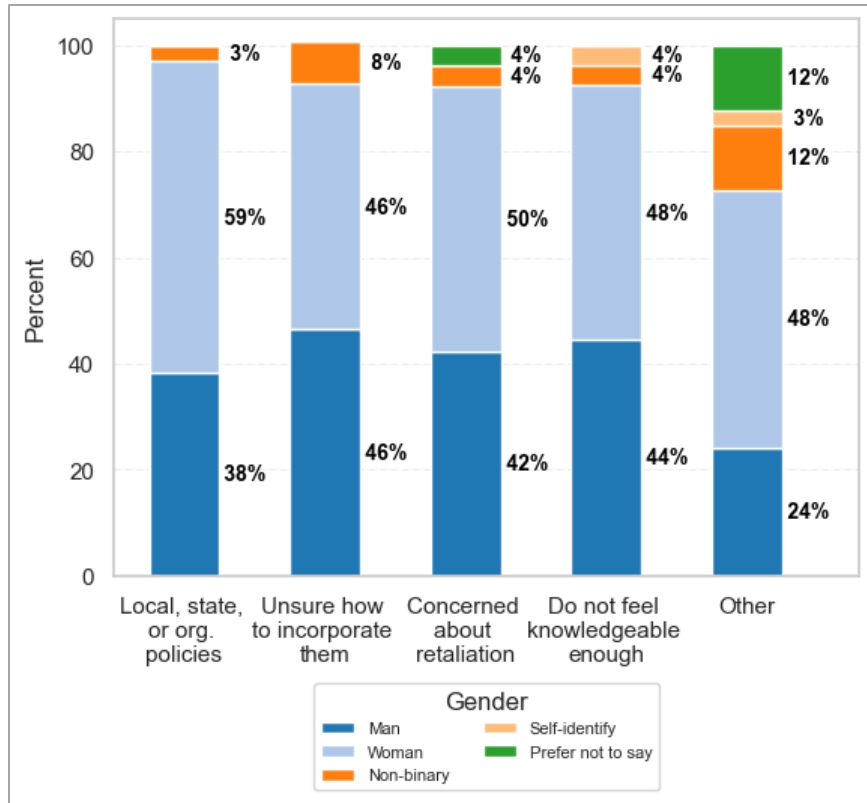
Figure 30: *Barriers by gender (N = 93)*
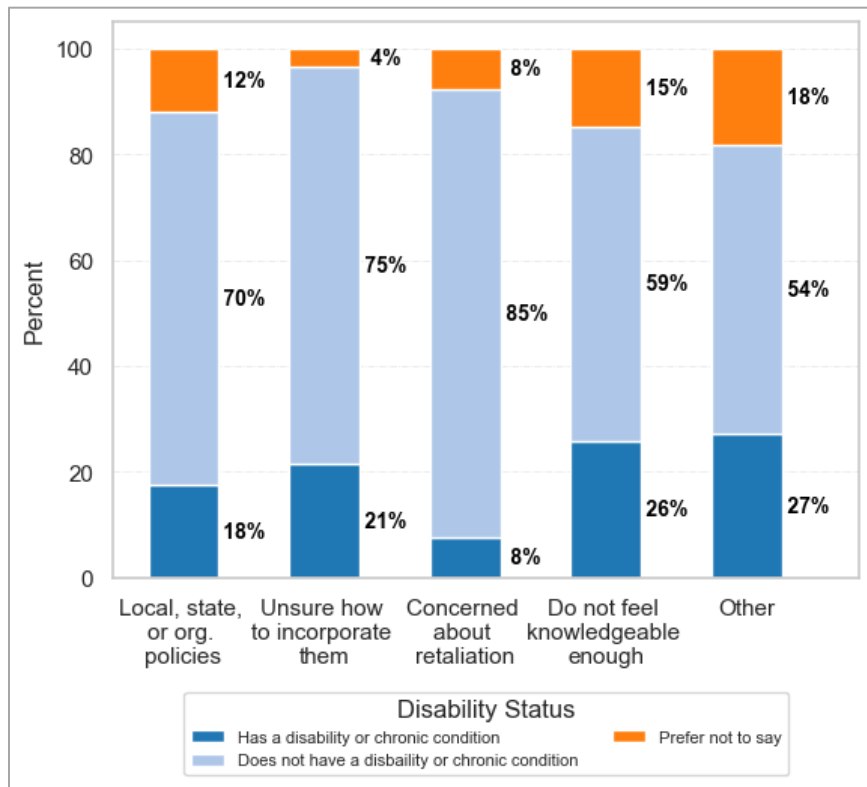
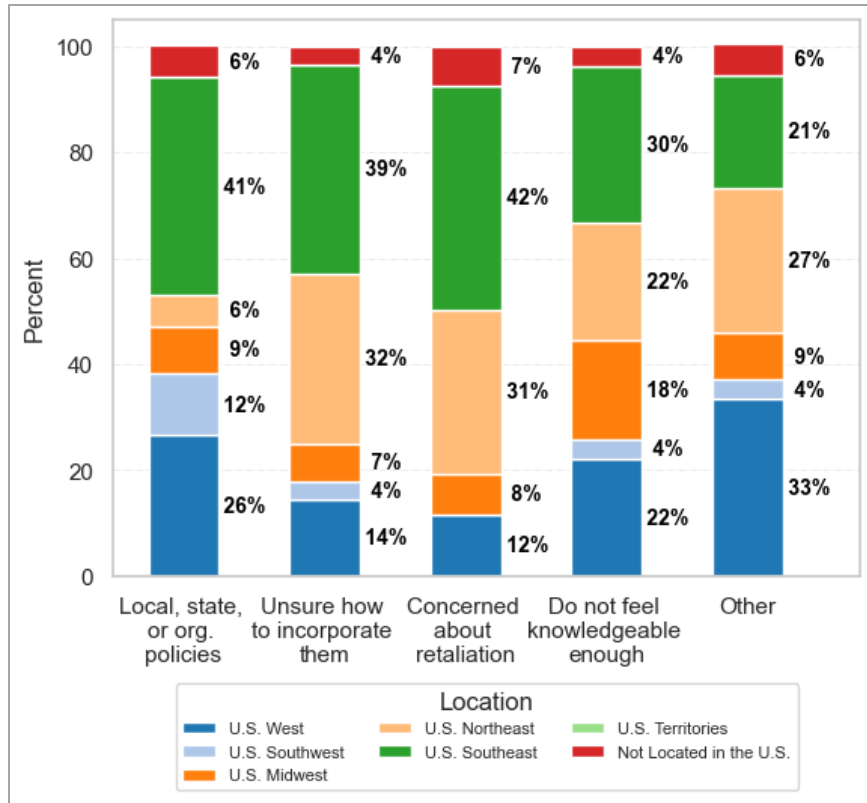***Figure 31:*** *Barriers by disability status (N = 93)*

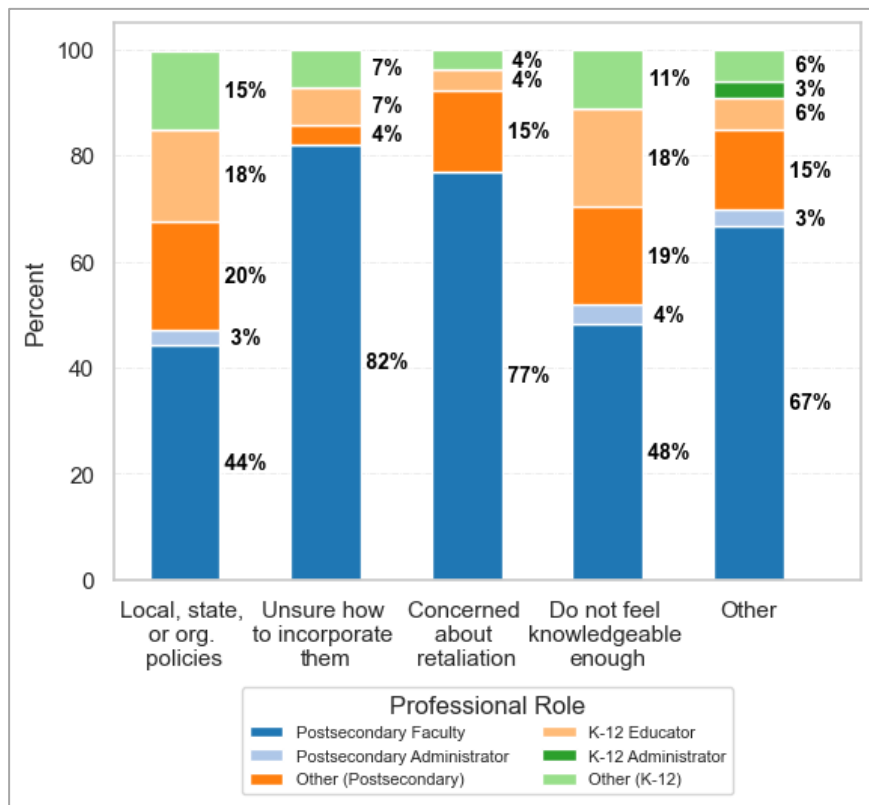***Figure 32:*** *Barriers by respondents' location (N = 93)*

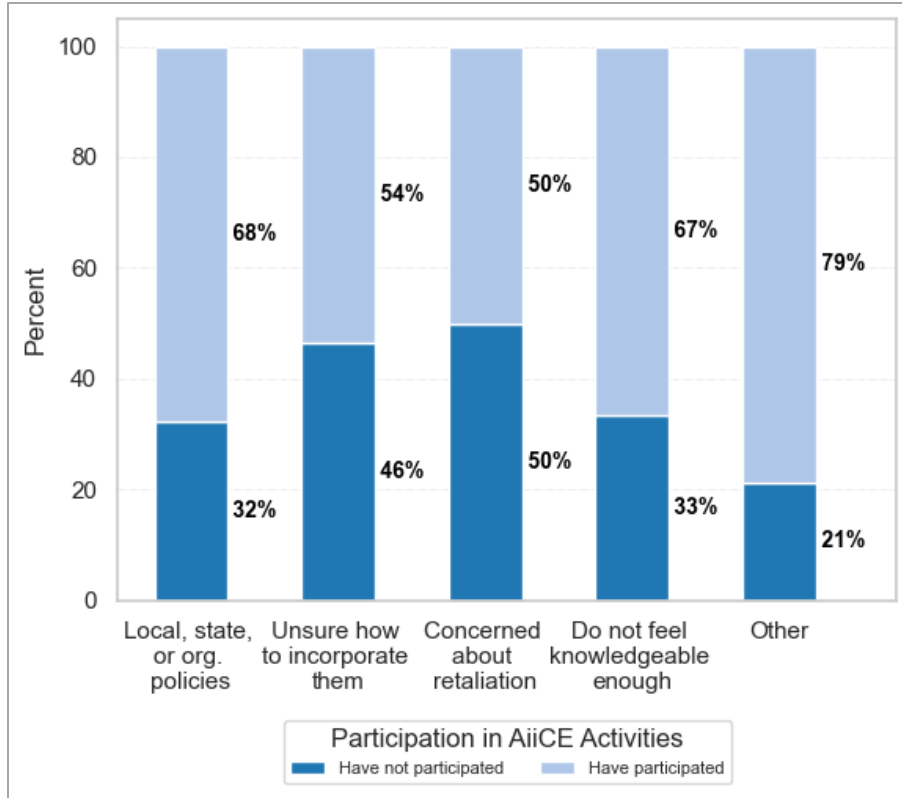***Figure 33:*** *Barriers by professional role (N = 93)*

Figure 34: *Barriers by AiiCE participation (N = 93)*

Table 15: Number of Respondents Reporting Barriers, by Race and Gender

	Local, state, or organizational policies limit what I can currently incorporate.					I am unsure how to incorporate them into my current courses or department.					I am concerned about possible retaliation.					I do not feel knowledgeable enough about these topics to incorporate them.				
	Man	Woman	Non-binary	Self-identify	Prefer not to say	Man	Woman	Non-binary	Self-identify	Prefer not to say	Man	Woman	Non-binary	Self-identify	Prefer not to say	Man	Woman	Non-binary	Self-identify	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	2	1	0	0	0	3	2	0	0	0	2	1	0	0	0	2	0	0	0	1
Black or from the African Diaspora	4	5	0	0	0	1	2	0	0	0	0	2	0	0	0	0	0	0	0	0
Latinx/Hispanic	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Middle Eastern or Northern African	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0
Multiple races (0)	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0
Multiple races (1)	1	1	0	0	0	0	0	1	0	0	1	1	0	1	0	1	0	0	1	0
Multiple races (2+)	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	5	9	0	0	0	8	6	1	0	0	8	7	0	0	0	8	9	1	0	0
Prefer not to say	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

Table 16: Number of Respondents Reporting Barriers, by Race and Disability Status

	Local, state, or organizational policies limit what I can currently incorporate.			I am unsure how to incorporate them into my current courses or department.			I am concerned about possible retaliation.			I do not feel knowledgeable enough about these topics to incorporate them.		
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	3	0	0	4	1	0	2	1	0	2	1
Black or from the African Diaspora	2	7	0	1	2	0	0	2	0	0	0	0
Latinx/Hispanic	1	0	0	0	0	0	1	0	0	0	0	0
Middle Eastern or Northern African	0	0	0	0	2	0	0	0	0	0	3	0
Multiple races (0)	0	1	0	1	1	0	0	1	0	0	1	0
Multiple races (1)	0	2	0	0	1	0	0	2	1	0	1	0
Multiple races (2+)	0	1	1	0	0	0	0	0	0	0	0	0
White	3	10	1	4	11	0	6	9	0	2	15	1
Prefer not to say	0	0	1	0	0	0	0	0	1	0	0	0

Other Limitations

Respondents who indicated no barriers present were asked if anything else limited their ability to incorporate the IIC Tenets. Twenty-eight respondents reported limitations to using the IIC Tenets (Figure 35). Approximately 61% were unaware of the full set of IIC Tenets until completing the survey and 3% were not interested in incorporating them. Approximately 36% of respondents noted other limitations such as difficulty understanding how to integrate Tenets into courses, lack of application to their work, lack of time, and the time needed to implement changes to their work. In the words of three respondents:

- *The biggest hurdle to implementing new policies at the departmental level is time, especially as senior faculty are doing teaching overloads. Personally, the issue is that the topics are hard to incorporate in the specific courses I've taught with respect to content.*

- *I am not employed in the formal education sector. Some Tenets are not applicable to my day to day work. (I do not teach courses or have a department structure to enact certain policy work).*

- *I am still working on incorporating the Tenets. The more knowledgeable I become, the more I adjust what I am doing in the classroom.*
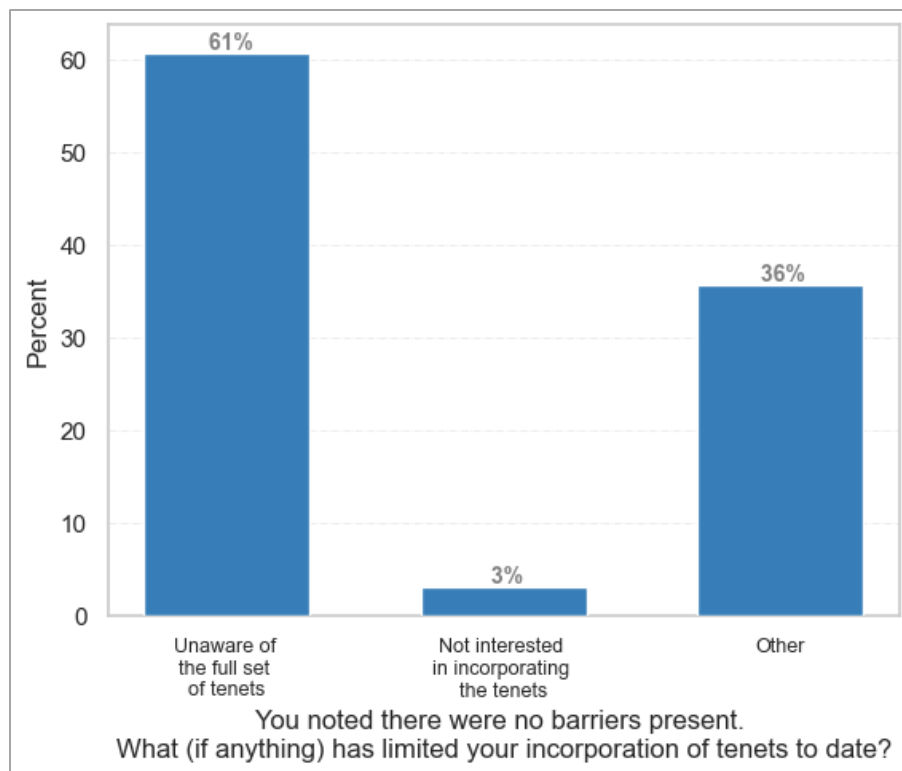

Figure 35: *Other limitations to using IIC Tenets (N = 28)*

Figures 36-41 show additional limitations identified by respondents, by race/ethnicity, gender, disability status, location, professional role, and AiiCE participation. Tables 17 and 18 show the limitations, disaggregated by race and gender as well as by race and disability status. Overall, it was observed that:

- More than half of the respondents who were unaware of the IIC Tenets identify as white (32%) or Asian (29%), with many being white women or Asian men.
- All respondents who were uninterested in incorporating the Tenets identify as Asian.
- More than half of the respondents who were unaware of the Tenets had not participated in AiiCE activities.
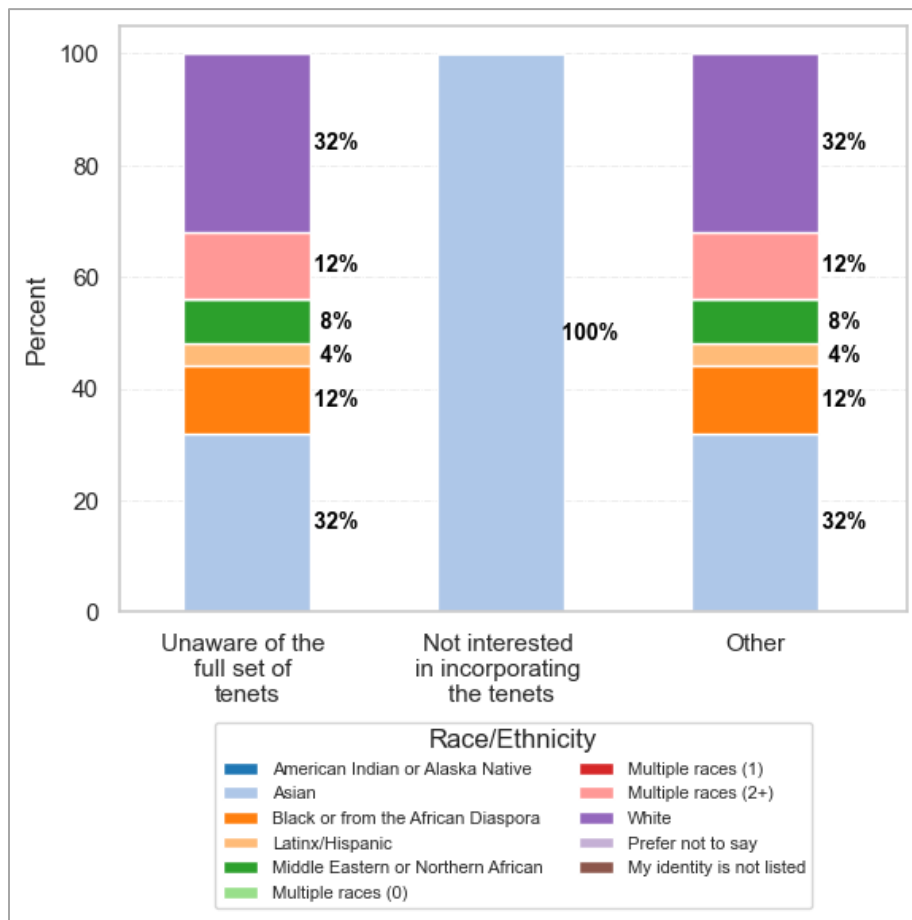
Figure 36: *Limitations by race/ethnicity (N = 28)*
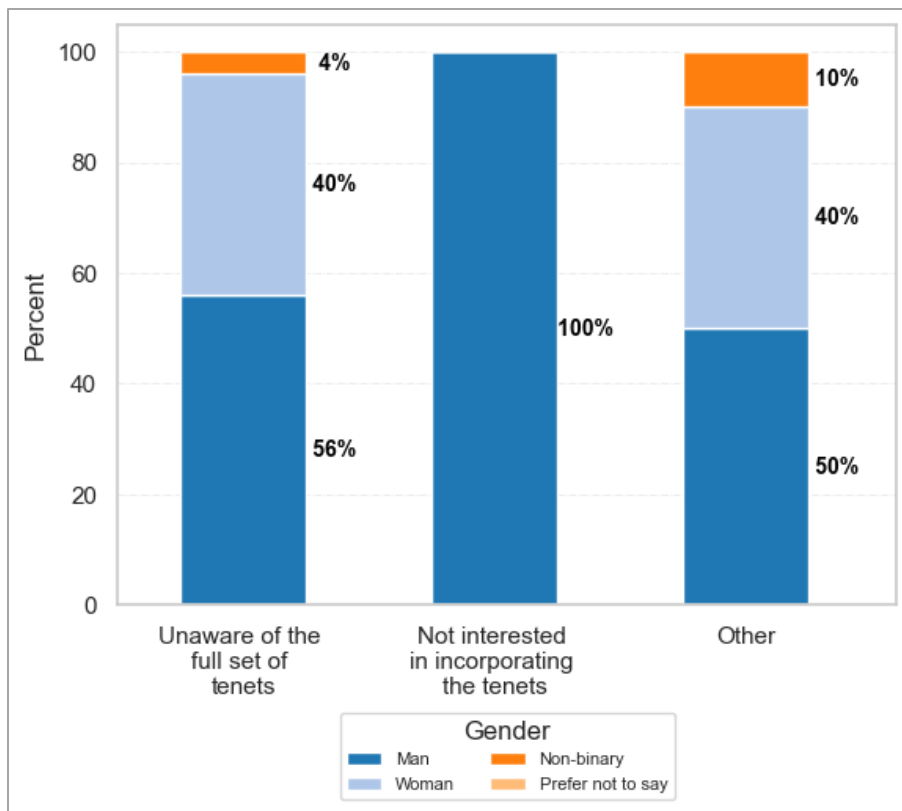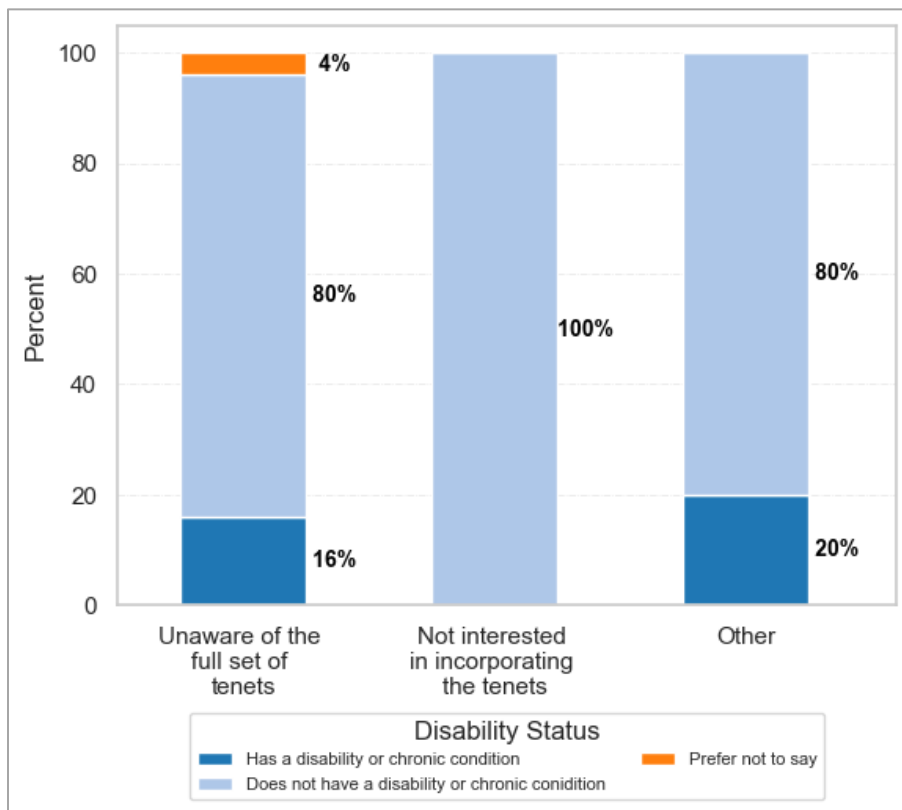
Figure 37: *Limitations by gender (N = 28)*
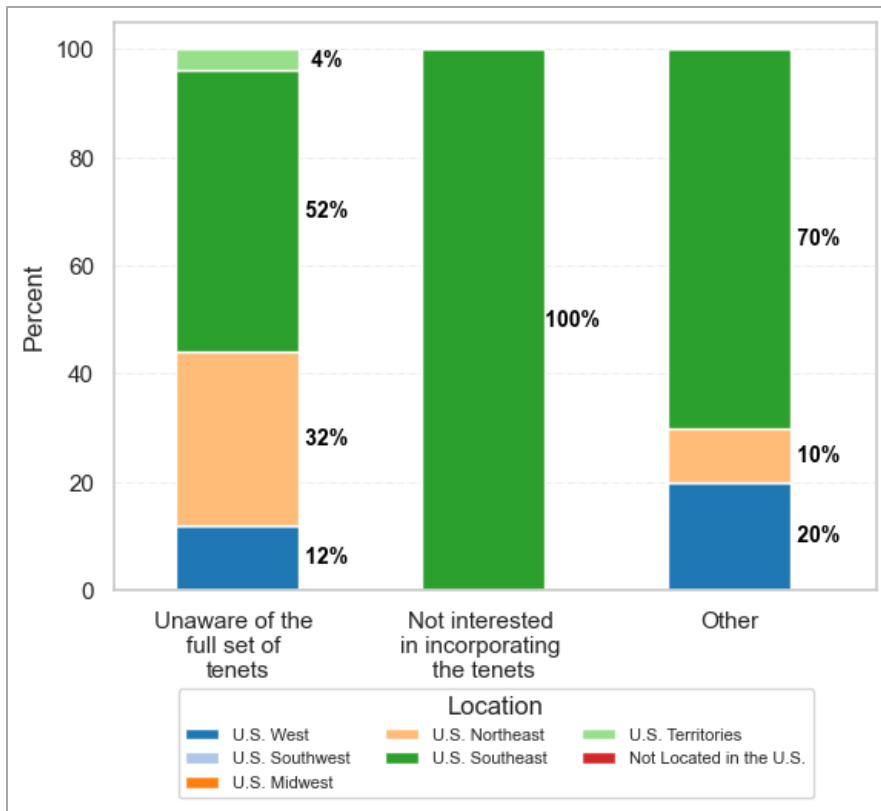

Figure 38: *Limitations by disability status (N = 28)*
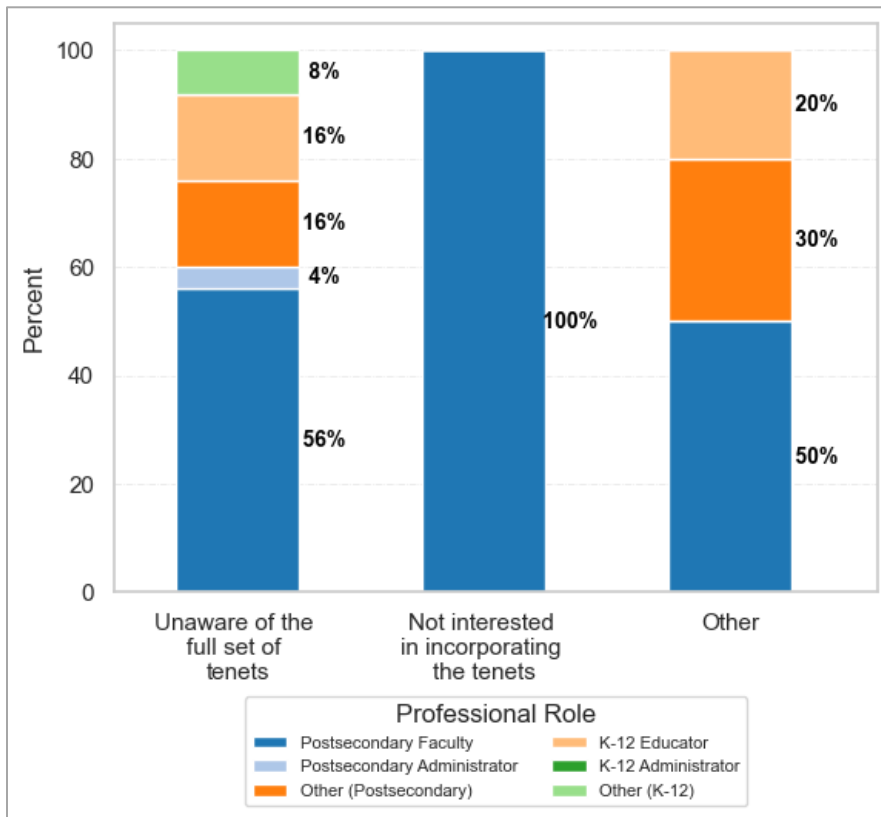
Figure 39: *Limitations by location (N = 28)*

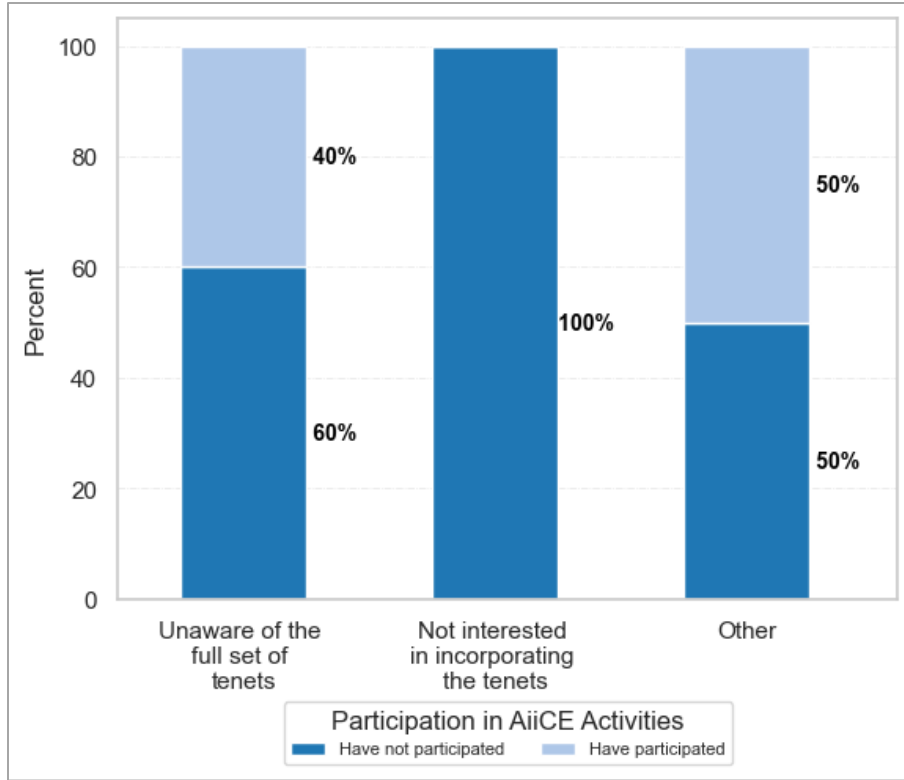***Figure 40:*** *Limitations by professional role (N = 28)*

Figure 41: *Limitations by AiiCE participation (N = 28)*

Table 17: *Number of Respondents Reporting Limitations, by Race and Gender*

	I was unaware of the full set of IIC Tenets.				I am not interested in incorporating the IIC Tenets.				
	Man	Woman	Non-binary	Prefer not to say	Man	Woman	Non-binary	Prefer not to say	Total
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	5	2	1	0	1	0	0	0	11
Black or from the African Diaspora	2	1	0	0	0	0	0	0	8
Latinx/Hispanic	1	0	0	0	0	0	0	0	1
Middle Eastern or Northern African	1	1	0	0	0	0	0	0	2
Multiple races (0)	0	0	0	0	0	0	0	0	1
Multiple races (1)	0	0	0	0	0	0	0	0	1
Multiple races (2+)	2	1	0	0	0	0	0	0	3
White	3	5	0	0	0	0	0	0	15
Prefer not to say	0	0	0	0	0	0	0	0	1

Table 18: *Number of Respondents Reporting Limitations, by Race and Disability Status*

	I was unaware of the full set of IIC Tenets.			I am not interested in incorporating the IIC Tenets.			
	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Has a disability or chronic condition	Does not have a disability or chronic condition	Prefer not to say	Total
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	0	7	1	0	1	0	11
Black or from the African Diaspora	0	3	0	0	0	0	8
Latinx/Hispanic	1	0	0	0	0	0	1
Middle Eastern or Northern African	0	2	0	0	0	0	2
Multiple races (0)	0	0	0	0	0	0	1
Multiple races (1)	0	0	0	0	0	0	1
Multiple races (2+)	2	1	0	0	0	0	3
White	1	7	0	0	0	0	15
Prefer not to say	0	0	0	0	0	0	1

References

[1] A. N. Washington, "When Twice as Good Isn't Enough: The Case for Cultural Competence in Computing," in *Proceedings of the 51st ACM Technical Symposium on Computer Science Education*, 2020, pp. 213–219.

[2] A. Washington, S. Daily, C. Sadler, "Identity-Inclusive Computing: Learning from the Past; Preparing for the Future," in *Proceedings of the 53rd ACM Technical Symposium on Computer Science Education* V. 2, 2022, pp. 1182.

[3] Tedre, M., et al. "Ethnocomputing: ICT in cultural and social context," in *Communications of the ACM*, vol. 49, no. 1, pp. 126–130, 2006.

[4] "Culturally Responsive-Sustaining Computer Science Education: A Framework," *Kapor Center*, Mar 17, 2023. https://www.kaporcenter.org/culturally-responsive-sustaining-computer-science-education-a-framework/

[5] "Equal Access: Universal Design of Computing Departments | AccessComputing," *Access Computing: The Alliance for Access to Computing Careers*, Sept 13, 2018. https://www.washington.edu/accesscomputing/equal-access-universal-design-computing-departments

[6] "CAPE," *Expanding Computing Education Pathways (ECEP) Alliance*, Sept 7, 2022. http://ecepalliance.org/resources/models/cape/

[7] Dylan, "Collective Impact Principles of Practice - Collective Impact Forum," *Collective Impact Forum*, Mar. 28, 2022. https://collectiveimpactforum.org/resource/collective-impact-principles-of-practice/

[8] B. E. Prefontaine, A. N. Washington, S. B. Daily, B. Blaser, J. Goode, and V. B. Barr, " "Work in Progress: Developing and Measuring the Adoption of Identity-Inclusive Computing Tenets" Paper presented at 2024 ASEE Annual Conference & Exposition, Portland, Oregon. https://peer.asee.org/work-in-progress-developing-and-measuring-the-adoption-of-identity-inclusive-computing-tenets

[9] Alliance for Identity-Inclusive Computing Education, "Identity-Inclusive Computing (IIC)," 2023. https://identityincs.org/sites/default/files/KaporCenter_AiiCEReport_Accessible_0.pdf

[10] "AIICE TA PD Info Site." https://sites.google.com/mtholyoke.edu/aiice-ta-pd-info-site#h.1suxsa2irpyw

[11] "The Computing Equity Project | Constellations Center for Equity in Computing." https://constellations.gatech.edu/computing-equity-project

[12] Computer Science Teachers Association, "Professional development Opportunities - Computer Science Teachers Association," *Computer Science Teachers Association*, Sep. 06, 2024. https://csteachers.org/pd-opportunities/

[13] "Cultural Competence in Computing (3C) Fellows." https://identity.cs.duke.edu/fellows.html

[14] "2024 Identity Inclusive Instructors in Computing Education Summit | Alliance for Identity-Inclusive Computing Education." https://identityincs.org/event/2024-identity-inclusive-instructors-computing-education-summit/