

Teaching Environment

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The Teaching Environment scale (*fTE*) includes questions pertaining to faculty perceptions of the extent to which they have the time, resources, environment, and help needed to do their best teaching. This document provides basic findings for the FSSE Teaching Environment scale and its individual component items.

Data Description

The data in this brief come from faculty respondents at 158 four-year colleges and universities that administered the Faculty Survey of Student Engagement (FSSE) in 2022 or 2023. If an institution participated in both years, we only used their most recent year of data. Most, 13,604 out of 15,353 faculty, at these institutions responded to at least one of the items in the Teaching Environment items. FSSE collects information annually at hundreds of four-year colleges and universities from faculty who teach at least one undergraduate course in the current academic year. The results provide information about faculty expectations for student engagement in educational practices that are empirically linked with student learning and development. Institutions use their data to identify aspects of the undergraduate experience that can be improved through changes in policy and practice. For more information, visit the FSSE website: fsse.indiana.edu.

Item Information

The Teaching Environment Scale consists of 4 items under one question stem. Information on these items can be found in Tables 1 and 2. Table 1 contains counts, means, and standard deviations; it additionally contains factor loadings for the items that fit within this scale. Table 2 contains frequency percentages for all the items' response options.

With the highest average and largest proportion of faculty responding "Strongly agree" or "Agree," faculty agree most strongly about knowing where to go for help with teaching at their institution. Faculty least strongly believe that the environments they teach in are conducive to quality teaching.

Table 3 contains significant correlations between the individual items in the Teaching Environment Scale. Moderate relationships exist among several of the items with the strongest relationship between believing that the environments faculty teach in are conducive to quality teaching and having the resources faculty need to do their best teaching ($r = .615, p < .001$). Some other notable moderate relationships include having the resources faculty need to do their best teaching and having the time faculty need to prepare for class ($r = .503, p < .001$); knowing where to go for help with teaching and having the resources faculty need to do their best teaching ($r = .423, p < .001$); and believing that the environments faculty teach in are conducive to quality teaching and having the time faculty need to prepare for class ($r = .401, p < .001$).

Scale Information

The individual items within Teaching Environment are combined together to create the Teaching Environment scale. First, the individual responses are recoded to a 0 to 60 scale: Strongly agree=4 is

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recoded to 60, Agree=3 is recoded to 40, Disagree=2 is recoded to 20, and Strongly disagree=1 is recoded to 0. Individual faculty responses on this 0-60 scale are then averaged together to create an aggregate scale score. Information on the Teaching Environment Scale can be found in Table 4. The intraclass correlation coefficient (ICC) suggests that 5% of the variation in *fTE* is at the institution level.

Correlations

Table 3 presents significant correlations between the individual component items within the Teaching Environment scale. Table 5 presents correlations between the Teaching Environment scale and the core survey FSSE Scales. Faculty who agree more strongly about aspects of Teaching Environment also perceive more positive Quality of Interactions and perceive that they display more Effective Teaching Practices.

Disciplinary Differences

Faculty perceptions of teaching environment (*fTE*) vary by faculty's disciplinary area appointment (Figure 1). Faculty who perceive more supportive Teaching Environment are in the fields of Physical Sciences, Mathematics, and Computer Science; Social Service Professions; and Business. Faculty who perceive less supportive Teaching Environment are in the fields of Arts and Humanities; Biology, Agriculture, and Natural Resources; Health Professions; and Social Sciences. There is noticeable variation within disciplinary areas as well. For example, faculty in most disciplinary area appointments have a relatively small interquartile range, suggesting that faculty in these fields more consistently perceive their Teaching Environment in similar ways. Other fields, such as Arts & Humanities and Social Sciences have a slightly larger interquartile range, suggesting that faculty in these fields have a greater diversity in their perception of their Teaching Environment.

Our Related Papers

For more information about FSSE and Teaching Environment see the following publications, conference papers and presentations, research reports or other FSSE investigations focused on Teaching Environment:

- Fassett, K., Nelson Laird, T., BrckaLorenz, A., & Strickland, J. (2020). [*Belonging, teaching environments, & grading: An exploration of faculty emotion*](#) [Conference presentation]. POD Network Conference, Virtual.
- Feldman, S., & Priddie, C. (2024). [*Understanding how queer faculty of color's values relate to how they spend their time*](#). Research paper presentation at the ASHE (Association for the Study of Higher Education) Annual Conference, Minneapolis, MN.
- Priddie, C., Silberstein, S., & BrckaLorenz, A. (2018). [*Support by any other name: Disaggregating supportive environments for faculty*](#). [Conference presentation]. 2018 Assessment Institute, Indianapolis, IN, United States.
- BrckaLorenz, A., & Brandon, J. (2022, January 20). [*Motivating Teaching Excellence: Identifying Supportive Environments for Diverse Faculty*](#). [Conference presentation]. Annual Meeting for the American Association of Colleges and Universities, Washington, D.C., United States.

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Predictors

Some types of faculty, courses, and institutions are more or less likely to perceive a supportive Teaching Environment. Table 6 presents significant ($p < .05$) predictors of a supportive Teaching Environment by faculty and institutional characteristics. Following Table 6 are figures representing the average Teaching Environment differences by these faculty and institutional characteristics.

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Table 1. Teaching Environment Item Descriptives

To what extent do you agree or disagree with the following statements?

Response options: 4=Strongly agree, 3=Agree, 2=Disagree, 1=Strongly disagree

	Count	Mean	Std. Dev.	Factor Loading
I have the time I need to prepare for class (<i>tetime</i>)	13,589	2.91	.734	.852
I have the resources I need to do my best teaching (office space, technology, materials, etc.) (<i>teresources</i>)	13,582	2.90	.781	.805
The environments (classroom, online, etc.) I teach in are conducive to quality teaching (<i>teenvironment</i>)	13,570	2.91	.751	.716
I know where to go for help with teaching at my institution (<i>tehelp</i>)	13,555	3.14	.695	.672

Table 2. Teaching Environment Item Frequencies

To what extent do you agree or disagree with the following statements?

	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)
I have the time I need to prepare for class (<i>tetime</i>)	18.3	58.6	18.7	4.5
I have the resources I need to do my best teaching (office space, technology, materials, etc.) (<i>teresources</i>)	20.4	54.8	19.2	5.6
The environments (classroom, online, etc.) I teach in are conducive to quality teaching (<i>teenvironment</i>)	19.5	56.9	18.9	4.7
I know where to go for help with teaching at my institution (<i>tehelp</i>)	29.5	57.0	11.1	2.4

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Table 3. Significant Correlations ($p < .01$) between Teaching Environment Items

	tetime	teresources	teenvironment	tehelp
tetime				
teresources	.503			
teenvironment	.401	.615		
tehelp	.308	.423	.393	

Table 4. Teaching Environment Scale Descriptives

Scale	Count	Minimum	Maximum	Mean	Std. Dev.	Cronbach's Alpha	ICC
<i>fTE</i>	13,507	0	60	39.3	11.32	.762	.049

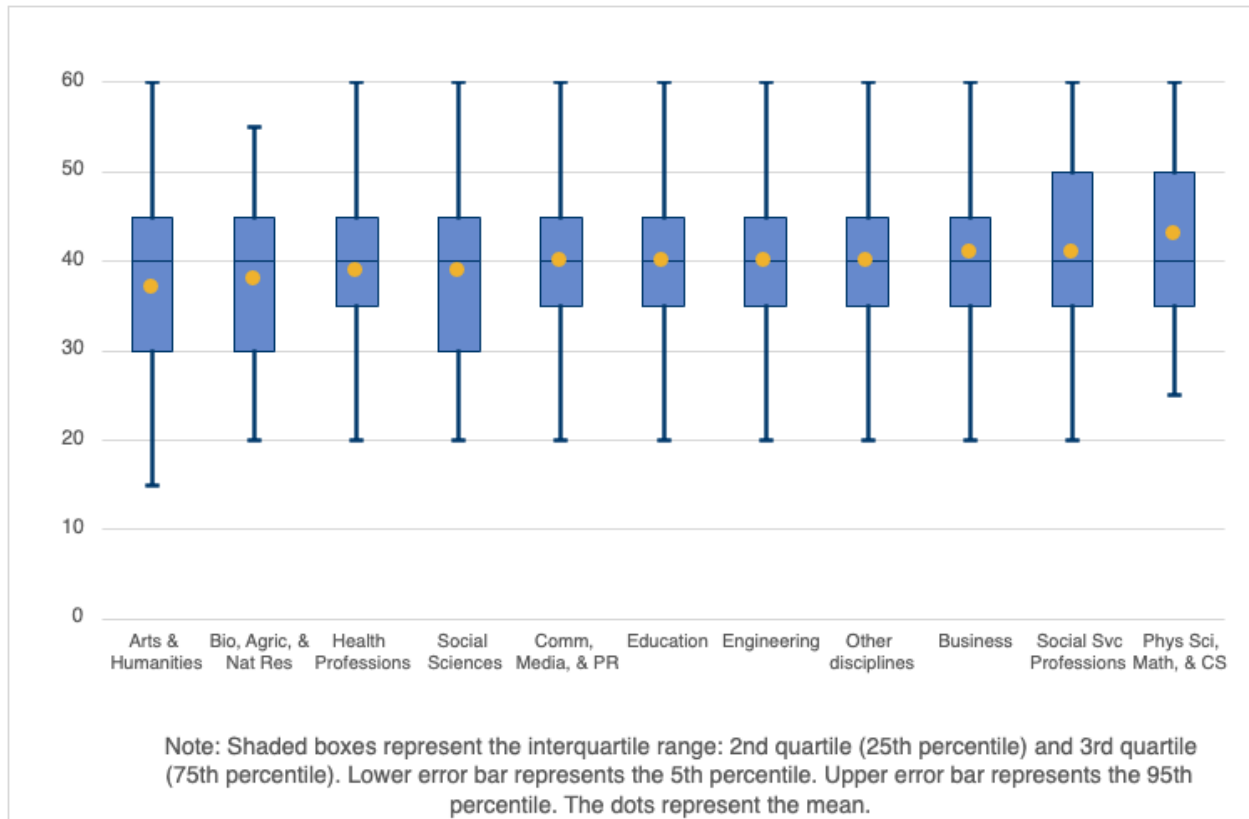
Table 5. Significant ($p < .001$) Correlations between Teaching Environment and FSSE Scales

Higher-Order Learning ($r = .028^{**}$)	Quantitative Reasoning ($r = .095^{***}$)	Effective Teaching Practices ($r = .103^{***}$)
Reflective & Integrative Learning ($r = .021^*$)	Discussions with Diverse Others ($r = .069^{***}$)	Quality of Interactions ($r = .373^{***}$)
Learning Strategies ($r = .031^{***}$)	Student-Faculty Interaction ($r = -.031^{***}$)	Supportive Environment ($r = .042^{***}$)

Note: $*p < .05$, $**p < .01$, $***p < .001$

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Figure 1. fTE by Discipline



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Table 6. Faculty, Course, and Institution Characteristic Predictors for Teaching Environment Scale (continued on next page)

		<i>fTE</i>		
		Unstd. B	SE	Sig.
(Constant)				
Course division	Lower-division course			
	Upper-division course	.054	.017	**
	Other division course	-.084	.026	**
Course size	Small course size (<21 students)			
	Medium course size (21-30 students)			
	Large course size (31+ students)			
Course format	Entirely in-person on campus			
	Entirely in-person at auxiliary location			
	Entirely online, synchronous (2021-present)			
	Entirely online, asynchronous (2021-present)			
	A mix of in-person and online instruction			
Disciplinary area	Arts & Humanities	-.160	.023	***
	Bio Sciences, Agriculture, & Natural Resources	-.121	.037	***
	Physical Sciences, Math, & Computer Sciences	.183	.034	***
	Social Sciences	-.130	.051	*
	Business	.076	.037	*
	Communications, Media, & Public Relations			
	Education			
	Engineering			
	Health Professions			
	Social Service Professions	.220	.062	***
	Other disciplinary fields			
Academic rank	Professor			
	Associate Professor	-.067	.027	*
	Assistant Professor			
	Instructor	.061	.029	*
	Lecturer			
	Other rank			
Tenure status	No tenure system	-.066	.030	*
	Not on tenure track	.141	.024	***
	Tenure track	-.080	.031	*
	Tenured			

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$. All continuous variables were standardized before entry in the model so that unstandardized coefficients can be interpreted similar to effect sizes. Effect coding was used so that coefficients can be interpreted as compared to the average faculty member as opposed to a selected reference group.

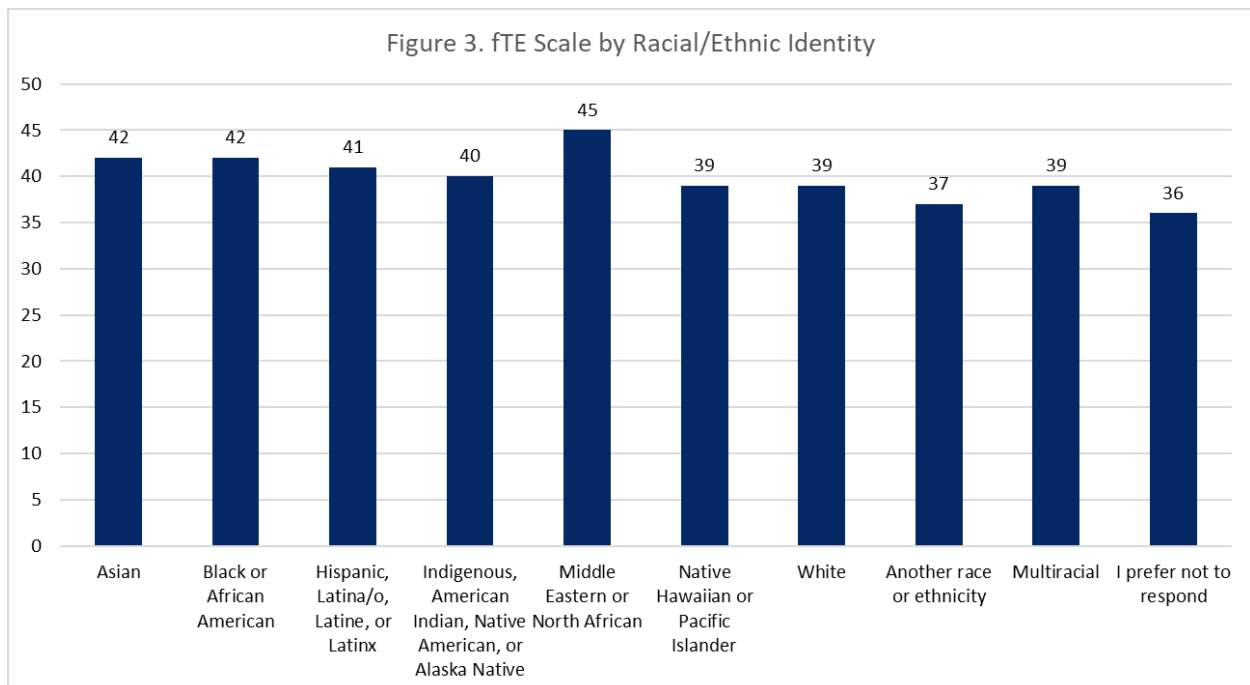
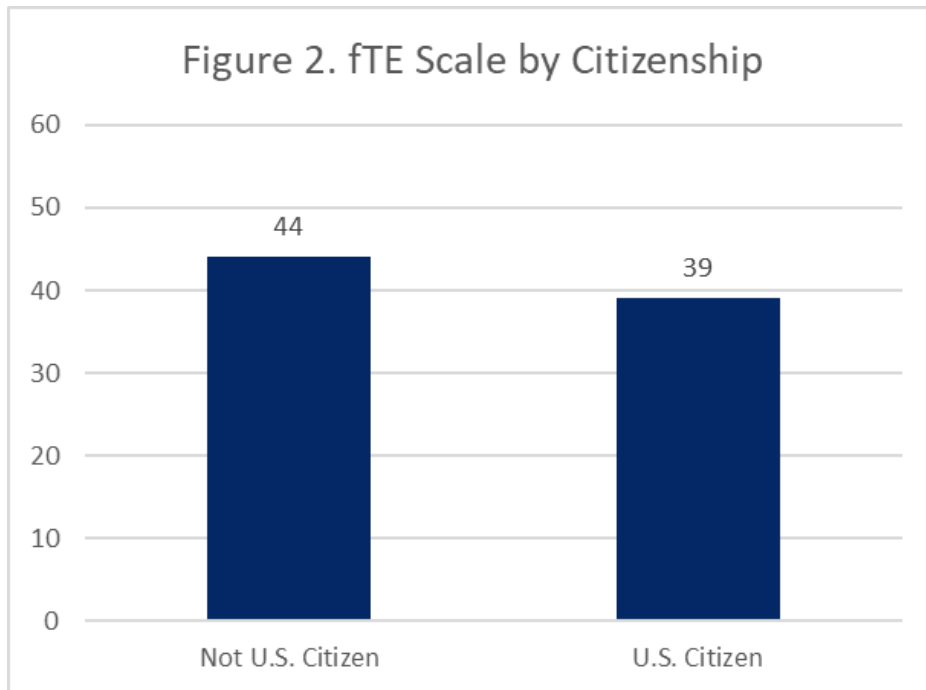
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Table 6. Faculty, Course, and Institution Characteristic Predictors for Teaching Environment Scale (continued)

		<i>fTE</i>		
		Unstd. B	SE	Sig.
Number of courses taught this school year		-.096	.011	***
Years of teaching experience				
Age in years		.080	.014	***
Gender identity	Woman			
	Man	.105	.036	**
	Nonbinary+			
	I prefer not to respond			
Racial/ethnic identification	Asian	.146	.068	*
	Black or African American			
	Hispanic, Latina/o, Latine, or Latinx			
	Indigenous, American Indian, Native American, or Alaska Native			
	Middle Eastern or North African			
	Native Hawaiian or Pacific Islander			
	White			
	Another race or ethnicity	-.228	.112	*
	Multiracial			
I prefer not to respond				
Sexual orientation	LGBQ+	-.111	.028	***
	Not LGBQ+	.123	.021	***
	I prefer not to respond			
Holds a terminal degree				
US citizen		-.324	.064	***
Private institution		.080	.023	***
Undergraduate enrollment in thousands		.028	.011	**
Carnegie basic classification	Doctoral Universities	.047	.021	*
	Master's College and Universities			
	Baccalaureate Colleges	.066	.025	*
	Other Carnegie classification	-.107	.044	*

Notes: * $p < .05$, ** $p < .01$, *** $p < .001$. All continuous variables were standardized before entry in the model so that unstandardized coefficients can be interpreted similar to effect sizes. Effect coding was used so that coefficients can be interpreted as compared to the average faculty member as opposed to a selected reference group.

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