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Forward

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Special Issue: Inclusive Learning

The Development of the Protocol for Advancing Inclusive Teaching Efforts (PAITE)

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Abstract

Inclusive teaching is instruction that fosters a sense of belonging, is equitable for a diverse student body, and shows students that they matter. Inclusivity is associated with positive student outcomes and is critical at institutions of higher education given the diversity of student populations. While there are a number of recommended practices for inclusive teaching, valid and reliable classroom observation tools that provide instructors with formative feedback on their instructional efforts are lacking. This article describes the development of the Protocol for Advancing Inclusive Teaching Efforts (PAITE). The PAITE was developed for formative purposes to provide higher education instructors with formative feedback on observable inclusive teaching practices. The protocol can be used by peer observers, educational developers, student pedagogical partners, and educational researchers in higher education classrooms. We describe the creation of the

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protocol, how to prepare observers to use it within classrooms, and how instructors can use the feedback to monitor and improve their inclusive teaching approaches.

Keywords: *inclusive teaching, equity, diversity, classroom observation, protocol*

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Introduction

Inclusive teaching is instruction that can foster students' sense of belonging and is equitable for diverse learners entering college classrooms with differing prior knowledge, skills, experiences, attitudes, perspectives, personalities, and social identities. Such approaches, therefore, take into account learner variability and are intentional. They can help mitigate barriers that students may face due to structural issues that result in exclusion.

The availability of an instrument that provides feedback on inclusive teaching efforts is critical given the need for instructors to monitor their teaching practices to effectively teach diverse learners. The Protocol for Advancing Inclusive Teaching Efforts (PAITE) described in this article is a classroom observation tool validated by research on inclusion as well as expert and student voices. The instrument is based on several constructs incorporated into other validated classroom observation protocols. The PAITE can be used to provide instructors with general feedback on their observable inclusive teaching practices.

The PAITE is modeled after the Classroom Observation Protocol for Undergraduate STEM (COPUS) which focuses on general classroom teaching and learning behaviors through an analysis of the actions of instructors and students every two minutes (Smith et al., 2013). The COPUS format was based on that of the Teaching Dimensions Observation Protocol (TDOP) (Hora et al., 2013). This protocol structure was chosen for PAITE because it allowed for observational feedback to be collected in a data-driven manner.

However, there are several notable differences between PAITE and COPUS. The PAITE addresses inclusive teaching practices, was designed for versatile usage across disciplines and course types, and focuses solely on the teaching behaviors of the instructor. Students are not a focus in the observations given difficulties with reliably categorizing learner sense of belonging and other affective responses.

The PAITE was designed to provide formative feedback on inclusive teaching efforts and was not used for evaluative purposes such as promotion and tenure reviews. Additionally, after the observer used the protocol in a class, they debriefed with the instructor and provided contextual and other feedback on the instructor's teaching. This post-observation feedback session involved opportunities for instructors to reflect on the findings and consider ways to be more inclusive in their teaching.

The PAITE can be used by a variety of community members at colleges and universities. Educational developers can use it within initiatives such as learning communities focused on inclusion or for any instructor interested in obtaining such feedback. As in this article, student pedagogical partners can be trained to use the PAITE in classrooms to support their efforts in giving feedback to faculty partners. Instructors can also be trained to use the protocol within departmental or other teaching circles. Furthermore, educational researchers might find usage of the protocol in projects that examine inclusive teaching practices.

Literature Review

Inclusive teaching practices have largely been operationalized by applying established socio-psychological constructs such as social belonging and growth mindset, teaching and learning frameworks that support the learning of diverse student populations, and the science of learning literature. A more comprehensive approach to inclusive teaching practices embraces principles from each of these domains. While inclusive teaching is context-dependent, and being responsive to the diversity of the learners in a course is critical, there are fundamental teaching practices that have the potential to foster inclusion regardless of the course taught or discipline. These principles were utilized in the development of the PAITE with a focus on inclusive teaching practices observable in an in-person course setting. This review provides important framing for the instrument described in this article and is not intended to be exhaustive of the higher education literature on inclusion.

Sense of belonging is an important affective state for students to experience in higher education; Maslow's characterization of social belonging within a hierarchy of needs is still very relevant today (Maslow, 1943). Several studies have uncovered associations between belonging and academic and physical well-being as particularly important for students from groups historically excluded from higher education learning environments (e.g., Walton & Cohen, 2011; Gopalan & Brady, 2019). Brady et al. (2020) followed the participants from the foundational Walton & Cohen (2011) study and found that positive outcomes persisted into their adulthood 7 to 11 years later. Specifically, the participants reported high well-being, success in their careers, and high levels of community involvement. A qualitative investigation to better understand how a similar belonging intervention contributed to good outcomes for first-year, ethnic minority college students was also carried out (Strayhorn, 2022). The video-based intervention used by the researcher was found to help ethnic minority students reframe and normalize the challenges that they faced with belonging.

Decreased sense of belonging has also been implicated for students with disabilities, students identifying as LGBTQ+, first-generation college students, as well as additional groups historically excluded in higher education (e.g., Vaccaro et al., 2015; Sotardi et al., 2022; Gopalan & Brady, 2019). More broadly, belonging has been found to be a positive predictor of well-being, motivation, and less intent to drop out of college for a general student body (Suhlmann et al., 2018). Related, sense of belonging was shown to be a predictor of student retention (Davis et al., 2019). Yet belonging is a complex construct as is evident in a study of first-year students who expressed it in three distinct ways: familiarity, interpersonal, and academic (Kahu et al., 2022) and requires more research that investigates different pathways leading to a sense of belonging (Hirsch & Clark, 2019).

While several of these studies explore inclusion within the broader sense of what students experience holistically at an institution, the classroom remains a critical place where instructors can foster students' sense of belonging. Problematically, exclusionary acts are known to occur in such learning spaces (Boysen & Vogel, 2009; Suárez-Orozco et al., 2015). Sense of belonging can be thwarted by classroom incivilities that threaten student identities when such acts are committed (e.g., microaggressions) (Sue, 2010; Lewis et al., 2021). Yet, there are a number of practices that have the potential to foster students' sense of belonging in classroom settings, such as establishing and reinforcing community guidelines, giving affirmation, learning students' names, engaging in anti-bias practices that confront and address exclusionary acts, and avoiding forced spokesmanship, where students are called on to answer questions and speak on behalf of a particular social identity. The power of affirmation has been explored in college settings and has been shown to support learners in navigating their social experiences, including students identifying as women in male-dominated fields (Walton et al., 2015). Values affirmation exercises have been shown to narrow opportunity gaps of students from groups historically excluded (Jordt et al., 2017; Miyake et al., 2010). A recent meta-analysis highlighted the effectiveness of affirmation when incorporated into a typical class activity (Wu et al., 2021).

Sense of belonging is also associated with instructors taking time to learn students' names. Cooper et al. (2017) reported that many students felt as if their instructors demonstrated care when they knew their names and that it made them feel valued. Mattering and feeling valued are critical aspects of inclusion (Strayhorn, 2019). The spokesperson phenomenon, or when an individual is asked to speak on behalf of their social identity, has been shown to exclude students in the classroom (McCabe, 2009). As an example, McCabe shared a quote from a learner identifying as a Black female who described her experiences with forced spokesmanship:

> Or like professors, we'll be discussing something about race or racial stereotypes and the first person they ask—me! And I'm like, no, don't ask me! (laughs) Just go to someone else. [The professor says] "Mya, what do you think about it?" I don't think about this. (p. 142)

Although arguably difficult for many instructors, addressing exclusionary acts if and when they occur and ensuring that students are not singled out based on their social identities may support a sense of belonging. There are a variety of helpful frameworks that instructors can use to address such occurrences such as the R.A.V.E.N. method and restorative justice models (Harris & Wood, 2020; Amstutz & Mullet, 2015; Gilbert et al., 2013).

Growth mindset is another socio-psychological construct that is also important in fostering inclusive environments (Dweck, 2006). A growth mindset is characterized by the ability to believe that one can achieve with practice, as opposed to a fixed mindset where one believes that intelligence cannot change. Students might enter their courses with varying mindsets about their intelligence. More recent work has made connections between the mindsets of teachers and the effect they can have on their students. Using data from the National Study of Learning Mindsets (NSLM), Yeager et al. (2022) found that the growth mindset of first-year high school students had to be supported by their teacher also having a growth mindset. Growth mindset and belonging mindset, the "belief that people like you belong in your school or in a given academic field," have also been characterized as two critical academic mindsets that can inform policy (Rattan et al., 2015, p. 721). Non-content instructor talk might play a role in how one fosters a sense of belonging and a growth mindset in their courses as instructors have been found to use such talk to build instructor–student relationships and establish a positive classroom culture (Seidel et al., 2017).

There are various teaching and learning frameworks that support inclusive practices. In culturally relevant and responsive teaching, the instructor's care, their design of the learning environment as one supportive of the growth and backgrounds of students, and how they build a community of learners (Gay, 2010) align with practices that promote social belonging and a growth mindset. Universal Design for Learning (UDL) is a framework for teaching a diversity of learners including students with disabilities (CAST, n.d.). Considering the principles of UDL, an instructor might employ diverse media to ensure representation, draw connections between the course content and authentic examples, and give students the agency to contribute to the design of the classroom environment, whether by creating collaborative guidelines or allowing for choice in how students engage in or complete a particular activity (CAST, n.d.). A review of the literature found UDL to be theoretically sound and the implementation of its respective principles to be appreciated by both instructors and students (Cumming & Rose, 2022). In addition to ensuring specific accommodations for students with disabilities, usage of digital accessibility practices (e.g., alt text for images for screen readers, captioning of media, color contrast, and more) also have the potential to reduce barriers that students can experience in their learning.

Further, applying the science of learning is important to the praxis of inclusive teaching as there are an abundance of studies showing that retrieval practice, formative feedback, and general active learning strategies decrease opportunity gaps (e.g., Freeman et al., 2014). Dewsbury et al. (2022) also found that using active and inclusive teaching approaches involving a reduction of course content decreased achievement gaps,

and provides evidence in favor of a less is more approach. High course structure is also implicated in reducing equity gaps (Eddy & Hogan, 2017).

The results of other studies corroborate the previously discussed findings. The Student Experience Project, a partnership between six institutions, engaged approximately 300 faculty in professional development experiences which focused on cultivating belonging, fostering a growth mindset, revising course syllabi, accessing evidence-based teaching resources, and creating communities of practice (SEP, 2022). With a sample of over 10,000 students, they found evidence that their intervention increased by 25% the percentage of Black, Latino, and Native American students experiencing financial distress who reported a positive learning environment at their institution. Further, their qualitative findings triangulated this data showing that students had an increased sense of belonging and positive perceptions that their instructor had a growth mindset. The DFW rate (the percentage of students who receive a grade of D, F, or withdraw from a course) of students fell by 26% and 18%, respectively, in the two semesters under study, and the rates of students receiving As or Bs increased. Another positive outcome of this initiative was that faculty expressed a greater sense of belonging to their institutions after engaging in the initiative.

This research provides evidence that it is important for instructors to adopt inclusive teaching approaches that support a diverse student population and counter systemic barriers that can result in opportunity gaps, lower persistence, and diverse students feeling unwelcome in college settings. Specific actions taken by instructors within classroom settings and types of instructor talk can positively impact inclusion. The Protocol for Advancing Inclusive Teaching (PAITE) described in this article thus fills a very important need by supporting instructors in their journeys to design more inclusive classroom spaces.

Purpose of the Study

The goal of this project was to develop a general classroom observation protocol that could provide formative feedback on the inclusive teaching efforts of instructors across disciplines and course types.

Methods

The development of this protocol involved a) the identification of observable teaching behaviors, b) the creation of a preliminary instrument, c) gathering validity evidence, d) an iterative process of revision after a pilot implementation to finalize the protocol and further validate its usage in college classrooms, e) calculation of reliability psychometric measures to demonstrate that repeated usage of the protocol by trained observers would yield consistency in findings, and the production of training materials.

Participants

Study participants included instructors within higher education from different disciplines and course formats (e.g., lecture, laboratory, seminar) at a liberal arts institution in the eastern United States. The pilot implementation of the protocol during the first semester involved six instructors within STEM and humanities disciplines who taught lecture, laboratory, and seminar courses. Over 11 observations were conducted within their classes. The final protocol observations involved six additional instructors within STEM, social sciences, and humanities disciplines and 17 observations. In total, 28 observations were conducted for this project with the final analysis reported on the 17 occurring after the pilot. Observations were 50, 60, or 75 minutes in length.

Context

During the pilot phases, all participants except one were part of a cohort of instructors engaged in an initiative focused on inclusive teaching that involved a one-semester commitment of setting inclusive teaching goals, working with a student pedagogical partner who observed their courses to provide feedback on their plans, and a learning community of other instructors for sharing practices and discussing literature focused on inclusive teaching. The instructor who was not a member of this cohort had expertise in inclusive teaching practices. After the student partners were trained on the protocol, the instructors were observed with the PAITE between 2 to 3 times during the semester by student partners in order to receive general feedback on their inclusive teaching approaches. The same student partners who engaged in the pilot study also conducted the final observations providing feedback and consistency on their use of the tool as it was modified and further validated.

Data Collection

This project initially involved the identification of observable inclusive teaching behaviors based on classroom observations of teaching by using established frameworks focused on inclusive teaching, the experiences of experts in educational development focused on inclusive teaching, feedback from students who are the recipients of inclusive instruction and student observers who drew from their perspectives as learners experiencing inclusive classrooms, instructors who adopt inclusive teaching approaches, and comparisons with other validated and reliable instruments. The validity evidence for the protocol is included below.

Protocol Development

A variety of protocol formats were considered when developing the protocol. The chosen format was modeled after the Classroom Observation Protocol for Undergraduate STEM (COPUS), a valid and reliable instrument that involves observers recording classroom behaviors every 2 minutes in a data-driven manner, and later generating a pie chart representing a breakdown of the respective teaching actions (Smith et al., 2013). The reason for this choice was to focus largely on specific observable behaviors in a way that inclusive teaching practices could be intuitively characterized and progress could be monitored. PAITE differs from COPUS in that it focuses exclusively on inclusive teaching behaviors. Additionally, the behaviors of students are not recorded using PAITE given that sense of belonging and perceptions of equity are not easily measurable through observation. The PAITE, therefore, focuses solely on the instructor's facilitation of an inclusive learning environment. A major goal of the protocol is to encourage instructor reflection on their inclusive teaching practices. Instructors identify any approaches they already utilize and additional strategies that they could implement in the future to foster inclusion.

Identification of Observable Inclusive Teaching Practices and First Iteration of Protocol

The development of the protocol began in 2020 through an iterative process and was completed in 2022. Nineteen observable inclusive teaching behaviors were initially identified through the validity evidence described below. Prior to the first usage of the protocol in classrooms during the pilot, a few adjustments were made after think-aloud sessions with student researchers. Clarity in language was given to an original code (later modified after the pilot) to indicate that the visual materials were reflective of diversity. A recommendation was added for the instructor to share their course roster containing student names. After the pilot the team learned that even with a list of names on a course roster, monitoring whether an instructor pronounced student names correctly or used their appropriate forms was challenging to carry out in a reliable manner. After the pilot, this code was modified to indicate that the instructor called students by their names without focusing on pronunciation. If an observer became aware of an instructor mispronouncing a student's name they could still provide such feedback during the debriefing session. Additionally, a new code, Media (MED), was added that focused on the instructors' use of visuals, either digital or physical objects, while teaching. This was absent in the pilot.

Validity Evidence

Kane's argument-based approach was used to obtain validity evidence for this protocol (Kane, 1990). This approach includes both an interpretive and validity argument. The interpretive argument specifies any assumptions made, and the validity argument provides evidence for such assumptions. The PAITE assumes that:

- Teaching behaviors exist that are inclusive.
- Some inclusive teaching behaviors can be reliably, directly observed during classroom instruction in higher education.
- An instructor's awareness of the frequency of their observable inclusive teaching behaviors can lead to more effective instruction.

In the development of this protocol, a multi-part approach to validity evidence was applied: research, expert opinion, students' perspectives, and items on validated protocols.

The identification of the observed inclusive teaching behaviors was largely based on established research on strategies and frameworks that promote inclusion. Each code on the protocol is aligned with literature supporting such practices. Expert opinion was sought on the observed practices, particularly feedback and input from an expert who has worked extensively with instructors and published research on inclusive teaching. However, relying on expert opinion for validity evidence for inclusion was an incomplete picture. Students' perspectives were also critical. Inclusive teaching, however, is complex and idiosyncratic, and large determinants of whether teaching is inclusive lie in the students and their perspectives; inclusion is tied to a feeling, a sense of belonging, and equity. Having input from a diverse team of six undergraduate students who worked closely with instructors on their inclusive teaching efforts was essential. Their think-alouds and ongoing feedback on the project provided more evidence as to the behaviors identified as being equitable and inclusive.

Additionally, the development of the PAITE was based on validated protocols to support construct validity. Specifically, a number of items on COPUS focused on active learning (Smith et al., 2013) as there is considerable evidence that such strategies can reduce opportunity gaps (e.g., Freeman et al., 2014). Active learning is also included with the Reformed Teaching Observation Protocol (Piburn, 2000) in Subscale 5, Classroom Culture: Student/Teacher Relationships item stating that "active participation of students was encouraged and valued." Other previously cited research and teaching and learning frameworks aligned with the inclusion of active learning (ACTIVE) on the PAITE as an inclusive teaching practice.

The Prior Knowledge Assessment (PRIOR) code on the PAITE was derived from "instructional strategies and activities respected students' prior knowledge and the preconceptions inherent therein," from the Lesson Design and Implementation Subscale, Community Standards from "the lesson was designed to engage students as members of a learning community," Student Choice (CHOICE) originated from "the focus and direction of the lesson was often determined by ideas originating with students," aligning with the framework of Universal Design for Learning (UDL) (CAST, n.d.).

The code Real-World Connections (REAL) was derived in part from items on the Content: Propositional Knowledge Subscale of the RTOP, "connections with other content disciplines and/or real-world phenomena were explored and valued" and triangulated with teaching and learning frameworks focused on inclusivity, such as culturally responsive teaching and universal design for learning (Gay, 2010; CAST, n.d.). From the Procedural Knowledge and Classroom Culture: Communicative Interactions subscales, the Media (MED) code previously described was based on "students used a variety of means (models, drawings, graphs, symbols, concrete materials, manipulatives, etc.)" and "students were involved in the communication of their ideas to others using a variety of means and media" as well as UDL principles.

Further, when determining which items could be included on the protocol, the research team used the following criteria:

Practices were:

- Observable in an in-person classroom setting,
- Implementable in any course regardless of discipline, and
- Described in the positive so as to empower instructors on inclusion efforts rather than reinforce deficit framing.

Data Analysis

Reliability

Two measures of reliability were calculated for the protocol, Jaccard similarity coefficients to measure the internal consistencies of scores for each of the final 15 individual codes (Jaccard, 1901) and Cronbach's alpha to measure the overall reliability of the Jaccard scores. We calculated Jaccard scores because, in this protocol, pairs of observers at times select the same code within the 2-minute increments. In order to calculate inter-rater reliability, two trained observers independently coded within the courses under study. Interrater reliability was determined by calculating Jaccard similarity scores for single codes. The equation for the Jaccard coefficient is T = nc /(na + nb - nc), where

- nc = the number of 2-minute increments that are marked the same for both observers plus 2-min increments
- na = the number of 2-minute increments that are marked the same for both observers plus 2-minute increments observer 1 marked that observer 2 did not
- nb = the number of 2-minute increments that are marked the same by both observers plus 2-minute increments observer 2 marked that observer 1 did not (see Smith et al., 2013).

Jaccard scores closer to 1.0 indicate more consistency between reviewers.

Table 1 shows the distribution of Jaccard scores for each of the codes (n = 17 observations). A sample of codes is listed in Table 2 and a comprehensive list in Appendix B. The scores averaged 0.90 across codes, and ranged between 0.73 and 1.0. To assess reliability across all single codes within the protocol, Cohen's kappa was calculated using DataTab and was found to be 0.74, within an acceptable range (Cohen, 1960).

Table 1. *Mean Jaccard Similarity Index Reliability Scores for PAITE Codes*

Code	Jaccard Reliability Index Score (mean +/- SE)
PRIOR	0.94 +/- 0.04
COMP	0.84 +/- 0.04
DIVEX	0.94 +/- 0.02
MED	0.73 +/- 0.08
REAL	0.80 +/- 0.04
COM	0.98 +/- 0.01
REL	0.92 +/- 0.03
NAME	0.87 +/- 0.04

AFFIRM	0.82 +/- 0.05
GROW	0.92 +/- 0.03
EXCL	1.00 +/- 0.00
IDEN	0.99 +/- 0.01
EQPART	0.86 +/- 0.03
ACTIVE	0.85 +/- 0.02
CHOICE	0.96 +/- 0.07

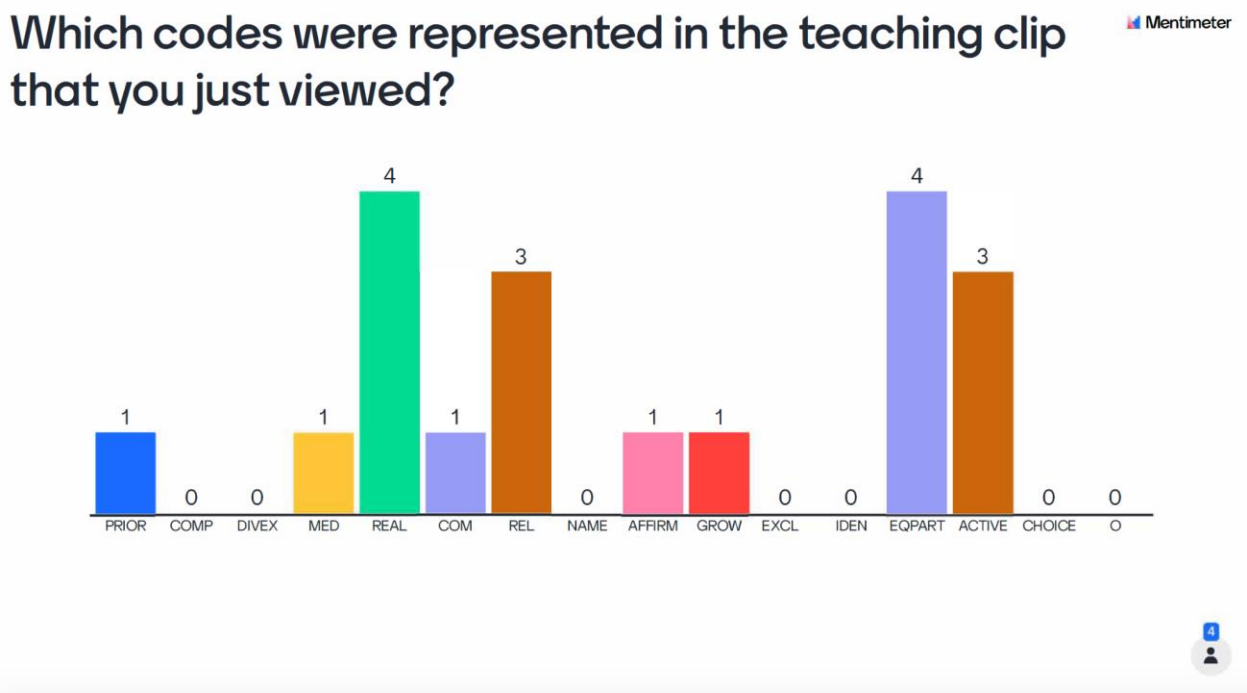
Table 2. *Sample PAITE Codes*

Code	What the Instructor is Doing
PRIOR	Prior Knowledge Assessment: the instructor measures students' baseline knowledge or skills using a formal or informal assessment that is turned in.
DIVEX	Diverse Examples: the instructor provides examples that present a diversity of people, situations, perspectives, or ideas.
MED	Diverse Visuals or Media: visual materials (e.g., slides, images, videos, and other visual materials) are reflective of diversity or instructor incorporates various (more than one) forms of media (e.g., slides, films, music, videos, articles, simulations, etc.). Can include physical objects.
REL	Relationship Building: the instructor allows time for informal student-to-student or student-to-instructor conversation for relationship building.
COM	Community Standards: referenced by the instructor to hold community members accountable to an inclusive learning environment.
EQPART	Equitable Participation: the majority of the students are engaged in an activity in which they are actively participating.
ACTIVE	Active Learning: the instructor uses active learning strategies which involve students engaging with the material and thinking about what they are doing.

Observer Training Sessions

The research team created a training guide for observers to support usage of the protocol (see Appendix B). Training sessions were refined after the pilot phase and involved a minimum of 2–3 hours. During these sessions student partners were provided with each of the observational codes to increase their familiarity, given examples of inclusive teaching practices included in the Training Manual, and shown video-based teaching vignettes. After viewing a vignette, the observers were polled anonymously with Mentimeter software on which teaching behavior code(s) were apparent (see Figure 1). Observers were next asked to provide reasoning behind why they chose their codes. The most appropriate codes were shared with the observers followed by a discussion on why they were the best choices. Observers were also encouraged to ask any questions during this time or clear up any confusion. This polling process was repeated until the observers mostly converged as a group on the most appropriate codes. The Inclusive Teaching Visualization Project, released in 2022 contains vignettes that can also be used for PAITE training purposes. They are linked within the training guide as well as other available media (see Appendix B).

Figure 1. *Sample Training Poll*



Note: Based on the responses of the four trainees, the highest responses were for the codes: REAL, REL, EQPART, and ACTIVE. These were designated as the most appropriate codes. This poll displays a few other codes that garnered one vote each noting the importance of discussing why those particular codes were not most descriptive of the teaching vignette.

Pilot Testing and Second Iteration of Protocol

The protocol was piloted in classes from a range of disciplines including STEM lecture and laboratory courses as well as a foreign language course. For the purposes of the development of the protocol, two observers were present. After the pilot semester the protocol was revised during think-aloud sessions with student observers based on the following guiding questions:

- Were the inclusive teaching practices easily observable?
- Were the codes easily interpreted and selected by the observers?
- Were there other areas of needed improvement?

After the pilot a few items were modified on the protocol. Diversity in Visuals and Media were also collapsed into one code, MED, because they were not always easily distinguishable. Heterogeneous Groups was removed from the code list and moved to an attribute that the observer could describe more generally for the observation if group work was being conducted given it was not always easy to determine the criteria by which the instructors created the groups. Additionally, usage of students' preferred names was made optional given that obtaining student names and their correct pronunciations prior to the observation proved challenging when implemented.

Final Testing of the Protocol

After the revisions were made to the protocol, 17 additional classroom observations were conducted with the PAITE the subsequent semester in courses from the 100 to 300 level, Humanities (Music History, Theater), Social Sciences (Economics), and STEM (Computer Science, Mathematics) disciplines. Two observers were present at all times, and in two of the observations, one of the pairs was the lead author. Each of the other

times the observers were student pedagogical partners. The reliability data subsequently presented reflects this final iteration of the protocol. In the final version of the protocol, accessibility and course structure were added as overarching areas for the observer to comment upon (not as codes) given their importance in inclusion.

Post-Observation Debriefing Sessions

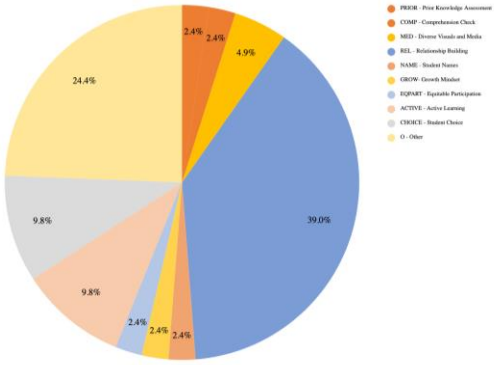
The primary observer for each observation was tasked to debrief with the instructor soon after each observation, optimally no more than one week later. On occasion, due to scheduling, this time was slightly extended. The primary observer shared a pie chart of the observed inclusive teaching behaviors with the instructor. The observers were expected to use specific examples from the classroom when discussing the inclusive teaching practices of the instructor, utilizing notes taken during the observation. After the first observation the instructor was provided with a reflection guide for making sense of the observational data (see Appendix C). They were encouraged to reflect upon their findings as well as to engage in goal-setting for what they hoped to see in subsequent observations. Generally, observers were asked to complete a minimum of 3 observations during the semester. For example, if an instructor was interested in using more affirmational and growth mindset language, their goal might be to see increases in the reported percentage of the AFFIRM and GROW codes over the course of their observations.

Results

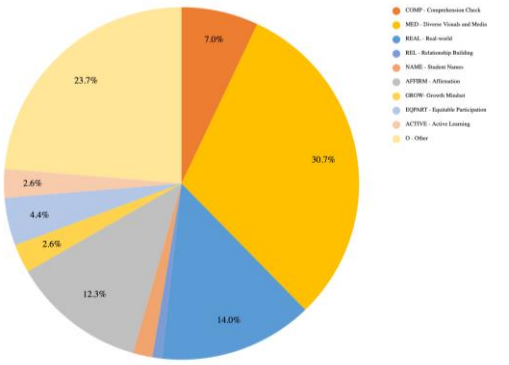
Each observed class had a unique PAITE typology of inclusive teaching behaviors showing the proportion of particular types of inclusive teaching approaches implemented by the instructor. A sample observation where a class session was focused mostly on relationship-building with interactions with students is shown in Figure 1A. A course where an instructor utilized a variety of media throughout the majority of the class is depicted in Figure 1B. A course with a higher percentage of active learning activities is shown in Figure 1C. Lastly, Figure 1D illustrates a course with high usage of affirmational language by the instructor.

Figure 1. *Sample Observation Typologies Using PAITE, Percent Breakdown of Coded Inclusive Teaching Practices*

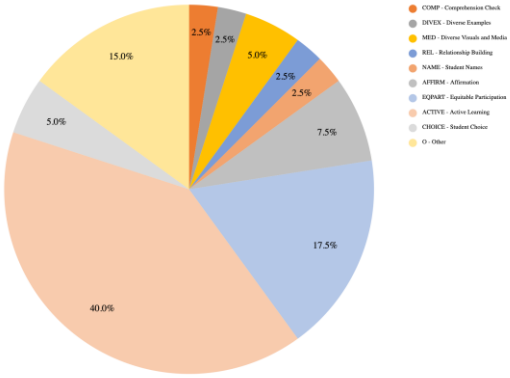
A. High Relationship Building



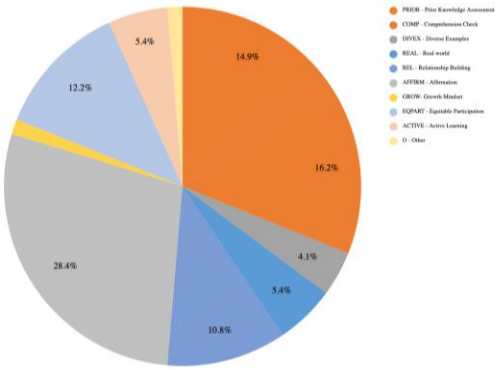
B. High Use of Media



C. High Active Learning



D. High Use of Affirmation



Discussion

Integration Into the Current Literature

As inclusive teaching is of critical importance at colleges and universities to instruct diverse student populations, obtaining feedback on such practices is paramount. The PAITE is an observational protocol developed: (a) to focus solely on inclusive teaching approaches, (b) with student voice, and (c) with reported validity and reliability evidence that lends itself to usage across higher education contexts. This protocol contributes to the existing observational tools, such as COPUS, TDOP, and RTOP, used within higher education settings (Smith et al., 2013; Hora et al., 2013; and Piburn et al., 2000).

Limitations

While exclusionary acts such as microaggressions have been reported to occur in higher education classrooms (Boyson et al., 2009), addressing them was not observed in the final protocol analyses. The observers indicated that they had not witnessed exclusionary acts committed in the classes they observed. This finding might not be surprising, and perhaps encouraging, given that the participants in this project were mostly part of an initiative focused on inclusive teaching and would, arguably, be expected to set a tone for inclusion early in their courses, likely resulting in fewer instances of such acts being committed, with less of a need to address them. Observers regardless should be aware that this code (EXCL) might be rarely selected during observations, but still is important to document when observed given the harms that can occur when such acts are committed and not addressed.

Although falling within an acceptable reliability range, the MED code required the most clarification for observers. When using this code, observers should focus on any digital and physical items used by the instructor beyond the verbal delivery of information. Examples include, but are not limited to, animations, movies, simulations, videos, physical objects, graphs and digital images.

Additionally, this protocol is focused on inclusive teaching practices that are observable. There are a variety of other inclusive teaching practices that might not be observable during a single classroom observation.

Implications for Theory and Practice

As previously noted, the majority of the participants in this study were part of an intensive initiative focused on inclusive teaching. They were more likely to demonstrate the PAITE inclusive teaching behaviors and

therefore were an ideal sample for the development of the protocol so that the practices could be observed. If this protocol is implemented more broadly across institutions, observers may see greater variation in typologies.

The protocol allows for instructors to individually reflect on their inclusive teaching efforts (see Appendix C, Instructor Guide) and obtain feedback from the observer to gain more insight into their inclusive teaching practices. Instructors are encouraged to be observed multiple times during a given term to have more data on their teaching practices and also so that they can use their findings for comparison purposes as appropriate. For example, if an instructor is interested in using more growth mindset language in a mathematics course, they might have an initial observation conducted to gauge their baseline level and a second later in the semester to see if they have increased their frequency of that particular inclusive teaching practice.

This protocol is not designed for evaluative purposes and should not be used in determining high-stakes decisions around promotion and tenure review. Given the diversity of what inclusive teaching can look like in classroom settings, simply relying solely on this protocol for evaluative purposes would be unjust. This protocol fulfills its intended purpose when used as a tool for confidential, formative feedback and reflection on inclusive teaching practices.

The PAITE is a useful tool for gauging inclusive teaching efforts but should not be the only one utilized. Although not part of this protocol, instructors are also encouraged to solicit feedback on other course materials such as syllabi, course sites, and other curricular material.

An instructor can also use a self-reflection tool for additional feedback and write reflective journal entries, as well as collect student feedback through anonymous mid-course surveys or small instructional group feedback sessions. Engaging in the act of gathering formative feedback on inclusive teaching efforts is a demonstrated commitment to teaching excellence and improvement.

Conclusion

The PAITE is a versatile classroom observation instrument that can be used to provide feedback on observable inclusive teaching practices across a variety of course contexts in higher education. Usage of this protocol is well-situated in centers for teaching in learning to provide formative feedback to instructors on their inclusive teaching approaches. Whether embedded within an initiative as described in this article, or used on an ad hoc basis, it can be a useful tool for instructors to assess their efforts. The protocol could also be used for informal observations of peers in classroom settings with a trusted colleague, within learning communities focused on inclusive teaching, or to monitor changes in inclusive teaching practices in courses where interventions have been implemented. Such observations can complement the instructors' own reflections on their teaching practices to ultimately advance inclusive teaching and learning in higher education.

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Appendix A—PAITE Observation Form

Date: Class: Instructor ID : No. Students: Observer Name:

Classroom arrangement (e.g. auditorium style seating, seminar table, lab benches in fours, etc.):
Class Structure (indicate if low, medium, or high):
Group Observations (if students work in groups, indicate how instructor has designed groups in support of inclusion):
Accessibility Observations (indicate any room, course materials, or course activities that support learner accessibility):

Instructions: For each 2-minute interval, place a "1" in the respective column to indicate what the instructor is doing according to each code.

CODES

PRIOR = Prior knowledge assessment; COMP = Comprehension check; DIVEX = Diverse examples; MED = Diverse visuals or media; REAL = Real-world connections; COM = Community standards; REL = Relationship building; NAME = Student names; AFFIRM = Verbal affirmations; GROW = Growth mindset; MICRO = Addresses microagressions; IDEN = Avoids forced spokesmanship of identity; ACTIVE = active learning; CHOICE = student choice; O = Other

min	PRIOR	COMP	DIVEX	MED	REAL	COM	REL	NAME	AFFIRM	GROW	MICRO	IDEN	EQPART	ACTIVE	CHOICE	O	Comments
0-2																	
2																	
4																	
6																	
8																	
min	**PRIOR**	**COMP**	**DIVEX**	**MED**	**REAL**	**COM**	**REL**	**NAME**	**AFFIRM**	**GROW**	**MICRO**	**IDEN**	**EQPART**	**ACTIVE**	**CHOICE**	**O**	**Comments**
10																	
12																	
14																	
16																	
18-20																	
min	**PRIOR**	**COMP**	**DIVEX**	**MED**	**REAL**	**COM**	**REL**	**NAME**	**AFFIRM**	**GROW**	**MICRO**	**IDEN**	**EQPART**	**ACTIVE**	**CHOICE**	**O**	**Comments**
20-22																	
22																	
24																	
26																	
28-30																	
min	**PRIOR**	**COMP**	**DIVEX**	**MED**	**REAL**	**COM**	**REL**	**NAME**	**AFFIRM**	**GROW**	**MICRO**	**IDEN**	**EQPART**	**ACTIVE**	**CHOICE**	**O**	**Comments**
30-32																	
32																	
34																	
36																	
38-40																	
min	**PRIOR**	**COMP**	**DIVEX**	**MED**	**REAL**	**COM**	**REL**	**NAME**	**AFFIRM**	**GROW**	**MICRO**	**IDEN**	**EQPART**	**ACTIVE**	**CHOICE**	**O**	**Comments**
40-42																	
42																	
44																	
46																	

Appendix B—PAITE Training Guide

Instructions for Observers

The Protocol for Advancing Inclusive Teaching Efforts (PAITE) was developed in alignment with validated research on observable inclusive teaching practices, as well as in collaboration with students, and provides instructors with formative feedback on their instructional efforts. The protocol was not designed to be used for evaluative purposes. This guide provides information for preparing observers to use the protocol in higher education classrooms.

Prior to each observation, observers should complete the following steps:

- Review all protocol codes and sample scenarios.
- Ask the instructor:
    - For their lesson plans and relevant materials.
    - For a course roster containing students' names.
    - If there are any specific inclusive teaching approaches for which they would like feedback.

The day of the observation the observer should:

- Have access to a timer to measure 2-minute intervals.
- Place a "1" in each box of the code corresponding to the teaching behaviors observed taking place during each 2-minute interval. Do not place any other numbers in the boxes other than "1".
- Mark O (Other) and explain in the Comments area if no code fits for a particular 2-minute interval. The O code should be used for when the instructor is lecturing.

After the observation, observers should:

- Review the findings.
- Create a pie chart using the template and share it with the instructor during a debriefing meeting as well as any additional feedback on their inclusive teaching practices.

Additional Form Components

Observers should also complete the top portion of the observation form and note the following:

- Classroom arrangement—Indicate the layout of the physical space of the classroom where learning is taking place (e.g., auditorium-style lecture hall, laboratory with benches, seminar room with a single table).
- Course structure—Note whether the structure of the lesson that day was low, medium, or high. A highly structured class session will have activities in a predictable and transparent sequence—e.g., learning goals, active learning activities, out-of-class activities. A non-structured class would not follow a predictable sequence.
- Heterogeneous groups—If group work is involved, make note of the heterogeneity of groups. As appropriate, the observer can ask the instructor which factors contributed to how groups were formed.

Observation Codes

Code	What the Instructor is Doing
PRIOR	**Prior Knowledge Assessment:** The instructor measures students' baseline knowledge or skills using a formal or informal assessment that is turned in.
COMP	**Comprehension Check:** The instructor asks students questions that check their understanding through an informal, low-stakes assessment that is not turned in.
DIVEX	**Diverse Examples:** The instructor provides examples that present a diversity of people, situations, perspectives, or ideas.
MED	**Diverse Visuals or Media:** Visual materials (e.g., slides, images, videos, and other visual materials) are reflective of diversity or the instructor incorporates various (more than 1) forms of media (e.g., slides, films, music, videos, articles, simulations, etc.). Can include physical objects.
REAL	**Real-world Connections:** The instructor applies course material or learning activities beyond the classroom.
COM	**Community Standards:** Referenced by the instructor to hold community members accountable to an inclusive learning environment.
REL	**Relationship Building:** The instructor allows time for informal student-to-student or student-to-instructor conversation for relationship building.
NAME	**Student Names:** The instructor calls on students by their names during class.
AFFIRM	**Verbal Affirmations:** Instructor uses words of encouragement and praise that validate students' contributions.
GROW	**Growth Mindset Language:** Instructor focuses on process and progress of learning rather than on outcomes.
EXCL	**Address Exclusionary or Other Oppressive Acts:** The instructor acknowledges and addresses exclusionary or oppressive acts if they occur during class.
IDEN	**Questions Based on Group Identity:** The instructor asks questions based on group identity and avoids forced spokesmanship to avoid making assumptions about a particular student's background.
EQPART	**Equitable Participation:** The majority of the students are engaged in an activity in which they are actively participating.
ACTIVE	**Active Learning:** The instructor uses active learning strategies which involve students engaging with the material and thinking about what they are doing.
CHOICE	**Student Choice:** The instructor offers students the opportunity to choose between different activities or options.
O	**Other:** A teaching behavior not accounted for in the other codes (e.g., lecturing)

Sample Teaching and Learning Scenarios

Overview: To ensure reliability, observers should review the sample scenarios below prior to each classroom observation. Please note that these are only examples and other teaching behaviors that fall under these particular codes might be observed. The vignettes also provide sample teaching practices.

Code	Instructor is Doing	Sample Scenarios	Video Clips of Teaching Practices
PRIOR	**Prior Knowledge Assessment: The instructor measures students' baseline knowledge or skills using a formal or informal assessment that is turned in.** *Rationale: Students may have differences in the opportunities they have had to be exposed to the material. By learning where students start, the instructor can better design instruction and provide relevant resources.*	-Instructor administers a quiz at the beginning of the class to determine what students already know -Instructor asks students to write down everything that they know about a particular topic and hand it in -Instructor asks students for a writing sample before a larger writing assignment to obtain a sense of students' skills	Inclusive Teaching Visualization Project - Social Sciences, Vignette 2 Inclusive Teaching Visualization Project - First-Year Seminar, Vignette 1
COMP	**Comprehension Check: The instructor asks students questions that check their understanding through an informal, low-stakes assessment that is not turned in.** *Rationale: Asking for formative feedback can lead to better learning for all students by letting both the instructor and students assess their understanding prior to a higher-stakes assessment.*	-Instructor poses a question to the class related to prior course material -Instructor poses a question to see if the class is following along with the material -Instructor may have students respond to questions through any means (e.g., raising hands, writing, polling) -Instructor asks targeted follow-up questions to check if students understand after a group discussion or Think-Pair-Share	Conducting In-Class Polling and Peer Discussion Inclusive Teaching Visualization Project - STEM, Vignette 2
DIVEX	**Diverse Examples: The instructor provides examples that present a diversity of people, situations, perspectives, or ideas.** *Rationale: Including material that resonates with diverse*	-Instructor uses examples of people from diverse cultural backgrounds or identity groups, or of diverse perspectives. -Instructor displays pictures that show individuals from diverse cultures and identity groups	Inclusive Teaching Visualization Project - STEM, Vignette 3 Inclusive Teaching Visualization Project - First-Year Seminar, Vignette 3

	students can foster a more inclusive classroom environment.	-Instructor uses examples from diverse cultures and identity groups (e.g., not Eurocentric)	
MED	**Diverse Visuals or Media: Visual materials (e.g., slides, images, videos and other visual materials) are reflective of diversity or instructor incorporates various (more than 1) forms of media (e.g., slides, films, music, videos, articles, simulations, etc.). Can include physical objects.** *Rationale: Using a variety of teaching approaches can support the learning of a diverse class.* **This code is selected for each time an instructor continues using a form of media or switches to a different type**	-Instructor uses images or media from individuals from beyond the majority group social identity backgrounds -Instructor uses different types of media -Instructor uses physical/tangible objects (e.g., artwork, chemistry models, games, scientific instruments)	Inclusive Teaching Visualization Project - Social Sciences, Vignette 3 Inclusive Teaching Visualization Project - STEM, Vignette 1 Inclusive Teaching Visualization Project - STEM, Vignette 2 Inclusive Teaching Visualization Project - STEM, Vignette 3 Inclusive Teaching Visualization Project - STEM, Vignette 4
REAL	**Real-world Connections: The instructor applies course material or learning activities beyond the classroom.** *Rationale: Including material that resonates with diverse students that they can apply to their lives can facilitate learning.*	-Instructor gives examples from their own life and connect it to the course topic -Instructor encourages students to give examples from their everyday lives related to the topic -Instructor makes a comparison to something in everyday life (e.g., baking, weather, etc.) -Instructor gives examples that are specific to [Institution Name] everyday scenarios -A foreign languages instructor has students apply what they learned by using a video involving individuals from the culture	Connecting Forward: Applying Concepts Beyond the Classroom Inclusive Teaching Visualization Project - Social Sciences, Vignette 3 Inclusive Teaching Visualization Project - STEM, Vignette 3
COM	**Community Standards: Referenced by the instructor to hold community members accountable to an inclusive**	-Instructor co-creates classroom guidelines with students for discussion -Instructor reminds students about	Norm-Setting at the Beginning of the Semester (Instructional Moves) Using Research to Set

	learning environment. *Rationale: Members of a community can feel an increased sense of belonging and trust when they agree to particular standards.* **Note: It can be helpful to ask the instructor if any community standards exist for the class in advance of the observation**	classroom guidelines for discussion -Instructor reminds students that the classroom is a brave space," "to speak from their own perspective," and "to not challenge the person but the idea"	Discussion Norms Inclusive Teaching Visualization Project - Social Sciences, Vignette 1 Inclusive Teaching Visualization Project - Social Sciences, Vignette 2 Inclusive Teaching Visualization Project - First-Year Seminar, Vignette 2
REL	**Relationship Building: The instructor allows time for informal student-to-student or student-to-instructor conversation for relationship building.** *Rationale: Forming student-instructor relationships can foster a sense of belonging.*	-Instructor facilitates an activity where students share information about themselves -Instructor shares personal stories or information about themselves -Instructor gives time for students to talk with one another on topics beyond course material -Instructor asks informal questions about students' co-curricular activities or engagements (e.g., How was your soccer game?) -Instructor asks students to switch partners so that they can talk with someone new in the class -Instructor mentions informal backchannel communication with the class (e.g., Slack channel, etc.)	Getting to Know Your Students Inclusive Teaching Visualization Project - Social Sciences, Vignette 1 Inclusive Teaching Visualization Project - STEM, Vignette 3 Inclusive Teaching Visualization Project - First-Year Seminar, Vignette 3
NAME	**Student Names: The instructor calls on students by their names during class.** If possible, in the Comments area, whether the correct pronunciation was used if known. Also note whether the language is gender-inclusive, i.e. The instructor uses and models using gender-inclusive language such as pronouns, and favors gender-neutral terminology**.**	-Instructor calls on students by their names -Instructor properly uses student pronouns (indicate in Comments area)	Getting to Know Your Students Inclusive Teaching Visualization Project - STEM, Vignette 2 Inclusive Teaching Visualization Project - First-Year Seminar, Vignette 2

	Rationale: Learning and using students' names can foster a welcoming environment. This can be particularly important for students from diverse cultural backgrounds whose names may be unfamiliar to the instructor.		
AFFIRM	**Verbal Affirmations: Instructor uses words of encouragement and praise that validate students' contributions.** *Rationale: Validation can boost student self-efficacy. Affirmation has been shown to particularly have a strong effect on students from diverse backgrounds.*	-Instructor uses language such as "good job," "this was a good idea," "you are in the right direction," etc. to affirm student contributions -Instructor says words such as "I know you know a lot about this" or "I like the way you said that," -Instructor is verbally open to students' new ideas and contributions -Instructor thanks students	Inclusive Teaching Visualization Project - Social Sciences, Vignette 2 Inclusive Teaching Visualization Project - STEM, Vignette 2 Inclusive Teaching Visualization Project - STEM, Vignette 4 Inclusive Teaching Visualization Project - First-Year Seminar, Vignette 1
GROW	**Growth Mindset Language: Instructor focuses on process and progress of learning rather than on outcomes.** **Instructor's language and follow-up conversations encourage students to think deeper about the material** *Rationale: Growth mindset language promotes flexibility, openness, and risk-taking.*	-Instructor encourages students to try again -Instructor says their efforts now will help them in the future	Inclusive Teaching Visualization Project - Social Sciences, Vignette 1 Inclusive Teaching Visualization Project - First-Year Seminar, Vignette 1
EXCL	**Address Exclusionary or Other Oppressive Acts: The instructor acknowledges and addresses exclusionary practices and oppressive acts if they occur during class.** *Rationale: Students have reported instructors not addressing exclusionary*	An exclusionary act is committed in the class and instructor addresses it Sample types of exclusionary acts (see Sue, 2010): -alien in your own land (where are you from?) -ascription of intelligence -second-class citizen	Inclusive Teaching Visualization Project - First-Year Seminar, Vignette 2

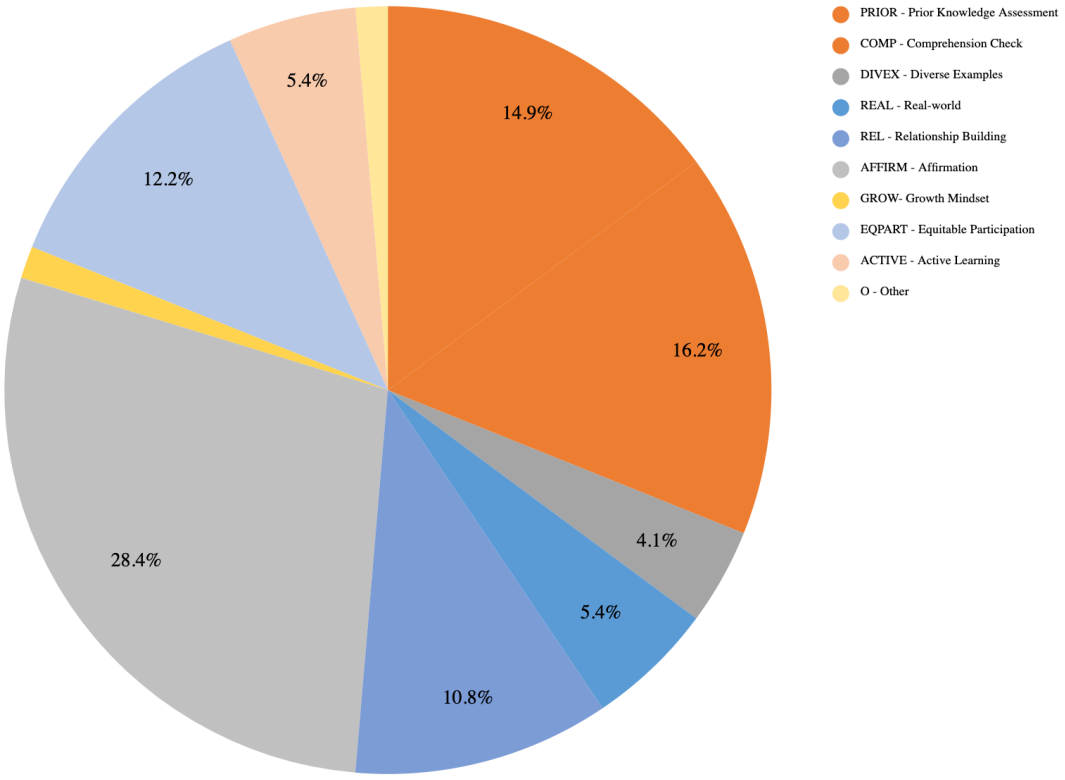
	practices which can already be harmful to students and hinder inclusion efforts.	-color blindness -assumption of criminal status -denial of individual racism -myth of meritocracy -pathologizing cultural values/communication styles -environmental microaggressions -how to offend without really trying	
IDEN	**Questions Based on Group Identity: The instructor asks questions based on group identity and avoids forced spokesmanship to avoid making assumptions about a particular student's background.** *Rationale: Students have reported that forced spokesmanship can interfere with an inclusive learning environment.*	-A topic in the class around diversity (e.g., disparities in health among demographic groups, culture) is being discussed and the instructor actively ensures students assumed to be the related identity background are not forced to respond.	Inclusive Teaching Visualization Project - Social Sciences, Vignette 3
EQPART	**Equitable Participation: The majority of the students are engaged in an activity in which they are actively participating.** *Rationale: Contributions of all students align with the principles of inclusion.*	-Polling -Going around the class -Using wait-time (pausing) -Group participation -Think-pair-share *Some may be simultaneously coded as active learning	Mixing Students Up in Small Discussion Groups Inclusive Teaching Visualization Project - Social Sciences, Vignette 2 Inclusive Teaching Visualization Project - Social Sciences, Vignette 3 Inclusive Teaching Visualization Project - STEM, Vignette 2 Inclusive Teaching Visualization Project - STEM, Vignette 4
ACTIVE	**Active Learning: The instructor uses active learning strategies which involve students engaging with the material and thinking about what they**	-Instructor is engaging students in learning through a method other than lecture (group work, polling, think-pair-share, laboratory exercise, writing exercise, one	Interspersing Pair-Shares Throughout Lectures Using Jigsaws to Facilitate Small-Group

	are doing. *Rationale: Active learning has been shown to reduce achievement gaps between majority groups and students from groups historically excluded.*	minute paper, etc.) -Code when more substantive active learning exercises for example, not just when an instructor poses a question to the class.	Discussions Getting Students Thinking and Engaging Through Small Group Instruction Inclusive Teaching Visualization Project - Social Sciences, Vignette 3 Inclusive Teaching Visualization Project - STEM, Vignette 2 Inclusive Teaching Visualization Project - STEM, Vignette 4
CHOICE	**Student Choice: The instructor offers students the opportunity to choose between different activities or options.** *Rationale: Giving students agency allows them to be more involved in the learning process and engaged.*	-Instructor enables student agency (e.g., they can choose their partner, topic, materials, whether to write or type an assignment, whether to work alone or in a group)	Inclusive Teaching Visualization Project - Social Sciences, Vignette 1 Inclusive Teaching Visualization Project - STEM, Vignette 4
O	**Other: A teaching behavior not accounted for in the other codes**	-Lecturing	

Graphical Feedback

Providing feedback to the instructor is one of the most critical aspects of using this protocol. Following the observation, the observer can generate a graphical display similar to Figure 1 to show the percentage of inclusive teaching behaviors coded. See sample below. A good practice for this feedback is to provide space for the instructor to review and reflect on the observation data prior to giving feedback, and then allow time for a feedback discussion. While the protocol provides feedback on general inclusive teaching behaviors that are observable, an instructor can also set goals for inclusion related to practices coded for future class sessions and observation. A recommendation is to use the protocol at the beginning, middle, and end of a course to allow for comparisons to be made between class sessions and also for progress to be monitored.

Figure 1. *Sample Percent Breakdown of Inclusive Teaching Behaviors*



Appendix C—PAITE Guide for Instructors

The goal of this guide is to provide feedback to instructors on how to utilize and make sense of the information obtained on the protocol.

Observation #1

1. Review the protocol codes below. Select a few codes (e.g., 1 - 3) that are consistent with inclusive teaching practices that align with your goals. Please keep in mind that these are observable behaviors that can be reliably observed. There may be other inclusive teaching practices that you utilize that fall outside of those listed below.

Code	What the Instructor is Doing
PRIOR	**Prior Knowledge Assessment:** The instructor measures students' baseline knowledge or skills using a formal or informal assessment that is turned in.
COMP	**Comprehension Check:** The instructor asks students questions that check their understanding through an informal, low-stakes assessment that is not turned in.
DIVEX	**Diverse Examples:** The instructor provides examples that present a diversity of people, situations, perspectives, or ideas.
MED	**Diverse Visuals or Media:** Visual materials (e.g., slides, images, videos, and other visual materials) are reflective of diversity or the instructor incorporates various (more than 1) forms of media (e.g., slides, films, music, videos, articles, simulations, etc.). Can include physical objects.
REAL	**Real-world Connections:** The instructor applies course material or learning activities beyond the classroom.
COM	**Community Standards:** Referenced by the instructor to hold community members accountable to an inclusive learning environment.
REL	**Relationship Building:** The instructor allows time for informal student-to-student or student-to-instructor conversation for relationship building.
NAME	**Student Names:** The instructor calls on students by their names during class.
AFFIRM	**Verbal Affirmations:** Instructor uses words of encouragement and praise that validate students' contributions.
GROW	**Growth Mindset Language:** Instructor focuses on process and progress of learning rather than on outcomes.
EXCL	**Address Exclusionary or Other Oppressive Acts:** The instructor acknowledges and addresses exclusionary or oppressive acts if they occur during class (e.g., microaggressions).
IDEN	**Questions Based on Group Identity:** The instructor asks questions based on group identity and avoids forced spokesmanship to avoid making assumptions about a particular student's background.

EQPART	**Equitable Participation:** The majority of the students are engaged in an activity in which they are actively participating.
ACTIVE	**Active Learning:** The instructor uses strategies which involve students engaging with the material and thinking about their learning.
CHOICE	**Student Choice:** The instructor offers students the opportunity to choose between different activities or options.
O	**Other:** A teaching behavior not accounted for in the other codes (e.g., lecturing).

2. Examine the graphical findings for the observation and reflect on the following:
   - Of the inclusive teaching behaviors coded during the observation, what percentage of them were within the areas of focus that you identified above (depth)? How many of the behaviors were observed compared to the total number on the protocol (breadth)?
   - Reflect on the class session. Can you recall utilizing these teaching practices? If so, what did you do?
   - Considering the code percentages, are they where you would like to be with regards to your teaching practices? If not, identify 1 or 2 ways that you can increase their frequency during subsequent class sessions. What are approximate ideal percentages for you? Why?
3. Consider the feedback that you received from the observer on both the protocol findings and other areas as relevant. How can you incorporate this feedback when you teach subsequent classes? Come up with a few specific approaches.

Case Examples

Case 1: An instructor teaches a course in writing and sets inclusive teaching goals to support students' growth mindsets with regards to their writing abilities, as well as goals for relationship-building. They are looking to use more growth mindset language in their classes in addition to verbal affirmations. During the first observation they notice that growth mindset language (GROW) represents a very small portion of the behaviors coded (2%), whereas affirmation (AFFIRM) is very high (25%). They intentionally consider how they can use more growth mindset language in the future in partnership with the observer.

Case 2: An instructor incorporates Universal Design for Learning principles in a course, specifically using multiple means of representation to teach different topics (e.g., photographs, simulations, animations). For this reason, the code diverse media (MED) is of particular interest to the instructor. Their PAITE results showed that MED was coded for nearly 50% of the inclusive teaching behaviors, which aligned with their inclusive teaching goals.

Case 3: An instructor aimed to design a classroom where students participate equitably, through writing, speaking, and other means. The code EQPART aligns with these goals. During the first observation, EQPART was rarely coded (3%). During a conversation with the observer the instructor brainstorms strategies for increasing equitable participation including polling, drawing student names while allowing them to pass their turn, and think-pair-share, and plans to utilize a few of these strategies in a future course.

Case 4: An instructor generally wants to gauge their inclusive teaching efforts to have a baseline understanding about their classroom practices, so that they can subsequently focus on other areas as needed. The graphical feedback from the PAITE gives them a general sense that they are using a number of different coded behaviors (breadth), but there are opportunities to use others more such as incorporating more real-world examples (REAL).

Observation #2 and Beyond

In answering the questions below, consider the inclusive teaching goals that you previously identified. Compare the graphs from the previous observation(s) to the current one(s).

1. Are there any differences? If so, what are they?
2. Are you seeing any progression (or consistency in achieving the desired range) in the areas most aligned with your inclusive teaching goals? If not, debrief with the observer to brainstorm additional approaches that can be implemented in future courses. If so, are the percentages on track with your target ranges?

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