What Do Students Perceive from the Syllabus? The Importance of Syllabi to Communicate Belonging and Promote Engagement

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Article Info	Abstract
	Syllabi are introductions and, like first impressions, can affect one's outlook. The current study is part of a larger evaluation of diversity, equity, and inclusion (DEI) in academic spaces; here we hoped to determine if research aligns with students' perceptions. Prior studies suggest syllabus qualities that signal belonging and increase engagement, especially for underrepresented students. Participants rated syllabi from different years. We anticipated that 2015-16 syllabi, before DEI objectives were enacted, would have fewer identity safety cues, less emphasis on inclusion, and focus less on diversity concepts compared to 2021-22 syllabi, after DEI objectives were prioritized. The latter were rated as more inclusive, more engaging, promoting greater belonging, and having a more approachable instructor. In comparisons by group, POC and white students did not differ in their perceptions of syllabi from 2015-16 nor did traditional and non-traditional students. Perceived changes from 2015-16 to 2021-22 syllabi revealed differences by social identities. White students perceived greater changes in instructor attributes and belonging over POC students, and traditional students rated greater changes in belonging, engagement, and instructor attributes than non-traditional students. These outcomes suggest that our DEI efforts are not being perceived equally among students, which ultimately may affect student motivation and outcomes.

Introduction

In recent years, growing attention has been paid toward diversity, equity, and inclusion (DEI) and what it means for the workplace, the classroom, and society in general. DEI works to bring about positive systemic changes for a more just and equitable community. Research efforts across fields are not only awakening to disadvantages in excluding diverse perspectives but are turning their attention to empirically demonstrate where DEI-related initiatives advance knowledge and holistically serve a community and/or broader society. With the socio-political landscape changing and individuals seeking to change along with it, having an understanding of DEI practices and their benefits is crucial.

The present study is part of a wider investigation on DEI curricular policies and practices in higher education. For this endeavor, we turn our attention specifically to course syllabi and the student perspective. Syllabi provide first

impressions and can affect one's outlook before a course begins. We sought to determine, as prior studies suggested, if syllabus qualities signal belonging and promote engagement, especially for underrepresented students.

Students' Sense of Belonging

In what is often credited as seminal work on "sense of belonging," Hurtado & Carter (1997) offered that this term "captures the individual's view of whether he or she feels included in the college community" (pg. 327). A simple question on whether students feel "a part of" their particular school has been offered as a means of measuring this general sense of belonging (Gopalan and Brady, 2020). However, which components determine this general belongingness? Students interact with a variety of people in their college community, including fellow students, faculty, and staff. Johnson and colleagues (2007) expanded upon Hurtado & Carter (1997)'s definition, offering a "sense of belonging illustrates the interplay between the individual and the institution. Students' success is in part predicated upon the extent to which they feel welcomed by institutional environments and climates" (p. 526). The primary means by which students may or may not receive that welcome within the institutional environment is their interactions with faculty and staff. Faculty, in particular, have substantial interactions with students and can therefore influence their sense of belonging within and across courses.

As the definitions describe, belonging is personal yet arises from an interplay with one's context. It is the latter that DEI initiatives target; it is contextual change that is accessible to an instructor. Where to begin? How does an instructor induce psychological safety and students' sense of belonging in a course? It could begin with discussing pronouns, sharing some personal background, or a "get-to-know-you" survey for students to provide their own perspectives. These are examples of identity safety cues (ISCs).

When exhibited through individual instructors' behavior and course design, ISCs can influence students' perceptions of them (Howansky et al., 2021; Maimon et al., 2021). Howansky and colleagues (2021) found that instructors who exhibited ISCs in their courses signaled to students the importance of social equity and inclusivity, as well as lower social dominance (i.e., discouraged social hierarchy in the classroom). Students exposed to ISCs also reported a higher sense of belonging in those courses. Subsequent research by Maimon and colleagues (2021) examined the relationship between sense of belonging and ISCs in syllabi alone. Similar results emerged: the inclusion of ISCs in syllabi led students to perceive the instructor more positively, feel a greater sense of belonging, and expect more engagement than syllabi without ISCs. It seems that ISCs may signal that the instructor will foster a classroom culture of inclusivity, encourage equal participation from all students regardless of individual identity, and focus on dissuading a social hierarchy to form within the student population.

Another variable that influences students' sense of belonging is the quality of the relationship between instructor and student. Hoffman and colleagues (2003) surveyed students to determine the factors important to quality student-instructor relationships, which include "student perception of faculty as humane and compassionate, student believing he or she is important to (valued by) the instructor, comfort with the instructor, and perception that he or she is supported by the instructor" (Hoffman et al., 2003, p. 233). Thus, a higher quality relationship is,

in large part, influenced by the instructor's attitude. Faculty that exhibit traits of higher approachability, flexibility, and friendliness are rated more positively by students and their sense of belonging in that course increases (Hoffman et al., 2003). Beyond, or rather before, classroom interactions, the tone of a syllabus can indicate attitudes, play a role in how the instructor is perceived, and students' sense of belonging in the course. Harnish & Bridges (2011) found that a friendly tone created a more favorable impression of the course and instructor.

Students' sense of belonging can be influenced by a number of factors as discussed thus far, including (but not limited to) identity safety cues, lack of social hierarchy in the classroom, instructor attitude, and positive student-instructor relationships. However, even if these variables related to belonging are present in a course, the extent to which they observably affect students' sense of their belonging may not be equal among all populations. An important and intrinsic aspect of DEI initiatives, in academia or otherwise, is to acknowledge and value the experiences of underrepresented populations.

Despite research broadly showing increases in students' sense of belonging and that efforts are being made by faculty and institutions, underrepresented students differ in their sense of belonging (Strayhorn, 2018). Namely, racial-ethnic minorities (URM) and first generation (FG) students report lower sense of belonging than those not identifying with these groups (Duran et al., 2020; Gopalan & Brady, 2020). Furthermore, Gopalan & Brady (2020) found URM and FG students report lower persistence in their studies in association with their lower sense of belonging. If the goal of DEI initiatives in higher education is to help strengthen underrepresented students' belonging and bolster their academic achievement, then it is of the utmost importance that these objectives are measured rather than assumed based on effort given by faculty. In the context of higher education, especially at the undergraduate level, it is integral that DEI efforts *actually affect* our underrepresented students.

Student Engagement

Student engagement is important for learning and retention in the classroom. Students are more engaged when they can connect with material and use it in practical ways (Harackiewicz et al., 2002). Student engagement has been repeatedly shown to improve learning outcomes, enhance student well-being, and promote equity. Students who have high and stable levels of engagement over time have a higher likelihood of success than those who have low or declining levels of engagement (Wang & Eccles, 2012). With engagement, students are more likely to achieve academic success regardless of socio-economic status or other risk factors (Finn & Rock, 1997). For these reasons, it is vital to consider how student engagement is impacted by DEI initiatives.

Strong engagement is more than attendance and exam scores; it arises from instruction, interaction, exploration, and relevancy (Taylor & Parsons, 2011). However, interaction and exploration occur only if the student perceives the classroom space to be safe enough to contribute; most colleges fail to provide such an environment (Museus et al., 2017). Here is where belonging intersects and influences engagement and where DEI-related practices can intercede. Faculty efforts to foster a welcoming learning environment by encouraging different perspectives and modeling empathy and understanding could increase student belonging and engagement. Additionally, Hu & Kuh (2003) found that students exposed to diverse experiences, including interacting with peers from different

backgrounds and taking courses that explore heterogeneous concepts and approaches, increase the likelihood that they will be engaged in their school work, which assists in their overall success. DEI initiatives also involve being aware of students' experiences and backgrounds, which ties into relevancy. Class resources that do not relate to student concerns or interests frequently lead to disengagement, and students who do not appreciate its future value do not implement the class information (Evans & Rawlings, 2021).

Engendering Outcomes via Syllabi

The syllabus, being students' introduction to a course, can shape their initial impressions of belonging and affect their engagement in the course. The extent to which a syllabus succeeds or fails to induce these depends on the culmination of its individual components. That is, the inclusion or absence of certain components can contribute to a student's general perception even before meeting the instructor or completing an assignment.

Creating an atmosphere of psychological safety and belonging can be a challenge in any class given the diversity of students we encounter; however, trying to communicate and encourage these qualities via a syllabus seems more daunting. Nevertheless, research has resulted in recommendations for instructors, specifically in higher education, to appreciate and promote DEI in syllabi and ultimately engender belonging and engagement. Specifically, Fuentes and colleagues (2021) compiled syllabi considerations, which we divide into two broad categories– overt and covert components– that signal and ideally, induce belonging and engagement.

Overt Syllabi Components

Some recommendations are more self-evident and overtly related to DEI when included in a syllabus: highlighting diversity in the course description and addressing intersectionality, including a diversity statement and territorial acknowledgment, noting different holidays and privileges of holidays celebrated, and the course policies on grading, class participation, and attendance, especially in relation to DEI concerns (Fuentes et al., 2021). For example, a syllabus might include a statement that although not all religious or cultural holidays are denoted on a university academic calendar (e.g., Yom Kippur, Ramadan), the attendance policy for the course is adaptable to accommodate students of all backgrounds. Flexibility for these types of policies and sections using DEI terminology are often directly observable for students, which can influence their perception of the course and the instructor as positive and inclusive. These forms of overt DEI-promoting components in a syllabus signal to readers an appreciation and awareness for DEI approaches directly.

Covert Syllabi Components

Other syllabi recommendations may be less obvious in their connection to DEI yet just as influential for promoting a sense of belonging: wording for learning objectives that considers varied viewpoints and possibly students' perspectives, incorporating materials by or about marginalized individuals, and expecting students to reflect on their learning and their background (Fuentes et al., 2021). For example, a stated learning objective may be for students to explain how the exclusion of certain groups in scientific research affects a particular concept. The

reason for this course objective may not be explicitly stated, yet it implies a diversity-centered approach. The accumulation of these more subtle DEI-related components in a syllabus may cue inclusion and result in a positive view of the course and/or instructor.

Another covert, yet important, factor is the overall perceived tone of the document and by extension, the instructor as "friendly" or "unfriendly." A syllabus with an affable tone is generally preferred by students and can include such components as "1) using positive or friendly language; (2) providing a rationale for assignments; (3) sharing personal experiences; (4) using humor; (5) conveying compassion; and (6) showing enthusiasm for the course" (Harnish & Bridges, 2011, p. 321). Something as simple as including a joke or cartoon graphic in the syllabus can signal to students an amiable tone, and in turn an approachable instructor.

Why Survey (Underrepresented) Students

As with many departments and universities, decisions are being made about DEI initiatives, including where they are needed and how they are best implemented. Therefore, it is valuable to survey students, especially those from underrepresented groups, to get a better sense of how DEI efforts are perceived and, ultimately, whether or not they improve belonging and engagement for all students. As a result, we can identify the needs and experiences of our stakeholders to introduce and/or revise policies that promote student success. Oftentimes, underrepresented students either do not have a forum to express their concerns or their opinions are lost in averages calculated across identities and dominated by majorities. By surveying all students yet examining data by social identities, we are able to amplify different perspectives.

Research to date has demonstrated the links among students' social identities, sense of belonging, and engagement (Duran et al., 2020; Gopalan and Brady, 2020; Strayhorn, 2018). Additionally, these efforts to survey students can foster an environment that supports DEI and improve belonging. Including all stakeholders demonstrates that students and their needs are important and that their institution wants them to succeed. However, universities and researchers must not let those voices be ignored; as Johnson (2022) highlights, many colleges hear the concerns but brush real institutional policy changes under the rug and try to appease students with rhetoric and DEI training.

Research Questions

The underlying aim for all our research is to improve student belonging and achievement. The central goal of the current study is to gauge student perceptions of DEI initiatives in our courses to effect meaningful change. With the implementation of curricular DEI initiatives, we desired and anticipated altered student perceptions of syllabi. Specifically, we predicted that syllabi from 2021-22 would have higher ratings of inclusion, belonging, engagement, and instructor approachability over syllabi from 2015-16, before DEI initiatives were enacted to increase identity safety cues and emphasize inclusion and diverse topics. Additionally, we explored how DEI initiatives may differentially affect students depending on their races/ethnicities and their status as a "traditional" or "non-traditional" student.

Method

The current study is part of a larger project to understand the impact of curricular changes and DEI efforts within college courses. As we attempt to connect observable student outcomes to these modifications, it seemed self-evident that we also gather stakeholder perceptions. We surveyed college students about their engagement with syllabi in general (e.g., when/if they read syllabi, what they want to know about a course) and their perceptions of specific sample syllabi. The latter were randomly assigned within the survey: one from a lower- or upper-level 2015-16 course and another from the same course in 2021-22. All information that could identify the time period or instructor was redacted from the syllabi.

Perceptions Variables

There are four perceptions of interest gleaned from the survey: belonging, engagement, inclusion, and instructor approachability. Each has been connected to positive academic achievement and outcomes in prior research. **Belonging** opinions were rated on a five-point scale in relation to the university (*"I feel like I belong at XXX"*) and in connection to each sample syllabi course (*"I feel like I would belong in this course."*). **Engagement** was reported on a ten-point scale for two items about enthusiasm and likelihood to interact with course content *during class* and *outside class* based on reading of the syllabus as well as a third global rating about engagement in classes overall. **Inclusive** was a ten-point average of six items on students' impression that the syllabus instructor would be inclusive to all students, and **approachability** referred to a ten-point general impression about the instructor being amicable.

Participants

Survey respondents were undergraduate students enrolled in introductory level psychology courses in 2022 at a primarily white institution (N=306). The majority were first year (65%) and second year students (21%); however, there were third (10%) and fourth year (4%) students as well. Most (70%) were not intending to major or minor in psychology, so the sample may approximate the general student body in terms of program diversity. However, the proportion of women in our sample (62%) did not match university enrollment (i.e., 46% of students are women). Of particular interest in our study, 29% of respondents were POC (—comparable to the university's 32% POC enrollment) and 37% indicated being first-generation, international, returning, and/or a student with a disability. We collapsed the latter identities into a singular "*non-traditional*" category for analyses (see Table 1 for sample characteristics).

In addition, half of the sample reported reading syllabi for all of their courses and approximately one-third, for most courses. Less than 3% said they never read syllabi. Three-quarters stated they were very or somewhat likely to read a syllabus regardless of its length although the sample reported, on average, that 4 pages is the ideal length for reading it thoroughly. Half of the respondents read the syllabus before the first class, and one-third read it immediately following the first class. The remainder reads it around the time of the first assignment (8%), only if there is a quiz on it (2%), or not unless there is a problem (6%).

Table 1. Participant Demographics

Variable		N	Percent of sample
Academic year	first	200	65%
	second	65	21%
	third	30	10%
	fourth	11	4%
Race/ethnicity*	Asian	33	11%
	Black/African American	27	9%
	Hispanic or Latinx	30	10%
	White	236	77%
	Native Hawaiian or Pacific Islander	2	0.1%
	Indigenous or Alaskan Native	4	1.3%
Student Status*	first-generation	60	20%
	international	28	9%
	returning or parent	9	3%
	veteran/active or reserve military	0	0%
	has disability	16	5%
	none of these apply ("*traditional*")	194	63%
Total		306	100%

Permitted to check all that apply, so total may not sum to 100%

When asked what they notice and what they expect, students indicated the materials required and grading/point distribution are their top answers, respectively (see Table 2 for five most frequent responses to each prompt and Notes for complete fixed lists). Taken together these descriptors demonstrate the value and weight given to the syllabus by the students, especially those sections related to course assignments and requirements.

Table 2. Noticed and Expected Information in Syllabi

Noticed	N	Expected	N
Materials required	175	Grading/point distribution	256
Attendance/participation requirement	163	Exam dates	255
Schedule for exams and assignments	137	Materials required	246
Number of exams	136	Attendance/participation requirement	233
Grading/point distribution	112	Course schedule	230

Results

T-tests (paired and independent) sufficed for assessing our key research questions, and all outcome variables of interest appeared normally distributed (e.g., no issues of skew or kurtosis). However, for some analyses, equal

variances could not be assumed and degrees of freedom were adjusted as a result. We used chi-square analyses for select supporting and descriptive content as well as ANOVA for exploration into intersectionality effects.

Improved Inclusion, Belonging, Engagement, and Approachability

The central hypothesis was confirmed: more recent syllabi had higher ratings (see Figure 1). We predicted that syllabi from 2021-22, *after* DEI initiatives were prioritized at the university and within the department, would have higher ratings of inclusion, belonging, engagement, and approachability over syllabi from 2015-16, *before* DEI initiatives were enacted to increase identity safety cues and emphasis on inclusion for all students and diverse perspectives.
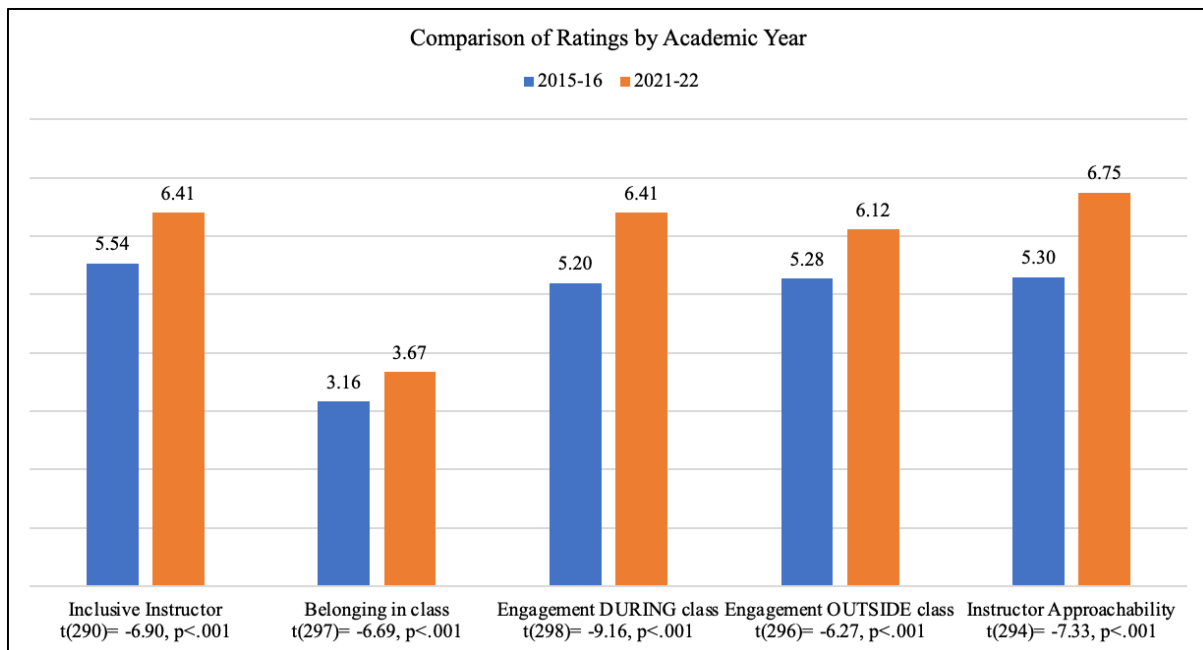
Comparison of Ratings by Academic Year

■ 2015-16   ■ 2021-22

	2015-16	2021-22
Inclusive Instructor t(290)= -6.90, p<.001	5.54	6.41
Belonging in class t(297)= -6.69, p<.001	3.16	3.67
Engagement DURING class t(298)= -9.16, p<.001	5.20	6.41
Engagement OUTSIDE class t(296)= -6.27, p<.001	5.28	6.12
Instructor Approachability t(294)= -7.33, p<.001	5.30	6.75

Figure 1. Inclusion, Belonging, Engagement, and Approachability by Academic Year

Instructors were rated as more inclusive (M=6.41, SD=1.96) and more approachable (M=6.75, SD=2.51), on average, across the 2021-22 sample syllabi than the 2015-16 syllabi (M=5.54, SD=1.86 and M= 5.30, SD=2.52, respectively for inclusive and approachable). On a related note, students felt they would belong more among the 2021-22 courses (M=3.67, SD=0.98) than the 2015-16 courses (M=3.16, SD=1.05). In sum, students reported feeling they would be more engaged during class for recent syllabi than for older syllabi (M=6.41, SD=2.10 and M=5.20, SD=2.02, respectively) and would engage with material outside of class, as well (M= 6.12, SD=2.14 and M=5.28, SD=2.16, respectively for 2021-22 and 2015-16 syllabi).

DEI Initiatives Perceived Differently Based on Social Identities

Our exploratory hypotheses involved social identities, specifically students' race/ethnicity identities and less traditional statuses. We suspected that students' various social identities would affect their perceptions of syllabi; however, we did not have a clear prediction how changes in syllabi might be perceived differently.

General Belonging and Engagement Differences

Comparisons by race/ethnicity and by student status revealed differences in a sense of belonging at the university and average levels of engagement across courses (see Table 3). White students felt they belonged more (t(298)=3.62, p<.001) and engaged more in their courses than students of color (t(132)=1.78, p=.04). A similar pattern emerged between traditional and non-traditional students with the former reporting higher belonging (t(298)= -2.41, p=.008) and more course engagement than the latter (t(199)= -3.35, p<.001). It is worth noting that students did not vary on their likelihood to read the syllabus or when they read it by race/ethnicity or by status, according to chi-square comparisons.

Table 3. General Belonging and Engagement by Social Identities

Social Identity		Belonging M (SD)	Engagement M (SD)
Race/ethnicity	POC	3.63 (1.09)	6.00 (2.27)
	white	4.11 (1.02)	6.50 (1.88)
Student Status	non-traditional*	3.69 (1.14)	5.97 (2.17)
	traditional	4.12 (0.99)	6.55 (1.91)

Includes first-generation, international, returning, and/or students with a disability

In addition, we examined intersecting identities and found that belonging and engagement varied by these groups (F(3,299)=6.90, p<.001 and F(3,296)=2.59, p=.05, respectively). As shown in Figures 2 and 3, white/traditional students reported the highest levels of general belonging and engagement, and POC/non-traditional students reported the lowest levels. POC/traditional and white/non-traditional students were comparable for course engagement, but POC/traditional and POC/non-traditional reported similar levels of belonging and differed from white/traditional students.
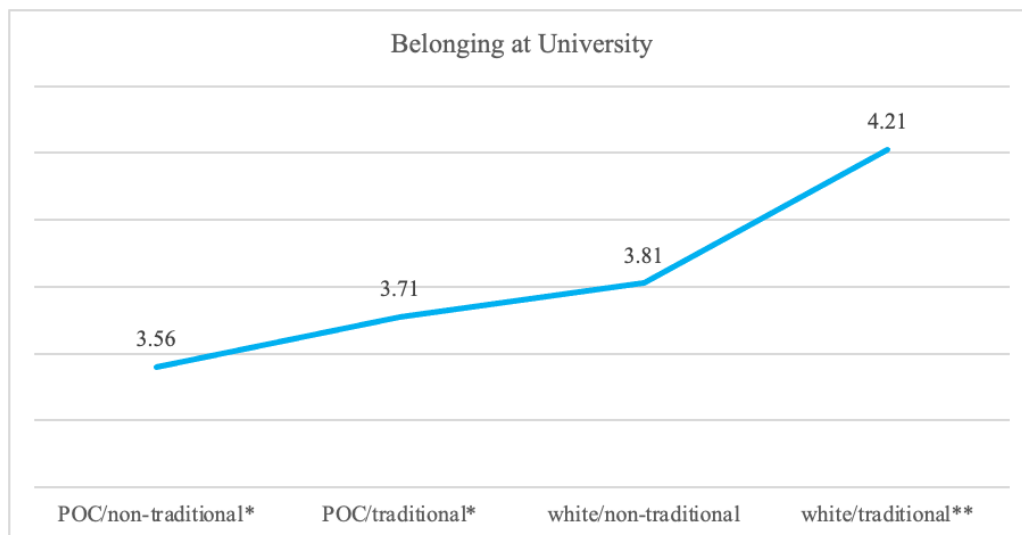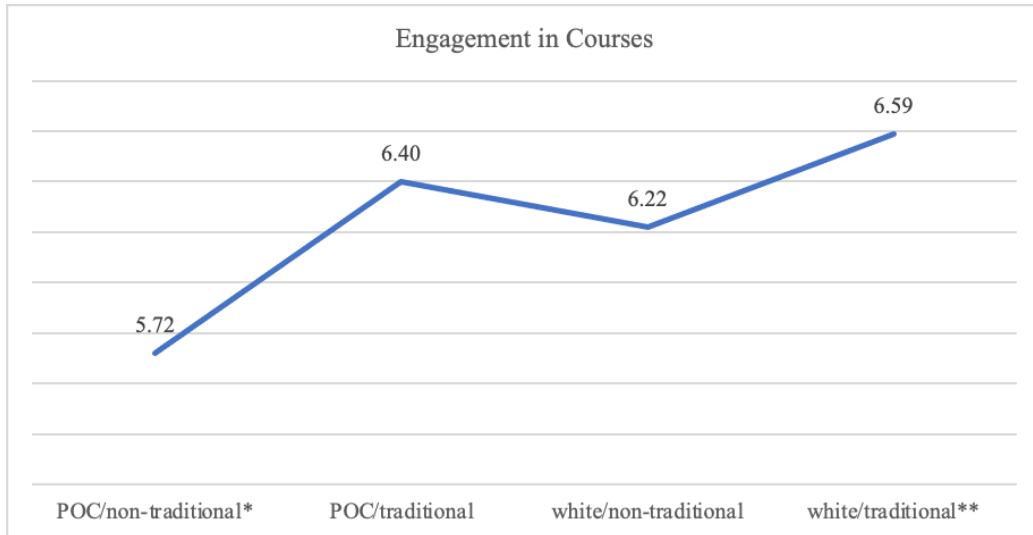

Figure 2. Belonging by Intersecting Identities

Figure 3. Engagement by Intersecting Identities

Differences in Syllabi Perceptions

Although the sample as a whole perceived increases in inclusion, belonging, engagement, and instructor approachability from pre- to post-DEI syllabi enhancements, not all students perceived these changes equally. Perceptions of syllabi prior to any concerted DEI efforts did not differ by race/ethnicity, by student status, or by intersecting identities. That is, the 2015-16 samples' ratings for inclusion, belonging, engagement during and outside class, and instructor approachability were all comparable. When we computed change scores from 2015-16 to 2021-22 for each rating, multiple significant differences surfaced by identities but none by intersecting identities (see Figures 4 & 5).
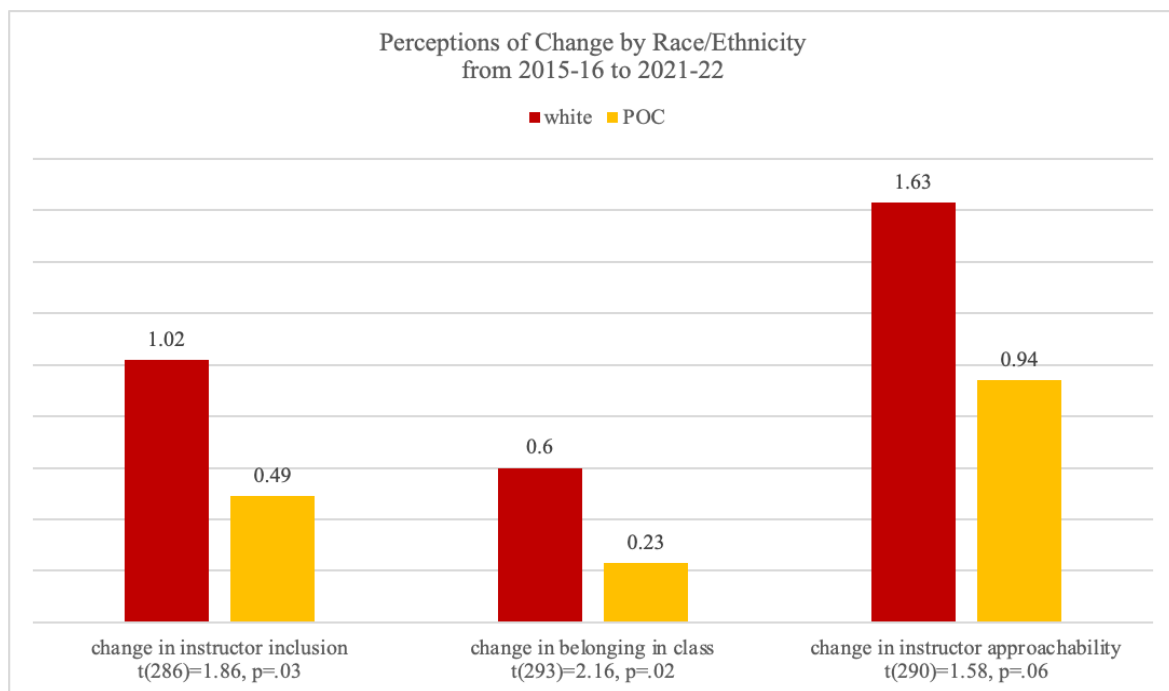

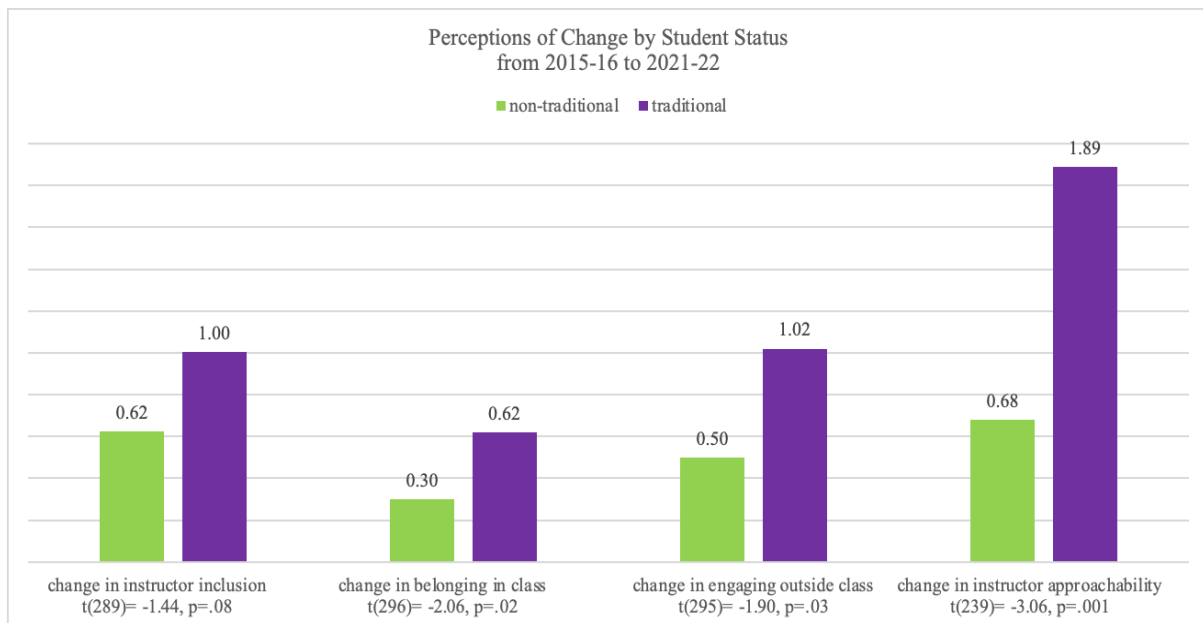Figure 4. Perceived Changes by Race/Ethnicity

Figure 5. Perceived Changes by Student Status

As shown in Figure 4, white students rated greater syllabi differences from 2015-16 to 2021-22 in inclusion and belonging (M=1.02, SD=2.08 and M=0.60, SD=1.29, respectively) over POC students (M=0.49, SD=2.33 and M=0.23, SD=1.33, respectively). The changes in instructor approachability trended toward significance between white (M=1.63, SD=3.46) and POC students (M=0.94, SD=3.29). In terms of status, as displayed in Figure 5, traditional students rated changes in belonging, engagement outside class, and instructor approachability (M=0.62, SD=1.30; M=1.02, SD=2.30; and M=1.89, SD=3.50, respectively) greater than non-traditional students (M=0.30, SD=1.30; M=0.50, SD=2.25; and M=0.68, SD=3.12, respectively). Changes in instructor inclusion trended toward significance between traditional (M=1.00, SD=2.15) and non-traditional students (M=0.62, SD=2.13).

Discussion

In sum, more recent syllabi, those after DEI initiatives were implemented, were rated higher for instructor inclusiveness and approachability as well as student sense of belonging and likelihood of engaging in the corresponding course. However, it was white students and traditional students who reported greater differences in these perceptions of pre- to post-DEI emphasis syllabi than POC students and non-traditional students. These variations may not be surprising as POC and non-traditional students generally reported lower levels of belonging at the university and of engagement across courses.

Instructor Perceptions and Sense of Belonging

Hoffman and colleagues (2003) suggested that instructor attitude has an impact on students' perception of them, specifically that instructors found to be friendly, flexible, and approachable are viewed more positively. Our results are consistent with this. Students' perceptions of an instructor as both inclusive and approachable varied based on the sample syllabi, with those from the 2021-22 academic year consistently rated higher on both variables

than the 2015-16 syllabi. The difference in those ratings may be attributed to concerted efforts between the two time periods; that is, instructors were encouraged by university and departmental representatives to be adaptable and more aware of hidden inequities in their policies and in turn, instructors explicitly stating their policies and any related flexibility in their syllabi. Thus, perceptions of the instructor as inclusive and approachable increased.

As these instructor views became more positive, anticipated belonging increased, which is consistent with the notion that greater inclusiveness and approachability can lead to greater belonging (Hoffman et al., 2003). The higher levels of DEI-related content and pedagogy and lower levels of social hierarchy in 2021-22 syllabi are consistent with this increase, as well. Maimon and colleagues (2021) suggested that signaling to students that there will be no social hierarchy in class, such as including identity safety cues in syllabi, promotes a more inclusive environment that increases belonging. This appears to be the case among our data, as syllabi following DEI implementation of flexibility, safety cues, and instructor accessibility had greater ratings for inclusivity, approachability, and belonging.

Although all students interpreted more recent syllabi as higher in instructor inclusiveness and approachability, non-traditional students and POC students did not view the changes from 2015-16 to 2021-22 syllabi to be as notable as traditional students and white students. A possible reason for this difference may simply be social positioning; that is, traditional and white students perceived the changes in inclusivity and approachability as appropriate (i.e., they felt welcomed) and an effective means of promoting DEI. On the other hand, non-traditional and POC students, whose experiences often have been overlooked, may not view instructor attempts to promote DEI that have been made thus far as strongly as those students already reporting higher belonging at the university. Recall that both non-traditional students and POC students reported a lower sense of belonging overall (see Table 2) and gains in anticipated belonging in a course from 2015-16 to 2021-22 were half those of the traditional and white students (see Figures 4 & 5). This provides additional evidence that non-traditional and POC students are likely to be affected differently than traditional and white students by DEI promotion efforts, such as flexible policies, diverse topics/authors, or ISCs' inclusion in syllabi. Taken together, the results on perceptions of the instructor and sense of belonging suggest that social identities modify the impact of changes. Students who have been marginalized notice the efforts and view them positively, just not enough to move the needle as far as students who occupy the majority.

Engagement

Viewing instructors' positively and feeling a sense of belonging are building blocks for student success, but even more critical is what a student does to learn. Research has widely studied and accepted the importance of student engagement and the positive academic outcomes that result from it. Students are more engaged when they have connection to the material in courses (Harackiewicz et al., 2002). Furthermore, courses that delve into diverse topics and give students varied experiences and perspectives should increase their engagement with the course, which predicts overall academic success (Hu & Kuh, 2003). We see that with DEI initiatives enacted, students did anticipate greater course engagement based on perceptions of 2021-22 syllabi versus 2015-16 syllabi. Like the results for instructor perceptions and sense of belonging, however, some engagement results varied by student

social identities.

POC and non-traditional students, the populations most DEI efforts hope to support and empower, reported lower levels of engagement in general across their courses. This was exacerbated for students with intersecting identities, specifically non-traditional, POC students who reported the lowest levels of engagement (see Figure 3). Yet, as noted in our descriptive results about reading syllabi, students did not vary by race/ethnicity or by status in their likelihood to read the syllabus or when they read it. This suggests that students do not differ in their commitment or approach to courses— they are reading the syllabus at equal rates and at similar times regardless of race/ethnicity or status. If POC and non-traditional students report being less engaged overall, this may indicate they are affected by other factors. Perhaps they desire engagement but are hindered by non-inclusive course structure, content, or instructor attitude toward DEI.

For engagement with content during and outside of class predicted based on syllabi reading, there were no significant differences by identities except one. Non-traditional students predicted greater engagement with content outside the class for more recent syllabi, yet that gain was not as large as the one traditional students anticipated (see Figure 5). All of these results need to be replicated, but this current lack of sweeping variations in specific course engagement could signal positive outcomes of DEI initiatives. Course-by-course we may engender engagement for all students, especially our marginalized students. If students anticipate they can engage with content, this will impact their ability to achieve academic success (Wang & Eccles, 2012). Through research, we know that with engagement, students are more likely to achieve academic success regardless of other risk factors (Finn & Rock, 1997). This finding is crucial because it shows engagement can act as a sort of protective factor.

Conclusion

Syllabi are important to all students, as they provide valuable information about courses and their instructors. This study demonstrates that what we put in syllabi matters, and what is interpreted from the syllabus varies by student identities. Underrepresented students' perceptions of instructors, their sense of belonging, and their engagement in their courses have improved with the introduction of DEI-related changes. However, their degree of change does not match that of their traditional and white peers. This may be a problem if the underrepresented populations that DEI efforts are intending to elevate are not being as supported as intended. On the other hand, it could be that white and traditional students have overestimated the effects of DEI-related changes, which may be a different issue of privilege and lack of awareness. Nevertheless, the current actions being taken to promote DEI in higher education are a step in the right direction and more can be done to make underrepresented students' experiences equitable. Based on our findings, recommendations for promoting DEI in syllabi are as follows: shorten the syllabi as much as feasibly possible and aim to make course policies, structure, and reasonings behind objectives and content transparent. Ultimately, first impressions matter. Creating a good first impression through syllabi *does* have an impact on the students reading it.

There are several limitations to take into account when analyzing our findings from this study. First, the

generalizability of our study is limited because of our small sample size. Additionally, we have some groups, such as members of the LGBTQ+ community, active duty military and veterans, and individuals with disabilities that are missing or underrepresented in our sample. This impacts our results because we do not have the input of these important populations and hinders our ability to understand more about the experiences of these students. Another limitation is that our data is based on predictions of engagement from students. There are additional factors that impact engagement in both positive and negative ways, such as how many hours they work outside of school, their finances, or any other responsibilities or stressors in their lives. This study does not explore these other complex factors to engagement.

Recommendations

While this study had students predict their levels of engagement and belonging in a course based on its corresponding syllabus, future research should additionally measure their actual feelings of engagement and belonging during and after taking the course. Establishing a relationship between predicted engagement and belonging with actual engagement and belonging may further show the importance of syllabi as a means of introduction for students.

While syllabi are an integral factor for determining how DEI efforts reach students, they represent only one touchpoint. Class meetings and corresponding online content are others. To build a comprehensive toolkit for understanding inclusion, belonging, engagement, and resulting performance outcomes, educational researchers need stakeholder surveys coupled with observable, measurable factors collected from class meetings and learning management systems (LMS).

Future research should seek to learn more from stakeholders, especially underrepresented students' opinions and perspectives. Interestingly, our findings show that anticipated engagement inside and outside of the classroom were not different among student identities but actual engagement across prior courses was rated higher by traditional and white students. Despite the work done to include DEI initiatives in our courses and in our syllabi in recent years, it is not increasing engagement or belonging to equal levels for all students. We have more listening and modifications to do to improve higher education experiences for our underrepresented students.

Notes

Rather than use open-ended survey items for syllabi components noticed and expected, we generated two fixed lists. These were compiled in part from elements noted in prior studies as well as based on a small pilot poll asking undergraduate students about their experiences with syllabi. The following are the complete fixed lists of syllabus components.

What do you notice when reading a syllabus? (You are encouraged to check more than one but not more than five.)
- Attendance/participation requirements

- Course topics
- Cumulative final exam
- Diversity statement
- Extra credit
- Final exam/project during finals week
- Grading/point distribution
- Group assignments/projects
- How absences are handled
- How student progress with be assessed
- Hybrid format or recorded lectures
- Inclusive topics or material
- Instructor's info and office hours
- Materials required
- Number of exams
- Open book quizzes/exams
- Opportunities to make up work
- Resources lists
- Schedule for exams and assignments
- Transparency of grading
- Where exams are taken
- Whom to contact for assistance/questions

What do you expect in a syllabus? (Check all that apply)

- Attendance/participation requirements
- Course overview
- Course schedule
- Description of assignments and expectations
- Exam dates
- Grading/point distribution
- Instructor contact information
- Materials required
- University-required statements

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