

SURVEY ON INCLUSIVE TEACHING: DATA ANALYSIS

Camille Gonzalez and My Khe Nguyen
Supervisors: Professor Sheppard and Professor Manzoni
St. Olaf College
June 3, 2019

I. Introduction

In this report, we provide analysis from a pilot survey of 59 students' reported experiences with inclusive teaching practices at St. Olaf College. We approach the analysis using three methods. We conducted univariate analysis to identify the most and the least common inclusive teaching practices that students reported to have experienced. We then performed bivariate analysis to explore the differences in such experience across demographic groups, and in case of intersectionality. We also coded responses to open-ended questions to examine themes students reported regarding what their professors are doing well or could be doing better. The study contributes four insights. First, the inclusive practices are used in varying prevalence at St. Olaf, and some are used at a remarkably low frequency. Second, some marginalized groups show a disproportionately low rate of having experienced some of the inclusive practices. Third, students who have more marginalized identities tend to report having experienced fewer inclusive practices than those with fewer marginalized identities. Finally, our qualitative analysis offers a glimpse into which inclusive practices professors have done well or could use more often.

II. Demographics Description

The demographics of our dataset are shown in Table 1. After removing one duplicate case (originally row 27), we have 59 observations (59 respondents). Every marginalized trait listed in Table 1 is represented in the data, and 22 of the 59 surveyed students (37%) do not belong to any of those groups (those who checked "None of the above"). The main spreadsheet used in this report can be found [in this link](#). We focus on the relationship between marginalized identities and reports of inclusive practices later in this report.

Table 1. Demographics of the data

Demographics	Percentage	Number
First Generation	11.9%	7
Low income	32.2%	19
Physically/ Learning Disability	15.3%	9
Non-Cis	1.7%	1
LGBTQIA+	13.6%	8
International Student	15.3%	9
Person of Color	22.0%	13
None of the above	37.3%	22
Other	1.7%	1

III. Univariate Analysis of Inclusive Teaching Practices Students Reported Used by at Least One of Their Professors in Class

A key survey question was "In your classes at St. Olaf so far: Have any of your professors used inclusive teaching practices such as those listed below? Check all that apply". As shown in Table 2, the survey addressed four categories of inclusive practices, each with four to five specific items. Question 1 addressed practices to help understand different levels of experience and needs in the student body, question 2 addressed practices to represent all students, question 3 addressed practices to promote inclusive course/group dynamics, and question 4 addressed practices to create safe and respectful classroom environments.

Table 2 shows the number of positive responses for each inclusive teaching practice listed on the survey. The practice that the greatest portion of students reported as having been employed at least once by their professors (86.4%) is item 4b, "Create a safe and comfortable environment by asking students to actively participate and listen to what others have to say, as well as help those

who do not understand a concept.” The practice that the fewest students reported as having been used at least once by their professors (22%) was item 3e, “Work together to create an agreement about group communication and rules such as a “team charter”.”

In the case of four specific practices, a majority of students reported that the practices had *not* been used by at least one of their professors in class. These are highlighted in the table in blue (grey). They include item 2c, “Provide different perspective on ideas, such as presenting multiple sides of an argument, having a debate, and/or playing devil’s advocate, to name a few examples” (37.3% yes); item 2d, “Ask for students to bring in articles or video clips that relate to discussion topic and briefly introduce them to the class” (32.2% yes); item 3d, “Assign group work that places value on different skills” (47.5% yes); and item 3e, “Work together to create an agreement about group communication and rules such as a “team charter” (22.0% yes).

Table 2. Descriptive statistics for each type of inclusive practice. Blue (grey) indicates majority negative response (*not* Yes).

Inclusive Practice	Yes (%)	Yes (raw #)
1. Practices to understand different levels of experiences and needs in the students body:		
a. Acknowledge verbally or in writing that different students may experience the course differently.	57.6%	34
b. Use lecture collaborative learning options, hands-on activities, Internet-based communications, educational software, field work, etc., to facilitate students’ understanding and accommodate different learning styles.	72.9%	43
c. Use small group conversations to consider those who do not often speak up in class.	83.1%	49
d. Evaluate students’ learning using multiple, flexible, accessible methods.	54.2%	32
2. Practices to represent all students:		
a. Use scenarios and course materials that reflect the diversity of our societies.	78.0%	46
b. Include multicultural examples, visuals, and other materials in lectures, discussion, and assignments.	54.2%	32
c. Provide different perspectives on ideas, such as presenting multiple sides of an argument, having a debate, and/or playing devil’s’ advocate, to name a few examples.	37.3%	22
d. Ask for students to bring in articles or video clips that relate to the discussion topic and briefly introduce them to the class.	32.2%	19
e. Address sensitive issues or heated discussions that may have arisen in class.	52.5%	31
3. Practices to promoting inclusive course/group dynamics:		
a. Create heterogeneous groups.	66.0%	39
b. Encourage responsibilities to be assigned equally among group members.	72.9%	43
c. Assign group work in which all students support each other.	62.7%	37
d. Assign group work that places value on different skills.	47.5%	28
e. Work together to create an agreement about group communication and rules such as a “team charter.”	22.0%	13
4. Practices to create safe and respectful classroom environments:		
a. Establish ground rules to promote a respectful and candid discussion.	62.7%	37
b. Create a safe and comfortable environment by asking students to actively participate and listen to what others have to say, as well as help those who do not understand a concept.	86.4%	51
c. Make sure that inclusive statements are honored in practice.	50.8%	30
d. Challenge inaccurate information, clarify misconceptions, and/or ask students to integrate their discussion points with major points from their readings.	76.3%	45

III. Bivariate Analysis

1. Pairs of Variables

For bivariate analysis, we used cross-tabs to observe whether there are any surprising difference between the expected counts and the actual counts of students' responses (or their expected and actual percentages). For example, if 60% of all respondents reported "Inclusive Practice #1" and there is no difference in the results for a given demographic group ("group A") and the rest of the respondents, then both groups will have about 60% of their members reporting "Inclusive Practice #1." The reality might not match perfectly with this expectation, yet when the difference is large, we reasonable suspect that there is a difference in experience between the group of interest and the other respondents.

Two observations emerge from our cross-tabs analysis. First, *there is disparity in students' reported experiences regarding item 1a* ("Acknowledge verbally or in writing that different students may experience the course differently"). Second, *low-income status matters*: the number of low-income students who reported "Yes" is disproportionately low not only for item 1a but also for items 1d "evaluate students' learning using multiple, flexible, accessible methods" and 2e "address sensitive issues or heated discussions that may have arisen in class".

a. Reporting that professors acknowledge that different students may experience the course differently: Being low income matters

Disproportionately high numbers of students in some of the marginalized groups reported that *none* of their professors have explicitly acknowledged that different students may experience the course differently. Table 3 shows the cross-tab results for item 1a "Acknowledge verbally or in writing that different students may experience the course differently" and Low Income (or not low income). Overall, 57.6% of students (34 of 59) reported that one or more of their professors "Acknowledge verbally or in writing that different students may experience the course differently". However, only 36.8% (7 of 19) of low-income students reported "Yes" that one or more of their professors did this, whereas 67.5% (27 of 40) non-low-income students reported this. Low -income students were only about half as less likely to report this behavior compared to non-low-income students. Conversely, 63.2% of low-income students reported "No" while only 32.5% of their non-low-income peers reported the same.

Table 3. Low-income and non-low-income students: Reports of whether professors "Acknowledge verbally or in writing that different students may experience the course differently"

Response	<u>All respondents</u> Percentage (and raw number)	<u>Not low income</u> Percentage (and raw number)	<u>Low income</u> Percentage (and raw number)
No, none of my professors did this	42.4% (25)	32.5% (13)	63.2% (12)
Yes, one or more of my professors did this	57.6% (34)	67.5% (27)	36.8% (7)
Total	100% (59)	100% (40)	100% (19)

b. Reporting that professors acknowledge that different students may experience the course differently: Disability matters

Table 4 shows the cross-tab results for item 1a “Acknowledge verbally or in writing that different students may experience the course differently” and Physical or Learning Disability. *Disability matters in students’ reports of this inclusive practice*. Overall, 57.6% (34 of 59) students reported that one or more of their professors “Acknowledge verbally or in writing that different students may experience the course differently”. However, among those with physical or learning disability, only 22% (2 of 9) students reported “Yes” compared to 64% (32 of 50) of their non-disabled peers. Conversely, students with disabilities were more than twice as likely as their peers to report that none of their professors had done this (77.8% versus 36.0%).

Table 4. Students with or without physical or learning disability: Reports of whether professors “Acknowledge verbally or in writing that different students may experience the course differently”

Response	<u>All respondents</u> Percentage (and raw number)	<u>No Physical or Learning Disability</u> Percentage (and raw number)	<u>Physical or Learning Disability</u> Percentage (and raw number)
No, none of my professors did this	42.4% (25)	36.0% (18)	77.8% (7)
Yes, one or more of my professors did this	57.6% (34)	64.0% (32)	22.2% (2)
Total	100% (59)	100% (50)	100% (9)

c. Reporting that professors acknowledge that different students may experience the course differently: Having a marginalized identity matters

Table 5 shows the cross-tab results for question 1a “Acknowledge verbally or in writing that different students may experience the course differently” and students who reported “None of the above” in demographic section. As explained above, 57.6% (34 of 59) of all respondents reported that one or more of their professors “Acknowledge verbally or in writing that different students may experience the course differently”. However, only 46.0% (17 of 37) of students with at least one marginalized identity reported this while 77.3% (17 of 22) of students with no marginalized identities reported the same. Students with at least one marginalized identity were only about half as likely to report this compared to students with no marginalized identities.

Table 5. Students with at least one marginalized identity and those with no marginalized traits (“None of the above”): Reports of whether professors “Acknowledge verbally or in writing that different students may experience the course differently”

Response	<u>All respondents</u> Percentage (and raw number)	<u>No marginalized identities (“None of the above”)</u> Percentage (and raw number)	<u>At least one marginalized identity (not “None of the above”)</u> Percentage (and raw number)
No, none of my professors did this	42.4% (25)	22.7% (5)	54.0% (20)
Yes, one or more of my professors did this	57.6% (34)	77.3% (17)	46.0% (17)
Total	100% (59)	100% (22)	100% (37)

d. Reporting that professors evaluate students’ learning using multiple, flexible, accessible methods: Being low income matters

Low-income students were also less likely than other students to report having experienced two other inclusive practices. Table 6 shows the cross-tab results for item 1d “Evaluate students’ learning using multiple, flexible, accessible methods” and Low Income. Among all students, 45.8% (27 of 59) reported having this experience. However, 65.0% (26 of 40) of non-low-income students reported this while only 31.6% (6 of 19) of low-income students reported this. That is, low-income students were only half as likely to report this behavior as non-low-income students.

Table 6. Low-income and non-low-income students: Reports of whether professors “evaluate students’ learning using multiple, flexible, accessible methods”

Response	All respondents Percentage (and raw number)	Not low income Percentage (and raw number)	Low income Percentage (and raw number)
No, none of my professors did this	54.2% (32)	35.0% (14)	68.4% (13)
Yes, one or more of my professors did this	45.8% (27)	65.0% (26)	31.6% (6)
Total	100% (59)	100% (40)	100% (19)

e. Reporting that professors address sensitive issues or heated discussions that arise in class: Being low income matters

Table 7 shows the cross-tab results between item 2e “Address sensitive issues or heated discussions that may have arisen in class” and Low Income. Among all respondents, 52.5% (31 of 59) reported that one or more of their professors “Evaluate students’ learning using multiple, flexible, accessible methods” as did 63% (25 of 40) of non-low-income students. Among low-income students, however, only 32% (6 of 19) reported this practice. Low-income students were only about half as less likely to report this inclusive behavior.

Table 7. Low-income and non-low-income students: Reports of whether professors “address sensitive issues or heated discussions that may have arisen in class”

Response	All respondents Percentage (and raw number)	Not low income Percentage (and raw number)	Low income Percentage (and raw number)
No, none of my professors did this	47.5% (28)	37.5% (15)	68.4% (13)
Yes, one or more of my professors did this	52.5% (31)	62.5% (25)	31.6% (6)
Total	100% (59)	100% (40)	100% (19)

We did not observe any other surprising differences for any other groups and practices. More research should be conducted in order to (1) investigate whether this holds true in a larger sample and (2) identify the underlying reason(s) for these results. For example, are non-marginalized students giving professors more “benefit of the doubt” regarding inclusive practices? Do marginalized students have higher standards regarding these practices?

2. Intersectionality

Intersectionality refers to “the interconnected nature of social categorizations such as race, class, and gender as they apply to a given individual or group, regarded as creating overlapping and interdependent systems of discrimination or disadvantage” (Oxford 2019). To investigate the possible relationship between respondents’ intersecting identities and their reports of inclusive practices, we used two approaches. First, we created an index of the number of positive responses to demographic questions and tested its correlation with the number of positive responses to the inclusive practice items. Second, we examined the largest single marginalized group (low income) and compared their results with other demographic groups.

Table 8 shows the descriptive statistics for the indexes of the number of positive answers for 18 inclusive practice questions and 8 demographic questions. For inclusive practices, the minimum number of positive answers is 4, indicating that all respondents reported having experienced at least 4 inclusive practices so far. Four people had the highest number of positive responses, at 17 (case ID numbers 4, 27, 30, and 35). Notably, none of the four reported having experienced a professor “Provide different perspectives on ideas, such as presenting multiple sides of an argument, having a debate, and/or playing devil’s advocate, to name a few examples.”

Table 8. Statistics for positive answers to inclusive practices and demographics items

Variable	Minimum	Maximum	Mean
Number of positive answers out of 18 inclusive practice items	4	17	10.69
Number of positive answers out of 8 demographics questions	0	5	1.14

We hypothesized that students with a larger number of marginalized identities would report fewer inclusive practices used by their professors as compared to students with fewer marginalized identities. Our results support this hypothesis. Table 9 shows the average number of inclusive teaching practices reported by each group of students – those with 0, 1, 2, 3, 4, and 5 of the marginalized identities. Please note that three students did not report any demographics including “None of the Above”; we placed these three students into the same group as the 22 “None of the Above” students. As Table 9 shows, students with a higher number of marginalized identities tended to report fewer inclusive practices. The negative relationship (as one variable increases, the other decreases) between the number of marginalized identities and the reported number of inclusive practices applies across different categories of inclusive practices, and there is no single category that drives the relationship. This relationship is also shown in box-plots in Appendix A which depict the relationship between the number of marginalized traits and the number of inclusive practices reported, and they show not only the average numbers of inclusive practices reported by each group but also the distribution of scores for each group.

Table 9. Average number of positive responses for the 18 inclusive practices reported by students with 0 to 5 marginalized identities

Number of Marginalized Identities	N	Mean	Std. Deviation
0	25	11.56	4.154
1	16	10.56	3.829
2	7	10.00	3.266
3	8	10.13	1.885
4	2	8.50	3.536
5	1	5.00	NA
Total	59	10.69	3.720

A possible explanation for this pattern can be found in our supposition that students with a greater number of marginalized identities may be stricter judges regarding inclusive practices. According to Patricia Hill Collins, the convergence of race, class, gender, sexuality, nation, age, and ethnicity shapes the intersectional forms of oppression that many people of color encounter in the United

States (2009: 4). Students who identify with a combination of marginalized identities face more intersectional forms of oppression than those with fewer or no marginalized identities and may, as a result, grow more critical of Predominately White Institutions (as compared to what researchers refer to as Historically Black Colleges and Universities, or HBCUs), such as St. Olaf College. This may be reflected in their reports of inclusive practices. However, a larger sample size is needed to further investigate the relationships between these variables.

We also examined the relationship between the largest of the reported marginalized groups (low-income students) and other demographics. First, we looked at intersectionality within this group. Table 10 shows the number of marginalized identities low-income students reported, and 63% or 12 of the 19 low-income students (adding the columns for two through five) reported more marginalized identities than their low-income status alone. The combinations of marginalized identities vary greatly, and the identity that co-occurs most frequently with low-income is Person of Color (9 out of 19, or 47%). Therefore we investigated the inclusive practices reported by students that have low-income status *and* are people of color.

Table 10. Number of marginalized identities possessed by low-income students

Marginalized Identities	Number	Percentage
One (low-income only)	7	36.8%
Two	2	10.5%
Three	7	36.8%
Four	2	10.5%
Five	1	5.3%

The difference in reported experience of inclusive teaching between students who reported as low income only and those who reported both low income and other marginalized identities is not conclusive. In item 3a “create heterogeneous groups” and item 4a “Establish ground rules to promote a respectful and candid discussion”, those with other marginalized traits in addition to low income are less likely to report having experienced the practices than those with low income as their only trait. However, for item 4c, “Make sure that inclusive statements are honored in practice,” they are more likely than those with only low income to report having experienced the practice. This result is curious, yet the small dataset precludes any reasonable explanation.

Table 11 shows the cross-tab results for item 3a, “Create heterogeneous groups,” and whether students reported low income as their sole marginalized identity. Among students with low income status as their only marginalized identity, 71.4% (5 of 7) reported that one or more of their professors “create heterogeneous groups”. However, among those with low income status plus other marginalized identities, only 33.3% (4 of 12) reported this. Students who identified with combination of low income and other marginalized identities were half as less likely to report this behavior, compared to students with low income as their only marginalized identity.

Table 11. Students with low income as their sole marginalized identity and those with additional marginalized identities reports of whether any of their professors “create heterogeneous groups” (analysis excludes all respondents with no marginalized identities)

Response	Low income only Percentage (and raw number)	Low income AND other marginalized traits Percentage (and raw number)
No, none of my professors did this	28.6% (2)	66.7% (8)
Yes, one or more of my professors did this	71.4% (5)	33.3% (4)
Total	100% (7)	100% (12)

Table 12 shows the cross-tab results for item 4a, “Establish ground rules to promote a respectful and candid discussion,” and whether students have low income as their *sole* marginalized identity. Among the students with low income as their only marginalized identity, 85.7% (6 of 7) reported that one or more of their professors “Establish ground rules to promote a respectful and candid discussion”. However, among students with additional marginalized identities, only 50.0% (6 of 12) reported this practice. Those students with a combination of low income and other marginalized identities were about one-third less likely to report this inclusive behavior.

Table 12. Students with low income as their sole marginalized identity and those with additional marginalized identities reports of whether any of their professors “Establish ground rules to promote a respectful and candid discussion” (analysis excludes respondents with no marginalized identities)

Response	<u>Low income only</u> Percentage (and raw number)	<u>Low income AND other</u> <u>marginalized traits</u> Percentage (and raw number)
No, none of my professors did this	14.3% (1)	50.0% (6)
Yes, one or more of my professors did this	85.7% (6)	50.0% (6)
Total	100% (7)	100% (12)

Table 13 shows the cross-tab results for item 4c, “Make sure that inclusive statements are honored in practice,” and whether students have low income as their sole marginalized identity. In this case, the results were surprising because the students with a larger number of marginalized identities reported a higher rate of this inclusive practice. Only 2 of 7 (28.6%) students with low income as their only marginalized identity report one or more professors “establish ground rules to promote a respectful and candid discussion”; however, among those with additional marginalized identities, 66.7% (8 of 12) reported this practice. Those with a combination of low income and other marginalized identities were more than twice as likely to report this behavior.

Table 13. Students with low income as their sole marginalized identity and those with additional marginalized identities report whether professors “Make sure that inclusive statements are honored in practice” (excludes those with no marginalized identities)

Response	<u>Low income only</u> Percentage (and raw number)	<u>Low income AND other</u> <u>marginalized traits</u> Percentage (and raw number)
No, none of my professors did this	71.4% (5)	33.3% (4)
Yes, one or more of my professors did this	28.6% (2)	66.7% (8)
Total	100% (7)	100% (12)

IV. QUALITATIVE ANALYSIS

1. What are some great things that your professors are doing (or have done) to include all students? Please give examples of specific practices.

Students reported a wide range of behaviors in response to the open-ended question “What are some great things that your professors are doing (or have done) to include all students?” The top four behaviors students reported, as shown in Table 14, are:

- Professors making small groups for discussion (32.2%;19 students)
- Professors acknowledging their students’ diverse backgrounds (18.6%; 11 students)
- Professor creating project/discussion groups based on commonalities and/or random traits (13.6% ;8 students)
- Professors becoming familiar with students to comprehend their schedule and course load (11.9%; 7 students)

These top behaviors indicate a theme of professors becoming more acquainted with students in smaller settings rather than larger ones, which may involve getting to know students’ academic and personal backgrounds. Exact quotes from students are listed in the Appendix.

Table 14: What are some great things that your professors are doing (or have done) to include all students? Please give examples of specific practices

Professor Action or Behavior	Percentage Reporting the Item	Number of Students
Professors making small groups for discussion	32.2%	19
Professors acknowledging their students’ diverse backgrounds, and being empathetic and creating a space to share their thoughts.	18.6%	11
Professor creating project/discussion groups based on commonalities and/or random traits.	13.6%	8
Professors becoming familiar with students to comprehend their schedule and course load.	11.9%	7
Professors ensuring that all students are given the equal opportunity to express their thoughts.	11.9%	7
Professors establishing a comfortable environment, where students may engage in discussion without fear of repercussions.	11.9%	7
Professors providing students with a curriculum that includes a diverse spectrum of scholarship (ex. Multicultural, Marginalized Scholars, Different academic fields, and etc.).	10.2%	6
Professors ensuring that all students understand what’s being taught in the class.	8.5%	5
Professors accommodating to their student’s needs and/or situation.	6.8%	4
Professors creating an inclusive environment. This entails diverse small groups, the sharing of international and domestic scholarship, and addressing their students’ identities correctly.	6.8%	4
Professors making a space to give and receive constructive feedback from students. (ex. Feedback in assignments, teaching styles, and etc.).	6.8%	4
Providing visuals that contain important points gone over in class (ex. PowerPoints)	3.4%	2
Professors increasing the usage in writing on walls (referring to St. Olaf’s whiteboard, Chalk board, projectors, etc.).	3.4%	2
Professors utilizing different teaching styles, and/or should take a course on "good teaching practices" .	3.4%	2
A conversation that takes place at the beginning of the term that is about the professor and their student’s expectations of the course.	3.4%	2

2. What are some great things that professors could be doing to include all students?

Students identified a wide range of behaviors in response to the open-ended question, “What are some great things that professors could be doing to include all students?” The top four behaviors students identified, as shown in Table 15, are:

- Professors creating an inclusive environment, this entails Professors creating small groups with diverse membership (15.3%; 9 students)
- Professors utilizing different teaching styles different from “large group discussions” (15.3%; 9 students)
- Professors providing students with a curriculum that includes a diverse spectrum of scholarship (ex. Multicultural, Marginalized Scholars, Different academic fields, etc.) (13.6% (8 students)
- Professors ensuring that all students are given the opportunity to express their thoughts within the classroom setting (10.2%; 6 students)

Again, students reported behaviors that relate to creating a small setting. They also reported that professors could be diversifying their teaching tools.

Table 15: What are some great things professors could be doing to include all students?

Professor Action or Behavior	Percentage Reporting the Item	Number of Students
Professors creating an inclusive environment, this includes professors creating small groups with diverse membership	15.3%	9
Professors utilizing teaching styles different from “large group discussions”.	15.3%	9
Professors providing students with a curriculum that includes a diverse spectrum of scholarship (ex. Multicultural, Marginalized Scholars, Different academic fields, etc.)	13.6%	8
Professors creating a comfortable environment where students may engage in discussion freely	13.6%	8
Professors ensuring that all students are given the opportunity to express their thoughts within the classroom setting	10.2%	6
Professors understanding that students come from different backgrounds, and are creating an atmosphere that allows them space to share their ideas freely	8.5%	5
Professors making small groups for discussion	8.5%	5
Professors opening conversation to discuss topics that might be consider sensitive (ex. Social stratification, sexual harassment, and etc.)	6.8%	4
Professors accommodating to students’ personal needs and/or situations	6.8%	4
Professors confirming that all students understand the materials being taught	5.1%	3
Professors ensuring that students are aware of current events on a local and global scale	5.1%	3
Professors recognizing their own and others’ biases within an academic setting	5.1%	3
Professors providing constructive criticism to students, and students being able to provide constructive criticism to professors	5.1%	3
Professors providing visuals that contain important points that were discussed in class (ex. PowerPoints)	3.4%	2
Professors creating collaborative projects with other classes, organizations, and institutions	3.4%	2
Professors trying to provide students with real life experiences that pertain to the course work	3.4%	2
Professors should take educational classes, education psychology, and good teaching practices	1.7%	1
Professors changing grading standards, so they do not distress their students	1.7%	1
Professors creating an environment that engages students to question and inquiry the course work.	1.7%	1

V. CONCLUSION

This pilot study examined St. Olaf students' reported experiences with inclusive teaching practices. Based on a dataset that includes marginalized groups, and using both quantitative (univariate and bivariate) and qualitative analysis, we contribute four insights regarding the research topic. First, the reported inclusive practices vary in prevalence at St. Olaf, and some appear to occur at a remarkably low frequency. The low frequency practices reported include the following:

- “Provide different perspectives on ideas, such as presenting multiple sides of an argument, having a debate, and/or playing devil's' advocate, to name a few examples” (item 2c)
- “Ask for students to bring in articles or video clips that relate to the discussion topic and briefly introduce them to the class” (item 2d)
- “Assign group work that places value on different skills” (item 3d)
- “Work together to create an agreement about group communication and rules such as a ‘team charter’” (item 3e)

All four of these items belong to sections in the survey that focus on practices designed “to represent all students” and “to promote inclusive course/group dynamics”.

Second, a few marginalized groups show a disproportionately low rate of reporting some of the inclusive practices. Students who reported at least one marginalized identity were less likely than those with no marginalized identities to report having a professor who “Acknowledge[s] verbally or in writing that different students may experience the course differently” (item 1a), as were students from low-income backgrounds and those with physical or learning disability. Low-income students were also less likely than any other group to report having a professor who evaluated students using multiple, flexible, accessible methods (item 1d) and who addressed sensitive issues or heated discussions that arose in class (item 2e).

Third, students who have more marginalized identities tended to report fewer inclusive practices than those with fewer marginalized identities (as shown by the box plots in the Appendix). Our analysis of the data from students with low income as the sole marginalized identity and those with additional marginalized identities suggests that students with a combination of marginalized identities may be stricter judges of inclusive practices. A larger sample size would allow for more investigation into this relationship.

Finally, our qualitative analysis offers a glimpse into the inclusive practices students view their professors as having done well (such as “making small groups for discussion) or as practices their professors could use more often (such as “creating small groups with diverse membership”). While some items mentioned by students overlap with the reported practices included in the closed-ended survey questions, they express students' preferences from their own perspectives and in their own words.

Sources Cited

Collins, Patricia Hill. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Routledge, 2009.

Oxford Dictionaries. *Intersectionality | Definition of intersectionality in English by Oxford Dictionaries*. (2019). <https://en.oxforddictionaries.com/definition/intersectionality>.

Appendix

Box-plots

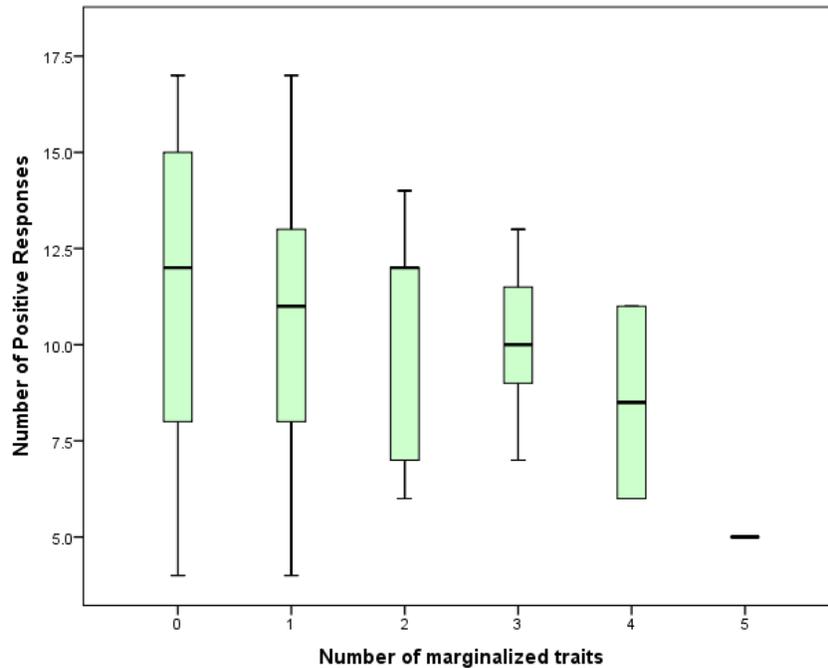


Figure A1. Box-plots showing negative relationship between the number of marginalized identities and the number of positive responses to all 18 inclusive practice items. The bar at 5 means there is only student with 5 marginalized traits, and they responded “Yes” to five inclusive practice questions.

One may ask “how does this relationship apply across all four subgroups”? and/or “Have any of your professors used inclusive teaching practices such as those listed below?”. There are four groups of inclusive practices: question 1 - those to understand different levels of experience and needs in the student body, question 2 - those to represent all students, question 3 - those to promote inclusive course/group dynamics, and question 4 - those to create safe and respectful classroom environments). We segregated the data to examine the relationship between the reported number of marginalized identities and the number of positive responses to each group of inclusive practice items. As shown in Fig. A1, there is a negative relationship (as one variable increases, the other decreases) between the number of marginalized traits and the number of reported inclusive practices that applies across different categories of items, with no single category driving the relationship.

Another hypothesis is that class year may influence the negative relationship in Figure A1; in other words, the longer a student has been at St. Olaf, the more inclusive teaching practices they reported experiencing. We tested and refuted this hypothesis. The mean number of marginalized traits for first-years, sophomores, juniors and seniors within our study are 1.16, 1.22, 0.93 and 1.29 respectively. We see that in our sample, juniors on average reported fewer marginalized traits than underclassmen. Although seniors reported slightly more, they account for only a small portion of the sample (7 out of 59 surveyed students, or 12%), and are thus incapable of driving the negative relationship shown in Figure A1. We therefore believe that the number of marginalized traits does indeed have an impact on the number of inclusive teaching practices reported by students in this study.

List A1. Responses (quoted, for respondents 1-59) to the question “What are some great things that your professors are doing (or have done) to include all students? Please give examples of specific practices.”

1. Encourage us to talk about our different perspective, share our experiences
2. using inclusive language (specifically in my religion class)
3. My English professors would take time to explain any questions, even if it was slightly off topic- felt safe to ask questions
4. I really appreciate when professors break large group discussions into small groups or assigned partners on occasion. This allows those who don't have anyone to talk to or maybe feel uncomfortable in a large group to have a new chance to speak.
5. Professor encourages hearing multiple perspectives and viewpoints. In a class last semester, the professor had each student share something from the culture that they are from (one student shares each class).
6. Discuss questions in small groups before returning to the full class of students, made opening statements about being respectful and careful when discussing a sensitive topic
7. Some have been looking at issues more in a global sense rather than just a local (US) perspective.
8. One professor worked with our groups to make a written plan and agreement sheet because one student was not very good with English and benefitted from seeing the expectations written down. In another class we always discussed our papers in small groups before choosing one from the whole semester to turn in. It really helped some people have their voices heard and to feel more confident in their writing abilities. It was a very low-stress and low-risk situation but still very helpful.
9. N/a
10. Breaking up into small groups to include students who don't speak up in class, choosing the groups for group projects
11. Made sure everyone felt welcome, nobody was left out of group projects, made sure everyone felt that their opinions were valid.
12. Let students share their experiences based on whichever background they belong to.
13. Working with students who are struggling with other life problems to have altered deadlines and one on one help that are fair for everyone and are ample with understanding and open help
14. small group discussion and activity, talk about things from several perspectives
15. Asking for comments from students who haven't spoken yet
- 16.
- 17.
18. Going around the room to make sure everyone talks. Embracing silence after questions so that students respond, instead of the prof. answering their own questions.
- 19.
20. They have focused in having group work be something that builds up over the semester with the same people.
- 21.
- 22.
23. Having small group discussions (three or four people) so the students can express their opinions comfortably because it isn't in front of the whole class. This also helps students understand some topics when they can discuss it with people that are learning the same thing (have no previous knowledge, learning it together).
24. Make everyone "volunteer"
25. One of my classes allowed every student to share a presentation on a topic of their choice related to the material which was effective because it both helped everyone learn from each other but also see from multiple perspectives. Another teacher worked with various community experts to bring them into the classroom and share their knowledge of the world instrument they studied.

26. small discussion groups after lecture
27. They have made sure to accommodate for those with learning disabilities. They are always available when you have a question. And they explain the material well and make it a fun atmosphere.
- 28.
- 29.
30. Utilizing small group discussions is a big one!
31. Spend the first day or two of class establishing norms for class discussions and how we will interact with one another and our ideas; Explicitly explained that our grade will be a reflection of our engagement in class and our in work rather than an accumulation of points based on a scale/metric; Acknowledged their own mistakes or missteps in class either the same day or in the next class period to demonstrate the importance and act of taking responsibility for one's words; Assigning open ended final projects that encourage creativity based on students' interests; Assigning reflective essays that ensure we think deeply about our learning and how we will use our new knowledge moving forward.
- 32.
33. Make us work together, sometimes by choosing who we want to work with and other times, making that choice for us in order to let us get to know to each other. They provide activities in which we have to work with others or discuss points of view and make contributions. In voice lessons, for example, they allow us to sing in our own language, although the professor did not speak that language.
34. Randomly assigning groups and encouraging both big and small group discussions.
35. We are placed into small groups and we are able to get to know a smaller amount of people instead of being forced into a class of 40 students, not knowing anything. She placed us based on interests and where we were from, so that we would be more likely to have a good experience with those around us.
36. Encourage people of a variety of backgrounds to share their experiences
37. Have students raise their hands to speak and encouraging students who have not spoken to speak and deliberately picking people based on how much they have spoken
- 38.
39. Ask students pronouns and make an effort to memorize it; Create mixed gender groups (women and man together); Provide powerpoints with general content- it helps non-native speakers to follow the class better;
40. Our textbooks for a philosophy class addressed all major religions and practices. Small groups are used to address class questions to get ideas flowing before turning to a class discussion. In a drama class, to get comfortable with acting and not being embarrassed, all students read lines in their own perceived manner and acted them out, so the embarrassment is minimal.
41. Provided one on one feedback sessions, was willing to ask how I was doing and actually listened, appreciated and acknowledged my background and experiences and tried to understand how they shaped the person I am today.
42. Asks people to perform or answer questions
43. Giving those who don't talk much a special chance to talk (eg "let's let those who haven't spoken yet have a chance to speak now") Giving evaluations that use different forms of testing (eg a test that has a multiple choice section and a free response section) Making a circle with desks to better include people
44. Make it clear that gender identity is important by respecting the pronouns of authors we've discussed in class.
45. Group activities, in which students present matters important to them.
- 46.
47. Leaving powerpoints up & available on Moodle after lectures so we can go back and review the material
48. To get more students to participate- would ask for more voices (mas voces). Also both would use small group discussions before large group in order to get people comfortable

with the topic before having to talk in front of the entire class. Also writing on the walls allowed for the students uncomfortable talking in front of the class the opportunity to have their opinions heard.

49.

50. Other than what is mentioned above, I have not noticed particular practices of inclusivity.

51. One great thing is when professors provide multiple ways for students to engage with the material, e.g. participation in the forms of journaling, discussion, small group discussions or team-based activities and debates, etc. I've found this practice helpful for feeling more comfortable with discussing difficult topics (for example, sensitive/personal issues that came up in Biology of Women) that are pertinent to the class. Another thing I've found useful is when discussions are very structured, e.g. going around a table to systematically share comments. While I don't think that students should be forced to speak if they don't feel comfortable doing so, this makes space for every student.

52. Randomly assigning partners for group work. Having small group discussions

53.

54.

55. Fjdsjfd

56. Allowing students to write on the white board so everyone can express their ideas.

57. Vary the day to day teaching styles - some days all large group, some small group, some spontaneous presentations, speakers

58. Groupings, discussions

59. Small group discussions and one on one office hours/discussions.

List A2. Responses (quoted, for respondents 1-59) to the question “What are some great things professors could be doing to include all students? Please give examples of specific practices.”

1. Create themselves the work groups so that they are more diverse
- 2.
3. They could try to accommodate shy or apprehensive students more, through different techniques than full class discussion to receive full participation
4. Try not to re-use the same assignments often or try to mix up the groups often!
5. Professors can confirm that all of the students understand the information that was presented to them.
6. Different ways of evaluating students on their knowledge of the material
7. More could be looking at other countries other than the US, everything seems so centralized around the US, when in fact they are affecting the world. Encourage more discussions based on sensitive topics.
- 8.
9. N/a
- 10.
11. Make sure the classroom is a safe space for everyone, and that all students feel comfortable sharing their perspectives
12. Add diverse examples about the topic being taught.
13. Being more aware of other school conflicts (sports, plays, breaks, etc) when they know many people in their class are involved in such conflicts
14. encourage students to participate in class and not let the same few kids answer every question
15. Professors in lecture classes could be more encouraging of questions
- 16.
17. Power Points or least bullet points of what we should get out of that particular class.
18. Including more writings/homeworks from marginalized perspectives. David Brooks Time's article from the 17th says a lot about fostering vulnerability.
- 19.
- 20.
21. More professors could acknowledge their own biases and when they don't have experience in certain areas
- 22.
- 23.
24. Comment on each others work
25. Taking more time to create community in classes by fostering more student interaction and providing more opportunities for experts in the field to come to class or for field trips to bring a new perspective to the class material.
26. have students anonymously write down any questions or insights they would like to share, but are maybe too shy to speak aloud
27. I think so far they have been doing a great job it's just up to the students to want to get involved.
28. Taking education classes or learning about educational psychology and good teaching practices (especially differentiated instruction and responsive multicultural education) on their own.
- 29.
30. Encouraging small group discussions, noticing when someone isn't being included and act on it, use multicultural examples in lecture
31. Do not use grades punitively. We are all in college to learn, grow, and explore our interests and abilities. If I choose to take a "hard" class with a "tough grading" professor because I want the challenge, want to explore something I am unfamiliar with, or want to get better at something I am not very good at, I do not want to be punished through my

- grades and GPA. Students who demonstrate effort and interest deserve to have "good grades," not only students who demonstrate ability or have prior knowledge. The classes I learn and enjoy the most are the classes I do not have to worry over my grade.
32. Flexibility with learning styles would be great, and acknowledging difficult topics in a constructive way that allows everyone to have a voice when discussing those topics.
 33. Include authors of different countries to read or to listen to. It would be awesome if we could also work with students and/or organizations from Carleton. That also means inclusion.
 34. Assigning groups so that students get to know other people
 - 35.
 - 36.
 37. Sometimes take a step back and let the class discuss the content without much professor supervision (unless it gets way out of control)
 - 38.
 39. Provide PowerPoint with main points during the lecture so students can follow along; Provide examples that include people with different backgrounds (e.g Biology: POC scientists; Political Science/philosophy/ sociology: include readings and theories from non-western POC women ...)
 40. I think more professors could realize not all students are comfortable speaking in large class discussions, thus they could implement small group discussions and make sure to have a class environment that is judgement free, so students feel able to share their opinions and thoughts even if it may not be correct.
 41. Listen, they need to be trained to understand that students from different backgrounds have different experiences, and actually respect that. Allow space for feedback, preferably anonymous and throughout the term.
 - 42.
 43. Acknowledging the importance of different voices and perspectives in group discussions to help everyone feel like their comments are valid
 44. Ask for a student to share their experiences if they relate to the subject at hand.
 45. Group activities.
 - 46.
 47. More hands-on activities
 48. I really think the teachers did a great job making sure everyone's opinions were heard.
 49. Professors need to ask for pronouns. I have been misgendered in every single class I have taken, and deadnamed 3 times by 3 separate teachers, 2 of which did not apologize. Occasionally in certain situations students will make homophobic or transphobic comments and the teacher will breeze over it to not cause conflict, but it needs to be addressed because it's harmful to every non cis-het person at St. Olaf
 50. I think that the inclusivity at St. Olaf is already great!
 51. I think professors should feel more prepared to cut off trains of thought in discussions that might be hurtful or personal in ways that they didn't anticipate. In the interim Philosophy and Feminism course I took, I found that the professor sometimes indulged devil's advocates too much surrounding sensitive issues that some of the people at the table had experienced (for example, letting half the class time become a discussion about an article questioning the legitimacy of subtle forms of sexual harassment). Although the professor eventually challenged the student's point of view, shaping an inclusive classroom sometimes means being not as inclusive of lengthy, hurtful points of views.
 52. Learn students names to make them feel more comfortable.
 - 53.
 - 54.
 55. Flkdsjsflkd
 56. Setting an example on day one, that they are serious about having an inclusive classroom so that it doesn't feel awkward through the rest of the course when they try to include the class.

57. Assign a few people to come with questions or discussion topics on a daily basis to encourage participation from everybody.
58. Encourage students to speak from their own lived experiences and for people to interpret things different ways
59. It's hard to include everyone with larger classes, it would be nice if smaller groups were introduced in certain stem related classes. SI was a great way for others to interact since classes are more lecture based.