

“Good Morning, Students”

Analyzing and Alleviating Gendered Communication in Classrooms

Communication Studies Capstone

Olivia Giorlandino & Jenie Michael

Advisor: Dr. Donica O’Malley

Northeastern University

April 26, 2019

Abstract

In a society often perceived as post-feminist, the cycle of gender bias institutionalization remains relatively unchecked in various settings. This paper explores the most prevalent issues of gender bias in classrooms as identified by researchers and scholars. We compare these identified problem areas with training topics used by educational institutions to determine if teachers are being properly equipped to mitigate gender biases in their classrooms. While our findings confirm academia's understanding of gender-biases in the classroom, these results also reveal that educational institutions are not addressing these biases through professional development trainings. It is our hope that this paper will demonstrate the importance of implementing effective gender bias trainings and will inspire future researchers to propose comprehensive plans toward creating more gender-neutral classrooms.

“Good Morning, Students”

Analyzing and Alleviating Gendered Communication in Classrooms

Every August, when the “back-to-school” sales hit the market, retailers such as Staples, OfficeMax, Walmart, and Target are flooded with students of all ages and their parents preparing for the upcoming school year. The colors and patterns that fill their shopping carts are likely aligned with the expectations for the gender of the child standing next to them. As those bright-eyed students step off the bus with their new red-and-black backpacks or their pastel-blue binders, it is no surprise that they will learn more than arithmetic in their new classrooms; they will learn how to behave in the highly gendered society that has been created for them.

While sex is based on biological characteristics, gender identity is an entirely socialized phenomenon which takes its form primarily in the early years of a child’s life. Gender, broadly defined for the purposes of this study, is the spectrum of identities existing between masculinity and femininity. While sex differences between males and females can be attributed to biological factors (such as differences in hormone levels), differences in gender identities are learned socially, taught both by observations and interactions. Gender identity formation is especially pivotal for elementary school children, who are constantly observing their environment and trying to make sense of their social place within it (West & Zimmerman, 1987).

Observations and interactions with others are mainly responsible for informing one’s gender identity as it is taking form, and educational environments become a main arena where these gender lessons are taught. Educators in particular hold immense power in prescribing gender identities via their communication patterns and actions. Assigning working groups based on gender, using pink and blue cubby tags, applauding and/or punishing male and female

students differently, or employing phrases such as “Good morning, boys and girls” all carry biases which students internalize into their gender schemas.

Academics have stressed the importance of the gender-neutral classroom over the past twenty years as a measure meant to improve all students’ educational experiences and prevent the perpetuation of gendered educational inequalities in the future (Hillard & Liben, 2010; Sanford, 2005). Gender communication trainings have supposedly been present in educators’ professional development in the past, but how encompassing and effective are these trainings? In a society sometimes seen as post-feminist, are these trainings, and possibly even the teachers themselves, blind to the implicit biases that are prevalent in their communication styles? Do these trainings truly address what scholars have determined to be the most detrimental forms of gendered communication in the classroom?

The following study is meant to answer these questions through a two-part process. First, we analyze communication scholars’ research in order to identify the most pertinent classroom gender biases and their consequences. Second, we compare these identified issues side-by-side with the current professional-development trainings used in public schools and educational non-profits. This comparison illuminates whether educators are focusing efforts on the most important areas of gender-neutral education as determined by researchers. Through this process, this study aims to answer three interconnected research questions:

RQ1: What is the nature of gender-bias communication practices identified by scholars in educational settings?

RQ2: In terms of issues addressed and strategies utilized, what are the main focuses of educators’ gender-bias training materials?

RQ3: To what extent do educators' gender-bias training materials address the issues identified by scholars?

Literature Review

Through analyzing scholars' previous work, we found that gender bias is ingrained at the fundamentally institutional level. At this level, both schools and teachers often are point to the notion of "naturalism" to explain differences in treatment, and they unknowingly alter their communication practices and teaching formats around their biases. These actions then allow imbedded assumptions of gender to trickle down into the treatment of students, especially in terms of setting expectations and in-class interactions. As a consequence of these assumptions and biases, students' gender identity formation, as well as their tangible schooling experiences, are greatly affected.

Institutional Educational Practices

School hours occupy the majority of children's time away from home, and the classroom becomes an incredibly vital sphere where gender identity is formed. While peer social interactions are included in this classroom experience, teachers and learning materials represent the authority in the classroom, meaning that lessons and enactments of gender expectations carry a weight that peer relationships alone cannot. As a result, teachers' gendered communication not only has an impact on students' tangible experiences in the classroom, but it also immensely impacts their understanding of gender itself, thereby facilitating students' creation of self-identity. Through our research, we found teachers treat students differently based on an assumed gender dichotomy, which is generally explained by a belief in naturalism and/or are the result of

accidental biases. Communication practices/classroom formats and student interactions are the main vehicles for these biases. (Gray & Leith, 2004; Tindall & Hamil, 2004).

Naturalism. According to Stoll (2013), naturalism is the idea that boys and girls are biologically different and thus behave differently. Naturalism is often employed to justify the differing treatment of males and females in classroom settings. For example, through conducting 21 structured interviews, Riley (2014) found differences in teachers' perceptions and treatment of male and female learners regarding maturity, behavior, or classroom learning styles, and/or a combination of traits. More notable, however, was that many teachers were not alarmed at these findings and acknowledged falling back on popular gender stereotypes to inform their perceptions (Riley, 2014). When pushed further on this stereotyping, many teachers pointed to fundamental differences between boys' and girls' biology and behavior, which demanded specific actions to address situations (Riley, 2014). Stoll (2013) also commented on the benefits and drawbacks of single sex schooling from the perspective that males and females are biologically different, learn in different ways, and should have different educational settings. This perspective feeds the assumption that early elementary classrooms are better for females who are biologically predisposed to thrive in social/emotional contexts, while STEM classrooms are better for males who are naturally suited toward the logic-based hard sciences (Gray & Leith, 2004). This assumption of naturalism then inevitably leads to unintentional biased actions.

Biases in Communication Practices. Because unintentional language can be so ingrained into lesson plans and individual communication styles, gender bias oftentimes appears to be invisible. Take, for example, our titular phrase, "Good morning, boys and girls." While generally deemed a normal class greeting, this language communicates a world where all people fall in one

of two categories and implies that these categories matter for identification and differentiation. More conspicuously problematic phrases including, “Don’t be such a girl” and “I need two strong boys to give me a hand” are also frequently dismissed, as Gray and Leith’s interviews identified (2004). Remarks like these qualify the aforementioned categories and ingrain the stereotypes that become a basis for a child’s gender-identity formation, as well as their interpretation of others’ genders.

Frawley (2005) identified three main communication practices that may contain subtle, but powerful, gender biases. First, teacher feedback is often gendered by attaching expectancy and competency. For example, the statement “If you put in a little more effort, John, you would be able to complete this” carries an expectation of capability and perseverance for the male student. These expectations are absent in statements of comfort often times directed at female students, such as: “It’s okay you didn’t do it correctly Jane; you tried your best.” By giving feedback that diminishes female students’ capability and instead focuses on comfort, teachers inadvertently convey that female students are less capable when challenged (Frawley, 2005).

The second bias Frawley addresses is calling on students in classroom discussions. When a teacher asks a question, male students call out answers more often than female students. If teachers accept these answers, instead of selecting students raising their hands (who are mostly female), the system rewards those who broke the rules while ignoring those who followed them. Male students are also generally more active and confident when volunteering answers for questions. When teachers only select the students who raise their hands first, they often overlook the (mostly female students) who raise their hands later. Together, these biases give male students more of an opportunity to dominate classroom discussions (Frawley, 2005).

Lastly, Frawley emphasizes the need for teachers to use gender-neutral language. Gender neutral language comes in the form of using words without a gender attached, such as “firefighter” instead of “fireman.” In addition, gender neutral language focuses on ability and personal characteristics in praise and criticism, which may include complimenting a female student for her thoughtful essay instead of how nice her new dress looks. Most importantly, sexist comments made by students, even if unintentional, must be challenged consistently. These declarations can be broad, from asserting that boys should not cry, girls are not allowed to play football, etc. Together, addressing all three of these gendered communication practices would greatly decrease the amount of gender biases in the classroom (Frawley, 2005).

Biases in Classroom Formats/Programming. Teachers’ unintentional biases can also greatly affect gendered communication in the classroom. For example, in their study of fifth grade classrooms, Stoll (2013) observed that one teacher led a colonial activity where students were assigned gender-based occupations. Females were required to sew, and males were required to write, which, the teacher explained, was true in terms of expectations for the time period. However, this division of labor in today’s context conveys inevitable gender biases regarding the acceptableness of work for the genders. In addition, the logic of “colonial era” expectations would imply that black students would be required to be slaves, which in this activity they were not (Stoll, 2013). Similarly, scholars have also noted that teachers consistently divide students into groups based on gender to avoid behavioral issues (Stoll, 2013; Gray & Leith, 2004). While this practice may be well-intentioned, if frequently used, it results in ingroups and outgroups, instigates competition, and reinforces multiple gender stereotypes (Gray & Leith, 2004).

Most importantly, Riley (2014) found that teachers' biases regarding gender, whether recognized or otherwise, can affect students' academic and social performances. When asked to place fictional student profiles into proficiency levels, the majority of teachers in Riley's study demonstrated bias, where "interview transcripts revealed that 'gender' as a category directly factored into student placement decisions" (Riley, 2014). Interestingly however, the study noted that most teachers believed they treated students equally and fairly, and that their gender biases either did not exist, did not affect students' learning, and/or were a natural and acceptable part of classroom management. Only one teacher participant placed students according to three predetermined levels of achievement without regard to gender. Upon interview, this teacher "acknowledged electing to focus on grades rather than designated group status as she believed the labels could incite bias" (Riley, 2014, p. 8). This verifies the notion that teachers must not only be made aware of their gender bias, but they must actively work to reduce the presentation and infiltration of those biases into classroom conduct (Riley, 2014).

As explored above, the institutional treatment of gender biases permeates through both school systems and into classrooms. The resulting consequence is differential treatment of male and female students in educational settings.

Treatment of Students in School

A prominent bias many studies identified was the assumption of gender dichotomy. Gender dichotomies expect males to act one way, females to act another way, and for all people to fall into the category of "boy" or "girl." In the classroom context, these dichotomies can allude to anything from students' strengths in certain subject areas to their ability to follow classroom rules. While gender dichotomies are theoretically harmless, the differential treatment resulting

from the ideology can be harmful to students. Teachers' expectations of students as well as their individual interactions with them are primary vehicles for gender dichotomous biases to manifest.

Expectations for Boys vs Girls in the Classroom. When teachers convey what they expect of students, whether consciously or unconsciously, they play a large role in shaping students' understanding of their abilities (Tindall & Hamil, 2004; Riley, 2014). Several scholarly sources highlight the expectation for boys to be aggressive and disruptive. More notably, they also indicated teachers see this behavior as harmless and inevitable part of development. In qualitative interviews, Stoll (2013) found that teachers described boys as squirrely, boisterous, and naturally immature, while girls are expected to be more mature and well behaved (Stoll, 2013). Additionally, Riley (2014) found the majority of teachers surveyed had an expectation that school was a better "fit" for girls than for boys, indicating girls were more likely to follow rules without needing punishment or reinforcement.

Moreover, Graham (2001) found that it was considered a more serious offense when girls acted out versus when boys did. When boys misbehaved, their anger was met with more reasonable discussion and conflict-resolution, as opposed to harsh punishments when girls showed anger (Graham, 2001). Boys were also more likely to continue to raise their voices in the classroom when they had a complaint. In both these instances, boys were still receiving more constructive attention, while girls were taught to not show anger and to follow the rules (Graham, 2001). Riley (2014) wrote that this normalization of boys' misbehaviors leads to a lot of modifications for boys, causing them to both learn to do better in school and to continue to take risks and push boundaries, while girls do not receive the same attention and learn to follow rules, do as they're told, and try hard without expecting recognition.

Biases in Interactions & Programming. Gray and Leith (2004) as well as Sunderland (2000) observed teachers' interactions with students, and both found that male students received more attention than female students. "More attention" notably refers to the fact that males received both more positive attention and negative attention. Their successes were applauded more while their failures/misbehaviors were reprimanded more consistently (Gray & Leith, 2004). Additionally, teachers were found more likely to recommend boys to special education programs than girls because of the additional attention they received (Anderson, 1997). Several articles provided further evidence corroborating this perspective, including Riley (2014), Frawley (2005), and Lundeburg (1997).

As is widely recognized, boys also are tremendously encouraged in sciences and math subject areas more than their female counterparts. This observation was reflected in a number of studies from Riley (2014), Grey & Leith (2004), and Tindall & Hamil (2004). While there have been efforts to correct this imbalance, Tindall & Hamil indicate that the issue is more structural than instructional. They discuss that, according to Aldridge & Goldman (2002) and Jones, Howe, and Rua (2000), the format of STEM classes caters to the way males are socialized from a young age: "The nature of play experiences and toy choices of boys provides more opportunity for the development of spatial visualization and basic math and science skills than do the play experiences and toy choices of girls" (Tindall & Hamil, 2004, p. 283). Science classes are also often competitive, and qualities like assertiveness and curiosity are applauded in boys due to cultural standards. However, when girls display these characteristics, they are often called obnoxious or bossy. Coupled with the fact that girls are socialized to embrace more imaginative forms of play (such as "house"), STEM classrooms do not as easily integrate into their socialized

learning style (Tindall & Hamil, 2004). As a result, the researchers concluded that “Stereotypes encourage girls to adopt self-conceptions and values that demote science interest and achievement. These self-conceptions lead to a pattern of learned helplessness with respect to science and mathematics, with success attributed to luck and failure to lack of ability.” (Tindall & Hamil, 2004, p. 284).

Impacts

Gender biases like the ones explored above have long-term impacts on students’ gender identity formation. Sanford (2005) observed this impact on middle school students during a poster assignment, which instructed students to illustrate their most important characteristics through words and images:

Although there was a range of descriptors, there were obvious gendered differences in the words and the images...girls' posters displayed words and phrases such as happy, excited, likes elephants, puppy lover, horse fan, has a cat, nice, neat, lots of friends, and adorable. Their selected images showed male rock stars; numerous domestic and farmyard animals (often baby animals); and pictures of themselves standing, sitting with family, or with a pet...The words and phrases offered by the boys included hyper, impeccable, radical, definitely cool, ordinary - NOT!, brilliant, hungry, chocolate mousse, potato salad, mountain bikes, skateboarding, martial arts, and Dungeons and Dragons. Images showed money, dragons, cartoon characters, hot cars, skateboarders, snowboarders, weapons, and themselves engaged in activities such as soccer and snowboarding (307).

Sanford noted that there were outliers to these general rules, with some girls noting intellect and some boys indicating an affinity for the arts. However, these instances were in the extreme minority, and most students fell between stereotypical gendered lines (Sanford, 2005). Sanford argued that these students were highly socialized, and their understanding of what their most important characteristics “should be” was reflected through this activity. These determinants

affect the students' understanding of themselves, and they also have repercussions for social interactions (Sanford, 2005).

Along these lines, Hillard and Liben's (2010) Developmental Intergroup Theory states that children existing in more salient gendered environments will be more attuned to and observant of gender differences. As a result, these children will actively categorize individuals into social groups and develop a rigid understanding of in-groups and out-groups. This reliance on categorization leads to a dependence on stereotypes and prejudices as tools to understand social spheres, while also fostering an "us vs. them" mindset (Hillard & Liben 2010). While these initial understandings are fairly fluid during childhood, when repeated constantly over one's lifetime, they construct a highly dichotomous world where genders are inherently and always at odds with each other. As a result, society constructs a strict and inflexible environment where males and females are required to adhere to prescribed expectations.

This type of gendered environment is readily observed in a classroom setting, as seen in the numerous studies reviewed above. The effects extend beyond a student's gender identity creation; there are lasting repercussions for a student's academic performance and professional outcomes. Riley's 2010 analysis of stigma, stereotyping, and attribution in the classroom concluded that when a student's success is attributed to ability, the teacher may have higher expectations for that student's future success and will inadvertently then push that student toward that envisioned success (Riley, 2010). Because of the discrepancy in attribution between boys and girls, lower-ability boys, overall, are more likely to see long-term success in academics than lower-ability girls (Tindall & Hamil, 2004). It is these findings that lead Riley to the conclusion:

Given the potential influence of teachers' perceptions upon learners' perceptions of themselves and each other, increased effort needs to be made to ensure teachers understand how their biases may influence decisions

about and treatment of learners. Without this understanding, educational policies, practices, and programs operating under narrowly defined notions of gender equity based upon equal rights and fairness may fail (7).

From scholars' previous work in this realm, it is imperative that educators be made aware of these gender biases pervasive in the classroom and work toward alleviating them. Appendix A shows the cyclical nature of gender biases through the educational system: the assumptions and beliefs held by teachers and schools have the potential to turn into the assumptions and beliefs students have about their own gender identities.

From this literature review, we deduce that educator trainings should be addressing the following issues: **challenging the gender binary, altering biased course material, enacting standardized punishment/praise procedures, monitoring hand raising of male vs. female students, using gender-neutral language/words of capability, and emphasizing awareness of unconscious biases**. The following comparative analysis of educator resources against these areas aims to act as a starting point for creating effective gender-bias trainings in the future.

Methods

To answer our research questions and determine what type of content educators' trainings were covering, we conducted a qualitative textual analysis via grounded theory. According to Charmaz (2006), grounded theory methods, also known as the constant comparison approach, consist of "systematic, yet flexible guidelines for collecting and analyzing qualitative data to construct theories 'grounded' in the data themselves" (Charmaz, 2006, p. 2). In constant comparison, a text is critically analyzed and different thematic elements are drawn out in regard to purpose, details, etc. After these observations are gathered, a comparison with the other texts

in the set is conducted, creating a codebook of similarities, differences, and general trends. From this analysis, results from the set are synthesized and phenomena can be described (Charmaz 2006). This method was chosen due to its open code nature which would allow the unknown trends to emerge without any influence of researcher bias. Grounded theory methods have also been utilized by scholars previously in educator research settings, notably by Sekarasih, et. al (2016) when studying how students responded to homework prompts regarding media violence and stereotypes.

Grounded theory methods were applied to the professional development training materials from public school districts and educational non-profit organizations, all of which were based in the Greater Boston Area (it is also of note that we attempted to include charter school systems; however, we were unable to do so due to lack of response). Our goal in choosing these arenas was to explore whether gender bias was mitigated in some contexts more so than others, if different environments constituted different approaches to gender bias training, or if similar issues persisted across the board. Our sample was convenience-based, as the necessity of cooperation from the schools and time restraints prevented us from using a wide-spread random sampling method. Our baseline analysis of public schools included materials from Somerville, Cambridge, and Brookline public school districts. NGOs Citizen Schools, Teach for America, and Boston Partners in Education (all of which utilize in-classroom teaching in public schools) were chosen to represent the non-profit perspective. It is important to note that we purposefully did not analyze private school materials due to the fact that private schools vary on mission and purpose, especially if they are religious or single-sex based. As a result, any analysis would be unique and not necessarily representative of private schools as a whole.

In terms of educator training procurements, we legally filed public records requests in each school district for all professional development materials discussing gender from the past eight years. For the non-profit organizations, we reached out to contacts (found online or through personal networks) inquiring about their training processes related to gender. While most materials provided through these efforts were documents and written records, we also held interviews with representatives from Teach For America and Maebright Group LLC (who was responsible for the Somerville educator trainings). Both of these phone calls provided context on goals and the process of each training.

We followed a systematic process when analyzing the training materials through the lens of grounded theory. First, we sorted the trainings into groups based on the type of institution from which they were sourced. Each training was then inspected two times, once by each researcher, while noting the following themes/questions, as well as general observations:

1. What is the purpose of this specific training?
2. What is the format of the training (an in-person setting, a reference sheet, etc.)?
3. How does the training describe what gender bias is and its importance?
4. What strategies for mitigating gender bias does the training recommend?

After a training was investigated twice (either through reading or reviewing call notes), a note sheet containing all the observations of each training was created. These note sheets were then compared for consistencies and differences in trainings between institutions and between the different educator types. Once these trends were compiled, they were compared to the areas identified by communication scholars as the most prevalent issues of gender bias in the classroom. Guiding this comparison were the following questions:

1. Are the trainings addressing the pertinent issues discussed by scholars?
2. How well do these trainings address the issues?
3. Are the trainings addressing issues not identified by scholars?

From using grounded theory methods, we were able to create themes and describe phenomena present in professional training materials. We discuss these themes in the following sections, and the analysis of each training is more fully outlined in Appendices B and C.

Analysis & Discussion

Educator Trainings

Through the grounded theory comparisons, educator trainings address gender in four distinct fashions: through LGBTQA+ awareness, race/cultural sensitivity competency, in-text gender-neutral language, and student education. However, as we conducted our research, we found that there was an immense disconnect between what educators believed to be relevant for a gender bias training and what scholars identified as imperative for a gender bias training. To reiterate, scholars identified that an effective gender bias training should discuss the gender binary, biased course material, standardized punishment/praise procedures, hand raising policies, gender-neutral language/words of capability, and awareness of unconscious biases.

LGBTQA+ Awareness. All trainings that explicitly discussed the concept of gender discussed it in the context of LGBTQA+ inclusion. The Cambridge Public School System provided us with 292 pages of training materials, the vast majority of which focused on anti-discrimination policies, background information on terminology surrounding LGBTQA+, as well as anti-bullying and intervention strategies. Public Schools of Brookline's materials addressed issues of LGBTQA+ inclusion, among many other miscellaneous topics that were

unrelated to gender biases in the roughly fifty pages provided. Both of these trainings were brief and surface-level, often simply outlining the notion that biases exist without offering solutions for mitigating them, aside from suggesting a generic “respect for human differences.”

The NGO Teach For America (TFA) provided extensive trainings to their teachers on LGBTAQ+ education and awareness, including everything from the definitions of keywords to activities emphasizing the importance of intersectionality. On our phone interview, we also learned that this LBGTQA+ education initiative in TFA was relatively new and still being developed. The training provided by Somerville Public Schools was administered by outside consultant Maebright Group LLC and discussed implicit biases related to the LBGTQA+ community. However, it did not touch on implicit biases related to cisgender children. MaeBright asserted that when educators work to recognize disciplinary or discriminatory practices toward members of the LBGTQA+ community, they are also forced to examine all their practices and recognize all biases. However, without explicit recognition and discussion of all forms of gender bias in the materials, it is impossible to guarantee or conclude that all teachers would be able to identify their biases and take active steps to mitigate them.

While the inclusion of LBGTQA+ resources and trainings provide incredibly important information and content for the professional development of educators, we must stress that these trainings do not cover the pertinent gender bias issues identified by communication scholars. At most, the discussion and education of the gender binary was present in the TFA, Cambridge, Somerville, and Brookline trainings. However, none of these trainings work to challenge the gender binary nor do they provide in-classroom examples of how it results in the differential

treatment of students. Thus, these trainings are inadequate because while they point to the existence of biases, none of them address how to mitigate them in practice.

Race/Cultural Competency. A consistent theme we saw across almost all of our trainings was a tie to race and cultural sensitivity. The thinking behind this connection was that unconscious biases present themselves around a variety of identities, whether that identity is gender, race, socioeconomic status, living situation, etc. The educational non-profits especially capitalized on this framework in an effort to individually work with each student and see each student as their own person. Citizen Schools and Boston Partners in Education both profiled the neighborhoods in which they work with demographic and socioeconomic information to emphasize the ethnically and economically diverse student body that they work with. Citizen Schools took this a step further by warning about stereotyping students from particular areas in the city, while also preparing Teaching Fellows for individual student circumstances. Boston Partners in Education also emphasized the importance of seeing the “whole student” and not assuming anything. Similarly, Teach for America emphasized the phrase “All Means All,” so to drive home the notion that all students of all identities are served by the organization and demand equal treatment. Overall, the educational non-profits highlighted the importance of intersectionality when interacting with students.

In this context, the public school systems of Cambridge and Brookline also focused on intersectionality as well as on anti-discriminatory policy. Policies describing the districts’ opposition to discrimination on any basis were included in the materials provided to us. In the individual training materials, the schools outlined the intersection of many identities such as

race, class, and gender and how all those identities impact each individual's experience. Again, cultural competency and understanding the differences of people was emphasized.

Similarly to the LGBTQA+ resources, these types of trainings acknowledge the presence of unconscious biases and instruct educators not to make assumptions about their students, but the materials still fail to provide practical solutions to actually achieve this. More importantly, these trainings do not discuss gender bias as a separate topic, and often present the concept of "cultural competency" as open-ended. While this term can encompass many different identity areas, it is still imperative that gender biases be named as a separate issue so teachers can work to mitigate their biases. Simply put, without being clearly defined, the majority of teachers will not look for, nor recognize, gender biases in their classroom or in their own practice. Overall, we concluded that these race/cultural competency trainings do not address issues of gender biases in classrooms identified by scholars at all.

Gender Inclusive In-Text Language. While not always an expressed topic in the majority of trainings, gender-inclusive language was noticeably present in all of the educational non-profits' trainings. Teach for America, Boston Partners in Education, and Citizen Schools all made the point of using words that did not carry either a gender visual or implicit connotation, such as students, learners, mentees, and class. The materials also generally avoided the use of pronouns in their trainings, and when pronouns were used, the more inclusive, all encompassing "they" pronoun was utilized. For Boston Partners in Education and Teach for America, this language selection choice implies that, while they do not expressly provide trainings on how to mitigate gender biases, they are aware of their existence and work to alleviate them when administering trainings. While this does not qualify as addressing the classroom issues as

identified by communication scholars, it does indicate an acknowledgement of the importance of addressing gender bias, and hopefully represents a trend that will develop into more pragmatic practical training in the future.

Citizen Schools was the only organization that actually took the use of gender-neutral language a step further in its training. In its *2019 Introduction to Apprenticeships*, one slide specified the need for inclusive language in the classroom. Included on this slide were the instructions: “Understand Your Own Biases, Avoid Assumptions, Challenge Stereotypes, Use Gender-Inclusive Language, Address Hurtful Language, Ask for/Use Pronouns, Learn Student Names.” Out of context, these instructions feel somewhat vague in helping Citizen Schools volunteers achieve these tasks and in describing what they look like in practice; however, the expectation is that the training facilitator explored them more in depth during the in-classroom session. If this is the case, the Citizen Schools training does address two areas that communication scholars identified as pertinent for gender bias trainings: using gender-neutral language/words of capability and emphasizing awareness of unconscious biases.

Student Education. Cambridge Public Schools provided the only materials addressing gender stereotypes; however, these materials were meant for educating students not teachers. The lesson plan for middle school health classrooms addresses gender stereotypes and gender-binary socialization, providing definitions of these key terms: gender, stereotype, gender stereotype, gender identity, gender discrimination, gender (in)equality, and gender (in)equity. The plan points at parents/family, peers/friends, and the media as the three “categories of influence” for the development of gender stereotypes (it is of note that schools/educators or institutions in general are not on that list). It also details why simple gender stereotypes, such as a child’s toy

preference, are problematic, and makes the following explicit statements regarding gender performance:

“It is okay to like things that are considered for the other gender.”

“It might be challenging to pursue something that is considered for the other gender.”

“You can be an ally for someone who is being teased for liking something that is considered for the other gender.”

The Cambridge lesson plan introduces an interesting contradiction. On one hand, this lesson plan is tackling gender biases head on in the student population. Even more so, it addresses two of the areas scholars identified as pertinent in confronting gender bias: challenging the gender binary and altering biased course material. However, this lesson plan again is for *students*, not teachers. While well-intentioned and should be continued to be taught, this lesson plan does not inform teachers on the unconscious biases that they could be carrying about their students nor does it explain what these biases look like in a classroom setting. Most importantly, it doesn't include teachers in the conversation of gender biases; teachers are essentially supposed to carry out this lesson plan as the authority figure in the classroom, yet they themselves have not been confronted with this content about their own actions. This indicates that while Cambridge recognizes that it is important to discuss issues of gender biases with students, they do not recognize their own influence on students' gender development.

Discussion

From our literature review, we determined that the most pertinent areas needing to be addressed were the gender binary, biased course material, standardized punishment/praise procedures, hand raising policies, gender-neutral language/words of capability, and awareness of unconscious biases. As we collected materials, it quickly became clear that these issues are not

addressed in the educator trainings, and more importantly, gender bias trainings essentially do not exist as independent entities.

Our educator resource analysis found that gender bias training is mostly lumped into other socially responsible classroom topics, such as LGBTQA+ awareness and cultural competency programs. To reiterate, LGBTQA+ inclusion trainings must not be discounted in their contribution toward building a gender-neutral classroom. In advocating for the most marginalized groups on the ends of the gender spectrum, equality can be increased for all those in the middle of it. However, the LGBTQA+ trainings we examined do not delve into the gender bias issues highlighted by communication scholars and do not explicitly discuss stereotypes or common biased classroom practices. They, instead, focus on validating students' identities and creating inclusive policies. While this work is essential in creating equitable opportunity for all students, it does not address still very prevalent issues of gender bias grounded in the gender binary. Essentially, it treats a symptom of the prescribed binary instead of trying to address and challenge the binary's existence.

Along these same lines, gender bias is a separate issue from cultural competency, but it is often times simply alluded to in cultural competency trainings. Cultural competency is meant to inform teachers on cultural practices, racial divides, and class differences they may encounter within their class, while also emphasizing the individuality and uniqueness of each student. It is not meant to delve into the ingrained ideologies of the gender binary nor point out the unconscious biases related to gender. Fundamentally, these trainings imply that all unconscious biases are able to be addressed and mediated in the same fashion, and this is not true. What is more, racial unconscious bias is explicitly covered in these trainings, while gender bias is not.

The fact that the public school systems as well as non-profits characterize gender-bias as a part of LGBTQA+ or cultural competency issues solidifies the pervasiveness of the issues' invisibility. As Riley (2014), Stoll (2013), and Sanford (2005) asserted in their research, gender biases seem to be so ingrained in our institutions that they do not register as problematic or out-of-the-ordinary in professional training spheres. While Massachusetts is very liberal, and many outwardly reject the notion of post-feminism, the results of this study show an utter lack of gender bias training in educational institutions in the Greater Boston Area. While teachers, administrators, and other education professionals might be aware that issues of inequity still exist, they are not being provided the tools to help combat these issues. Many current professionals were raised and socialized in a world even more gendered than the one we live in today, and they carry implicit biases they learned during their formative years with them into the classroom. However unintentional it may be, educators will pass their biases on to their students.

This research defines a clear need for gender bias training programs by identifying both the prevalence of gender bias in classrooms. These immediate effects of educational gender biases have long-term repercussions that ripple throughout our society. As Developmental Intergroup Theory (Hillard & Liben, 2010) suggests, students develop in-groups and out-groups based on gendered teachings and learn societal standards and stereotypes for gendering both themselves and others. These lessons are carried with them throughout their lives and lead to the cultural inequalities observed in the workplace, politics, media, and everyday social interactions. Therefore, in order to achieve greater gender equity, the teaching of stereotypical views of gender must be seriously mitigated and a more gender neutral classroom must emerge.

Limitations

As with any research project, this study was limited in a few key aspects. First, our study only sampled public school institutions in the Greater Boston Area. Time and financial constraints limited our ability to reach out to public and charter school systems from across the country, resulting in our findings being skewed toward a Northeastern United States cultural mindset. Coupled with the fact that we had a small sample size in general, we can not generalize our findings to the greater United States public educational system.

Along these lines, we were very limited in our access to educator training resources. In total, we reached out to twelve different educational institutions in the Greater Boston Area, of which were four public school systems, four charter schools, and four educational non-profits. However, after multiple follow-ups via e-mail and by phone, we only received trainings from six of these organizations. Three trainings were from educational non-profits, and the other three were the public school systems of Brookline, Cambridge, and Somerville. The public school records were only obtained after submitting public records requests via the respective Municipal Governments in each city. We were unable to obtain any records from charter schools, and we were legally not entitled to request their records. As such, our findings are skewed toward the trainings present in large public school districts in the Greater Boston Area.

In terms of educational non-profits, we were also limited due to the fact we interacted with the national/corporate headquarters of each organization. As a result, we received bureaucratic program trainings of the organization but did not have access to how or if regional offices conducted trainings on a smaller level. Consequently, there may be gender bias trainings carried out on smaller levels in these organizations, but we cannot ascertain that from this study. Similarly, we have no way of knowing whether the trainings we received from both the public

schools and the educational non-profits were exhaustive. While we made our wording for each training material request as specific as possible, human error and subjectivity is always a concern in terms of whether we were given all content that we were looking for. As mentioned previously, we also received no responses from any charter school systems, meaning that we cannot extend any of this research to that realm.

Future Research

We encourage future studies to address all of these limitations head on in order to build off this initial research. First and foremost, any future research should investigate a large sample of charter and public school systems from around the country. In addition, while interacting with educational non-profits at the corporate level is important for organizational messaging purposes, we encourage future researchers to also look into what is happening at the local level in these organizations. It is often the case that educators on the ground have a perspective of the classroom that is missing from the larger corporate strategic picture, and it is worth investigating whether they are addressing gender biases on their own initiative.

Most importantly, researchers who undertake this course of study should be prepared to encounter a lack of trainings related to gender biases, and they should be prepared to offer their own findings to these institutions. One of the most important responsibilities of academia is to investigate injustices and unfairness in our systemic practices and work to improve them. We suggest that anyone passionate about making a difference through evidence based research should devise intervention plans to help alleviate gender biases in educational settings as well.

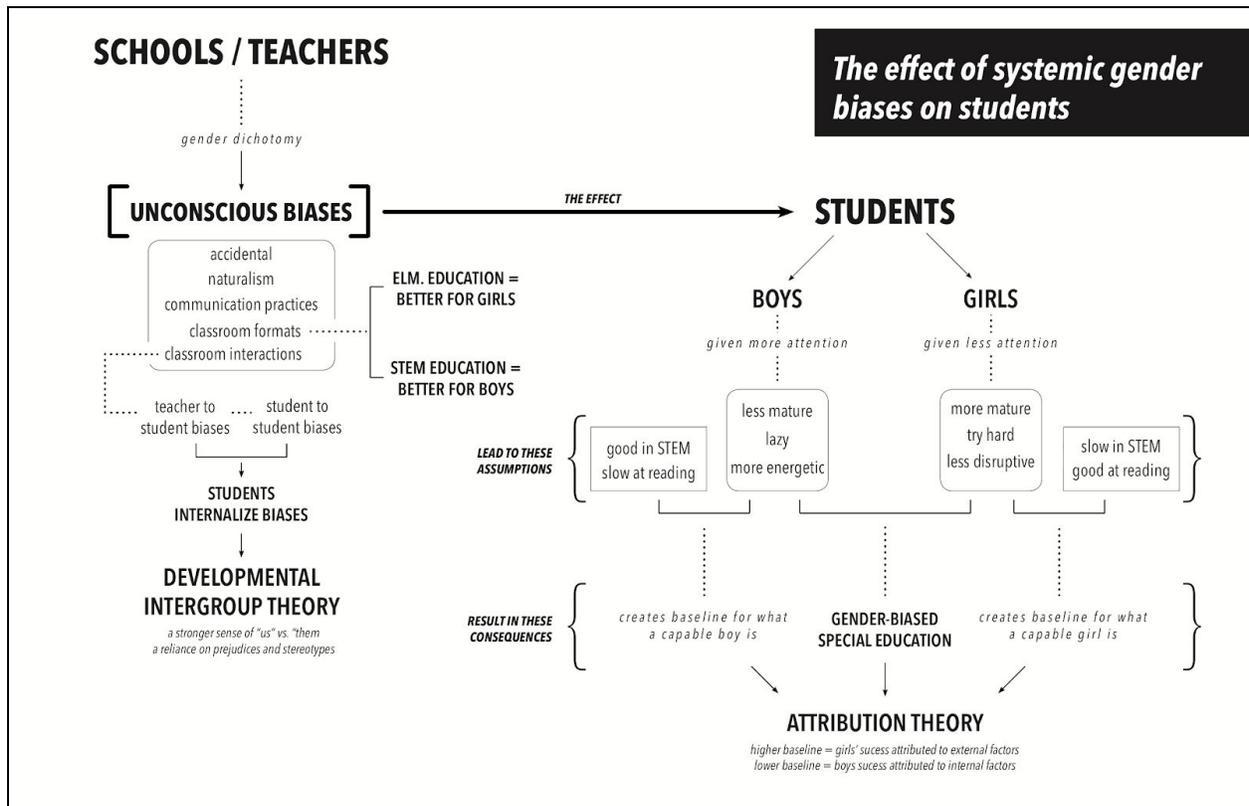
References

- Aldridge, J., & Goldman, R. (2002). Gender equity and education. *Current issues and trends in education*, 163-170. Boston: Allyn and Bacon.
- Anderson, K. G. (1997). Gender Bias and Special Education Referrals. *Annals of Dyslexia*, 47, 151-162.
- Bianco, M., Harris, B., Garrison-Wade, D. & Leech, N. (2011). Gifted Girls: Gender bias in gifted referrals. *Roeper Review*, 33(3), 170-181. doi: 10.1080/02783193.2011.580500
- Bigler, R. S. & Liben, L. S. (1990). The Role of Attitudes and Interventions in Gender-Schematic Processing. *Child Development*, 61(5), 1440-1452.
- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. London, UK: SAGE Publications Ltd. Retrieved from <https://books.google.com/books?hl=en&lr=&id=2ThdBAAAQBAJ&oi=fnd&pg=PP1&dq=charmaz+2006+grounded+theory&ots=fZnX6GoBDZ&sig=XJ0yLuRkBVXDxfBm2mFWoCLwU-8#v=onepage&q=charmaz%202006%20grounded%20theory&f=false>.
- Frawley, T. (2005). Gender Bias in the Classroom: Current Controversies and Implications for Teachers. *Childhood Education*, 81(4), 221-227.
- Graham, M. (2001). Increasing Participation of Female Students in Physical Science Class (Doctoral dissertation). Retrieved from *ERIC Institution of Education Sciences*.
- Gray, C., & Leith, H. (2004). Perpetuating gender stereotypes in the classroom: A teacher perspective. *Educational Studies*, 30(1), 3-17.
- Hilliard, L. J., & Liben, L. S. (2010). Differing Levels of Gender Salience in Preschool Classrooms: Effects on Children's Gender Attitudes and Intergroup Bias. *Child Development*, 81(6), 1787-1798. doi:10.1111/j.1467-8624.2010.01510.x
- Jones, M. G., Howe, A., & Rua, M. J. (2000). Gender differences in students' experiences, interests, and attitudes toward science and scientists [Electronic version]. *Science Education*, 84, 180-192.
- Lundeburg, M. A. (1997). You Guys Are Overreacting: Teaching prospective teachers about subtle gender bias. *Journal of Teacher Education* 48(1), 55-61.
- Riley, T. (2010). Stigma, Stereotypes, and Attributional Theory: A successful merger. *Journal of Educational Thought*, 44(2), 229-246.
- Riley, T (2014). Boys are Like Puppies, Girls Aim to Please: How Teachers' Gender Stereotypes may Influence Student Placement Decisions and Classroom Teaching. *Alberta Journal of Educational Research*, 60(1), 1-21.

- Sanford, K. (2005). Gendered Literacy Experiences: The Effects of Expectation and Opportunity for Boys and Girls Learning. *Journal of Adolescent & Adult Literacy*, 49(4), 302-315. doi:10.1598/jaal.49.4.4
- Sekarasih, L., Nayar, K., O'Malley, D., Olson, C. & Scharrer, E. (2016) Entertaining audiences, ensuring inclusivity, and considering media influence: Sixth graders' understanding of media producers' responsibility. *The Communication Review*, 19(2), 128-152. Doi: 10.1080/10714421.2016.1161338
- Stoll, L Cooper. (2013). What Problem? Gender in the Gender-Blind Classroom. *Race and Gender in the Classroom: Teachers, Privilege, and Enduring Social Inequalities*, 50-59. Lanham, MD: Lexington Books.
- Sullivan, P. (2002). "It's Easier to Be Yourself When You Are Invisible": Female College Students Discuss Their Online Classroom Experiences. *Innovative Higher Education*, 27(2), 129-144.
- Sunderland, J. (2000). New understandings of gender and language classroom research: Texts, teacher talk and student talk. *Language Teaching Research*, 4(2), 149-173.
- Tindall, T. & Hamil, B. (2004). Gender Disparity in Science Education: The causes, consequences, and solutions. *Education*, 125(2), 282-295.
- West C. & Zimmerman, D. H. (1987). Doing Gender. *Gender & Society*, 1(2), 125-151.

Appendices

Appendix A. concept map created from our critical analysis of scholarly sources and connections we identified between prominent classroom gender-biases and consequences identified by communication scholars.



Appendix B: Analysis of educator training materials compared to the gender-bias issues identified by communication scholars.

Public Schools:

Cambridge Public Schools	
What is the purpose of this specific training?	<ul style="list-style-type: none"> - To introduce new institutional no-tolerance policies surrounding discrimination and harassment of LGBTQA+ students, particularly students of color - To establish new anti-violence policies as well as bullying prevention and intervention plans - To facilitate staff understanding of LGBTQA+ community, cultural competency, and intersectionality

	<ul style="list-style-type: none"> - To advance the implementation of inclusive classrooms
What is the format of the training (an in-person setting, a reference sheet, etc.)?	<ul style="list-style-type: none"> - In-person training including powerpoint presentations, reference sheets, policy guidelines and lesson plans
How does the training describe what gender bias is and its importance?	<ul style="list-style-type: none"> - The training defines the following terms in a lesson plan for middle school students: gender, stereotype, gender stereotypes, gender expression, gender identity, transgender, cisgender, gender discrimination, gender equality/inequality and gender equity/inequity - The lesson plan indicates to students that it is important to understand gender biases, but does not detail why it is important - The training makes no further mention of gender biases
What strategies for mitigating gender bias does the training recommend?	<ul style="list-style-type: none"> - The training does not recommend any mitigation strategies for teachers. It suggests a lesson plan that should help students mitigate or resist biases, but does not address faculty/educators.

<i>Somerville Public Schools</i>	
What is the purpose of this specific training?	<ul style="list-style-type: none"> - To improve the climate and culture for LGBTQA+ students in Somerville Public Schools
What is the format of the training (an in-person setting, a reference sheet, etc.)?	<ul style="list-style-type: none"> - In-person training delivered by an outside organization (Maebright Group, LLC) - Training is the first of an ongoing series with Somerville Public Schools - Materials were described by a representative via phone rather than provided for direct analysis
How does the training describe what gender bias is and its importance?	<ul style="list-style-type: none"> - The training does not describe gender bias outside of a transgender/non-binary context
What strategies for mitigating gender bias does the training recommend?	<ul style="list-style-type: none"> - The training suggests that in serving the most marginalized groups, teachers will be prepared to recognize all biases and empower all groups - Emphasizes the importance of inclusive language in the classroom and “removing constant differentiation between boys and girls”

<i>Public Schools of Brookline</i>	
What is the purpose of this specific training?	<ul style="list-style-type: none"> - To introduce the Safe Schools Program for LGBTQA+ students - To establish plans for the integration of social justice lessons into math education - To discuss the importance of “understanding our students through the contexts of social identity, unconscious bias, and social justice,” specifically with regard to issues of “race and privilege.” - To launch the Identity Curriculum and SEED project, which are designed

	<p>“to cultivate students’ and faculty’s understanding of race, power, and identity as a basis for empathy, scholarship and action.”</p>
<p>What is the format of the training (an in-person setting, a reference sheet, etc.)?</p>	<ul style="list-style-type: none"> - Multiple in-person trainings - Events (flyers and outlines provided) - Mailings and electronic messages
<p>How does the training describe what gender bias is and its importance?</p>	<ul style="list-style-type: none"> - The training does not describe gender bias, however it does recommend summer reading to teachers: <i>A Guide to Gender: The Social Justice Advocate's Book</i>, by Sam Killermann, which includes “pages of gender exploration, social justice how-tos, practical resources, and fun graphics & comics.
<p>What strategies for mitigating gender bias does the training recommend?</p>	<ul style="list-style-type: none"> - The training does not suggest strategies for mitigating gender biases.

Non-Profits:

<i>Boston Partners in Education</i>	
<p>What is the purpose of this specific training?</p>	<ul style="list-style-type: none"> - To onboard new volunteers in working with students and the BPE program - To establish best practices in building relationships and conflict management - To teach cultural competency
<p>What is the format of the training (an in-person setting, a reference sheet, etc.)?</p>	<ul style="list-style-type: none"> - In-person slideshow presentation/activities - Slides are easy to understand for independent viewing
<p>How does the training describe what gender bias is and its importance?</p>	<ul style="list-style-type: none"> - Does not specifically mention gender bias - Uses gender-neutral language throughout the presentation
<p>What strategies for mitigating gender bias does the training recommend?</p>	<ul style="list-style-type: none"> - Does not mention any strategies for mitigating bias, gender or otherwise - Biggest takeaway and key phrase is “don’t make assumptions”

<i>Citizen Schools</i>	
<p>What is the purpose of this specific training?</p>	<ul style="list-style-type: none"> - To prepare Teaching Fellows to work collaboratively with Citizen Teachers on Apprenticeships - To prepare volunteers to enter culturally diverse classrooms

What is the format of the training (an in-person setting, a reference sheet, etc.)?	<ul style="list-style-type: none"> - In-person slideshow presentation/activities - Slides are easy to understand for independent viewing
How does the training describe what gender bias is and its importance?	<ul style="list-style-type: none"> - Does not explicitly mention gender bias, but discusses cultural competency and the ability to see the entirety of a student <ul style="list-style-type: none"> - Emphasizes the danger of a “single story” - Builds racial and socioeconomic awareness - Highlights the impact of microaggressions
What strategies for mitigating gender bias does the training recommend?	<ul style="list-style-type: none"> - Does not suggest specific strategies for gender bias - In general for a inclusive classroom: <ul style="list-style-type: none"> - “Understand Your Own Biases - Avoid Assumptions - Challenge Stereotypes - Use Gender-Inclusive Language - Address Hurtful Language - Ask for/Use Pronouns - Learn Student Names”

<i>Teach for America</i>	
What is the purpose of this specific training?	<ul style="list-style-type: none"> - To prevent discrimination against students and peer teachers by teaching about LGBTQA+ and intersectionality - To build understanding of identities
What is the format of the training (an in-person setting, a reference sheet, etc.)?	<ul style="list-style-type: none"> - In-person slideshow presentation/activities <ul style="list-style-type: none"> - 1.5 hours, densely packed with content - Slides are easy to understand for independent viewing
How does the training describe what gender bias is and its importance?	<ul style="list-style-type: none"> - Does not specifically mention gender bias - Defines gender identity, gender attribution, sex at birth, and gender expression - Long section concerning gender, but more so in the lens of what is gender and how it affects gender-non conforming students
What strategies for mitigating gender bias does the training recommend?	<ul style="list-style-type: none"> - Does not mention any strategies for mitigating gender bias - However, makes a point of defining gender identity, gender attribution, sex at birth, and gender expression and their differences - Building an inclusive and open classroom for all identities

Appendix C. Analysis of educational organization’ resources in relation to scholarly research

	Are the trainings addressing issues discussed by scholars?	How well do these trainings address the issues?	Are the trainings addressing issues not identified by scholars?
<i>Boston Partners in</i>	- No, the training main theme is to not make assumptions	- Does not address actual issue of gender bias, but does a good	- Yes, training talks more so on how to work with the

<i>Education</i>	<p>about students, but does not specify what assumptions would be not specifying.</p> <ul style="list-style-type: none"> - However, training is entirely gender neutral in language. 	<p>job of being a gender neutral resource when discussing students</p>	<p>youth and not make assumptions about them</p> <ul style="list-style-type: none"> - Does not specify what these assumptions can be, but related to cultural competency.
<i>Citizen Schools</i>	<ul style="list-style-type: none"> - No, training is primarily for teaching CS volunteers how to conduct the apprenticeship - Small portion of training dedicated to cultural competency 	<ul style="list-style-type: none"> - The small section on cultural competency does emphasize the importance of understanding personal biases and not making assumptions about students - Does not elaborate further on what these would be in context of gender 	<ul style="list-style-type: none"> - Yes; cultural competency training that is meant to encompass all differences between students
<i>Teach for America</i>	<ul style="list-style-type: none"> - No, this training is very encompassing on LGBTQA+ issues and awareness raising but does not touch on gender biases themselves 	<ul style="list-style-type: none"> - Does not address actual issue of gender bias, but does acknowledge different levels of privilege and defines the gender spectrum 	<ul style="list-style-type: none"> - Yes; LGBTQA+ and intersectionality is the main focus of this training - Focuses on gender-nonconformity more so than binary gender bias
<i>Cambridge Public Schools</i>	<ul style="list-style-type: none"> - No, this training mostly addresses LGBTQA+ issues, with a focus on bullying and discrimination prevention 	<ul style="list-style-type: none"> - Acknowledges issues of gender bias in a suggested lesson plan for middle school students. Details definitions and gives examples, but does not discuss the importance of mitigation or give suggestions beyond encouraging acceptance 	<ul style="list-style-type: none"> - Yes; the training discusses many issues pertaining to LGBTQA+ and intersectionality - Focuses on bullying and discrimination
<i>Somerville Public Schools</i>	<ul style="list-style-type: none"> - Yes, Maebright Group LLC's training addresses the importance of gender-neutral language, however, specifically as it pertains to creating inclusive environments for LGBTQA+ youth - No other issues are adressed 	<ul style="list-style-type: none"> - The training addresses the issue of inclusive language very well - The training also urges teachers to examine their own implicit biases, but does not make mention of binary gender bias issues 	<ul style="list-style-type: none"> - Yes; the training is primarily focused on practices for inclusivity of LGBTQA+ youth - Focuses on gender-nonconformity more so than binary gender bias
<i>Public Schools of Brookline</i>	<ul style="list-style-type: none"> - No, the training does not discuss gender biases aside from making reference to suggested reading for teachers 	<ul style="list-style-type: none"> - The training does not address gender biases, instead focusing on the importance of social identity, unconscious bias, and social justice, specifically with a race and privilege lens. 	<ul style="list-style-type: none"> - Yes; the training highlights intersectionality and cultural competency