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Lessons learned: faculty watch parties are a powerful approach to foster diversity and inclusivity discussions

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Lessons learned: Faculty Watch Parties are a Powerful Approach to Foster Diversity and Inclusivity Discussions

Introduction

This "lessons learned" paper, presented as a lightning talk, discusses the use of virtual watch parties to facilitate discussions and foster diversity and inclusion mindsets and praxis among faculty. Over several sessions, faculty from multiple disciplines, including a majority from engineering, across multiple universities watched and discussed the documentary "Picture a Scientist." These watch sessions were hosted by the Institute for Engineering Education and Innovation (IEEI) within Texas A&M University (TAMU) with the purpose of building and empowering a community that regularly considers and discusses diversity, equity, and inclusion, among its members' professional and personal lives, particularly in the context of the classroom.

Background

Underrepresentation of women in science, technology, engineering, and mathematics (STEM) is a topic that has been in the spotlight for over 50 years. Efforts have been met with varying successes in engineering, computer science, life sciences, physical sciences, and mathematics. While gender disparities have drastically reduced in fields such as chemistry and biology with representation reaching near parity, some STEM fields like engineering and physical science still struggle with equal numerical representation at the undergraduate level [1]. Moreover, these gender gaps become more noticeable and persistent at the postdoctoral and faculty level in many STEM fields [2, 3]. In addition to numerical representation, social and climate factors often send subtle (and not-so subtle) cues to women about whether or not they belong[4]. Unfortunately, women often experience aggressions, both at the micro and macro level, both in fields where they have high representation and where they do not. In order to make lasting impacts on these "chilly climates" that hinder women's sense of belonging [5], it is imperative that people be made aware of the lived experiences of women and women of color in STEM fields and have opportunities to reflect on the systems and climates that need to be drastically overhauled.

In April of 2020, the documentary "Picture a Scientist," released by filmmakers Sharon Shattuck and Ian Cheney, sought to bring to light the disparities women in STEM have historically been facing in a way that has proven to be extremely accessible and influential to the public [6]. "Picture a Scientist" brings together a blend of statistics and personal experiences of female faculty in STEM to illustrate the environment that largely still exists in higher education regarding implicit and explicit biases against women and women of color. The film explores efforts that women in STEM have made to speak up and bring about change within their working environments or disciplines [6]. The scientists in the film have courageously chosen to share their heart-wrenching and emotional stories in order to shed light on these dark realities and improve the working conditions for their daughters and future generations to come. Many women watching may find themselves in similar situations and potentially aggravated to see how often such instances occur. The film urges women to not stay silent, forget the societal taboo, and seek the justice they deserve.

The "Picture a Scientist" film was chosen for a faculty watch party consisting mostly of STEM colleagues across three universities (TAMU, Prairie View A&M University, and Texas A&M University-Kingsville). This community is situated within a book club community group that is

advertised across the entirety of TAMU as a remote event through Zoom. IEEI hosted the watch party at TAMU as a part of a long-running book club series. The faculty book club series consumes various forms of media, including literature and films, as a point of reference to discuss culturally difficult topics. Such topics are related to diversity, equity, and inclusion both in higher education and in the broader sense of their everyday lives in a space that is safe for members to largely share their thoughts, opinions, and feelings.

The book club format, where participants have an opportunity to discuss the content of various forms of literature, serves as an excellent tool for professional development of professors [7]. This format fosters an environment that is non-threatening, where thoughts and feelings about various sensitive topics can be shared openly, while other settings would otherwise make it more difficult for faculty to engage in. When faculty can find environments that are conducive and safe for them to engage in, dialogue book clubs can then operate in a fashion that promote critical thinking, self-reflection, perspective-taking, community, teamwork, communication, and can decrease occupational stress and strain [8]. Professional development using book clubs has been found to be more effective than traditional modes of professional development, as participants of book clubs often make direct changes in their instructional praxis, academic thinking, and personal beliefs due to their participation [9]. Moreover, book clubs serve as a productive space for professional identity development, challenging participants' existing beliefs and biases and providing space for reflection of praxis [10–14]. The current study builds upon an established book club community, which previously showed positive interactions and personal growth amongst faculty member participants [15]. This study focuses on the interactions and discussions between book club participants who viewed the "Picture a Scientist" film.

The film was viewed and discussed over four one-hour+ sessions where the film was screened for approximately 20–30 minutes and discussed openly for 30–40 minutes. In these discussions, there were designated facilitators whose roles were to spark discussion and keep order based on an agreed set of rules for a safe space discussion, outlined by Axtell [16]. Axtell's rules for safe space discussions serve to set a tone of mutual respect and outline expected participant behavior. While primarily serving as guidelines for behavior, Axtell's rules also allow the discussion to be rich and dynamic with the ultimate goal of promoting understanding of topics that are often difficult to discuss and, in this case, are often inadequately covered during business-as-usual discussions between colleagues in STEM disciplines.

Discussion Analysis

Overall participation in this watch party of "Picture a Scientist" was beyond expectation, with an audience regularly surpassing twenty participants. These participants ranged across the three Anonymous Universities and included women and men who are tenured faculty, pre-tenure faculty, academic professional track faculty, library faculty, and ex-administrators now working as faculty across many STEM disciplines.

Four sessions were audio recorded via Zoom with automatic closed-captioning live transcription enabled which allowed the researchers to pull transcripts, compare, and correct them with the original audio recording. Transcripts were then analyzed by two individual researchers using thematic analysis approach [17] to identify prominent themes of what was discussed during the four sessions. Researchers used Google sheets on a secured Google Drive provided by TAMU to process and categorize themes. The top themes and associated quotes of discussion for each session can be found in Table 1. These themes and quotes highlight the various discussions that were had during this watch party experience spurred by the topics discussed in the film. Quotes reflect experiences that participants had in their lives as examples of what their experiences in STEM have been.

It is abundantly clear that the experiences captured in the film do not exist in a vacuum as many of the participants of this watch party had either experienced similar situations themselves or were familiar with a friend or colleague who had been subject to some of these experiences. Several participants' experiences were shared in these discussions, bringing home the strikingly regular frequency in which these events happen. A large portion of these discussions focused on what these faculty could do to support the women in their classrooms, departments and colleges. It was made painfully obvious that every higher education institution has significant room to improve when considering the demeaning, wrong, and tragic behaviors that women are subject to.

Based on these discussions it is believed by the authors that this watch party was successful in providing a safe space in which faculty can discuss difficult topics related to diversity, equity, and inclusion as it pertains both in their classrooms and in their professional and personal lives. Both women and men who attended this watch party felt comfortable in voicing their experiences, even when difficult to relive, and asked questions to further understand the experiences of their colleagues. Moreover, this kind of positive experience will continue to stick with these participants throughout their lives and will hopefully bring them back to participate in future endeavors similar to this watch party. This kind of social discourse is not common at TAMU amongst STEM faculty of any title in their normal lives. IEEI will continue hosting these watch parties and book club series in hopes to keep these experiences as offerings by IEEI indefinitely.

Lessons Learned and Drawbacks

Recognizing, naming, calling out, and understanding, how these faculty in their own lives have experienced these injustices, either first hand or through observation of their peers in some cases, empowered the faculty to take back power from these experiences through group collective reflection of those events and the sharing of vulnerable emotions and experiences. It was immediately understood that many of our faculty have had very similar experiences, those of which are highlighted in 1 as defining quotes of participants. This collective reflection lead to discussion that informed participants as to how they might restructure various teaching praxis they have that might mitigate these events from reoccurring. Through this collective reflection and discussion, faculty also formulated ways in which they can better serve as support systems for students or peers who endure these types of injustices regularly. The process of these faculty understanding that they are not alone in their experiences and struggles brought a new sense of community and belonging amongst the group, wherein they are rarely provided platforms to share their experiences and to encourage these feelings.

While this was a largely successful experience for those involved, there are drawbacks that will be addressed in future book club meetings. The time scheduled made it difficult for some to attend every week, resulting in a varied group of participants. While inherently providing a wider range of viewpoints, there was an issue with some participants not having seen previous viewings of the film for full context of topics being discussed. This could be rectified by another watch party in the future in which participants are asked to watch the film on their own if they hadn't been

Duration	S1 0:00–19:13	S2 19:14-40:04	\$3 40:05-1:05:55	\$4 1:05:56-1:32:10
Prominent Themes	 Hostile environment Student faculty relationships and power dynamics Stereotyping Questioning job qualifications 	 Power dynamics in the workplace Lack of support for LGBTQIA+ Relating to women in the film 	 Cycle of problems Not accepted in discipline Significant evidence of women not being heard Men pressuring women to do things for positions 	 Bullying Educated does not mean inclusive Putting up jerks in higher ed
Discussion Quotes	"I was so insulted. I didn't know what to do. I've been there for like the first week of classes, and I just went, Oh, Okay." "As students, they're in a dif- ficult position in a very power down position. They have to get that grade. So they did not ad- dress the issue then, because they needed the grade." "I still like that's still my most poignant moment of like that space because somehow I was like on this pedestal, one woman who was like really good at math but he was at the same time shaming the entire class of women as being not good at math." "You see a lot of faculty we pushed really hard to make sure that women and minorities are in the faculty that get interviewed, but they often aren't actually as- signed the job so there's all these myths about the qualified people are being displaced."	"To get more attuned to perspective, we have to really develop the deep skill on as somebody said on recognizing the power that's been exerted in the room, even if it's not by the title." "[from a student] Well, honestly, it's because I'm gay, and I don't feel that [removed] was sup- portive of me here and so I feel like I need to leave." "Why do they all have the same experiences why do women of color, all have the same experience like everything that girl said."	"The frustration comes from a place of not having much of an ability to to even change, I mean that we're talking, not just change itself but even though there's, a sense among faculty, all faculty of all experience levels that men are going to behave in particular ways And you either accept it or you get punished for not and there's no in between." "So, again, these were all from my per- spective, they seemed like the, the fac- ulty who were saying is just coming up with ways to discredit these young women." "This is a lesson in power, because the evidence was long existed before MIT Nancy Hopkins and others. I was part of that generation and it was like, Okay, a whole bunch of us have been saying its for decades, but now that some cool Pro- fessors from MIT are saying it all of a sudden it matters." "It's everywhere. That's the part that you know I hear all of this, and you know I saw it in Washington DC, where women were targets, you know, men pressured them to do things for positions."	"Bullies are such a waste of time and energy. And that's really all it is, they're just, they're huge waste of time and energy is so pointless. And that's why you need to call them out every time in front of a crowd and make them look bad because they are bad, because we don't re- ally have to do anything other than that, at least in some cases." "Because, you know, it's still here, it hasn't gone away with all the intelligence that peo- ple have, we're talking about people with PhD degrees, I mean the highest degree you can attain, and you're still acting like a jerk." "I remember I sat with the black women who had other complaints against this man and said, he's a jerk. But he's our jerk."

Table 1: Prominent themes	s and associated	participant	discussion q	uotes for each	Session (S)

attending for the entirety of the sessions.

The current target audience is mostly faculty working at TAMU, and while the invitation is open to anyone at the university regardless of department, there seems to be a core group of participants who solely work in the college of engineering. This reduction in reach is somewhat limiting to the potential of this community. The possibility of explicitly recruiting participants from other colleges at TAMU will be considered as STEM fields as a whole at TAMU do reflect significant under-representation of minorities in many departments and colleges outside of engineering.

Conclusion and Future Plans

The overall positive experience participants had in this watch party reinforces the drive of IEEI to continue this safe space social discourse book club. The faculty group participating has a dedicated core group of individuals interested in continuing this experience; some of those members have become facilitators for other media and book club discussions. IEEI continues the wide spread advertisement of the student and faculty book clubs across TAMU and extends that invitation throughout an alliance of Universities to promote diversity, equity, and inclusion in a multitude of forms. Future research will involve interviews and surveys of participants to ascertain the impacts of the book and media club experience on the educational and work climates in STEM. In addition to expanding upon the previous work by the authors at TAMU [15], future work includes collaboration efforts between other universities who are operating similar book clubs.

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