

# Diversity, Equity, Inclusivity (DEI): Initiatives and Resources from the

American Statistical Association & US Universities

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## **1. Introduction**

Over the past decade, institutions across the United States have become increasingly committed to advancing Diversity, Equity, and Inclusivity (DEI) to create learning environments that build solidarity, promote inclusion, and embrace diverse points of view and backgrounds. In this article, I will discuss DEI initiatives and resources from various organizations, beginning with the efforts of the American Statistical Association. Next, I will delve into initiatives at California Polytechnic State University at San Luis Obispo, where I am currently employed. This will be followed by an exploration of DEI activities and resources from other U.S. universities. The insights and strategies presented are not only relevant to the U.S. context but could also be used to help foster DEI principles within Japanese educational settings.

NOTE: Before proceeding, I would like to point out that some institutions include the term "justice" alongside diversity, equity, and inclusivity. "Justice" refers to social justice, leading to the acronym JEDI, representing all four terms. Additionally, institutions like UC Berkeley have introduced a fifth term, "belonging," resulting in the abbreviation DEIBJ for all five terms. For the sake of simplicity, in this article, I will use "DEI" to represent all these concepts.

## **2. DEI Initiatives and Resources from the ASA**

For many years, the American Statistical Association (ASA) has actively advocated for and promoted DEI principles. As an illustration, the ASA has established several task forces and

committees focused on DEI. These include: (1) the Diversity, Equity, & Inclusion Task Force, (2) the Anti-Racism Task Force, (3) the Committee on Minorities in Statistics, (4) the Committee on Women in Statistics, and (5) the Caucus for Women in Statistics.

The ASA has also established DEI-focused social media outlets on X, including: (1) the Data Science JEDI Outreach Group<sup>1</sup>, (2) the Committee on Minorities in Statistics<sup>2</sup>, (3) Women in Statistics and Data Science<sup>3</sup>, and (4) the Caucus for Women in Statistics<sup>4</sup>.

Beyond these examples, another excellent source for ASA's DEI initiatives is their publications, particularly the monthly membership magazine, *Amstat News* ([magazine.amstat.org](http://magazine.amstat.org)). Notably, recent issues of *Amstat News* have included a special section dedicated to DEI-related articles, titled the "JEDI Corner." (Please refer to Figure 1 for a screenshot of the JEDI Corner.) Some recent article titles include "Infusing DEI Learning into an Elementary Statistics Class," "Increasing JEDI in Clinical Trials," "Disabilities as Assets and Strengths," and "Beyond the Myth of 'Hard to Reach': Considerations for Engaging LGBTQIA+ Communities." These titles illustrate the broad spectrum of subjects addressed. If interested, please visit the JEDI Corner website<sup>5</sup> where you can access all their articles for free.

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<sup>1</sup> <https://twitter.com/DataSciJedi>

<sup>2</sup> <https://twitter.com/AmstatComis>

<sup>3</sup> <https://twitter.com/WomenInStat>

<sup>4</sup> <https://twitter.com/cwstat>

<sup>5</sup> <https://magazine.amstat.org/blog/category/jedi-corner>



Figure 1. JEDI Corner from the Amstat News Website

Beyond the JEDI Corner feature, certain issues of Amstat News are dedicated to DEI-related themes. For instance, in recognition of Black History Month in February, Amstat News publishes a special issue celebrating the contributions of Black and African American professionals in statistics and data science. Similarly, in honor of Women's History Month in March, the magazine issues a special edition acknowledging the contributions of women in the field. (Please refer to Figure 2 for the recent February and March covers of Amstat News.)

Other issues of Amstat News also place a special emphasis on DEI-related topics. For instance, the main article in the September 2022 issue explores the use of data literacy as a tool for social justice. Another article in the same issue delves into equity and bias within algorithms. The November 2022 issue features a main article highlighting DEI efforts at the Department of Biostatistics at the University of Iowa, the Department of Biostatistics at New York University, and the School of Public Health at Indiana University. This article covers various DEI activities undertaken by these institutions, including the challenges and successes each program encountered during the implementation of these initiatives.



Figure 2. Amstat News Covers (a) February 2024: Celebrating Black History Month. (b) March 2024: Celebrating Women's History Month.

While Amstat News is the official membership magazine of the American Statistical Association (ASA), access is not restricted to ASA members. The Amstat News PDF Archive<sup>6</sup> is open to everyone, providing free access to monthly issues from 2010 to the present. (Please refer to Figure 3 for the archive of issues from 2022 and 2023.) Those interested are encouraged to explore Amstat News by visiting their website. The magazine offers a window into the ASA's ongoing DEI efforts and those at various educational institutions. In almost every issue published in recent years, you will find at least one article dedicated to DEI topics.



Figure 3. Amstat News PDF Archive (a) 2022 Issues. (b) 2023 Issues.

<sup>6</sup> <https://magazine.amstat.org/archives>

### 3. DEI at Cal Poly

California Polytechnic State University San Luis Obispo (Cal Poly) is made up of six colleges, one of which is the College of Science and Mathematics. This college comprises seven departments, along with the School of Education. I am a faculty member in the College's Statistics Department. Each department in the College has its own DEI committee. In 2020, the DEI committee of the Statistics Department was launched, and I served as the committee chair from 2020 to 2022. Below I describe some of our committee's activities.

As committee chair, one of the first tasks that I was charged with was to recruit members for the committee and my goal was to make the group diverse. After all, it would be ridiculous to create a committee to address issues on diversity when the committee itself is not diverse. To create diversity, first I ensured that we had a mixture of faculty ranks. Among the 11 committee members, we had three Professors, two Associate Professors, three Assistant Professors, and three lecturers. Next, I focused on gender balance, ultimately resulting in a committee of five men and six women. Additionally, the committee included a diverse range of ethnicities, sexual orientations, marital statuses, and ages. This diversity helped ensure that voices from different backgrounds could be heard as our committee planned for and engaged in activities.

A key activity of our committee was establishing the *Statistics Department Statement on Diversity, Equity, and Inclusion*. While Cal Poly had already created a university-wide DEI statement, and the College of Science and Mathematics had its own college-wide statement, we recognized the importance of having a department-specific DEI statement for the benefit of our faculty, staff,

and students. We started drafting the statement in the Spring 2021 quarter, completing it in the Fall 2021 quarter; it is available on the department's main website<sup>7</sup>, and a screenshot of it is shown in Figure 4.

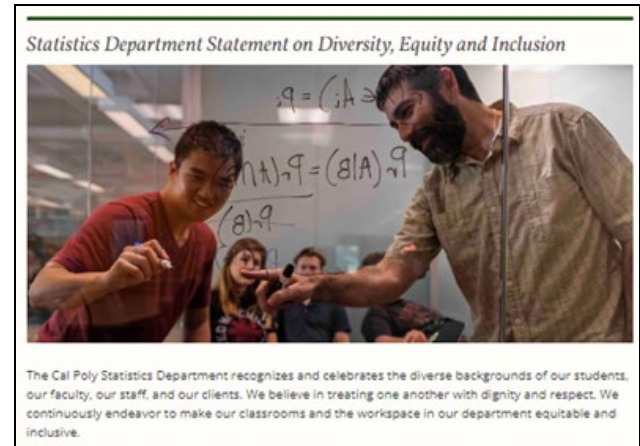


Figure 4. Department Statement on Diversity, Equity, and Inclusion from Cal Poly Statistics Department Website.

The department statement on DEI is shown below:

*"The Cal Poly Statistics Department recognizes and celebrates the diverse backgrounds of our students, our faculty, our staff, and our clients. We believe in treating one another with dignity and respect. We continuously endeavor to make our classrooms and the workspace in our department equitable and inclusive.*

*Statistics is the study of variation. As statisticians and data scientists, we investigate diverse aspects of human (and other) populations. These investigations are embedded in social and cultural contexts, which invoke aspects of each researcher's identity. We cannot have constructive discussions about statistical investigations unless we acknowledge and embrace that everyone approaches them with a different perspective, each informed by different*

<sup>7</sup> <https://bit.ly/DEI-CALPOLY>

*aspects of our identity and our lived experiences. These diverse perspectives facilitate a richer understanding of how statistics can be used in the progression of science.*

*As a department, we stand united in support of the Cal Poly values of love, empathy, and respect. We are committed to actively supporting one another. We also stand emphatically against all actions disparaging any group or demographic of individuals. And through all these actions we believe we can help make our department, our college, and our university a better place to be.”*

In our statement, the first and third paragraphs provide general insights into DEI, while the second paragraph specifically connects DEI to our statistics discipline. As a summary, we state that statistics is the study of variation and as statisticians and data scientists we explore diverse aspects of populations. The paragraph goes on to state that it is through these diverse perspectives that we gain a better understanding of how statistics can be applied to advance and progress science.

With the completion of this statement, we feel that we have clearly defined the values we hold most dear as a department in regard to DEI principles. And we have made this statement easily accessible as it is the first image users see when visiting our website.

Another significant activity related to DEI that our department has undertaken is the establishment of open forum meetings involving various segments of our faculty. As mentioned in our DEI statement, we believe inclusivity and equity are important not only in the classroom but also in the workplace. To help promote inclusivity among the faculty, our committee created outreach opportunities targeted at specific faculty groups.

We started with our most recently hired professors, namely the Assistant Professors. In

the past, some Assistant Professors expressed reluctance to voice their opinions and concerns to senior faculty members. This hesitancy could stem from a fear of judgment or retribution, a desire to avoid causing trouble, or a perceived expectation to remain silent. This issue is likely a common challenge for Assistant Professors at many other universities. To address this, the committee felt it would be helpful to establish an open forum for the Assistant Professors, allowing them to freely express their concerns without fear of judgment or retribution.

As the committee chair, I, along with the Department Chair, met with the Assistant Professors. We had a very candid and open meeting which proved to be quite successful. Many Assistant Professors agreed that without this meeting, they probably would not have expressed all of the points they had shared.

Similarly, we organized an open forum meeting for our full-time and part-time lecturers. This is another group of faculty that may have felt hesitant to express their opinions and concerns. Thankfully, this meeting was also very successful.

As a result of these meetings, we addressed many concerns raised by the two groups and we agreed to continue such gatherings in the future. We believe these meetings have helped foster a stronger sense of community and inclusivity within the department.

I have described some of the actions our committee has engaged in during its first two years of existence. For a complete list of committee activities during the 2020-2022 period, please visit <https://bit.ly/DEI-COMM>.

#### **4. DEI at Other Universities**

I also reached out to faculty members in math, statistics, biostatistics, and data science departments at various US universities and inquired about their ongoing efforts in DEI. In

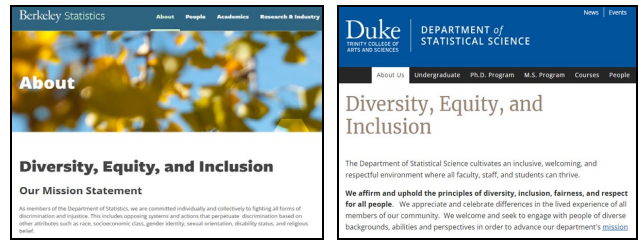
total, I received feedback from 18 institutions. I would like to share some of the information they provided.

The first point to note is that most of the departments contacted have already established their own DEI committees. The remaining departments were in the process of forming such committees.

The initial step taken by most of these committees was to create a department DEI statement. Math and statistics programs that have DEI statements include the following:

- Appalachian State Univ. Dept. of Math Sciences
- Arizona State Univ. School of Math and Statistical Sciences
- UC Berkeley Statistics Dept.
- Cal Poly San Luis Obispo Statistics Dept.
- Columbia University Statistics Dept.
- Duke University Statistics Dept.
- Iowa State University Statistics Dept.
- NC State Univ. Statistics Dept.
- Villanova University Math & Statistics Dept.
- Univ. of Washington Statistics Dept.

Refer to Figure 5a and 5b for website screenshots of the Statistics Department DEI Statements at UC Berkeley and Duke University, respectively. To access the DEI statements from the ten programs listed above, please visit <https://bit.ly/DEI-DEPT>. By comparing the statements, you will find that each is a unique reflection of what DEI means to the respective programs, but you will also find commonality in their commitment to fostering an inclusive and equitable environment.



(a) UC Berkeley Statistics Department DEI Statement.  
 (b) Duke University Statistics Department DEI Statement.

Some departments have conducted what is known as a Climate Survey, which is a very effective DEI-related activity. In this survey, respondents are asked to assess their perceptions and experiences within the department regarding DEI. In some departments, the survey is restricted to faculty and staff members, while others also include students as participants. Due to the sensitive nature of the survey questions, responses are invariably kept anonymous. The following is based on Climate Survey questions used by the Statistics Department at Iowa State University:

- “How would you rate the department climate in terms of being inclusive and welcoming?”
- “Does the department create a diverse and inclusive workspace?”
- “Have you experienced harassment or offensive conduct from someone within the department? (for example, power harassment)”
- “Have you experienced any treatment that is not fair or equitable within the department? (for example, gender bias)”
- “In what ways can the department improve diversity?”
- “In what ways can the department improve equity?”
- “In what ways can the department improve inclusivity?”

Using questions such as those shown above, the Climate Survey can be a very illuminating tool. Survey responses can reveal the genuine sentiments of individuals regarding the conditions within the department and can also help in identifying problem areas that may have previously gone unnoticed.

Various programs around the US have created helpful online resources for people to learn more about DEI as it related to education. For example, the Statistics Department at North Carolina State University has produced an informative DEI-related website titled “DEI Teaching Resources<sup>8</sup>.” The site is intended for their department faculty; however it could be helpful for anyone wanting to learn more about DEI for teaching. The following three main questions are addressed on the site:

- What is Inclusive Teaching?
- What is an Inclusive Classroom?
- What are Inclusive Datasets?

The webpage provides insights into each of these questions, along with suggested reading references for further study. See Figure 6 for a screenshot of the website. This resource could be especially useful for educators who are not very familiar with DEI.



Figure 6. DEI Teaching Resources Website from NC State University.

<sup>8</sup> <https://bit.ly/DEI-NCSSU>

Finally, here is a summary of some other DEI-related activities from various US universities:

**DEI Reading Group:** In some departments, faculty members meet regularly during the academic term to discuss DEI-related books, articles, and papers. The purpose is to stay better informed about DEI issues in education. Popular resources for DEI-related articles include The Chronicle of Higher Education ([www.chronicle.com](http://www.chronicle.com)) and Amstat News (for example, JEDI Corner).

**Afternoon Tea Social Event:** In some departments, faculty, staff, and students frequently engage in such a social event, enjoying coffee, tea, and pastries. Students often appreciate this unique opportunity to mingle with faculty in an informal setting. The event is low-cost and offers a simple way to help promote community and inclusivity.

**Foreign Language Listing:** Some departments feature a list of foreign languages spoken by the faculty on their faculty directory websites. This listing can help spark conversations with people whose native language is not English (for example, foreign exchange students). Examples of such directories can be found at the Appalachian State University Math Department<sup>9</sup> and at the Cal Poly Statistics Department<sup>10</sup>.

## 5. Conclusion

Over the past several years, I have had the opportunity to work with multiple educators at universities and high schools in Japan. Given the growing popularity of DEI in education, many of these educators have shown a strong interest in

<sup>9</sup> <https://mathsci.appstate.edu/people>

<sup>10</sup> <https://statistics.calpoly.edu/content/directory>

learning how they can successfully adopt DEI principles at their institutions. Implementing DEI principles is a challenging task, and the best course of action can often depend on the unique environment of each institution. Despite these challenges, here are some strategies that educators might consider to help advance DEI at their institutions in Japan:

- **Form a DEI Committee:** Make efforts to create a diverse committee. Consider including a variety of perspectives based on ethnicity, gender, age, marital status, sexual orientation, and faculty rank.
- **Create a Department DEI Statement:** Start the process of creating a DEI statement by identifying which aspects of DEI are most relevant to your department. Review the ten department DEI statements discussed earlier as examples to guide the development of your statement.
- **Conduct a Department Climate Survey:** Develop survey questions that address the DEI issues of greatest concern to your department. Ensure anonymity for respondents. Decide on the participants for the survey, such as students, faculty, and staff. Use the sample climate survey questions previously discussed as a guide and template.
- **Create Open Forum Meetings:** Organize open forum meetings, particularly with groups that might be hesitant to express their opinions and concerns, such as Assistant Professors or part-time and full-time Lecturers. These meetings can be valuable for open dialogue and addressing DEI-related issues.
- **Create Social Events with Faculty and Students:** Following the example of the “Afternoon Tea Social Event” mentioned earlier, consider organizing informal

activities with faculty members and students. These events can be an effective way to foster inclusivity and create a welcoming environment.

Finally, I want to offer a note of encouragement. Starting out in DEI efforts can be an overwhelming experience as there are so many ideas to consider. Even after launching successful DEI initiatives, desired change may not appear for a long time. To emphasize the importance of patience and long-term commitment, one of the DEI experts I work with at Cal Poly shared this advice: “DEI is not a sprint, it is a marathon.” These words serve as a reminder that DEI initiatives may take considerable time to effect change. As you launch your own DEI efforts, I hope you too can remain steadfast and patient in your endeavors. Hopefully, your actions will build momentum and lead to meaningful, lasting change.

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