

On April 28, 2021, Dr. Kofi Akinjide, the principal investigator, and Adela Naranjo-Bernabe, Cand. Ed.d., conducted two student equity focus groups to assess the extent to which students from racially minoritized communities are thriving academically, intrapersonally, and interpersonally in MATH 4, MATH 10, MATH 12, MATH 18, BUS 9, and/or PSYCH 2A during the fall 2020 semester at Cabrillo College. One group included students who identify racially as Latinx/a/o American and the second group included students who identify racially as Asian American. This report documents findings gathered from eight (8) students and lends insights into a variety of aspects of students' experiences with taking a transfer-level mathematics course at Cabrillo College. The limitations of this study include: (1) limited student participation and (2) focus groups were conducted in the context of a web-based learning environment due to the ongoing COVID-19 pandemic, which is a major deviation from the traditional method of face-to-face learning that the majority of students utilize.

The key findings are organized into six categories: (1) sense of belonging at Cabrillo College, (2) academic thriving – engaged learning, (3) academic thriving – academic determination, (4) intrapersonal thriving – positive perspective, (5) interpersonal thriving – social connectedness, and (6) interpersonal thriving – diverse citizenship.

Key Findings:

- **Sense of Belonging at Cabrillo College:**

- When asked what is it like to take math at Cabrillo College as an Asian or Latinx/a/o American student, most participants who responded to this question **expressed a positive experience with faculty and tutoring**. Participant 2, a student who identified as Latinx/a/o American, shared:

I felt really supported . . . as long as I was always talking to my professor, asking questions and going to office hours. And there were always opportunities to get tutoring.

Additionally, Participant 8, a student who identified as Latinx/a/o American, stated:

My teacher was very organized. . . . She was very structured and also uploaded her notes along with her Zoom conference. Another thing she did was gave us funny jokes while she was doing lessons, which made it more lively and concepts were easier to grasp.

- When asked to what extent did you feel welcome in your particular math class as an Asian or Latinx/a/o American student, all participants who responded to this question **expressed that they felt welcomed**. Participant 3, a student who identified as Latinx/a/o American, noted:

*One of the things that I liked . . . about the campus platform is being able to pronounce your name for your instructors. . . . I grew up with teachers never being able to say my name and have gone by my nickname. . . . **It felt important to me to be able to record my name so that the instructor would be able to pronounce it.***

- When asked to describe their interactions with math faculty at Cabrillo College as an Asian or Latinx/a/o American student, all participants who responded to this question **expressed positive experiences with math faculty**. Participant 5, a student who identified as Latinx/a/o American, shared:

*I feel like when we were in person, I wouldn't really go to office hours as much . . . because . . . [it] wasn't worth going to Cabrillo for a few minutes just for a simple question. . . . **I feel like with Zoom office hours, since I'm home, I can basically go any time. . . . And being that it was Zoom, I was more likely to go and ask questions.***

- When asked who are some key people in the math department that conveyed messages of encouragement and support (e.g., "You belong here." "You can do it." "You have what it takes to be successful."), two instructors were mentioned: **Helene Payne and a PSYCH 2A instructor** who was not named. Participant 2, a student who identified as Latinx/a/o American, shared:

*I've only taken one math course and her name is Helene Payne . . . she was just great, absolutely great. Every time I'd go to office hours, she'd be super helpful and **she'd be very encouraging to me.** I'm just a communications major, but she'd be like: "You should consider doing STEM, you're great at math. You have the potential to do good. You should even try out this club that Cabrillo has for women in STEM." I've doubted myself in math multiple times and having that, I was like, "Wait, there's so many things I can look into." And it was just because she was telling me, "You're doing great and I think you have potential to do awesome things."*

Furthermore, Participant 2 stated:

I've considered . . . [going into STEM]. I think specifically, I was thinking maybe following through with communication [studies], but maybe doing my graduate degree in something [STEM related]. . . . I've definitely opened my eyes up to all the possibilities, maybe even being a teacher in math.

- When asked how important is being Asian or Latinx/a/o American to you, **all participants who responded to this question, except for one student, indicated that it was very important**. Participant 3, a student who identified as Latinx/a/o American, poignantly noted:

*It's important to me, but it's also confusing. Our family will identify themselves more as Chicano, but also recognizing that most of my ancestry and background is Native American. There had to be such a denial of that and my parents didn't teach us Spanish because they grew up getting in trouble for it, so it's just this weird thing of being really proud of something that you don't know a ton about or have a connection to because **they thought that they were serving us: to help us assimilate or just get along.***

Participant 5, who indicated that it was not that important, poignantly noted:

*For me, it's not as important. **I've always tried to hide the fact that I'm Latina** and a lot of it has to do with when I started school. My parents would tell me, if I can't translate a paper, then why am I going to school and that they were going to pull me out. So there's just a lot of trauma with it.*

- **Academic Thriving – Engaged Learning:**

- When asked in what ways did the course material in your math class connect to what's important in your life, there were two themes that emerged: a professional connection and no connection. One participant stated:

At a nonprofit, we're working with foster youth or families affected by domestic violence. We're looking at research or studies or surveys, and then trying to see where the need is so that you can help them go to a funder and say, "We need money because these are the numbers, here's the math that's showing it." So it was helpful in terms of how to extract those numbers to tell the story, to get the money.

Participant 2, a student who identified as Latinx/a/o American, shared:

*My math class was . . . MATH 12, which is general statistics and it was hard. . . . We didn't focus too much on what was important to me or my major, which . . . doesn't require math in general. But **a few times there were questions about COVID and that was interesting because the statistics and connecting it to our current reality, that was pretty good.***

Participant 5, a student who identified as Latinx/a/o American and indicated that there were no connections, noted:

*I really haven't had that connection with math connecting to my life directly. **Mainly, I use these math skills when in the field of biology, but so far, I haven't been able to connect that yet.***

- When asked to describe their experience with having Asian or Latinx/a/o American people reflected in the course material, **the majority of participants who responded to this question indicated that there was no representation.** Participant 8, who identified as Latinx/a/o American, stated:

*A lot of the material was on number-based calculator work, so **there wasn't really any representation of a certain ethnicity in the material, but I guess it would be hard to.** So it's not like it's a bad thing, but it's just because it's a lot of numbers.*

- **Academic Thriving – Academic Determination:**

- When asked how motivated were you to succeed in your math class, all participants who responded to this question indicated that they were very motivated. Participant 8 shared:

*I was . . . very motivated to pursue an A. I've always really wanted to receive straight A's . . . but I think even then, **I was just so interested in the material that it wasn't that hard for me to stay motivated.***

- When asked to describe their experience in their math class with receiving information about academic support services, **all participants who responded to this question expressed a positive experience.** Participant 8 stated:

*One of my teachers . . . Joe Krause . . . was very involved in math plus and he would constantly tell people about it. I didn't take advantage of that program or I forgot what it was, but I'm sure it's a supportive service. **Also, I think Cabrillo auto-enrolls us in something. I don't know what it is, but it's a module on Canvas and it links you to a bunch of support services, not only for math, but even tech stuff and that's pretty helpful.***

Additionally, Participant 7, who identified as Latinx/a/o American, shared:

*Professor Reynolds made sure to let us know what learning support resources there were. **There were many times he emailed us.** He made sure things were always there.*

- **Intrapersonal Thriving – Positive Perspective:**

- When asked how would you describe your attitude toward yourself and the learning process when it comes to math, there were three theme that emerged: a growth mindset, I'm hard on myself, and it was transactional. Participant 4, a student who identified as Asian American, shared:

*My attitude toward math is that it has to be done, but I do not enjoy it. So, it's something that I've always kind of struggled with, but I know definitely as an Asian . . . **I've had that weird prejudice come at me, where people have said, "You're Asian, why aren't you good at this?" Or, "You're Asian. That's why you did so well on the exam."** So that has come up a couple of times, but that unfortunately has never made me feel like I'm going to be really good at it because I'm Asian.*

- When asked in what ways did your experience in your math class increase or decrease your attitude toward yourself and the learning process when it comes to math, there were two major themes that emerged: it increased my attitude and a focus on learning. Participant 4 noted:

*I think it increased my attitude about myself in a positive way because I was so worried about doing the math class. And then **once I was able to not only pass the class, but pass it with a B, that really helped my self-esteem, in terms of math.***

- **Interpersonal Thriving – Social Connectedness:**

- When asked to describe their experience with forming and maintaining healthy relationships with other students in their math class who had a different racial identity than theirs, **the majority of participants who responded to this question expressed a positive experience.** Participant 7, a student who identified as Latinx/a/o American, shared:

*It felt very easy to form healthy relationships with people in my class including those of other races **through the discussions and things like that.** It was a bit more difficult to maintain those relationships.*

Additionally, Participant 4, who identified as Asian American, stated:

*I never really found it difficult, or I never had any issues with integrating myself with different groups when I was doing math classes. People were always pretty welcoming. And mostly **we were all bonded together over a mutual discomfort at learning math.***

- When asked how important it is for you to have healthy relationships with other students and why, Participant 8, who identified as Latinx/a/o, noted:

*To me it's somewhat important, but it's not like the end of the world for me. I know that there's always other resources I can go to, especially at Cabrillo, but I think the importance of that has gone up for me because I use to not seek those relationships with other students as much and whenever they do pop up, I think, "Oh, I'm glad I made this decision to start talking to the person sitting next to me or forming study groups." **I get the assurance that I'm not the only one struggling or we're all in this together type thing.** And it's definitely a lot more important for me now to create these relationships with fellow students.*

- **Interpersonal Thriving – Diverse Citizenship:**

- When asked to describe their experience with receiving affirmation from other students in their math class in relation to being an Asian or Latinx/a/o person, **all participants who responded to this question indicated that they did not receive affirmation from other students.** Participant 8 shared:

Because we never had discussions or anything in my math class . . . nobody knew who anybody was.

- When asked to what extent do you feel like being an Asian or Latinx/a/o American person was valued in your math class, one student, who identified as Latinx/a/o American, responded by stating:

It really wasn't discussed, but I didn't feel unvalued.

Recommendations

Based on the findings reported herein, the following recommendations are being provided so that students from racially minoritized communities can thrive academically, intrapersonally, and interpersonally in transfer-level mathematics courses at Cabrillo College:

1. Provide Professional Learning Opportunities That Are Focused on Building Institutional Capacity to Practice Culturally Relevant Teaching within Mathematics
2. Provide Funding for at Least Three Mathematics Instructors to Become Resident Experts in Liberatory Mathematics or Hire a Full-Time Tenure-Track Mathematics Instructor Who Has an Expertise in Liberatory Mathematics
3. Partner with the Cabrillo College Federation of Teachers and Human Resources to Negotiate a Requirement for All Instructors to Complete a Minimum of Six Hours of Professional Learning per Academic Year in the Area of Student Equity and Success
4. Partner with the Cabrillo College Federation of Teachers and Human Resources to Negotiate Nonmonetary Incentives (e.g., Extended Holiday Benefits, Increased Health Insurance and/or Retirement Benefits, Release Time during the Following Academic Year, etc.) for Completing Professional Learning Opportunities in the Area of Student Equity and Success
5. Partner with the Cabrillo College Federation of Teachers and Human Resources to Negotiate the Inclusion of Student Equity and Success as a Performance Measure on Performance Evaluations
6. Provide Ongoing Office Hours via Zoom

References

- Bensimon, E. M., & Malcom, L. (2012). *Confronting equity issues on campus: Implementing the equity scorecard in theory and practice*. Sterling, VA: Stylus.
- Delgado, R., & Stefanic, J. (2017). *Critical race theory: An introduction*. New York: New York University Press.
- De Meuse, K. P., Hostager, T. J., & O'Neill, K. S. (2007). A longitudinal evaluation of senior managers' perceptions and attitudes of a workplace diversity training program. *Human Resource Planning*, 30(2), 38-46.
- Garcia, G. A. (2019). *Becoming Hispanic-serving institutions: Opportunities for colleges and universities*. Baltimore, MD: Johns Hopkins University Press.
- Klein, S. G. (2015). Using performance-based funding to incentivize change. *RTI International*. Retrieved from <https://files.eric.ed.gov/fulltext/ED556038.pdf>
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., & Associates. (2005). *Student success in college: Creating conditions that matter*. San Francisco, CA: Jossey-Bass.
- Ladson-Billings, G. (1995). But that's just good teaching: The case for culturally relevant pedagogy. *Theory Into Practice*, 34, 159-165. doi:10.1080/00405849509 543675
- Love, B. L. (2019). *We want to do more that survive: Abolitionist teaching and the pursuit of educational freedom*. Boston, MA: Beacon Press.
- Schreiner, L. A., Louis, M. C., & Nelson, D. D. (Eds.). (2012). *Thriving in transitions: A research-based approach to college student success*. Columbia, SC: University of South Carolina, National Resource Center for The First-Year Experience and Students in Transition.

- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Tomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7, 221-258. doi:10.1007/s10833-006-0001-8
- Taylor, E., Gillborn, D., & Ladson-Billings, G. (2016). *Foundations of critical race theory in education* (2nd ed.). New York, NY: Taylor & Francis.
- Wong, K. (2017). Diversity work in contentious times: The role of the chief diversity officer. *Liberal Education*, 103(3), 34-37. Retrieved from [https://www.aacu.org/liberaleducation/2017/summer-fall/wong\(lau\)](https://www.aacu.org/liberaleducation/2017/summer-fall/wong(lau))

Protocol for Student Equity Focus Groups

April 28, 2021

Research Question: Are students from racially minoritized communities thriving academically, intrapersonally, and interpersonally in MATH 4, MATH 10, MATH 12, MATH 18, BUS 9, and/or PSYCH 2A at Cabrillo College?

Theme (i.e., Major Area & Scale)	Focus Group Questions
Sense of Belonging at Cabrillo College	<ol style="list-style-type: none">1. What is it like to take math at Cabrillo College as a/an [salient identity] student?2. To what extent did you feel welcome in your particular math class as a/an [salient identity] student?3. Describe your interactions with math faculty at Cabrillo College as a/an [salient identity] student?4. Who are some key people in the math department that conveyed messages of encouragement and support (e.g., "You belong here." "You can do it." "You have what it takes to be successful.")?5. How important is being [salient identity] to you?
Academic Thriving - Engaged Learning	<ol style="list-style-type: none">1. In what ways did the course material in your math class connect to what's important to you in life?2. Describe your experience with having [salient identity] people reflected in the course material.
Academic Thriving - Academic Determination	<ol style="list-style-type: none">1. How motivated were you to succeed in your math class?2. Describe your experience in your math class with receiving information about academic support services.
Intrapersonal Thriving - Positive Perspective	<ol style="list-style-type: none">1. How would you describe your attitude toward yourself and the learning process when it comes to math?2. In what ways did your experience in your math class increase or decrease your attitude toward yourself and the learning process when it comes to math?

Interpersonal Thriving - Social Connectedness	<ol style="list-style-type: none"> 1. Describe your experience with forming and maintaining healthy relationships with other students in your math class who had a different racial identity than you. 2. How important is it for you to have healthy relationships with other students? Why?
Interpersonal Thriving - Diverse Citizenship	<ol style="list-style-type: none"> 1. Describe your experience with receiving affirmation from other students in your math class in relation to being a/an [salient identity] person. 2. To what extent do you feel like being a/an [salient identity] person was valued in your math class?
Closing Question(s)	<ol style="list-style-type: none"> 1. Is there anything else that you would like to share about your experience taking math at Cabrillo College?