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How BSU STEM Faculty Can Learn from Identity-Based Programs to Help Minority Students Feel a Sense of Belonging

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Abstract

This study has revealed that, although minority students have a sense of belonging in identity-based organizations, they do not feel the same in the classroom environment or with STEM faculty. Identity-based resources in universities can be a great way to represent and support minority students [1]. However, resources should also follow through to classroom environment. Faculty should be aware of the racial inequity between minority students and nonminority students. As important members of society, faculty have the responsibility to inspire and drive generations to succeed. Faculty should strive to close this racial inequity in the classroom and through their teaching style. This study focused on understanding if and how minority students in STEM "feel a sense belonging" at Boise State University [2]. We conducted 14 individual interviews with minority students who are a part of the Louis Stokes Alliance for Minority Participation (LSAMP) program. Together, we analyzed and discussed the interviews through the use of a collaborative empathy map. We found that minority students felt a sense of belonging, had family-like relationships, and were comfortable in their own skin when at identity-based organizations. Although, when it came to faculty and classroom environments students did not feel the same. We found that minority students didn't build meaningful relationships with faculty, faculty does not reach out to students, and classroom environments often alienate them. We recommend that (1) BSU faculty gain understanding of how differently minority students' experiences and feelings are towards classroom vs. identity-based programs, (2) BSU faculty should learn from the identity-based programs and implement successful components in the classroom (3) BSU faculty should create a safe space in the classroom that allows for students to comfortably talk and participate in discussion.

References

[1] E. Knaphus-Soran, D. Hiramori, and E. Litzler, "Anti-racist institutional transformation matters: how can community cultural wealth and counterspace processes illuminate areas for change?," in American Society for Engineering Education Annual Conference and Exposition, Online, 2021.

[2] T. L. Strayhorn, *College students' sense of belonging: A key to educational success for all students*. New York, NY: Routledge, 2012.

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BACKGROUND

Boise State University (BSU) has many identity-based resources available for their minority students whenever needed. These resources range from safe spaces like the Student Diversity Center, and programs such as LSAMP. However, there is a blind spot in these resources for minority students at BSU. This study has revealed that although minority students have a sense of belonging in identity-based organizations, they do not feel the same towards the classroom environment or STEM faculty. It is crucial that BSU learns through these students' stories and identity-based programs. BSU faculty can help minority students feel a sense of belonging in classrooms and not just on campus.

RESEARCH QUESTION

How can BSU STEM faculty implement successful components of identity-based programs into the classroom in order to help minority students feel a sense of belonging?

METHODS

I.   Developed proposal for IRB approval
II. Developed interview questions and protocol
III. Participants were recruited through LSAMP's student population using criterion sampling
IV. Conducted one-on-one interviews that were ranged from 30 to 60 minutes
V.   Interviews were analyzed collaboratively through empathy mapping

THEMES

Identity-based faculty stepping out of professional role and doing more

"My family was going through a lot of financial and health problems. I had some relatives die at the moment. The main coordinator [of CAMP*], helped us through it quite a bit. She helped get my citizenship. So, I'm super thankful for that. So, what I'm saying is that she stepped out of her role of just a teacher." – Joaquín

Joaquín talking about BSU faculty:
"To them [identity-based faculty], it's not just a job. And a lot of times, I know they have a lot of stress on their back, and still step out of their way to help. I love that about the programs. I don't expect my structures professor to do that." – Joaquín

Identity-based programs give a sense of belonging and family-like relationships

"We started meeting new people through OELA*, I got to connect and to communicate about their culture, learn different things. They get to learn different things from me…I started building up confidence and joining all those [identity-based] organizations…I'm making a change somehow [by being a peer mentor]. I'm helping other students. I'm helping organizations, I'm helping other people that are Latin or Hispanic just move forward. I know there isn't a lot of us on campus, but hey, you can be someone." - Jimena

Jimena talking about BSU classroom environment:
"…I don't think other students feel comfortable talking to others that are not similar to their race or ethnicity [talking about being a peer mentor to incoming freshman]…'this is your advisor now; you should go talk to them' but it's more like we're on our own." – Jimena

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"The CAMP* program, I feel welcome there…the LSAMP* staff and office, I feel really welcome there…the Equity Center, I feel really welcome there too…honestly all the staff in CAMP feel like familia [family]…to, the communities that are important to me, are those that are marginalized, those that are minorities." – Juanito

Juanito talking about BSU classroom environment:
"I noticed one time in one of my classes that people try to avoid sitting next to me. People didn't sit next to me because I was the only person of color…sometimes there's only 4 or 5 people in the breakout room [Zoom class session]. I asked a question and I was completely ignored. I was the only student of color within that breakroom." – Juanito

DICTIONARY*
CAMP – College Assistant Migrant Program
OELA – Organización de Estudiantes Latino-Americanos
LSAMP – Louis Stokes Alliance for Minority Participation

REFERENCES
[1] E. Knaphus-Soran, D. Hiramori, and E. Litzler, "Anti-racist institutional transformation matters: how can community cultural wealth and counterspace processes illuminate areas for change?," in American Society for Engineering Education Annual Conference and Exposition, Online, 2021.

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IMPLICATIONS

- Identity-based programs help BSU's minority students feel safe, comfortable, and have a sense of belonging [2]
- Minority students don't express the same feelings towards classroom environment and/or STEM faculty [2]
- Identity-based programs can create family-like relationships with minority students [1]
- BSU cannot rely on only identity-based programs to help their minority students feel like they belong on campus [1]

RECOMMENDATIONS

- Have BSU STEM faculty gain understanding of how differently minority students' experiences and feelings are towards classroom vs. identity-based programs
- BSU STEM faculty should learn from identity-based programs and implement successful components in the classroom
- BSU STEM faculty should create a safe space in the classroom that allows for students to comfortably talk and participate in discussion

minority BSU culture family race diversity disparity ethinicity belong equality inclusive safe home comfortable environment connect

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