2023 Annual Conference & Exposition
Baltimore Convention Center, MD | June 25 - 28, 2023
The Harbor of Engineering Education for 130 Years
ASEE
Paper ID #37859

Listening to Those That Matter: Deans' Responses to the Barriers that Latiné/x/a/o Contingent Faculty at HSI's Face

Dr. R. Jamaal Downey, University of Florida

Dr. Downey has been a postdoctoral research associate in the Department of Engineering Education at the University of Florida since 2021. His current research is focused on determining how engineering students respond to hidden curriculum as well as how Latinx contingent faculty experience workplace inequities in engineering. He received his Ph.D. in Language, Literacy, and Culture in Education from the University of Massachusetts-Amherst. Dr. Downey focuses on critical qualitative inquiry with a discerning eye toward humanizing and culturally sustaining pedagogies.

Dr. Idalis Villanueva Alarcón, University of Florida

Dr. Villanueva Alarcon is an Associate Professor in the Engineering Education Department at the University of Florida. Her multiple roles as an engineer, engineering educator, engineering educational researcher, and professional development mentor for underrepres

Jose A. Munoz
Lisa Berdie

"We need to do better to support these folks": Deans' responses to the barriers and assets of Latiné/x/a/o contingent faculty in STEM

By:
Dr. R. Jamaal Downey, Dr. Idalis Villanueva Alarcón, Dr. Jośe Muñoz, and Lisa Berdie

Introduction

The authors of this paper hosted a 2-day conference that brought a group of Latiné/x/a/o contingent faculty from the California State University (CSU) system together to better understand the barriers they face in their professional roles and responsibilities while also identifying assets they bring to the classroom and institutions. Contingent faculty face mounting and compounding barriers that have devastating effects, not only on the faculty, but also the students they serve since a majority of contingent faculty are hired to teach first-generation, working class, and students of color [1]. This paper seeks to synthesize a follow-up to the conference in where five STEM deans within CSU system were recruited to do a reading and reflection about the findings connected to the 2-day conference for the contingent faculty. From the dean's responses, the authors paint a picture on the challenges that also impact deans from making changes for contingent faculty.

Literature Review

The focus of this paper are deans and their reflective responses to the data collected from the contingent faculty participants who participated in the 2-day conference [2]. We will discuss the roles and responsibilities of deans before discussing and contextualizing contingent faculty and their perilous positions. Deans are faced with the tall task of managing both up to their bosses which are often vice/provosts or higher, and managing down to faculty, both tenured and non-tenured [3]. Deans also must manage fiscal responsibilities. It should come as no surprise that deans hold the highest turnover rates for higher administration at 22% [4] with an average term of service lasting a mere 4.5 years [5]. Deans are asked to be highly proficient as administrators, producers of publications in their given fields, but also able to collaborate with P-12 and their academic colleagues [6]. Deans not only need to be skilled at making decisions in real time, they also "need a strong sense of professional identity to self-evaluate how decisions impact their faculty, student, administrative colleagues, and staff because they affect the quality of life of their institutions" [p. 2, 7]

Deans are required to be strategic thinkers in ways to mobilize powerholders, which will help their institutions thrive in the present and in the future [8]. Each decision they make is simultaneously oscillating between the needs of the here and now, along with others to come. Deans need the ability to move "a wide range of highly complex puzzle pieces around with the foreknowledge that the implications could resonate for years or even decades" [p. 17, 5].

In part due to the several requirements and responsibilities of deans, one might understand why the role of deans has the highest turnover rate in academia. These professionals are tasked with an almost insurmountable position, but one that is vital to the needs of all academic parties on campus: administration, faculty, and ultimately, students. Knowing how to navigate these roles can be difficult at best. There have been many highly accomplished scholars in the role of dean that "have been pushed out of their positions, not realizing that there must have been a disconnect between what they believed about themselves and their role and what their constituencies wanted and expected" while not also being fully aware of "the consequences

of their actions on others and having time to reflect on ways their values and goals were affecting their work environments" [p. 3, 7]. Understanding the vice-like position that deans are in—being squeezed from above and below—situates us with knowing what deans can and can't do. As you'll see in the data, contingent faculty oftentimes didn't understand what issues deans could and could not solve. The tension between what deans see as viable options for change, and what contingent faculty request, is palpable.

With respect to contingent faculty, previous research has defined contingent faculty as "non-tenure-track positions that are contract-term bound or temporary" [p. 76, 9]. Contingent faculty face some barriers that their tenure-track colleagues don't: job insecurity, lapses in health care and benefits if even provided, low course pay not commensurate to their worth or labor output, a sense of not fitting in the department and institution on a whole based on the lack of support, and under-resourced working conditions [9]-[15].

The National Center of Educational Statistics [16] determined that in United States higher education, there are over 1.5 million faculty. Of that number, 46% are part-time or contingent faculty [17]. People of color and underrepresented ethnic groups make up only 10.4% of all faculty appointments. Seventy-three percent of these 10.4% are contingent positions [18]. Overall, 69.5% of teaching positions in higher education in the U.S. are contingent roles [14]. More specific to STEM and engineering, 8.9% of full-time teaching faculty in United States engineering programs at 4-year colleges are contingent faculty [19]. Given these statistics, the findings from both parts of the project have implications that far surpass Latiné/x/a/o contingent faculty and can serve as a framework to address minority lecturers, part-time, and other non-tenure track faculty in STEM higher education.

Related to student learning and the practice of pedagogy, contingent faculty also face what might seem to be overwhelming challenges. Contingent faculty are less likely to interact with students in innovative pedagogical ways [20], [21]. The ways in which these lesser innovative teaching methods and practices manifest for the students includes but not limited to less interaction with students, less opportunities to engage in collaborative strategies, and less time for classes which could leave contingent faculty unprepared. These factors coupled with a sense of not belonging for contingent faculty places said individuals on the periphery of any kind of connection to both the students and to institutions they teach.

Framework

Overview of the Two-Day Conference

The conference for contingent faculty spanned over a two-day period. Participants were asked to watch presentations from experts in the field of HSIs and then to engage in activities that produced data and artifacts. The activities included google forms that asked for their reflections on the data that was presented, jam-board, gallery walks in which the participants got up and moved around different spaces in the room and wrote their answers to guided prompts on post-it notes, or a small group discussion (see Table 1). All the activities were followed up with a large group discussion as an ancillary goal of the conference was to promote a sense of community and belonging. The building of community and sense of belonging continued as most of the participants stayed in the same hotel. The research team witnessed some of the participants engaging in side discussions in common spaces while others enjoyed their newly found community in the hotel pool. The next morning, there were large tables of participants talking at breakfast in the hotel lobby.

The deans' participation in the conference was lower stakes. The deans, who came from the same institutions as the contingent faculty, received a link to a google form that included an infographic (see figure 1) that included an overview of the findings stemming from the contingent conference, a summary of the de-identified and aggregated contingent participants gathered and coded data, and seven reflexive questions (see table 2). The questions asked the deans to identify the barriers they knew about, those they didn't, what programs are implemented on their own campuses that help contingent faculty, and recommendations for ways to improve the fragile position of contingent faculty. The deans had two weeks to complete these tasks.

Methods

The paper that follows was the second part of a two-part conference. The first conference was a gathering of self-identified Latiné/x/a/o contingent faculty in the STEM discipline at Hispanic Serving Institutions (HSI) and its findings were published [2].

Participants and Data Collection for First Conference

Twenty-two contingent faculty within the CSU system gathered for a two- day in person conference in which structured discussions and group activities allowed the participants to share what they perceived to be strengths and weaknesses with their positionality within the institutions they serve and the students they teach/mentor.

The contingent faculty were identified by the research team by creating a list of department chairs and departments of STEM programs in the CSU system. The deans corresponding to different CSU system campuses were then contacted to ask them to identify potential participants. We then contacted each potential participant directly by finding their information through websites.

The demographics of the contingent faculty participants were as follows: all identified as Latiné/x/a/o, 12 self-identified men, 9 self-identified women, and 1 gender nonbinary individual. There were 15 individuals that identified as first-generation (FG) and most (n=20) participants had a Masters' degree or higher. More than half of the participants (n=12) had five or less years of teaching experience. We did not collect any demographic information for the deans that participated.

The structure of the conference was to invite guest speakers that have done extensive research in the fields of HSIs and contingent faculty to present on their current research to inform the participants, contextualize their experiences, and to serve as a launching point for deeper reflexion of their own relationships with their institutions, students, colleagues, and their personal selves.

Following each guest speaker, there was a structured activity ranging from a space to add anonymous reactions such as google jam-board, to a gallery walk that allowed participants to engage with others. A dialogue in small groups preceded a large group dialogue followed each activity. During the initial stages of the activities, each small group discussion, and the larger all-group discussion, the research team took observational notes that included factors such as who is and isn't engaging, body language, and any comments made that the research team deemed important to capture. The initial analysis from this group of participants derived from these data artifacts.

Table 1: Summary of conference activities

	Description	Group work	Individual work

Activity 1: Current state of Contingent faculty	Have participants identify their realities on campus	Virtual gallery walk with self-selected groups	Short answer Google form to capture reflections
Activity 2: LatinX identity as assets	Participants reflect on ways their marginalized identities are assets to their institutions	A gallery walk with different self-selected group	An individual walk among the gallery walk
Activity 3: Barriers	Identify ways they either feel or they are told that their marginalized identities as contingent faculty are seen as barriers to their institutions and students	Group discussion among self-selected group followed by posting on a Google Jamboard from selected prompts	Short answer Google form that asked participants to expand on the group discussions but as individuals
Activity 4: Critical call to action	Humanize participants by having them envision a world where their positions are barrier-free and their identities are seen as assets	Lively facilitated large group discussion	Long answer Google form where participants are asked to continue to imagine a barrier-free world relating to their employment

The largest barriers that contingent faculty identified were job insecurity, lack of institutional support through the means of financial for equipment or even by not providing adequate office space to meet with students. Participants also found that their compensation was not equal to the amount of labor they shouldered with their added roles. These added roles mostly came in the form of being able to identify with their students as first-generation, Latiné/x/a/o, and native Spanish speakers and manifested in informal mentoring and supporting students outside of the classroom academically and/or social-emotionally. While these additional tasks are often done by faculty, contingent non-tenured faculty do not reap the benefits of these endeavors. For example, contingent faculty do not request letters of support from students for tenure. It would be these qualities that the participants felt were seen as deficits by the administrations and/or institutions. However, the participants felt these identity connections were assets and should be rewarded rather than ignored.

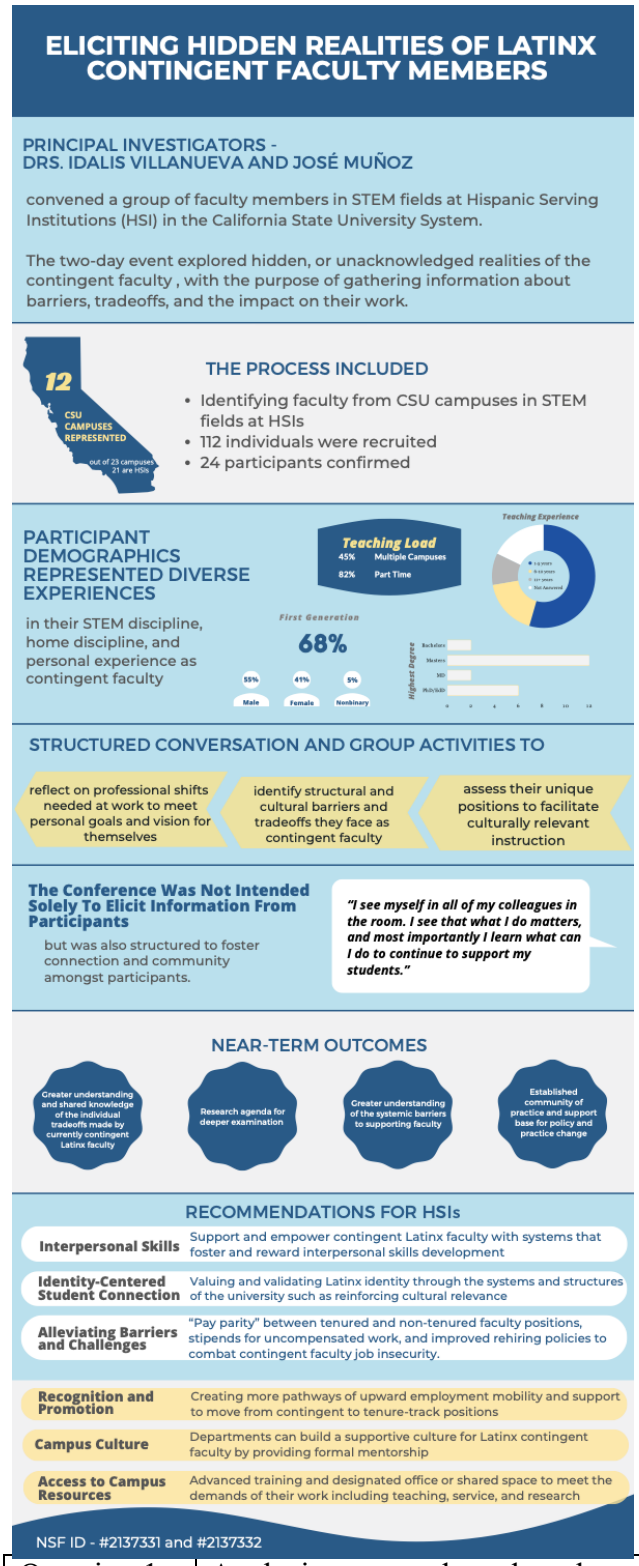
Participants also discussed the campus culture as difficult for contingent faculty as they are regularly left out of decision-making situations, faculty meetings often being held in non-traditional times that benefit full time faculty but are during contingent faculty teaching time, and an overall sense of not belonging on campus by their colleagues. These feelings of an essential caste system on campus were regularly supported by the institution given the participants' lack of control over their employment status and courses they teach. Participants described being offered a semester-by-semester contract just weeks before the semester started without ample time to prepare for the classes that were dictated to them. Lastly, participants spoke of their invisibility on campus by not being recognized and promoted for their dedication to the students.

All of these factors led contingent faculty to not feel as though they belonged on campus and valued by their institutions—while at the same time feeling valued by their students who leaned on them to help guide them through the daunting task of engaging in higher education with several marginalized identities.

The results found from this first conference was synthesized into an infographic (see figure 1) that was to be shared with the deans on the follow-up. To summarize, some of the recommendations posed by the contingent faculty to the deans were:

- Support the interpersonal skills that Latiné/x/a/o contingent faculty bring to campus
- Value and validate Latiné/x/a/o identity through cultural relevance
- Alleviate barriers and challenges by having pay parity between tenured and non-tenured faculty, stipends for uncompensated wok, and improved rehiring policies
- Recognition and Promotion that creates more pathways for upward employment mobility
- Help campus culture and isolated contingent faculty by building a supportive culture of Latiné/x/a/o by providing mentorship to navigate the institutional and cultural landscape.
- More access to campus resources such as office space to meet the demands of their work including (but not limited to) teaching, service, and research.

Participants and Data Collection for Deans following the Conference



The deans that were directly connected to the contingent faculties' home campuses were contacted in order to coordinate communication with the dean of the co-PI of this project— a dean of one of the CSU system campuses. The role that the co-PI's dean had on this was important in that we wanted the recruitment of deans to be endorsed by one dean. Also, by a dean endorsing and communicating with other deans, recruitment for this study was intended to be viewed as personal messages and not just another email in their inbox to address.

A total of eight deans were contacted and agreed to the study. However, only five completed the questionnaire. The data collected from the deans were as follows: deans were asked to do a virtual read of the infographic (Figure 1) and the bullet points of its findings and were asked reflect of the data that was collected for contingent faculty in the first conference. The deans were then provided with seven reflective questions that they were asked to answer (Table 2).

Table 2: Deans' reflective questions

Question 1	Analysis was conducted on the contingent faculty's shared experiences and these were summarized as a policy report. We are including both a summary of the findings as well as an infographic that together paint a landscape for

	existing contingent faculty in STEM in the CSU System. Please take a few minutes to read and take notes of the results.
Question 2	Were you aware of the issues that were summarized in the previous question (summary and infographic)?
Question 3	What issues were you aware of (summary and infographic)? Please elaborate.
Question 4	What issues were surprising to you (summary and infographic)? Please elaborate.
Question 5	In order to diversity faculty, some universities and colleges have developed programs to assist contingent faculty to have opportunities for promotion. a. What programs or strategies do you consider could be incorporated at your college that would support contingent faculty in STEM? b. Please elaborate on what could be potential barriers to implement said programs or strategies. c. How might these steps specifically help Latinx contingent STEM faculty as they perform their teaching duties?
Question 6	In consideration of the barriers you have just stated, what policies and practices can be implemented at your college to support contingent faculty?
Question 7	Do you want to share any additional insights or information about contingent faculty in STEM?

Coding Process for Deans Data

Given that there were only five deans, the coding came in the form of thematic analysis in which the data are searched to identify, analyze, and report repeated patterns [22]. The researchers gathered the data from the anonymous google form, put them in a spreadsheet, and began to identify specific themes by either particular words or by the inferences they made. Since there were only five participants, there was not the opportunity to make larger sweeping inferences about identities, where one works, or who said what due to their life experiences. We also were intentional on keeping this survey anonymous as these deans could be easily identified if specific campus and college information were to be shared.

The findings from the data described below represents three rounds of coding: the first was to identify larger themes based on the participants' answers to all seven questions, a second round that coded their answers based on each question, and the final round was an attempt to take a step back and see what the data was saying in relation to the others in order to establish any group patterns [22]. Larger themes included not being surprised about the current state of contingent faculty, funding and space being larger barriers, discrepancy of value between what deans feel contingent faculty are worth versus the (lack of) manifestation of this value based on needs being met, meritocracy, a list of recommendations, and potential ways to view the differences that contingent faculty bring as assets.

Findings and Discussion

Awareness and Value

Out of the five deans, all stated they were aware that most of the barriers identified by the contingent faculty existed on their own campuses with comments such as "yes, many of these are familiar" and "yes, I am familiar with the variety of issues summarized in the previous section." The deans also identified the mutual issues they see on their campuses that the contingent faculty

participants identified such as job insecurity, timely and length of contracts, pay scale, office space, (lack of) professional development, negative campus culture, resource shortages, and uncompensated service work. The deans also shared concerns that these barriers are so present on their own campuses. One dean said,

> What is most disappointing is that the CSU system relies heavily on part-time instructors, and they provide a significant proportion of the instruction. So, it is frustrating that these are the realities of individuals who meet such critical needs on our campus.

In this comment, the dean is identifying the importance that contingent faculty play within the institutions and how pivotal they are in student development. Yet, their own positions as contingent faculty force them to be in between expectations from higher-ups and those that work under them. This contradictory stance—a space of friction between one's value due to the labor they conduct while also being undervalued as manifested in the lack of job and pay security along with several other barriers mentioned above—is a stance that is not sustainable, nor does it allow the contingent faculty to provide their best to the students they teach and colleagues they're expected to collaborate with. This tone is shared throughout the deans' replies: that contingent faculty are essential to the institution's (and students') success even while their own status as faculty is shaky at best.

The idea of contingent faculty not being able to operate at their best based on the frictional positionality they operate is grounded in Maslow's Hierarchy of Needs [23]. In it, he describes the base layer of needs for someone to function being food, water, shelter, and sleep as the bare necessities. The next level is more pertinent to this study even though the case could be made that some contingent faculty's basic needs are being met (such as potentially scare food and water, and sleep). The second tier of needs labeled safety and security and consists of health, employment, family, and social stability. Contingent faculty are expected to operate as though all of their needs are being met when in reality, most have not made it to the second layer of Maslow's Hierarchy of Needs. Understanding that some of the struggles contingent faculty face are rooted in psychological needs might help understand why they feel stuck betwixt and between [24] their personal value based on the labor they conduct, and what their administrators see as their value based on lack of adequate pay, job insecurity, and not being present for decision-making conversations.

When asked what findings were surprising, in a moment of radical candor, one dean simply answered "none." Other deans were surprised at the lack of office space provided to contingent faculty since they provide offices for all of the contingent faculty at their campus. Another dean was surprised at how many of the contingent faculty participants were first generation college students themselves. This particular dean began to see the marginalized identities of these contingent faculty as an asset by stating "I think this is important issue related to equity that is directly related to some of the same challenges our students face in academia except at a higher level." By identifying that these contingent faculty participants endured some of the same hardships that, as an HSI, the student population faces, this dean is seeing the connections between the contingent faculty and the students they serve. These bonds could draw students in closer and care more since the faculty not only look like them, but also have similar experiences.

Lastly, one dean was surprised to see how many faculty participants taught at multiple campuses and suspected that "this makes it challenging for them to have a manageable workload, have work-life balance, and be able to have a reasonable income." Better understanding the

realities of contingent faculty and the adversities they face might build empathy for their position. Simply put: people want to feel seen.

Meritocracy

When asked about ways their own institutions have helped support contingent faculty on their campus, meritocracy mentality that some of the deans struck was shocking, but not surprising to the authors. Comments such as "It is important for those who have an interest in tenure track positions to discuss with their chairs, and work proactively toward it," or "It is important that contingent faculty be proactive in their professional development, especially [if] their goal is to convert to a tenure track position," and "it is important for them [contingent faculty] to participate in faculty meetings and contribute to the development of curriculum. It will be beneficial also to be a part of course coordination teams." These comments ignore the hidden realities and barriers that they previously has just identified. These comments seemingly place the emphasis on individuals to fix systemic issues. Asking individuals to fix institutional and systemic issues is akin to asking individuals to fix global warming. While it takes the individual to make individual efforts that come together as a collective change, without the buy-in and support of larger institutional players such as auto manufactures, large power plants, and other industrial manufacturing, curbing the crisis climate will never happen. By asking those who are already not properly compensated for their roles, to take on additional uncompensated roles for the hope that it might open a door in the future seems to deny the source of the problem while asking those with little power to remedy their situation individually. Other programs that support contingent faculty on their own campuses include offering mini-grant programs to support contingent faculty research and establishing a contingent faculty advisory group.

Funding and Recommendations

As deans, these individuals hold positions of power and influence. They were able to identify administrative barriers that hinders their ability to fully support contingent faculty on campus. The single largest barrier identified by three of five deans was funding followed by space. One dean commented that their lecturers had "no idea how their pay works." A contingent faculty asked this dean to create a space for them and just "get them a raise." The same dean also commented that these contingent faculty couldn't "see the difference between what I can and cannot do." This is an indication of the lack of institutional support contingent faculty possess since they're not aware of how their pay works along with who can do what on campus when they need things.

One way to remedy this as identified by a dean, was for better onboarding processes. As stated, "Better onboarding of contingent faculty would be beneficial both for the quality of teaching and for career advancement of contingent faculty. By providing better onboarding processes, contingent faculty could feel more empowered to self-advocate by knowing the ways and means to obtain items they need and voice their concerns to people that can create change.

Recommendations from the deans included:

- Allowing senior lecturer faculty to opt-in for a service role
- Provide more opportunities to support professional development among contingent faculty
- Create varied full-time instructional positions that include teaching, research or a blend of the two

- Open more opportunities for mentoring and building community between contingent and tenured faculty
- Identify mechanisms to compensate contingent faculty for the non-instructional work they do to support students

While helpful, the list generated by the deans is limited in its scope. These limitations might be due to what the deans see as possible based on their own institutional power and knowledge. This set of recommendations do address the concerns generated by the contingent faculty. As researchers and advocates, it leaves us wanting more. What ways can individual deans do collectively that acts as preventative maintenance rather than the current position of disaster control? What system-wide changes could be identified and implemented that allows contingent faculty to step into positions with security and a sense of belonging rather than must claw for these basic needs?

Asset-based mentality

The conference with contingent faculty also produced a list of what they felt were assets they brought to the institutions they serve, but that are either seen as deficits or not seen at all. The two areas that the contingent participants identified as strengths included interpersonal and socioemotional skills and identity-centered student connection. Latiné/x/a/o faculty spoke to their work ethic and adaptability which are seen as prerequisites of, and responses to, the nature of contingent faculty roles. Participants shared their expertise while building trust with colleagues and students by demonstrating empathy and authenticity. The interpersonal skills manifested themselves in the form of communication and collaboration skills, both with fellow faculty as will with students.

Contingent faculty also felt the interpersonal skills they brought to their work served as a foundation for the connections that they build with students, but their ability to build bridges with students was often rooted in a shared racial, ethnic, and/or experiential background. Participants described these common experiences and mutual understanding were rooted in a shared culture, similar upbringing of economic and financial challenges while navigating college which also could include food insecurity and experiencing homelessness. One dean confirmed by stating:

> One of the findings that I am aware of but I think is less vocalized is the under recognition of the assets of Latinx faculty as it relates to their interpersonal skills and ability to connect with students. I think Latinx students are more likely to reach out and feel comfortable talking a Latinx faculty and many times they have more students approach them and seek them out for mentorship. This is corroborated by research findings. I think these faculty also are inspiring to students and help create a sense of belonging and this is not recognized enough.

Finding ways to help contingent feel more of a sense of belonging promotes an intrinsic motivation that far exceeds extrinsic motivation. By focusing on intrinsic motivation, data shows that students benefit from what is called the Trickle Down Model [25]. This also buttresses what deans can and can't change which is hampered by logistics such as money and space.

Additionally, campus culture is nothing that a single dean can remedy and will take time to correct with steadfast dedication to supporting *all* faculty albeit part- and full-time contingent that includes lecturers and short-term appointments, to tenured faculty. While there might seem to be a rivalry between tenure and contingent faculty on campus for funds and resources, together, they are fighting the same fight—they have more in common than not. Finding ways to

slowly build these relationships would help enhance campus culture and provide a space where all feel they belong.

Future Implications and Recommendations to Deans

The *how* is more difficult to identify than the *what*. As said by a dean in their last question:

> I think we need to do more to support contingent faculty. On my campus we have some exceptionally strong contingent faculty that are highly engaged and even mentor students in research. They are so deeply committed to the university and are a tremendous asset. We need to do better to support these folks.

The authors agree. There is more at stake than simply making contingent faculty feel comfortable. By providing contingent faculty with the resources they need to be effective teachers/practitioners/researchers/mentors, and by leveraging the non-traditional skills they bring to the classroom—the same lower-level classrooms in which they teach a large portion of students who look and talk like them—institutions will help recruit and retain more diverse students. These students will continue on and diversify STEM in ways that is desperately needed. These students will also remember the opportunities that were afforded to them by seeing a successful person that looks like them helping people with a shared culture, shared language, and shared life experiences.

Like the previous meritocratic and bootstrap mentality struck by the deans in relation to contingent faculty helping themselves, the authors identify that most of the recommendations offered by the deans are very isolated and limited to what individual deans can do on their own campuses *despite* contingent faculty's concerns being widespread across several institutions. The recommendations are based upon the concept that one person will fix whatever issues are present and they're going to go it alone.

What would be possible if said deans worked together to get institutional wide change that far exceeds the capacity of any one individual? What change could occur if these deans used their collective power to advocate for contingent faculty they do and do not know? This belief in the collective power should not stop deans from addressing current issues. We hope this belief in a collective power empowers deans to speak to one another and find better ways to address the issues that affect most of their contingent faculty—in which students ultimately feel the impact.

Lastly, college deans would be well-served by understanding the Employee Value Proposition (EVP) [26]. In it, the authors identify the EVP as "the sum of all the rewards offered by the organization, both monetary and nonmonetary, in exchange for membership on the organization and employee effort and performance [p. 22, 26]. Issues with the EVP has consequences such as problems attracting and retaining employees and for those that come and stay, their productivity. Deans must find creative ways through The Rewards of Work Model to increase and entice contingent faculty to stay with a variety of means such as but not limited to compensation, benefits (such as childcare or subscription memberships to gyms etc.; free tuition for family member), career opportunities, work content, and a sense of affiliation [26]. The four steps they recommend for change to the EVP for the better include workforce analysis, leadership strategy, employee analysis, and competitive analysis.

Acknowledgements

This material is based upon work supported by the National Science Foundation (NSF) No. 2137331 and 2137332. Any opinions, findings, and conclusions or recommendations expressed in this material do not necessarily reflect those of the NSF. A special thanks to Isabella Cantu

who created the infographic for the research team and for Drs. Karina Vielma, Nancy Acevedo, and Katy Pinto who supported in the conference and helped in the initial brainstorming stages of the questions asked of the deans. We also want to thank the deans themselves for taking from their incredibly busy times for this work.

References

1. J. Hoff. “Are adjunct professors the fast-food workers of the academic world?” https://www.theguardian.com/commentisfree/2014/jan/24/exploitation-of-adjunct-professors-devalues-higher-education (accessed Feb. 1, 2023). *The Guardian*.
2. L. Birdie, R. J. Downey, J. A. Muñoz, I. Villanueva Alarcón. Learning from hidden realities of latinx contingent stem faculty at hispanic serving institutions: Policies to support latinx contingent stem faculty. *J of Hre Ed Mgnt*, 38(2), pp. 19-31.
3. S. B. Wepner, A. D’Onofrio, & S. C. Wilhite. (2008). “The leadership dimensions of education deans.” *J of Teac Ed.* vol. 59 no. 2, pp. 153-169.
4. Higher Education Publications Inc. (2018, August 8). College administrator data/turnover rates: 2016-Present.” https://hepinc.com/newsroom/college- administrator-data-turnover-rates-2016-present/ (accessed Nov. 2, 2022). Higher Education Publication.
5. D. Butin & F. Zamudio-Suarez. “So, you want to be a dean?” https://www.chronicle.com/article/so-you-want-to-be-a-dean-245022/ (accessed Sept. 2022). *The Chronicle of Higher Education*.
6. J. E. King, & R. Hampel. “Colleges of education: A national portrait.” The American Association of Colleges for Teacher Education. Washington, DC, U.S. [online] https://aacte.org/colleges-of-education-a-national-portrait/. 2018.
7. B. S. Wepner & A. W. Henk. 2022). “What Might We Learn From 25 Years of Research on Education Deans?” *J of Ed Ledr & Poli Sdy*. vol. 6 no. 1. pp. 1-21, 2022.
8. H. Thomas & F. Fragueiro. “The dean’s many roles.” *BizEd*, vol. 6 no.1, pp. 54-59, May/June, 2011.
9. C. Atkins, L. E. Esparza, R. Milkman, & C. L. Moran. (2018). “Organizing the academic precariat in the United States.” *Global Labour Journal*, vol. 9, no. 1 https://doi.org/10.15173/glj.v9i1.3385
10. “The annual report on the economic status of the profession.” American Association of University Professors. [online]. https://www.aaup.org/sites/default/files/2019-20_ARES.pdf
11. N. Fetcher, M. E. Lam, C. R. Cid, & T. Mourad. (2019). “Contingent faculty in ecology and STEM: An uneven landscape of challenges for higher education.” *Ecosphere*, vol. 10, no. 12. pp. 1-16. https://doi.org/10.1002/ecs2.2964
12. CAW [Coalition for the Academic Workforce]. “A portrait of part-time faculty members: A summary of findings on part-time faculty respondents to the coalition on the academic workforce survey of contingent faculty members and instructors.” *Coalition for the Academic Workforce*. http://www.academicworkforce.org/CAW_portrait_2012.Pdf. [online] 2012.
13. D. Douglas-Gabriel. (2019, February 14). “‘It keeps you nice and disposable’: The plight of adjunct professors.” https://www.washingtonpost.com/local/education/it-keeps-you-nice-and-disposable-the-plight-of-adjunct-professors/2019/02/14/6cd5cbe4-024d-11e9-b5df-5d3874f1ac36_story.html (accessed Dec. 2022). *The Washington Post.*
14. U.S. Government Accountability Office. (2017, October). “Report to congressional requesters. “Contingent workforce: Size, characteristics, compensation, and work experiences of adjunct and other non-tenure-track faculty.” Washington D. C. [online] https://www.gao.gov/products/gao-18-49 (accessed Sept. 2022).
15. J. W. Curtis, & M. F. Jacobe. (2006). “AAUP contingent faculty index.” https://www.natcom.org/sites/default/files/pages/

NCA_Career_Center_AAUP_Contingent_Faculty_Index_2006.pdf. [online] (accessed Sept. 2022).
16. J. McFarland, B. Hussar, X. Wang, J. Zhang, K. Wang, A. Rathbun, A. Barmer, E. Forrest Cataldi, & F. Bullock Mann. (2018). "The Condition of Education 2018 (NCES 2018-144)." U.S. Department of Education. Washington, DC: National Center for Education Statistics. [online] https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018144 (accessed Oct. 2022).
17. C. De Brey, L. Musu, J. McFarland, S. Wilkinson-Flicker, M. Diliberti, A. Zhang, & X. Wang. (2019). "Status and Trends in the Education of Racial and Ethnic Groups 2018." NCES 2019-038. National Center for Education Statistics. [online] https://nces.ed.gov/pubs2019/2019038.pdf.
18. "Promoting racial and ethnic diversity in the faculty: What higher education Unions can do." American Federation of Teachers. ERIC Clearinghouse. [online] https://www.aft.org/sites/default/files/facultydiversity0310.pdf.
19. C. Fitzmorris, R. Shehab, & D. Trytten. (2020). "As necessary as the cleaning crew: Experiences of respect and inclusion among full-time non-tenure-track electrical engineering faculty at research-intensive institutions." *IEEE Trns on Ed.* vol. 63 no. 4. pp. 263-272. Nov. 2020. https://doi:10.1109/TE.2020.2978643
20. P. D. Umbach. (2007). "How effective are they? Exploring the impact of contingent faculty on undergraduate education." *Rvw of Hi Ed,* vol. 20. no. 2, pp. 91-123, 2007. https://doi.org/10.1353/rhe.2006.0080.
21. R. G. Baldwin & M. R. Wawrzynski. (2011)." Contingent Faculty as Teachers: What We Know; What We Need to Know." *Amrcn Behvl. Sci.* American Behavioral Scientist, vol. 55, no. 11, pp. 1485–1509 2011, https://doi.org/10.1177/0002764211409194.
22. V. Braun & V. Clarke. "Using thematic analysis in psychology." *Qual Res Psychol*. vol. 3, no. 2 pp. 77–101, 2006.
23. P. Pichère, & A. C. Cadiat. (2015). *Maslow's hierarchy of needs*. Lemaitre.
24. Z. Leonardo, & C. Matias, C. (2013). Betwixt and between colonial and postcolonial mentality. In D. Maramba & R. Bonus (Eds.), The "other" students: Filipino americans, education, and power (pp. 3-18). Charlotte, NC: Information Age Publishing.
25. D. A. Saucier, S. S. Miller, T. L. Jones, A. L. Martens. "Trickle Down Engagement: Effects of Perceived Teacher and Student Engagement on Learning Outcomes" *Int J of Tea & Ler in Hi Ed.* vol. 33, no. 2. pp. 168-179. 2022.
26. G. Ledford Jr. Gerald. (2003). "The Rewards of Work Framework: Attracting, Retaining and Motivating Higher Education Employees." *CUPA-HR Journal*. vol. 54, no. 2, pp. 22-26, 2003.