

NC

Teaching & Learning Hubs

Promising Evidence on Professional Learning in North Carolina:

EARLY FINDINGS FROM TEACHING & LEARNING HUBS



NC STATE UNIVERSITY

College of Education
Belk Center for Community College
Leadership and Research

DVP-PRAXIS

SARAH DEAL
& DEREK PRICE

OCTOBER 2023

INTRODUCTION



STUDENTS SPEND MOST OF THEIR TIME IN THE CLASSROOM, WHETHER IN-PERSON OR VIRTUALLY, WHICH MAKES COMMUNITY COLLEGE INSTRUCTORS KEY ACTORS IN THE STUDENT SUCCESS AGENDA.

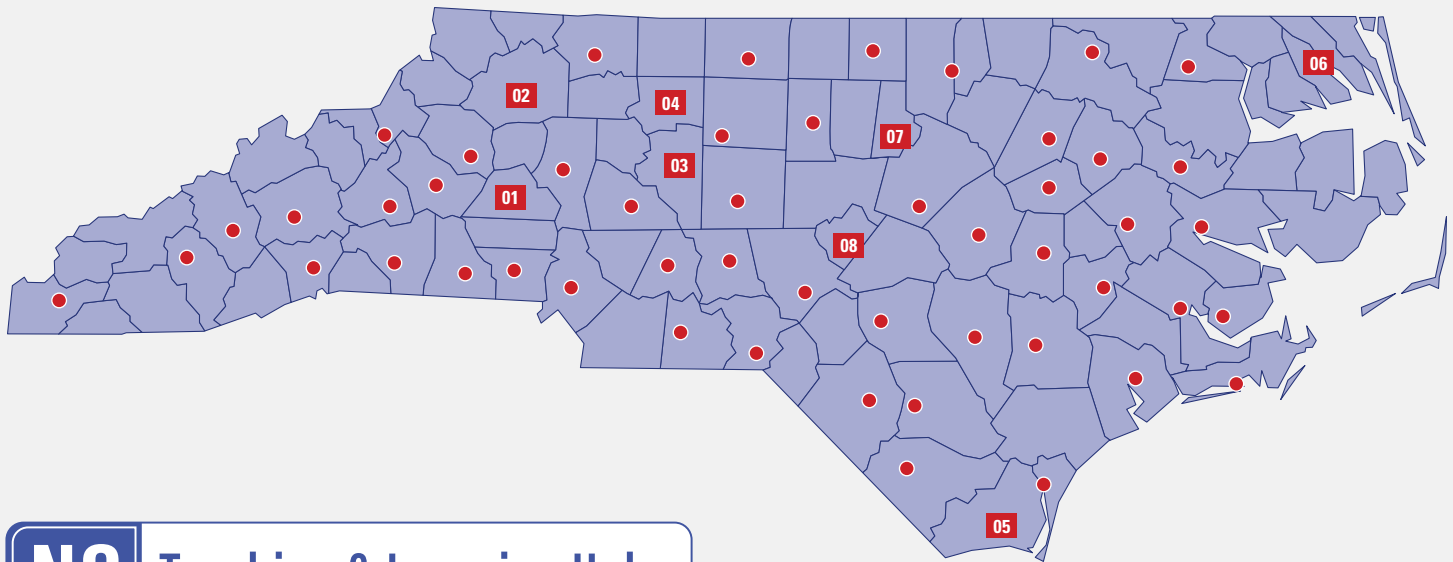
Instructors are essential in helping students feel connected with colleges and guiding their choices for future career fields.¹

As community colleges seek ways to continue improving student success, especially for adult, low-income, and minoritized learners, reform efforts are expanding to incorporate strategies that enhance teaching and learning.²

North Carolina's Teaching and Learning Hubs are a prominent statewide effort to leverage instructors in the state's student success agenda. This strategy launched in the fall of 2021 and aimed to deliver evidence-based professional learning opportunities through four regional hubs that serve all 58 North Carolina community colleges.³ During the first two years of this strategy, 128 professional learning sessions were offered that covered a range of topics, such as actionable non-instructional strategies (e.g., making course documents more transparent and welcoming), strategies for increasing in-class engagement, and tips for classroom management.

Focus groups with North Carolina instructors substantiated the importance of professional learning and indicated they would be motivated to attend professional learning sessions when there were concrete takeaways.⁴ This interest in professional learning was reflected in statewide participation during the first year of the Teaching and Learning Hubs strategy: 522 participants, including 279 instructors who taught 2,411 courses collectively, registered for at least one professional learning session.⁵

In spring 2023, DVP-PRAXIS LTD designed and administered a survey to more than 1,800 registrants for professional learning sessions hosted by Teaching and Learning Hubs. This brief report shares some early insights into the experiences of participants in Hub-offered professional learning, including what changes they are making to their teaching practices because of their participation and how they expect these changes to influence student success.



NC Teaching & Learning Hubs

WEST HUB

CO-HOSTS

- 01** Catawba Valley
- 02** Wilkes

AFFILIATES

- Asheville-Buncombe
- Blue Ridge
- Caldwell
- Cleveland
- Gaston
- Haywood
- Isothermal
- Mayland
- McDowell Tech
- Mitchell
- Southwestern
- Surry
- Tri-County
- Western Piedmont

PIEDMONT HUB

CO-HOSTS

- 03** Davidson-Davie
- 04** Forsyth Tech

AFFILIATES

- Central Piedmont
- Guilford Tech
- Montgomery
- Randolph
- Richmond
- Rockingham
- Rowan-Cabarrus
- South Piedmont
- Stanly

EAST HUB

CO-HOSTS

- 05** Brunswick
- 06** College of the Albemarle

AFFILIATES

- Beaufort
- Bladen
- Cape Fear
- Carteret
- Coastal Carolina
- Craven
- James Sprunt
- Lenoir
- Martin
- Pamlico
- Roanoke-Chowan
- Robeson
- Sampson
- Southeastern

CENTRAL HUB

CO-HOSTS

- 07** Durham Tech
- 08** Central Carolina

AFFILIATES

- Alamance
- Edgecombe
- Fayetteville Tech
- Halifax
- Johnston
- Nash
- Piedmont
- Pitt
- Sandhills
- Vance-Granville
- Wake Tech
- Wayne
- Wilson



SUMMARY OF SURVEY FINDINGS

Learning and evaluation partner DVP-PRAXIS LTD conducted a survey of all North Carolina Teaching and Learning Hub registrants (Fall 2021-Spring 2023) between April 20, 2023-May 3, 2023.⁶ 297 individuals completed the survey representing a 16% response rate.

Respondents are more engaged and experienced instructors, and survey results indicate that participation in Hub-provided professional learning sessions is leading to tangible changes in the classroom.

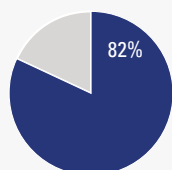
The purpose of the survey was to understand the changes that participants made or plan to make because of their professional learning experiences.

Among the survey sample of registrants, respondents were more likely than non-respondents to participate in AY 22-23 professional learning sessions (73% v. 69%) and to participate in professional learning sessions in both AY 21-22 and AY 22-23 (13% v. 10%). Moreover, survey respondents were more likely than non-respondents to have participated in 3 or more professional learning sessions (37% v. 28%). Survey respondents also reported more years of teaching experience: 46% had 11+ years of teaching experience compared with 38% of non-respondents, and only 19% had 5 or fewer years of experience compared with 28% of non-respondents. ***Put simply, survey data reflect more engaged and more experienced instructors.*** There were no substantive differences between survey respondents and non-respondents by race, ethnicity, and gender.

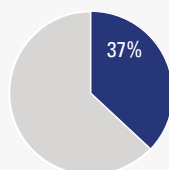
Of registrants who completed the survey, 82% (n=243) participated in at least one professional learning session, and among those participants, 67% (n=164) indicated they were making changes in their classroom because of attending a Hub-offered professional learning session. Overall, ***survey results indicate that participation in Hub-provided professional learning sessions is leading to tangible changes in the classroom.*** The extent of change reported by survey respondents is a positive indicator of the value instructors place on professional learning. In AY 21-22, almost 21,000 unique students enrolled in courses with instructors who participated in Hub-offered professional learning sessions, so the potential impact on students' classroom experience is substantial.⁷

COLOR KEY

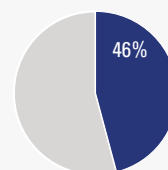
■ RESPONDENTS



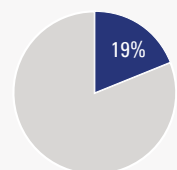
Participants in at least one Professional Learning Session.



Participants in 3 or more Professional Learning Sessions.



11+ Years Of Teaching Experience



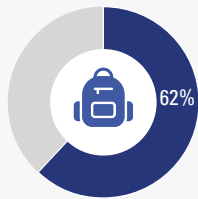
5 Or Fewer Years Of Teaching Experience

KEY SURVEY TAKEAWAYS

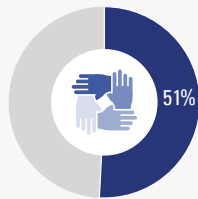
01

Reflection + Inquiry

The most common experiences reported by survey respondents who participated in at least one professional learning session (N=243) were engaging in reflection and/or inquiry around their teaching practices (62% reported this experience) and reflection and/or inquiry around issues of diversity, equity, and inclusion (51%).



Reflection/Inquiry Around Teaching Practices



Reflection/Inquiry Around Diversity, Equity, & Inclusion

02

Classroom Changes

Two-thirds of participants in Hub-sponsored professional learning sessions (n=164) reported they are making changes in their classrooms, and almost 60% of this group indicated they are making (or plan to make) changes in 3 or more areas. The most common change reported was encouraging active learning (63%).



Making Classroom Changes

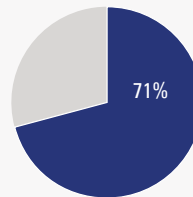


Making Classroom Changes in 3+ Areas

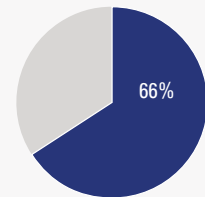
03

Improved Experiences

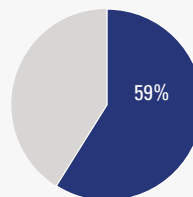
Survey respondents who reported they are making (or plan to make) changes (n=164) are confident their changes will improve class experiences for students, such as:



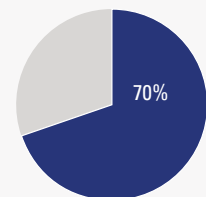
Engaging In More Discussion



Feeling Welcomed In Class



Interacting With Peers



Improved Sense Of Belonging In Their Program & At The College



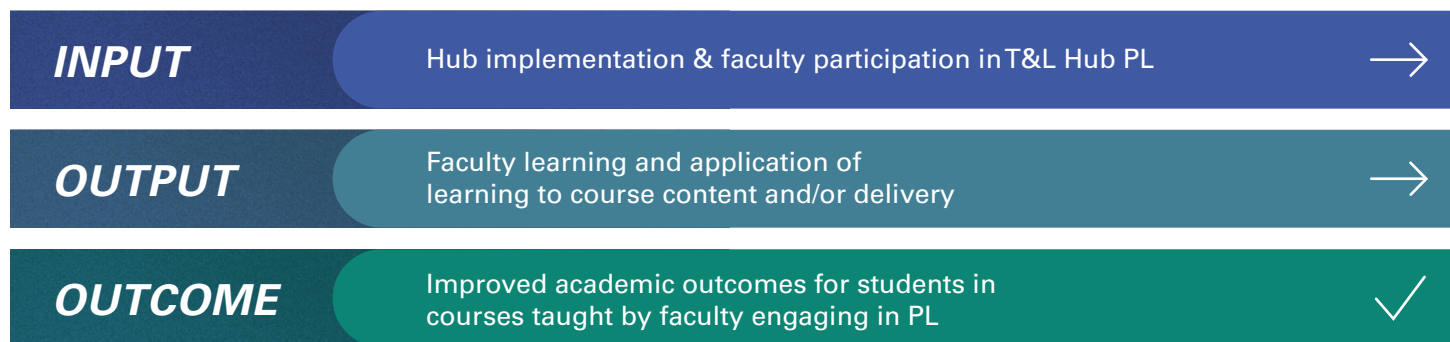
SURVEY RESULTS

THE NORTH CAROLINA TEACHING AND LEARNING HUBS AIM TO IMPROVE STUDENT SUCCESS BY PROVIDING EVIDENCE-BASED PROFESSIONAL LEARNING OPPORTUNITIES TO CLASSROOM INSTRUCTORS.

Based on their experiences participating in Hub-offered professional learning, the intent is that instructors implement changes in their classroom that lead to improved student outcomes. (Figure 1)

Figure 1

RELATIONSHIP BETWEEN FACULTY T&L HUB EFFORTS AND STUDENTS' ACADEMIC OUTCOMES



Between April 20, 2023-May 3, 2023, we administered a survey to all Teaching and Learning Hub registrants (Fall 2021-Spring 2023). The purpose of the survey was to understand the changes that participants made or planned to make because of their professional learning experiences. In other words, the survey was intended to document the output of Teaching and Learning Hubs: faculty learning and application of learning to course content and/or delivery. We plan to re-administer the survey in Spring 2024.

This report first summarizes the experiences of the 243 survey respondents who participated in professional learning sessions provided by Teaching and Learning Hubs, followed by an analysis of survey data from the 164 participants who reported they are making (or plan to make) changes because of their participation. This analysis describes the types of changes being made to their teaching practices, timing and scope of these changes, and expectations on how these changes could impact student outcomes. Overall, **survey results indicate that participation in Hub-provided professional learning sessions is leading to tangible changes in the classroom.**

PARTICIPANT EXPERIENCES (N=243)⁸

Among survey respondents who participated in one or more professional learning opportunities, we asked about their experiences in the sessions they attended.

By far, **the top two experiences among participants were engaging in reflection and/or inquiry around my teaching practice in general (62%) and engaging in reflection and/or inquiry specifically around issues of diversity, equity, and inclusion (51%)** (Figure 2). These results reflect that teaching practices and DEI were a focus for Hub Co-Directors in designing professional learning. For example, when designing their Hub professional learning sessions, Co-Directors indicated at least one-third of the sessions offered have an explicit focus on DEI.

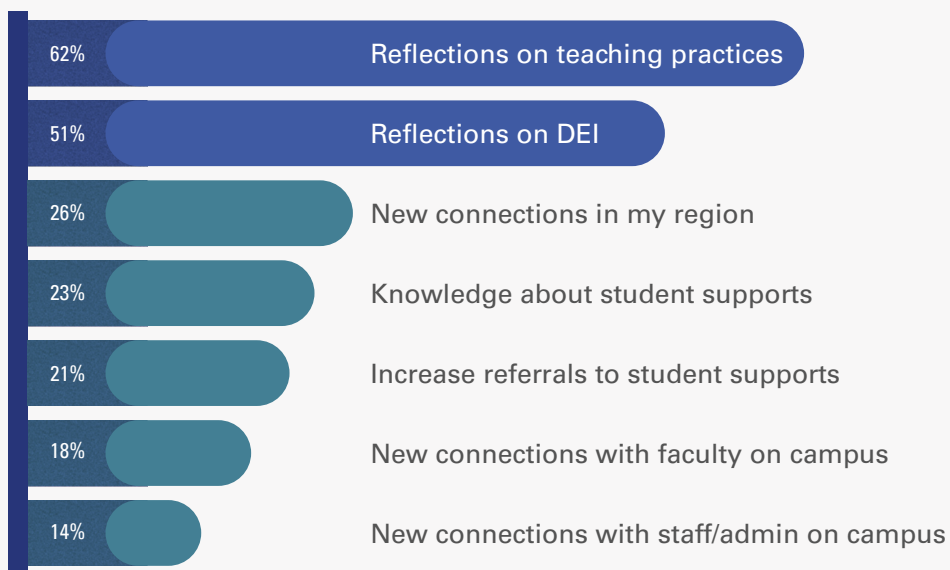
The Hubs were designed to cluster colleges together within geographic regions so that faculty and staff could develop a regional network of colleagues and have access to a broader set of professional learning opportunities. A small percentage of survey respondents shared that participating in Hub-sponsored professional learning sessions resulted

in new connections with a community of teaching colleagues in their region (26%), new connections with other instructors on campus (18%), and new connections with staff and administrators on campus (14%). These responses suggest that bolstering opportunities for collaboration within Hub-offered sessions is a potential area of growth for the Hubs, or the results could reflect pre-existing familiarity with other attendees given that participants are from colleges in the local region.

A small percentage of survey respondents who participated in Hub-sponsored professional learning sessions shared they improved their knowledge about student support services across campus, such as financial aid, counseling, academic advising, etc. (23%), and were more likely to refer students to these supportive services (21%). These results suggest that there may be an opportunity to expand content about student supports and how to connect students to supports within future professional learning sessions, although this topic may be challenging to cover in detail given the multi-college, regional structure of the Hubs.

Figure 2

PARTICIPANT EXPERIENCES IN PROFESSIONAL LEARNING AFTER PARTICIPATING IN ONE OR MORE OPPORTUNITIES (N=243)



Note: Respondents could check all that apply.



CHANGES MADE TO TEACHING PRACTICES (N=164)

Of the survey respondents who participated in Hub-based professional learning sessions, 67% indicated they were making changes to their teaching practices because of their participation.⁹

Among survey respondents who are making changes, **the most frequent change reported was to encourage active learning (e.g., students interact with content, reflection assignments, complete projects) with almost two-thirds (63%) reporting they are making or plan to make this change** (Figure 3).

Respondents making changes to encourage active learning were also likely to indicate they were adopting collaborative learning strategies (e.g., small group discussions, projects, and assignments, peer feedback), implementing practices around connecting with students (e.g., interacting with students by name, individual student meetings, supporting and monitoring students' progress), and improving feedback to students. During the annual Teaching and Learning Hubs Co-Directors meeting, active learning in the classroom was discussed as a focal area for instructors because of the COVID-19 pandemic and their desire to find new ways to engage students in the classroom.

Among survey respondents who are making changes, **nearly half (49%) reported they are implementing or plan to implement inclusive teaching practices** (e.g., respecting diverse talents and ways of learning, multi-modal learning opportunities, awareness of cultures students represent) **and creating or plan to create more transparent course structures** (e.g., align learning objectives, assessments and instructional activities; articulate explicit objectives regarding learning outcomes and goals); and **48% reported they are making changes or plan to make changes to improve feedback to support learning** (e.g., low stakes assessments, scaffolding feedback, frequently update grades, being clear on how quickly you will respond to inquiries).

Additionally, **45% of survey respondents who are making changes reported they are making or plan to make syllabus changes** (e.g., more welcoming language; articulating teaching philosophy sharing campus resources), and **41% indicated they are implementing or planning to implement more collaborative learning strategies and opportunities to connect with students.**

Figure 3

CHANGES PARTICIPANTS HAVE MADE / ARE PLANNING TO MAKE TO TEACHING PRACTICES (N=164)



Note: Respondents could check all that apply.



TIMING AND SCOPE OF CHANGE TO TEACHING PRACTICES (N=164)

Co-Directors shared that the professional learning sessions are designed to facilitate immediate implementation of changes and that participants are highly motivated, having self-selected to participate in professional learning.

To learn about the timeline of implementing changes, the survey asked respondents to report on the timing for each of the changes they are making or plan to make (i.e., already implementing, next academic term, beyond the next academic term).

Notably, **among the seven types of change asked about in the survey, most of those who said they were making changes because of their participation had already taken action to implement them.**

This result suggests that Hub-based professional learning sessions can have an immediate impact on teaching practices.

Among survey respondents who reported they are making or plan to make each specific change, the list below provides the percentage who is already implementing each specific change.

- 85% are already implementing changes around connecting with students.
- 71% are already implementing strategies around inclusive teaching practices.
- 67% are already implementing changes to encourage active learning.
- 65% are already implementing strategies for improving feedback.
- 62% are already implementing changes to collaborative learning strategies.
- 51% are already implementing strategies around transparent course structures.
- 27% are already implementing strategies around syllabus changes.

The survey also asked participants how significant each current or planned change is to their teaching practice. Participants who are making changes to encourage active learning, improve collaborative learning strategies, create better connections with students, and incorporate inclusive teaching practices, indicated the changes they were making were “minor.” Their perception that these changes were minor may explain why they were so commonly reported; that is, participants saw these changes as immediately actionable steps to improve teaching and learning.

Participants who reported making changes to improving feedback, transparent course structures, and syllabus changes, indicated the changes they were making were “moderate.” Except for changes to transparent course structure (9%), very small percentages (5% or fewer) indicated the changes they were making or plan to make were “significant.”

“I have found myself thinking differently in real time when I am in the classroom. Even though I already have strong lesson plans, I find ways to incorporate what I have learned on a regular basis.”

SURVEY RESPONDENT



EXPECTED STUDENT OUTCOMES (N=164)



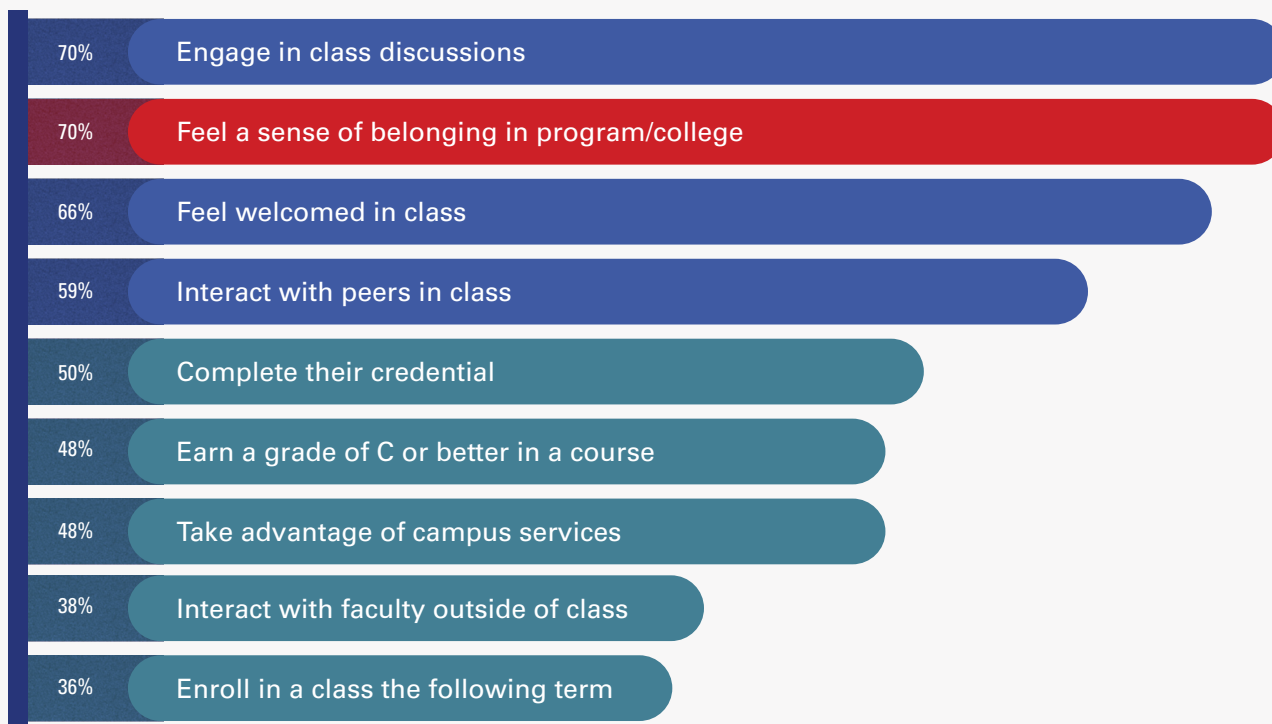
The survey also asked respondents who participated in Hub-based professional learning sessions and indicated they were making changes to their teaching practices because of their participation, how they expect the changes they are making to impact students' success.

Respondents largely expected their changes to improve students' experiences within class (see blue bars in Figure 4), such as being more likely to engage in class discussions (small or large group) (70%), feel welcomed in class (66%), and interact with peers in class (59%).

Notably, 70% of survey respondents who participated in Hub-offer professional learning **expect students will be more likely to have a sense of belonging in their program/at the college because of the changes they are making** (see red bar in Figure 4). The expected influence on students' sense of belonging is important, because research shows that sense of belonging is critical to student success.¹⁰

Figure 4

PARTICIPANTS' EXPECTED IMPACT OF CHANGES ON STUDENT OUTCOMES (N=164)



Note: Respondents could check all that apply.

TEACHING AND LEARNING HUB OPPORTUNITIES



Survey results also point to a few opportunities for how Teaching and Learning Hubs can continue encouraging changes to teaching practices that influence student success:

01

Survey data indicate that Hub-offered professional learning is not resulting in stronger connections among colleagues and that instructors do not expect changes to their teaching practices to influence longer-term student outcomes like retention and credential completion.

As the Hubs continue to center community college reform efforts around the classroom experience (i.e., where students spend most of their time), there are opportunities to clarify how the knowledge and skills gained in professional learning sessions can impact longer-term student success outcomes. Building these connections can help instructors see themselves as critical to the larger student success agenda and can support the building of relationships across college divisions to form a stronger network of support for students.



02

The most common change to teaching practices is around active learning strategies.

As an extension of this important teaching practice, Hubs should consider integrating more professional learning sessions around connecting with students (i.e., faculty and student relationship building) and collaborative learning (i.e., student-to-student relationship). Building relationships between instructors and students, and between students, is an important element for enhancing students' sense of belonging on campus and ensuring that students have social and emotional support when they need it.



IMPLICATIONS

EARLY INSIGHTS IN HOW PARTICIPANTS IN NORTH CAROLINA'S TEACHING AND LEARNING HUBS ARE CHANGING THEIR TEACHING PRACTICES, AND HOW THOSE CHANGES ARE EXPECTED TO INFLUENCE STUDENT OUTCOMES, ARE PROMISING.

Two-thirds of participants are making changes and almost 60% of this group indicated they are making (or plan to make) changes in three or more areas. Notably, many instructors indicated they are already making changes because of their participation in Hub-sponsored Teaching and Learning professional learning: among each of the seven types of change asked about in the survey, most who said they were making changes were already implementing them.

Survey respondents who participated in Teaching and Learning Hub professional learning sessions shared their top experiences were engaging in reflection and/or inquiry around teaching practices in general and engaging in reflection and/or inquiry specifically around issues of diversity, equity, and inclusion. Importantly, Teaching and Learning Hub participants expect their changes to influence student experiences within their classroom and students' sense of belonging in their program and at the college.

As cited in this brief, prior research on student experiences suggests that sense of belonging is key to student success, and that is especially important to address for student populations who have not been historically welcome and supported in higher education: adult, low-income, and minoritized learners. These reflections, actions, and expectations by instructors are positive indicators that instructors are actively working to address the needs of diverse learners in North Carolina.



ENDNOTES



- 1 Barnett, E. A. & Cho, S. (2023). Caring campus faculty leadership in student success. Community College Research Center. Columbia University. New York, NY.
- 2 Strayhorn, T. L. (2019). College students' sense of belonging: A key to educational success for all students (2nd ed.). Routledge.
- 3 Tinto, V., & Pusser, B. (2006). Moving from theory to action: Building a model of institutional action for student success. National Postsecondary Education Cooperative.
- 4 Stout, K. (2018, November 28). The Urgent Case: Centering Teaching and Learning in the Next Generation of Community College Redesign. [Lecture] Dallas Herring Lecture: North Carolina State University, Raleigh, NC. <https://ced.ncsu.edu/event/2018-dallas-herring-lecture/>
- 5 Eynon, B., & Iuzzini, J. (2020). ATD teaching and learning toolkit: A research-based guide to building a culture of teaching and learning excellence. Silver Spring, MD: Achieving the Dream.
- 6 Professional learning is also referred to as professional development.
- 7 Stout, K. & Jaeger, A. J. (2023, February 15). Introducing teaching and learning hubs. Inside Higher Ed. <https://www.insidehighered.com/advice/2023/02/16/faculty-development-improve-student-outcomes-community-colleges-opinion>
- 8 Thomas, E. (2023, February 27). Teaching and learning hubs: A new professional development model for N.C. community colleges. EdNC. <https://www.ednc.org/teaching-and-learning-hubs-a-new-professional-development-model-for-n-c-community-colleges/>
- 9 Deal, S. A. & Valentine, J. L. (2021). Faculty experiences with professional development: Data to inform community college teaching and learning hubs in North Carolina. DVP-PRAXIS LTD. Indianapolis, IN.
- 10 Deal, S.A., Valentine, J.L., & Price, D.V. (2023). The Reach of the North Carolina Teaching and Learning Hubs: An Inaugural Year Report. DVP-PRAXIS LTD. Indianapolis, IN.
- 11 The survey was piloted by Hub Co-Directors before administration.
- 12 Deal, S.A., Valentine, J.L., & Price, D.V. (2023).
- 13 In our analysis, we dropped the 54 survey respondents who registered for a Teaching and Learning Hub professional learning session but reported they did not participate. Survey results reflect the 243 survey respondents who participated in at least one professional learning session or the 164 participants who indicated they are making or plan to make changes in their classroom.
- 14 28 respondents are not making changes to their teaching practices. Of these "no change participants" the majority (61%) indicated they did not make a change because they were already engaging in the practice. Other no change options included that the professional learning session "wasn't designed to support changes to teaching practice" and "the session wasn't helpful."
- 15 Johnson, R. M. (2022). A socio-ecological perspective on sense of belonging among racially/ethnically minoritized college students: Implications for equity-minded practice and policy. *New Directions for Higher Education*. 197, 59-68. doi.org/10.1002/he.20427
- 16 Strayhorn, T. L. (2019).

ACKNOWLEDGMENTS

The evaluation team at DVP-PRAXIS LTD thanks the North Carolina Community College instructors for taking action to support student success through professional learning. We would also like to thank the Teaching and Learning Hub Co-Directors and host-college leadership for dedicating resources to providing these professional learning opportunities, and the Belk Center for Community College Leadership and Research, Achieving the Dream, and the North Carolina Student Success Center for their support of North Carolina’s community college students, Teaching and Learning Hub leaders, and college faculty and staff through this important work. Finally, the authors would like to thank Lori Vogelgesang for her work in developing this survey as well as Julia Rose Karpicz and Amber Lubera of DVP-PRAXIS for their thoughtful feedback on earlier drafts.

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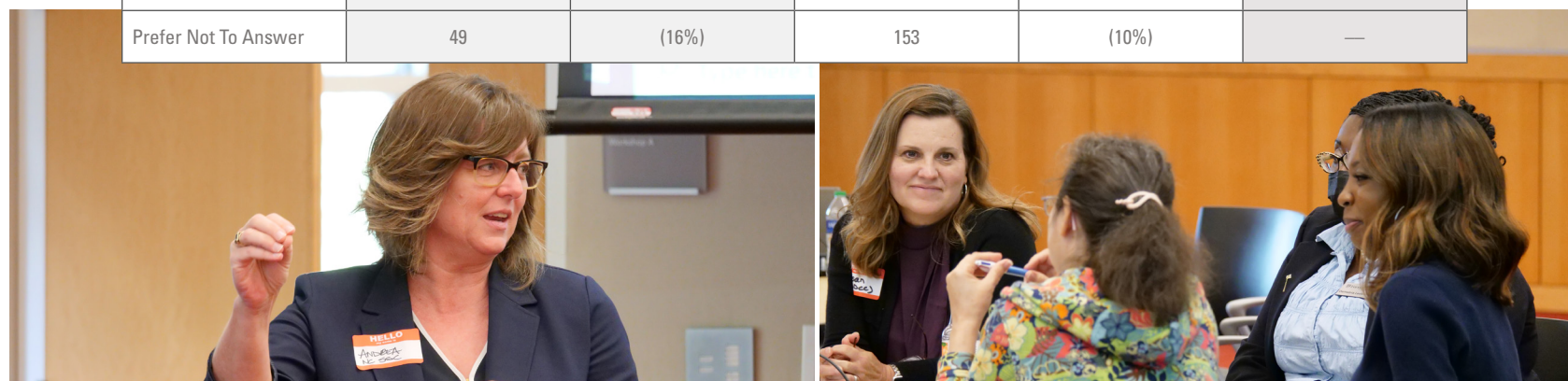
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APPENDIX: CHARACTERISTICS OF SURVEY RESPONDENTS AND NON-RESPONDENTS (N=1,828)

AY PL PARTICIPATION	Survey Respondents		Non-Respondents		Difference
	Number	Percent	Number	Percent	
2021 – 2022	24	(8%)	324	(22%)	-14% ***
2022 – 2023	217	(73%)	2050	(69%)	+4% **
2021-2022 & 2022-2023	39	(13%)	157	(10%)	+3%
Missing – Not Matched	17	(6%)	0	(0%)	—

GENDER	Survey Respondents		Non-Respondents		Difference
	Number	Percent	Number	Percent	
Female	211	(71%)	1065	(70%)	+1%
Male	38	(13%)	307	(20%)	-7% *
Non-Binary	—	—	—	—	-6%
Transgender	—	—	—	—	+1%
Prefer Not To Answer	45	(15%)	152	(10%)	—

RACE/ETHNICITY	Survey Respondents		Non-Respondents		Difference
	Number	Percent	Number	Percent	
White	194	(65%)	1014	(66%)	-1%
Asian	2	(1%)	20	(1%)	0%
Native American	4	(1%)	33	(2%)	-1%
Black	36	(12%)	249	(16%)	-4%
Hispanic	5	(2%)	42	(3%)	-1%
Multiple	7	(2%)	20	(1%)	+1%
Prefer Not To Answer	49	(16%)	153	(10%)	—



Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Significance here is determined using a chi-square test in STATA (tab) and post-hoc comparison (tabchi) to determine if the distribution of a given variable significantly differed between respondents and non-respondents as well as which sub-variable comparison these significant differences could be attributed to.

APPENDIX: CHARACTERISTICS OF SURVEY RESPONDENTS AND NON-RESPONDENTS (N=1,828)

YEARS OF TEACHING EXPERIENCE	Survey Respondents		Non-Respondents		Difference
	Number	Percent	Number	Percent	
0-1 Years	23	(8%)	149	(10%)	-2%
2-5 Years	33	(11%)	273	(18%)	-7% **
6-10 Years	48	(16%)	293	(19%)	+3%
11-20 Years	89	(30%)	393	(26%)	+4% *
20+ Years	49	(16%)	180	(12%)	-4%
NA/Missing	55	(19%)	243	(16%)	—

NUMBER OF PL SESSIONS ATTENDED	Survey Respondents		Non-Respondents		Difference
	Number	Percent	Number	Percent	
1	101	(34%)	837	(55%)	-21% ***
2	68	(23%)	273	(18%)	+5% **
3 or More	111	(37%)	421	(28%)	+9%
NA/Missing	17	(6%)	0	(0%)	—

Total Survey Respondents	Total Non-Respondents
297	1531

DATA-DRIVEN CALL TO ACTION

Respondents seem less convinced that their classroom changes will help students complete a credential (50%), pass their course with a grade of C or better (48%), or enroll in a class the following term (36%). Additionally, less than half of survey respondents expect their changes to influence students taking advantage of campus services (48%) or to increase the interaction with faculty outside of class (38%). These results suggest that, despite the early success of Teaching and Learning Hubs, instructors are not necessarily connecting what they do in the classroom to the larger student success agenda at their colleges.



Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Significance here is determined using a chi-square test in STATA (tab) and post-hoc comparison (tabchi) to determine if the distribution of a given variable significantly differed between respondents and non-respondents as well as which sub-variable comparison these significant differences could be attributed to.

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