Building Bridges and Changing the Story: Recognizing Funds of Knowledge in Summer Bridge Programs

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Positioned at the crucial point of access to higher education, summer bridge programs often serve students of color and multilingual learners as well as first-generation and low-income students. Bridge programs, which frequently include first year composition courses, represent an underexplored entry point for collaborations between academic and student affairs. In this qualitative research study, twenty-two summer bridge program websites were systematically coded and analyzed to assess the extent to which bridge program website discourse incorporates funds of knowledge, which are the resources and experiences that diverse groups of students bring to university spaces (Moll et al.). The results from this study indicate that bridge programs provide models for integrating aspirational knowledge and familial knowledge, two funds of knowledge areas, into academic coursework and departmental programming, particularly into the work of writing programs. Composition scholars are uniquely positioned to share their expertise regarding linguistic knowledge and resistant knowledge with their bridge program colleagues. This article suggests that campus partnerships between academic and student affairs can create meaningful institutional change to better support diverse groups of students.

While squinting against the harsh desert sun streaming through the window, I began returning the classroom to its original state. I had just finished my first day of teaching composition in a summer bridge program for incoming students at my institution. I saw one student standing off to the side. Haseya hesitantly met my smile and stepped forward.[1]

"Miss, I want you to know that I'm a Navajo student." As we began talking, Haseya explained that she had only ever attended school on the reservation and that she was worried about the workload at a four-year university. We began meeting regularly after class to discuss assignments. She asked questions about the difference between a personal narrative and a research paper because she had never encountered a research paper before. She wanted to know if her ideas in her first language translated clearly into English and if her writing was college-level. She spoke about not wanting to let her family down.

As I came to know the other students, I was surprised to find that Haseya's experiences were not unique. The students I worked with had little relevant

experience with academic research, which was a required component of the summer bridge program. They expressed low confidence in their writing and exchanged personal stories of the ways in which teachers had shamed them for using Spanish in school. Over half of the students were multilingual. Many were the children of immigrants, immigrants themselves, or Generation 1.5 learners, students with "life experiences that span two or more countries, cultures, and languages" (Roberge 4). They wrote about achieving their dreams of college graduation to honor the sacrifice of their families. I did my best to counter students' deficit views of their own intelligence and abilities. I sensed that there were ways to integrate linguistic and cultural knowledge more meaningfully into course themes and assignments, but I felt unsure about how to do so.

Composition programs are enmeshed in the work of bridge programs, which serve incoming first year students at the point of access to higher education. Bridge programs usually include several weeks of accelerated coursework, study skills workshops, and social activities as well as a residential component in the summer before a student's first semester. They provide "intensive" introductions to "college expectations and the cultural contexts of the institution" (Gonzalez Quiroz and Garza 103). These programs may be housed in student affairs, new student and transition offices, diversity and inclusion offices, or institution-specific TRIO programs funded by the U.S. Department of Education, such as Upward Bound. Summer bridge programs can serve as the first component of a more comprehensive initiative that encompasses advising, tutoring, career preparation, and study skills workshops. Across the country, first year composition is a frequent component of bridge program coursework. Writing studies instructors may teach in their institution's bridge program, and a student's first college writing experience may be in a bridge program composition course. Yet little published research in writing studies focuses on bridge programs, even though these programs represent an exciting and underexplored entry point for bridge-building between academic and student affairs.

Bridge programs typically serve diverse groups of students, such as students of color, first-generation students, multilingual learners, and low-income students.[2] Diverse student populations are often categorized by colleges and universities as "at risk" due to their low retention and graduation rates (Rios-Aguilar and Kiyama, "Introduction" 4). Institutional and cultural stereotypes have popularized claims that these students lack motivation and family support, are lazy, or are academically underprepared (Mora and Rios-Aguilar 152). This at-risk discourse stems from deficit models of learning and assumptions about students and permeates the work of higher education institutions.

In seeking to remedy student deficits, higher education institutions miss an opportunity to tap into the resources that students already possess. Stu-

dents from diverse groups bring specific strengths and resources, or "funds of knowledge," to university spaces (Moll et al.). The term funds of knowledge became widely known in educational circles after anthropologists and education researchers at The University of Arizona partnered with K-12 teachers to interview Mexican-American and Pascua Yaqui families. The researchers found many different funds of knowledge such as cultural knowledge and the ability to move back and forth between multiple languages. They argue that instructors should incorporate these knowledge areas into the curriculum to help students make connections between their prior experiences and course content.

Several pedagogies from writing studies share key features with the interdisciplinary funds of knowledge framework. These pedagogies include translanguaging (Horner; Parmegiani), student-led ethnography (Murie et al.), storytelling (Mlynarczyk and Babbitt; Parmegiani), students' right to their own language (Gilyard and Richardson), code-meshing (Young), hybrid literacies (McCrary), and anti-racist pedagogies (Condon and Young), among others. While these approaches are not specifically identified as funds of knowledge, many operate from an epistemological stance that views students as valuable repositories of knowledge. Instructors employing these and similar pedagogies have found ways to incorporate students' prior experiences and expertise into assignments and course themes.

For example, Qwo-Li Driskill outlines a pedagogy that utilizes a "decolonial skillshare" method in which "students are asked to not only learn *about* indigenous rhetorics but to learn indigenous rhetorics through linguistic, embodied, and material practices" (58). As both learners and teachers, students engage in embodied practices surrounding indigenous languages, wampum records, and woven baskets. This pedagogy honors the knowledge and skills that students bring to university spaces from their home communities. As another example, Kelly Medina-López uses an anti-racist pedagogy in her "Corrido-ing Composition" assignment, which asks students to compose *corridos* (Mexican folk ballads) "while considering genre, language, audience, community and cultural epistemologies, information literacy, and knowledge production all within the very real contexts of institutional power dynamics and 'what counts' as university writing" (Summerhill et al. 124). Because students draw on cultural knowledge to compose their *corridos*, this assignment is aligned with the funds of knowledge framework.

However, these pedagogical approaches stop short of acknowledging students' funds of knowledge directly, which may make it more difficult for students to see their prior experiences as true strengths. In addition, these pedagogies typically only focus on one or two funds of knowledge areas, but the funds of knowledge framework provides a multifaceted model for students to understand their strengths across many areas, from linguistic expertise to

cultural experiences and community knowledges. More instructors would become aware of funds of knowledge pedagogies if they were incorporated into the scholarly conversation surrounding writing studies. As an example, Genesea M. Carter employs the dual frameworks of funds of knowledge and discourse communities in a digital literacy map assignment. In this project, students choose four communities in which they are insiders. Drawing on their prior knowledge, they create maps that visually represent the literacies of those communities. There is a need for more scholarship like this in writing studies that directly engages the funds of knowledge framework. In the context of the wider university, much work remains to bring various program structures to their full potential in terms of emphasizing students' prior knowledge.

As I prepared to teach a second bridge program composition course the following summer, I considered a funds of knowledge framework to better recognize the prior experiences and resources of my students. I designed the course around the theme of language varieties, which allowed me to incorporate linguistic knowledge as one approach to funds of knowledge. However, I saw the need for models of composition courses that incorporated multiple approaches to funds of knowledge in a single course. Thinking about bridge programs across the country, I also wondered about the extent to which they reflected a funds of knowledge orientation to students, especially considering the at-risk discourse surrounding diverse student populations in university spaces.

This frustration served as the exigency for this research project. I conducted a study of the website descriptions of twenty-two summer bridge programs across the United States; I focused on websites because they can reveal the discourses that shape programs and institutions (Barrios; Knight et al.; Pack Sheffield). Despite the dearth of scholarly attention on program websites, they are "important institutional spaces that serve as interfaces to particular values, beliefs, and practices" (Knight et al. 192). What is included or excluded from a program's website communicates information about the values and assumptions undergirding the program, department, college, or institution. In examining program websites, this study focuses on how students in bridge programs are represented to a range of potential audiences, including students and their families, faculty and staff, university administration, donors, and accrediting agencies. My research offers a method for becoming critically aware of online representations of students.

The goal of this study was to explore connections to funds of knowledge concepts across a range of bridge programs. Results from this study identify several funds of knowledge areas where composition programs and other academic affairs units can learn from student affairs initiatives such as bridge programs. Conversely, there are several funds of knowledge areas regularly employed by academic affairs that could be more thoroughly incorporated into

bridge programs. Ultimately, this article argues for a model of institutional change-making that draws on shared expertise between academic and student affairs to better serve students.

Coding Funds of Knowledge

I used systematic qualitative coding to analyze website descriptions of bridge programs to examine how they position themselves and the students who participate in their programs. My research is guided by the following question: In what ways do website descriptions of bridge programs at a range of institutions reflect funds of knowledge approaches to first year students and the support their programs provide? To answer this question, I analyzed twenty-two publicly-available summer bridge program websites across sixteen different institutions (some institutions had multiple programs that met the data set criteria for this study listed below). I limited this study to my institution at the time and its fifteen peer institutions, as specified by the Arizona Board of Regents' Approved University Peer List, so that I could examine programs operating in institutionally similar ways ("Peer Institutions"). Thirteen of the sixteen institutions had at least one bridge program that met the data set criteria, and about half of them had more than one. All are listed as "Doctoral Universities: Very High Research Activity" by the 2018 version of the Carnegie Classification of Institutions of Higher Education ("Institution Lookup"), and they are all large universities, with student populations ranging from 29,911-59,837.[3] They are all listed as "4-year or above," "public," and "full-time." I narrowed my search to institutions and programs that satisfied the following conditions:

1. are exclusively for incoming first-time, first year undergraduate students at the university they will attend in the semester immediately following the program;
2. occur in the summer between high school graduation and the subsequent fall semester;
3. include an on-campus residential option or requirement;
4. include academic courses taught on campus for more than one week; and
5. have their own websites or sections on official university websites.

The appendix details the twenty-two bridge programs in the data set. Twelve of the twenty-two programs, just over half of the data set, are for student populations deemed "diverse," a designation that varies by institution. The other ten programs in the data set may serve diverse student groups without explicitly naming this on their websites. Eighteen of the twenty-two programs in the data set offer first year writing as a mandatory or optional course.

I drew on provisional coding, which establishes a list of codes generated from the study's conceptual framework, research questions, or previous research findings prior to data collection (Saldaña 168). Since my research question focused on funds of knowledge, I used Tara J. Yosso's article "Whose Culture Has Capital?: A Critical Race Theory Discussion of Community Cultural Wealth" to develop the codes. Yosso argues that funds of knowledge are forms of community wealth which can be strategically employed by diverse communities (77). She synthesizes the work of cultural studies scholars over the past several decades into distinct funds of knowledge categories. While Yosso's article is widely cited among scholars who focus on culturally-relevant pedagogies, Cecilia Rios-Aguilar and Judy Marquez Kiyama argue that Yosso's community wealth categories should be understood as categories of knowledge rather than as types of capital since utilizing funds of knowledge outside one's home community does not always yield economic benefits ("A Complimentary Framework" 18). Therefore, I rendered Yosso's categories in this research as knowledge categories (e.g., "aspirational capital" becomes "aspirational knowledge"). I created codes for four of Yosso's categories (see Table 1 for excerpted codebook):

- aspirational knowledge: the ability to dream of a different future despite barriers (Yosso 77)
- familial knowledge: kinship bonds that serve as models for "caring, coping, and providing" (77-79)
- linguistic knowledge: the ability to communicate in multiple languages or styles (78)
- resistant knowledge: skills developed through opposition to inequity and oppressive structures (80).

Table 1. Excerpted Codebook

Code	Description	Example or Starting Point
Aspirational Knowledge	Supporting students' future goals and dreams despite potential barriers	Example: "AAP encourages students to explore their talents and abilities, to believe in themselves and "to aspire to academic and professional excellence."
Familial Knowledge	Recognizing how kinship bonds can support student success	Example: "The parents of Millennium Scholars are vital to the program's success."

Code	Description	Example or Starting Point
Linguistic Knowledge	Acknowledging the intellectual and social skills required to communicate in more than one language and/or style	Not present in the data set
Resistant Knowledge	Allowing space for diverse groups of students to counter societal messages and structures that devalue them	Starting Point: "Connections with peers who looked like me"

I examined the entire written text from each website line-by-line to track patterns.[4] Table 1 provides a description of each code and an example. Because none of the bridge program websites in the data set included a code for linguistic knowledge or resistant knowledge, the table identifies a starting point for where resistant knowledge can be better incorporated.

Learning from Student Affairs Professionals: Aspirational Knowledge and Familial Knowledge

Despite their shared commitment to student support, student and academic affairs professionals frequently operate in separate spheres. Instructors and staff working in one area are often unaware of the work being done in another area on campus. An increased level of collaboration between student affairs and academic affairs begins with honoring the expertise of each group. Bridge programs in this study provide models for integrating aspirational knowledge and familial knowledge into academic coursework and departmental programming. Eight programs in the data set had at least one aspirational knowledge or familial knowledge code.

Aspirational Knowledge: Recognizing Students' Potential

Bridge program references to aspirational knowledge, "the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers" (Yosso 77), emphasize students' academic and career goals. For example, the webpage for the Summer Bridge Experience at The Ohio State University claims the program is "designed to assist Young Scholars reach [*sic*] their full potential and achieve their academic and career goals through personal, professional, and leadership development" ("Summer Bridge Experience"). Instead of focusing on skills or knowledge that students lack, programs emphasizing aspirational knowledge imply an understanding of students as motivated and goal-oriented.

The Freshman Summer Program at the University of California, Los Angeles is the only other program in the data set that uses the word "potential" ("Freshman Summer Program"). This program is housed in the Academic Advancement Program (AAP). According to the website, "AAP programs and services are linked together by an underlying belief that all AAP students have earned their academic right to be at UCLA and have demonstrated the academic potential to excel at, and graduate from, UCLA" ("Freshman Summer Program"). By referencing students' education as a right and asserting that student participants will graduate, the bridge program makes the implicit argument that they are prepared to overcome challenges. To honor aspirational knowledge, other student success and academic programs should explicitly reference student potential in their programmatic materials.

Another bridge program makes an overt connection to students' dreams and goals through an unlikely ally—corporate partnerships. The Successful Transition and Enhanced Preparation for Undergraduates Program (STEPUP) Summer Bridge Program at the University of Florida is "the [engineering] college's first summer-bridge transition program targeting freshman engineering students, with a particular focus on underrepresented student populations (i.e. Women, African-Americans, Hispanic/Latinx and Native-American students)" and first-generation learners ("Successful Transition"). Students benefit from engineering facility tours, research mentorship by a corporate sponsor, and an alumni speaker series. While corporate sponsorship of bridge programs might seem suspect, STEPUP honors students' aspirations by helping them navigate barriers to fulfilling their goals. For first-generation engineering students, these barriers can include unfamiliarity with potential careers, a lack of procedural knowledge in finding internship and job opportunities, and the lack of personal contacts who are engineers. STEPUP's website discourse provides a useful counter to the banking model of education, described by Paulo Freire as one that views students as empty "receptacles" needing "'to be filled'" (72). Instead of viewing students as "empty vessel[s]" (79) without aspirations, or treating their goals as irrelevant, the website discourse positions students as capable and goal-oriented. STEPUP provides specific contacts and information designed to help students realize their professional goals.

These approaches toward aspirational knowledge employed by student affairs professionals offer a useful model for academic affairs, particularly composition programs. Academic departments and individual instructors can connect what they do to students' own aspirations and goals if they are not already doing so. Most students arrive at higher education with motivations and dreams—they are not blank slates. Yet composition instructors and administrators do not always design assignment options and programmatic pathways around these aspirations. Given the vast potential to connect with

students on a deeper level through aspirational knowledge, this funds of knowledge area should be incorporated more broadly into writing studies programs. Assignments can be designed so that students can tailor them towards their individual goals, research interests, and areas of expertise. In addition, composition programs can collaborate with writing centers to offer workshops on personal statements, application writing, and other goal-oriented writing to better support students' aspirational knowledge. By learning from our colleagues in student success, we can better integrate aspirational knowledge across academic courses, programs, and departments.

Familial Knowledge: Integrating Students' Support Networks

Alongside aspirational knowledge, familial knowledge offers a useful strategy for integrating students' assets into bridge programs. Familial knowledge involves "recognizing how kinship bonds can support student success" and can involve both biological and non-biological support networks. The Millennium Scholars Program, which houses Summer Bridge at The Pennsylvania State University, emphasizes family involvement: "The parents of Millennium Scholars are vital to the program's success. We expect and encourage parent engagement from Interview Weekend until graduation" ("Summer Bridge"). By deeming families "vital to the program's success," the Millennium Scholars Program comes the closest of the programs in this study to recognizing families' funds of knowledge in its website discourse. Parents are given a venue to network with one another and to assist with events.

On the other hand, these roles may preclude participation in ways that more clearly draw on families' experiences. Luis Moll et al. examine the various "household" areas of knowledge present in communities of color in Tucson, Arizona such as agriculture and mining (soil and irrigation systems, timbering), material and scientific knowledge (masonry, architecture), economics (renting and selling, loans), medicine (herbal knowledge, folk medicine), and household management (budgets, cooking, appliance repairs) (73). Presentations by students' families as a part of bridge program curricula could demonstrate real-life applications of disciplinary expertise and familial funds of knowledge. Composition courses in bridge programs could ask students to write reflections on familial knowledge, particularly as it relates to an expansive definition of multiliteracies. Instructors can intentionally design assignments that make connections to the literacies that students bring with them to university spaces. Student affairs and academic affairs professionals can draw on students' familial knowledge where they are not already doing so, and collaborations between both areas may yield new possibilities.

*Learning from Academic Affairs: Linguistic Knowledge and
Resistant Knowledge*

While bridge programs provide examples for academic programs to recognize and integrate aspirational knowledge and familial knowledge into their work, academic departments can claim different areas of expertise related to funds of knowledge. Composition professionals are particularly well-suited to share their expertise in linguistic knowledge and resistant knowledge with bridge programs and other student success initiatives. As none of the bridge program websites in the data set included a code for linguistic knowledge or resistant knowledge, I provide examples of how bridge programs can better incorporate these funds of knowledge areas.

Honoring Linguistic Knowledge

Many bridge programs serve students who speak more than one language or who speak non-dominant varieties of English such as African American Vernacular English (AAVE) and Chicano English. Drawing on bilingual education research, Yosso frames linguistically-based funds of knowledge as "the intellectual and social skills attained through communication experiences in more than one language and/or style" (78). In their everyday lives, multilingual students "develop and draw on various language registers, or styles, to communicate with different audiences" (79). Due to their experiences of moving back and forth between standardized English, non-dominant varieties of English, and other languages, diverse student populations may already possess intuitive knowledge in audience awareness and rhetorical decision making, skills which are referenced in the Council of Writing Program Administrators' Outcomes Statement for First Year Composition.

Despite the academic strengths of this linguistic flexibility, none of the bridge program websites mention the fact that students bring linguistic knowledge to their programs. Instead, they refer to the bridge program's ability to confer linguistic and communication skills to students. Two programs in the data set are designed for international students and specifically address language use. The International Student Summer Institute at the University of Wisconsin-Madison has the goal of "helping students improve their academic English skills" and easing the "transition to American university life" and academic culture ("International Student Summer Institute"). One of the courses, English as a Second Language 113: Academic Reading and Writing, seeks to help students improve "speaking, reading, writing, and listening skills that are essential to academic success at UW-Madison" ("International Student Summer Institute"). Similarly, Summer Start at University of California, Davis lists a series of writing courses designed for "undergraduate students

whose native language is not English" ("Summer Start"). This program offers "opportunities to strengthen language skills and intercultural competencies so that they [students] are better prepared to be a full citizen of the university" ("Summer Start"). Though not an international student program, Early Fall Start at University of Washington also addresses the particular academic needs of international students with "special courses for students who want to improve their English language skills" ("Early Fall Start").[5] The website discourse of these bridge program courses emphasizes a desire to help students gain experience and skills with the kind of standardized English that is valued in higher education institutions; this is certainly helpful, especially for international learners. Bridge programs in the data set that are not designed for international students also describe how their programs develop linguistic and communication skills. However, the website discourse of all programs in the data set stops short of recognizing the versatile linguistic knowledge that diverse groups of students bring with them to university spaces.

Scholars in writing studies can draw on decades of rich disciplinary conversation regarding linguistic knowledge. The 1974 Conference on College Composition and Communication position statement, *Students' Right to Their Own Language (SRTOL),* called for attention to the multiple valid ways that students communicate beyond standardized forms of English, including non-dominant varieties. Although not part of this study's data set, the ESL program at the University of Massachusetts Boston emphasizes an asset-based approach to students' varied language use. The website description for their program serves as a model for how programs can adopt a funds of knowledge stance towards linguistic knowledge:

> Our work in the ESL program is founded on the knowledge that cultural, linguistic, and rhetorical composing processes work together when multilingual students produce writing. . . . the ESL program is committed to racial equity, diversity, inclusiveness, multilingualism, multiculturalism, and individuals' language rights. Thus, we, the ESL program administrators and faculty, believe that our students' multilingual and multicultural repertoires are invaluable assets that promote and enrich the linguistic landscape of the institution and the sociocultural development of all our student body. ("Undergraduate ESL Program")

Bridge programs and writing programs can help students develop this asset-based understanding of the varied ways in which they use language. The statement moves beyond articulating the impact of linguistic knowledge on individual students; instead, it claims that students' multilingualism enriches

the institution as a whole and promotes the "sociocultural development" of the entire student body. Thus, the wider university community stands to benefit when linguistic knowledge is recognized and supported. While scholars in writing studies have begun to answer the *SRTOL's* call to honor linguistic knowledge (Canagarajah; Lu and Horner; Young), additional scholarship and resources are needed to shift faculty and staff, administration, politicians, and the general public toward understanding students' varied language use as an asset.

As a beginning step toward this story-changing work (Adler-Kassner 29), composition scholars should seek to partner more intentionally with their colleagues in bridge programs if they are not already doing so. Student support staff should be invited to writing program workshops and professional development sessions. Due to their expertise in linguistic knowledge, writing studies scholars can serve as key ambassadors of this funds of knowledge area. Instructors can share reflection prompts that ask students to analyze their own approaches to language. Bridge program staff may find activities for teaching students about language varieties to be particularly relevant to their own program curricula. Discussions about language diversity across traditional university boundaries have the potential to initiate institutional change.

Resistant Knowledge and Social Belonging

In addition to linguistic knowledge, academics also have expertise in resistant knowledge—academic critique often involves an interrogation of power structures and societal messages. Composition scholars can draw on the work of scholar-activists such as Linda Adler-Kassner, Ellen Cushman, Linda Flower, Paulo Freire, bell hooks, and many others to frame their approaches to resistant knowledge. Diverse groups of students have access to family and community experiences of resistance to racism, identity stereotypes, and inequity. They may arrive at university spaces well-versed in "cultural knowledge of the structures of racism and motivation to transform such oppressive structures" (Yosso 81). While none of the bridge program websites in the data set included a code for resistant knowledge, their discussions of peer relationships and social belonging offer a starting point for this funds of knowledge area.

Rooted in developmental psychology's connection between intellectual and personal development (Boylan and Bonham 59), bridge programs focus on supporting the whole student to develop "personal and academic" skills needed for a positive college experience (vi). Bridge program websites in the data set frequently cite higher education scholar Vincent Tinto's theoretical model for integrating students academically, socially, and culturally into university life. Tinto's foundational text, *Leaving College: Rethinking the Causes and Cures of Student Attrition,* asserts that students need to develop strong academic and

personal connections to successfully transition to the institution. Peer connections are a crucial component of this transition. Bridge program websites in the data set use student testimonials to highlight the relationships students could develop with their peers. One student from the Special Transitional Enrichment Program at University of California, Davis said, "After I went through my first day I went to sleep comfortable because throughout the day I had shared my story with people that were complete strangers to me" ("Special Transitional Enrichment Program"). This type of sharing aligns with Tinto's understanding of the social integration that facilitates a "sense of belonging" and "the sense that they are part of a larger community" ("Through the Eyes" 258), which he identifies as critical factors for student persistence (*Leaving College* 120).

One type of peer connection is particularly relevant to resistant knowledge as it relates to diverse groups of students—the opportunity to make friends with peers who share their demographic characteristics. For example, a student from Ohio State's Summer Bridge Experience comments on the "chance to make friends that are more like myself" ("Summer Bridge Experience"). Similarly, a Special Transitional Enrichment Program student at University of California, Davis, refers to the program as "an awesome three weeks that helped me form connections with peers *who looked like me*, and made me feel welcomed in the University" (emphasis added). Both programs primarily serve first-generation, low-income students. Given that U.S. society is stratified by race, ethnicity, and socioeconomic class, first-generation and low-income students in bridge programs are more likely to be students of color as well. Tinto argues that there should be "sufficient numbers of students of similar backgrounds on campus to allow for the development of self-sustaining student communities" ("Through the Eyes" 261). His use of "self-sustaining" implies a funds of knowledge orientation, one that views students as integral to establishing support networks with each other.

These student support networks within bridge programs have the potential to function as manifestations of Nancy Fraser's private "enclaves," spaces where marginalized groups can withdraw from larger groups and gather together. The notion of private enclaves is related to her term "subaltern counterpublics," which are "discursive arenas where members of subordinated social groups invent and circulate counterdiscourses, which in turn permit them to formulate oppositional interpretations of their identities, interests, and needs" (Fraser 67). In bridge programs, groups of students who have little discursive power in general can collectively push back against stereotypes they face in the university and in society. Bridge programs can acknowledge enclaves as a specific programmatic benefit. In doing so, diverse student groups could center student-generated knowledge, such as strategies for dealing with microaggressions, responding to institutional racism, and navigating imposter syndrome.

Making space for these strategies in curricula and activities would allow bridge programs to take supporting the whole student to the next level.

Composition scholars have expertise in employing a critical lens in their research, and student success programs can use their approach as a model for emphasizing resistant knowledge in their programs. Writing studies scholars can identify research that helps their bridge program colleagues advocate for resistant knowledge approaches to stakeholders such as university administrators, grantmakers, and other funders. Composition instructors who teach in bridge programs can design course curricula around themes of social belonging and imposter syndrome. They can create assignments that allow diverse groups of students to speak back to deficit-based societal messages. By incorporating resistant knowledge more thoroughly in their collaborations with bridge programs, writing studies professionals can use their expertise to support student persistence and retention.

Funds of Knowledge Applications and Future Directions

Bridge programs provide models for integrating aspirational knowledge and familial knowledge into academic coursework and departmental programming, especially in terms of writing programs. Composition scholars and programs are uniquely positioned to share their expertise regarding linguistic knowledge and resistant knowledge with bridge programs. The funds of knowledge framework has the potential to reshape curricula, programs, and retention initiatives if administrators, instructors, and student staff work together. I developed a heuristic (see table 2) for integrating funds of knowledge into academic and student success programs. For each stakeholder group, the heuristic addresses generative questions for interrogating assumptions about students as well as practical questions of application. As a tool for reflexivity, this heuristic can be adapted to the specific contexts of local programs as one way to begin story-changing work, which "proceeds incrementally" (Adler-Kassner 131) and "is most effectively enacted at the local level" (184). It offers a starting point for academic and student success programs to assist students in naming and claiming their prior experiences as valuable in university spaces.

Table 2. Heuristic for Integrating Funds of Knowledge

Stakeholder	Generative Questions	Practical Questions
Administrators	What obstacles have students at your institution successfully negotiated to arrive at college? How much do you know about the varying prior educational experiences of students from diverse groups?	How can staff professional development, placement mechanisms, student learning outcomes, and assessment account for students' prior knowledge? In what ways could program materials use discourse that emphasizes students' assets instead of their deficits?
Instructors	What are your assumptions and expectations about what the ideal student is like? In what ways do students' prior educational experiences inform their evolving understanding of the bridge program and institution they attend?	What course themes, assignments, and activities prompt students to recognize their own funds of knowledge? How do you address grammar, expression, and mechanics in your course?
Student Staff (Tutors, Resident Assistants, Peer Mentors, etc.)	What prior knowledge areas do you possess that aren't always recognized in academic spaces? What were your personal experiences in adjusting to college?	What multiple forms of intelligence can you acknowledge in other students? In what ways can you feature students' aspirational, linguistic, and cultural knowledge in social and academic activities?

In the introduction to their edited collection, *Retention, Persistence, and Writing Programs,* Ruecker et al. argue that writing studies scholars should engage with institutional, regional, and national retention conversations to keep the focus on student learning (9). They contend that while "first-year composition has long been employing some of the best practices validated by retention research . . . we often fall short of connecting our work to the bigger picture of student success" beyond composition courses (15). Participating in this work is important as enrollment, retention, and graduation rates will remain institutional metrics of success. Empirical data does link participation in a bridge program with higher retention rates, but current data is limited in scope (Cabrera et al.; McCurrie). More research is needed to demonstrate the ways in which funds of knowledge approaches can yield increases in enrollment, retention, and graduation rates.

Additional research may focus on other types of institutions beyond large, four-year, public research universities to see whether this study's findings are more broadly applicable. In addition, bridge program websites offer a limited view of what happens in these programs since these public-facing narratives must appeal to potential students and their families as well as to upper-level administrators who make funding decisions. While program websites can reveal latent assumptions, they "are created and live within institutional and infra-structural hierarchies, and these hierarchies are often invisible to us" (Knight et al. 190). Individual programs do not always have the funds or personnel to create and manage an online presence (196). Content and design can be dictated by a webmaster elsewhere in the institution, such as a university relations office or through a centralized information technology unit (196). In response to this limitation, future research projects can offer a deeper understanding of how bridge programs operate in practice.

Surveys, interviews, and focus groups of instructors who teach writing courses in bridge programs could yield more data about bridge program courses, particularly composition. While these courses were an original focus of this research, there was not enough consistent information across the data set to make claims about the teaching of writing in these programs. Information about course assignments and themes could yield valuable insights regarding the extent to which a funds of knowledge orientation is present, if at all, in these courses. In addition, surveys, interviews, and focus groups of writing program administrators and bridge program leaders would be particularly valuable in mapping the existing relationships between composition programs and bridge programs at a range of institutions.

Research examining the alignment of composition course assignments with funds of knowledge areas would be especially generative as this framework can contribute much to writing studies. Imagine the potential of funds of knowledge to restructure composition placement mechanisms. Policies for writing courses and programs that draw on funds of knowledge would recognize linguistic knowledge as a strength, rather than as a deficit. Instructor professional development could give rise to curricula that honors students' prior experiences as strengths.

As composition scholars and programs embrace public diversity and inclusion missions, collaborating with our colleagues in bridge programs already engaged in this work is essential. Writing studies instructors could attend bridge program professional development sessions and events, and composition programs could invite bridge program professionals to their own events and workshops. Collaboration across areas with a shared commitment to student support is a crucial step toward meaningful institutional change. These types

of bridges between academic and student affairs can allow both to partner with students in changing the story.

Acknowledgments

Notes

1. Name has been changed.

2. While students can be diverse in many ways, I use these particular identity categories as they are the most common across this study's data set.

3. The exception is University of California, Merced, which is listed as "Doctoral Universities: High Research Activity" and has 7,967 students.

4. I copied the full text of bridge program websites in the dataset as they existed in July 2018. Pages may have since changed. Images, videos, and page design are beyond this project's scope.

5. Early Fall Start is part of University of Washington's Continuum College. I included this program because it meets the criteria and reveals how one university responds to diverse student populations at the point of access.

Appendix: Programs in the Data Set

Michigan State University: (1) Engineering and Science Success Academy, (2) TRIO Excel Summer Program

The Ohio State University: (1) Louis Stokes Alliance for Minority Participation (LSAMP) STEM Bridge Program, (2) Summer Bridge Experience

The Pennsylvania State University: (1) Learning Edge Academic Program, (2) Summer Bridge

The University of Arizona: (1) New Start Summer Program, (2) UAdvantage First Year Experience (discontinued)

University of California, Davis: (1) Special Transitional Enrichment Program, (2) Summer Start

University of California, Los Angeles: (1) College Summer Institute, (2) Freshman Summer Bridge Program, (3) Freshman Summer Program

University of California, Merced: UC Merced Summer Bridge First-Year Program

University of Florida: The Successful Transition and Enhanced Preparation for Undergraduates Program (STEPUP) Summer Bridge Program

University of Maryland, College Park: Summer Bridge Program for Scientists and Engineers

The University of North Carolina at Chapel Hill: Summer Bridge Program

The University of Texas at Austin: Summer Bridge

University of Washington: Early Fall Start

University of Wisconsin-Madison: (1) International Student Summer Institute, (2) Mechanical Engineering Summer Launch, (3) Summer Collegiate Experience

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