Rethinking the Resources of Culturally and Linguistically Diverse Elementary Students in a Preservice Teacher Education Program[1]

Replanteamiento de los recursos cultural y lingüísticamente diversos en un programa de formación inicial docente de Educación Primaria

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Abstract:

Many teachers enter the profession with a deficit-perspective of their students and their communities, particularly those working with students from low-socioeconomic backgrounds and/or students who are emergent bilinguals. Yet the majority of the students in our schools today come from backgrounds that often have different sets of values and different ways of viewing the world. The result is that, too often, educators adopt a deficit perspective. The goal of this study was to disrupt deficit thinking by introducing preservice teachers to the

Resumen:

Muchos maestros ingresan a la profesión con una visión deficitaria acerca de sus estudiantes y de sus comunidades, particularmente aquellos que trabajan con estudiantes de entornos socioeconómicos bajos y/o estudiantes que son bilingües emergentes. Aún así, la mayoría de los estudiantes de nuestras escuelas hoy en día provienen de entornos que a menudo tienen formas de ver el mundo y valores diferentes. El resultado es que, con demasiada frecuencia, los educadores adoptan una visión deficitaria. El objetivo de este

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notion that students arrive in our classrooms with existing funds of knowledge (Moll, Amanti, Neff, & Gonzalez, 1992). Through class activities and assignments, preservice teachers were introduced to the concept of funds of knowledge. This study examines the impact of introducing an asset-based perspective early in candidates' preparation and asks what shifts occur in preservice teachers' perspectives of their students and the resources those students bring when engaged in purposeful examination of their own and their prospective students' cultural funds of knowledge.

estudio fue terminar con la visión deficitaria introduciendo a los maestros en formación la noción de que los estudiantes llegan a nuestras aulas con conocimiento previos (Moll, Amanti, Neff y González, 1992). A través de actividades y asignaciones de clase, los futuros maestros fueron introducidos en el concepto de conocimientos profundos. Este estudio examina el impacto de introducir una perspectiva basada en activos al comienzo de la formación de los candidatos y pregunta qué cambios ocurren en las visiones de los futuros maestros sobre sus estudiantes y los recursos que esos estudiantes aportan cuando se involucran en un análisis intencionado de su propia cultura y la de sus futuros estudiantes.

Key words:
Preservice teacher preparation; preservice teacher; funds of knowledge; cultural competency; culturally sustaining pedagogy.

Palabras clave:
Formación de futuros docentes; futuros docentes; fondos de conocimiento; competencia cultural; pedagogía culturalmente sostenible.

Résumé:
De nombreux enseignants entrent dans la profession avec une vision déficitaire de leurs élèves et de leurs communautés, en particulier ceux qui travaillent avec des élèves issus de milieux socio-économiques défavorisés et/ou des élèves qui sont bilingues émergents. Pourtant, la majorité des élèves qui fréquentent nos écoles aujourd'hui sont issus de milieux qui ont souvent une vision du monde et des valeurs différentes. Le résultat est que, trop souvent, les éducateurs adoptent une vision déficitaire. L'objectif de cette étude était de mettre fin à la vision déficitaire en présentant aux enseignants en formation initiale la notion selon laquelle les élèves arrivent dans nos salles de classe avec des connaissances préalables (Moll, Amanti, Neff, & Gonzalez, 1992). Par le biais d'activités et de travaux en classe, les futurs enseignants ont été initiés au concept de connaissance approfondie. Cette étude examine l'impact de l'introduction d'une perspective basée sur les atouts au début de la formation des candidats et s'interroge sur les changements qui se produisent dans la vision que les futurs enseignants ont de leurs étudiants et des ressources que ces derniers apportent lorsqu'ils s'engagent dans une analyse ciblée de leur propre culture et de celle de leurs futurs étudiants.

Mots clés:
Formation initiale des enseignants; futurs enseignants; sources de connaissances; compétence culturelle; pédagogie culturellement sensible.

1. Introduction

Many teachers enter the profession with a deficit-perspective of their students and their communities (Delpit, 1995; Valencia, 1997), particularly those working with students from low-socioeconomic backgrounds and/or students who are multilingual. As has been well-documented, the majority of educators in the United States are white women from Middle Class backgrounds whose experiences align with the dominant culture, the same culture schools were created to replicate (National Center for Educational Statistics [NCES], 2021). Yet the majority of students in our schools come from backgrounds that often have different sets of values and different ways of viewing the world (NCES, 2021). The result is that, too often, educators adopt a deficit perspective. Instead of viewing students' knowledge and perspectives as assets to be both celebrated and incorporated into the curriculum, they view students as lacking because they do not have knowledge of the dominant culture.

The goal of this study was to disrupt deficit thinking by introducing preservice teachers (PSTs) to the notion that students arrive in our classrooms with existing funds of knowledge (Moll, Amanti, Neff, & Gonzalez, 1992). Through class activities and assignments in their Emergent Bilingualism and Culturally Sustaining Pedagogy course, PSTs were introduced to the concept of funds of knowledge and asked to examine their own funds of knowledge. The PSTs were then asked to consider the funds of knowledge of students in the local community through engagement in a Community Walk activity (Aguirre et al., 2013). The findings from their walks formed the basis for their thinking about future instructional activities. This study examines the impact of introducing this asset-based perspective early in candidates' preparation and asks what shifts occur in PSTs' perspectives of their students and the resources those students bring when engaged in purposeful examination of their own and their prospective students' cultural funds of knowledge.

2. Conceptual and Theoretical Frameworks

Teachers enter their preservice preparation with a preconceived set of beliefs developed over the course of their lives. It is then the role of teacher preparation to disrupt these preconceived belief systems to support all

PSTs in developing an asset-based framework that will inform their work with students. A funds of knowledge perspective is one framework that can facilitate the development of an asset-oriented framework.

In the following section, we explore three overarching bodies of literature that were used to inform this study: preconceived teacher beliefs, role of teacher preparation in disrupting beliefs, and the funds of knowledge framework.

2.1. Preconceived Set of Beliefs

PSTs often enter their preparation programs with preconceived notions that inform their understanding of schools (Cochran-Smith et al., 2015). Though efforts are underway to change the face of educators in the United States, as has been well-documented, the overall teaching workforce lacks diversity and is predominantly white, with white monolingual women comprising around 76% of the overall K-12 teaching workforce (Ingersoll et al., 2018). The predominance of white teachers contributes to the overall whiteness of school norms and curriculum (Bazemore-Bertrand & Porcher, 2020; Cook, 2013). As a result, students of color often experience cultural discontinuity, a disconnect between their experiences at home and those at school (Boykin, 2001). This resulting discontinuity leads to the delegitimization of students' experiences and knowledges and contributes to deficit perspectives on the part of educators. Gorski (2010) identifies deficit beliefs as larger ideological assumptions related to poor people of color in the United States. These beliefs define "every social problem in relation to those toward the bottom of the power hierarchy, trains our gaze in that direction, and as a result, manipulates the popular discourse in ways that protect and reify existing sociopolitical conditions" (Gorski, 2010, p. 7). In schools, deficit perspectives contribute to blaming school failure on students' own internal, familial, or cultural deficits (Valencia, 2010). Parker, Reid & Ghans (2017) name educators' deficit perspectives of students a "deficit default," which describes the educators' constant struggle against preconceived notions and beliefs and often results in a re-emergence of deficit perspectives of students associated with race, language and poverty, despite efforts made in preservice to shift this orientation.

The reality is that educators have had a long time to develop their deficit perspectives. Historically, practices of subtractive schooling were

the norm, where the white, mainstream culture dominated and students either did not see their culture represented in the classroom or, in the worst cases, were punished for actions that drew attention to their culture, such as speaking a different language on the playground (Rios & Longoria, 2021; Valenzuela, 2010). White students, raised in the mainstream culture, saw their culture replicated in the classroom and came to associate the practice of schooling with their own culture's ways of being and ways of knowing.

As has been highlighted in the research literature, PSTs' preconceived notions of students and of schooling in general are deeply informed by their own years as students (Cochran-Smith et al., 2015; Lortie, 1975). As Lortie (1975) found with the concept of "apprenticeship of observation" (p. 61), a teacher's actions in the classroom typically reflect the manner in which they were taught. After having spent around 13,000 hours in direct, close contact with classroom teachers during their own K-12 experiences, PSTs often adopt the practices and frameworks they studied through the observation of their own teachers in a cultural transmission model of learning. By the time PSTs enter their teacher preparation programs, teacher educators are challenged to disrupt the PSTs' pre-existing notions about schooling. Consequently, when they become teachers themselves, these teachers continue to replicate the mainstream culture in their own classrooms.

2.2. Role of Teacher Preparation in Developing New Frameworks

Still, it is within preparation programs that teacher educators have the opportunity and responsibility to prepare culturally competent educators to meet the educational needs of K-12 classrooms (Cochran-Smith et al., 2015). Research indicates that learning increases in the classroom when teachers leverage their knowledge of students' background--including social, cultural, and linguistic--to design and implement instructional activities (Banks et al., 2005). Culturally competent educators operate from frameworks that recognize the knowledges and experiences that children bring with them from their homes and communities, and incorporate these knowledges and experiences into the classroom in order to provide meaningful instruction (Hollie, 2019; Karabon, 2021). It is the responsibility of teacher educators to introduce PSTs to these frameworks.
Yet shifting the frameworks on which teachers base their decisions can

be challenging. For years, teacher preparation programs have worked to infuse, at least in name, a social justice orientation into their curricula (Grant & Agosto, 2008). But although PSTs embrace the ideas taught within their preservice coursework, when they are confronted with the realities of teaching and the cultures already in place at a school site, too often they struggle with what Feiman-Nemser and Buchmann (1985) refer to as the two-worlds pitfall, or the disconnect between the theoretical ideas of their learning and the application of those ideas in practice. Despite the focus of their coursework and their embracing of the social justice ideologies, teachers often revert back to the preconceived notions learned through their apprenticeship of observation (Lortie, 1975) as they begin teaching in their own classrooms.

Shifting the frameworks on which PSTs operate requires ongoing and sustained attention while they are enrolled in teacher preparation, along with the opportunity to begin to apply those ideas in a field-based experience. This shift also requires teacher educators to embrace the notion of PSTs as learners and recognize that learning is both continuous and dynamic (Feiman-Nemser, 2001). PSTs need to have opportunities that allow them to embrace the frameworks introduced at a deeper, more conceptual level that will lead to shifts in their belief system (Grossman et al., 1999). This process of shifting belief systems can begin with PSTs explicitly examining their perceptions of "good teaching" as a lens that impacts their vision of teaching. Preservice teacher curriculum deliberately designed to productively engage with the tensions across the two worlds can lead to the permeation of the boundaries between the learning spaces, which can ultimately lead to the adoption of new frameworks at a more conceptual level. Hebard (2016) suggests designing learning opportunities in both coursework and fieldwork to explicitly disrupt the disconnect between the two worlds by supporting the transfer of theory into practice. New teachers are then better positioned to draw on these frameworks when they enter their own classrooms and are confronted with pre-existing deficit-oriented cultures at a school site.

As a first step in shifting PSTs' belief systems, Bazemore-Bertrand and Porcher (2020) call for "disruptive practices" that interrupt both preconceived and deficient-oriented perspectives. This process of disrupting deficit perspectives of students, schools and communities begins by teacher educators and PSTs together exploring their own identities, per-

ceptions and beliefs (Bazemore-Bertrand & Porcher, 2020). Once they are able to honestly establish what their existing belief systems are, they can begin the process of shifting their thinking towards more asset-based perspectives.

Critical in the process of developing new perspectives is having opportunities to develop cultural competency through a deepening understanding of students and the assets and resources of the communities in which they teach. This work involves entering into the community and engaging with students and their families in authentic ways outside the school setting (Emdin, 2016; Love, 2019) that can potentially disrupt any previously held biases or deficit-based perspectives. When they return to their courses, PSTs then need support in unpacking these experiences and learning how to use their learning about students and their lives outside of school in meaningful ways to support instruction. As they do, PSTs begin to develop their knowledge of culturally sustaining pedagogies, which are defined as teaching that helps culturally and linguistically diverse students develop and maintain cultural competence and academic success, while also developing critical consciousness (Freire, 2013; Puzio et al., 2017) that contributes to learners' agency to intervene.

2.3. Funds of Knowledge as a Framework to Shift Perspective

Rooted in an ethnographic study of the knowledge students develop carrying out tasks in their everyday home lives, a funds of knowledge perspective counters deficit views of linguistically and culturally diverse communities by presenting an additive way of viewing diverse children and families. Moll et al. (2005) developed the concept of funds of knowledge to theorize household practices in order to better understand and build upon the complexity of students' lives. To adopt a funds of knowledge perspective, Moll et al. (1992) argue that teachers must view communities and families as resources for students in schools. The knowledge students develop in their everyday lives (e.g. caring for family members or assisting with household chores) should be viewed as assets to be built upon in the classroom. In theorizing household and community practices, educators are better equipped to understand the complexities of children's lives in order to implement what Moll et al. (2005) call a "new attitude" towards the cultural resources found in the households.

Once teachers take stock of the funds of knowledge their students bring, they can use this knowledge to inform their own pedagogical decisions.

Funds of knowledge (Moll et al. 1992) and other seminal asset-oriented frameworks -such as culturally relevant pedagogy (Ladson-Billings, 1995)- provide the groundwork for culturally sustaining pedagogies (Alim & Paris, 2017). In this study, we drew upon the foundational concept that candidates must first recognize funds of knowledge in order to then engage with culturally sustaining pedagogies.

Introducing theories such as this early in teachers' preservice preparation may help to disrupt previously held notions about students and student learning, but only when the more formal theories are connected to PSTs' existing beliefs (informal theories) (Szabo, Scott, & Yellin, 2002). One approach to disrupting PSTs' previously held belief systems is to introduce them to the funds of knowledge framework.

2.4. Funds of Knowledge in Teacher Education

Previous research has demonstrated the positive impact introducing the funds of knowledge framework in preservice coursework can have on PSTs' belief systems. When PSTs critically examined their own funds of knowledge, they were better positioned to begin to interrogate the hegemonic curricula in place in their school settings (Karabon, 2021). Yet even when they did engage in this critical analysis, when actually in the classroom, many still reverted to teaching in ways similar to the ways they had been taught (Lortie, 1975).

Aguirre et al (2013) found that through engagement in a community walk activity, PSTs demonstrated distinct connections with children's mathematical thinking and their community funds of knowledge. During the community walk activity, the PSTs visited community locations and spoke with parents and community members. The PSTs then leveraged their learning to develop mathematical lesson plans. The researchers contend that it is essential that culturally responsive pedagogies draw upon community funds of knowledge to support learning and that practice and engagement with funds of knowledge is necessary for PSTs to develop robust teaching practices.

3. Methods

To examine the shifts that occur in PSTs' perspectives of their students and the resources those students bring when engaged in purposeful examination of their own and their prospective students' cultural funds of knowledge, we utilize case study methodology (Stake, 1995) and draw upon qualitative methods for data collection and analysis. As the third author was the instructor of the focal course, the study follows a tradition in Teacher Education of instructors researching their practice through student learning and program processes (Grossman, 2005).

3.1. Context

This study is situated at a regional university in the western United States with a large teacher education program, preparing approximately 300 elementary teachers annually through a post-baccalaureate model. The program utilizes a cohort model to support PSTs throughout their coursework.

The course that forms the focus of this study was part of a teacher residency cohorts offered through a partnership with a local, semi-rural district situated in the town of Rural in California's Central Valley. In the program, PSTs took all courses together as a cohort. As a component of the residency, their coursework took place in classrooms at schools within the district where they were completing their student teaching. The PSTs completed the first phase of their coursework in the summer and the second and third phases during the academic year.

Rural (25,000 residents) is located 20 miles from a large, urban city in California's Central Valley. The district served a population of 12,102 students in 2017-2018, the year when data were collected. Of those, 20% were identified as English learners, and 70% received free or reduced-price meals. Approximately two-thirds of the students identified as Latinx, while another one-third identified as white. Just under 20% (17.8) identified as Asian.

Data included were collected during the summer, candidates' first semester in the program. Within this semester, PSTs took an Emergent Bilingualism and Culturally Sustaining Pedagogy course, from which data used in this study were collected. Additionally, PSTs took coursework in literacy foundations, curriculum, and developmentally appropriate prac-

tices, as well as an inquiry and puzzles of practice seminar. At the same time, PSTs were doing observations in summer school classes offered in the district and engaging in individual and small group instruction.

Although the authors were not the instructors of the Emergent Bilingualism and Culturally Sustaining Pedagogy course, they did teach other courses in the program.

3.2. Participants

The majority of the 23 PSTs who made up the cohort had just completed their undergraduate degrees at the same university, a designated Hispanic-serving institution. Of the 23 PSTs included in this study, 18 were female. Of those, eight identified as Latinx, nine identified as White, one identified as a Hmong, and one identified as Filipina. Of the four males, three identified as Latinx, and one identified as White. While most candidates were from the nearby metropolitan area or surrounding communities, three of the PSTs lived in the town of Rural.

3.3. Instructional Sequence

In the Emergent Bilingualism and Culturally Sustaining Pedagogy course, PSTs were initially introduced to the concept of funds of knowledge through a funds of knowledge inventory, followed by a group analysis of the children's book The Last Stop on Market Street (de la Peña & Robinson, 2015). The PSTs then participated in a community walk (Aguirre et al., 2013) before presenting their findings to their classmates in community walk presentations. The instructional sequence spanned four 90-minute class sessions.

3.3.1. DAY ONE INSTRUCTION

Prior to day one of instruction, students read an introduction to the funds of knowledge framework (Moll, Gonzalez & Amanti, 2005) to develop an understanding of the framework at a conceptual level. During the first day of the instructional sequence, the PSTs used their knowledge to engage in a funds of knowledge inventory activity where they charted their own funds of knowledge and the funds of knowledge of their students and the community based on nine categories: home language, family values and traditions, caregiving, family and friends, household

chores, educational activities, scientific and environmental knowledge, family occupations, and culture. The PSTs were prompted to reflect on the similarities and differences between their funds of knowledge and those of the students and their community. They were also prompted to consider how to build upon their students' and the community's funds of knowledge in their classrooms.

3.3.2. Day Two Instruction

On the second day of instruction, students participated in a group reading and analysis of the children's book The Last Stop on Market Street (de la Peña & Robinson, 2015). Prior to reading the text, the group again reviewed the funds of knowledge concept (Moll, Gonzalez &Amanti, 2005) and reflected on the funds of knowledge inventories they had previously completed. The PSTs then engaged in a reading of The Last Stop on Market Street and discussed ways in which the character of Nana represented a funds of knowledge perspective.

After the literature analysis, the instructor guided the whole class in a discussion to collectively develop definitions of a funds of knowledge perspective and a deficit perspective, thinking about the impact of each on the students in the classroom. The group then viewed a video on culturally responsive teaching and the funds of knowledge theoretical model (Bender, 2016). Finally, the PSTs brought these concepts back to reconsider their students' funds of knowledge and to think about how they might leverage these funds of knowledge for learning. Before the end of the session, the students were introduced to the Community Walk (Aguirre et al., 2013) activity.

3.3.3. Day Three Instruction

On Day Three, the PSTs participated in the Community Walk (Aguirre et al., 2013). Working together in small groups, they went into the local community to identify and document assets they found. The instructor developed the goals for the community walk based on Aguirre et al. (2013) and shared those with the PSTs.

1. Engage in our students' community: Visit Rural locations, dialogue with families, parents, and community members.
2. Increase our knowledge of the students' community, particularly of activities and practices that might make us think about connections to content areas like math, science, and social science.

3. Increase our knowledge of children's out of school activities (in home or community.)
4. Broaden our perspective and understanding of children's competencies.

Each group was assigned a content area (math, science, social studies, language arts, and visual/performing arts) and instructed to document community practices that might serve as resources for content instruction. As they looked for these resources, the PSTs were encouraged to talk to members of the community. Although the instructor suggested they select an insider from among the group members to assist them, they were also encouraged to go places they had never been. Additionally, they were encouraged to walk and not drive in order to slow down and engage with the community. The PSTs were instructed to note both resources of practices that may not be traditionally thought of as educational and resources that surprised them. Each group was also asked to collect artifacts and record assets they found through digital photos to be included in their group's slide presentation to be shared the following class session.

3.3.4. Day Four Instruction

When they returned to the classroom on the fourth day, the PSTs edited their collections of digital images. The groups also worked to articulate the connections between the community resources they identified and the classroom curriculum. Each group presented its findings to the cohort. The course instructor then led a whole class discussion of ways in which these assets represented funds of knowledge and could be leveraged for learning.

4. Data Sources

Data sources include (1) PSTs' written reflections detailing the perspectives of their students and the assets they bring before and after the class activities, (2) ethnographic field notes recorded during class sessions that focused on the introduction of the funds of knowledge approach, (3) all assignments completed by the PSTs, and (4) community walk presentations.

5. Data Analysis

Data were coded qualitatively using an inductive approach (Merriam, 2009) to identify themes in participants' emerging understandings and adoption of a funds-of-knowledge perspective. In the first round of coding, the researchers independently coded the data and developed a list of themes. We then compared codes and developed a common codebook, which was used to guide the second round of coding. The second round of coding was conducted with all researchers working together to develop the final list of themes, which included community assets, familiar situations, personal identification supported conceptual development, savior mentality, community resilience, and discourse of individualism, among others. Trustworthiness (Denzin & Lincoln, 2005) was maintained by identifying consistent themes across data sources. Researcher debriefing after the initial independent coding and final coding led to the confirmation of alignment among data sources and codes.

6. Findings

Data analysis revealed three overarching findings about shifts that occurred in PSTs' perspectives: Repeated Exposure Leads to New Understandings, Turning Theory into Practice, and Reluctance to Engage.

6.1. Repeated Exposure Leads to New Understandings

Ethnographic field notes revealed that the PSTs in this study interacted with the funds of knowledge framework with varying levels of engagement, which then led them to varying levels of understanding during the learning sequence. Through the process, some of the PSTs developed a deeper, more complex understanding of the funds of knowledge framework, while others' understanding remained at the surface level. Overall, findings demonstrated that providing multiple opportunities for repeated exposure to the concept in a variety of formats led to new and deeper understandings.

6.1.2. Funds of Knowledge Inventory

When initially engaging in the funds of knowledge inventory, the PSTs demonstrated a narrow understanding of the concept. Their limited definition included the general concepts of heritage, language, music, and food without providing any specific details. In the subsequent discussion, the instructor emphasized that funds of knowledge were historically accumulated and could potentially shift over time. Through this discussion, one student broadened her definition to include "that [funds of knowledge] is an expression of family dynamics and it influences what you do outside of school," demonstrating her understanding of the fluid and contextual nature of the framework.

In their final funds of knowledge inventories, the PSTs' expanded on their initial definition. The PSTs also added spirituality and community structures with a specific emphasis on community Elders and various family structures. One student also discussed caregiving activities including sibling and elder care. The PSTs identified jobs, such as construction and plumbing, as being funds of knowledge. When thinking about linguistic funds of knowledge, the PSTs broadened and articulated their definition by including formal and informal language as well as students' home and heritage languages. The PSTs explicitly identified English, Spanish, Hmong, Arabic and American Sign Language.

After completing the funds of knowledge inventory, one preservice teacher said, "This makes me appreciate how much knowledge the students have as kids." Another responded by sharing, "This makes me think of kids who don't think they're smart. Maybe they felt that way by the way that we were measuring it, but it's not true." Together, these comments demonstrate the impact engaging in a critical analysis of their students' out-of-school knowledge can have on the PSTs' belief systems, at least initially. The second preservice teacher highlighted here began to make the connection between students' own perceptions of their knowledge and the negative impact not taking into account their out-of-school funds of knowledge can have on their perceptions of themselves as knowledgeable individuals.

6.1.3. Literature Analysis

Findings showed that, during the literature analysis, the PSTs developed a broader and more complicated notion of the funds of knowledge framework. They expanded their understanding of the framework to inclu-

de character traits such as respectful behavior, caring, non-judgemental nature, and physical comfort. In the following discussion of the text The Last Stop on Market Street (De La Pena, 2015), the PSTs shared their ideas about the main character of the book, CJ, and his grandmother, Nana.

> Instructor: How does Nana represent a funds of knowledge or asset-oriented perspective?
>
> Lucinda (all names are pseudonyms): [Nana] guides him to a more positive outline.
>
> Raphael: She is caring with the soup kitchen and wants him to grow up being caring.
>
> Marie: Teaching him social interactions. Teaching how to be respectful – say hello to everyone on the bus, giving up a nickel to the man playing guitar.
>
> Sarah: She's teaching him humility.
>
> Sal: She is also right by him. Physical comfort.

Though the instructor asked specifically about how Nana represents a funds of knowledge perspective, the PSTs' responses were actually more nuanced as they began to explore the lessons Nana taught to CJ through her interactions with others, all of which represented an asset-based perspective. As the PSTs highlighted, the lessons Nana taught to CJ through her actions and comments focused more on character development and ways of interacting in the larger community rather than a specific skill. As she nudged CJ to give his newly acquired nickel to the man playing guitar on the bus, she modeled having respect for all and valuing each individual's contributions to the world. The PSTs noticed this and recognized Nana for the way she modeled a funds of knowledge perspective.

As their discussion continued, the PSTs discussed the ways in which funds of knowledge were passed on from one generation to the next through day-to-day interactions including questions, answers, and dialogue between CJ and Nana navigate the city together. Analyzing these interactions and realizing the deeper learning that occurred between the two helped the PSTs to expand the types of knowledge their students might be developing--from language and skills to ways of being in the world--through elders in their own lives and communities. Through the literature analysis activity, we observed the PSTs developing an increasingly complex understanding of the funds of knowledge framework.

6.1.4. COMMUNITY WALK

The following day of instruction, the PSTs left the classroom to participate in the community walk activity (Aguirre et al., 2013). After their walk, the PSTs had the opportunity to present their findings. During their presentations, the PSTs demonstrated an increased connection to the community and a deeper understanding of what Rural had to offer.

One group shared they found an art gallery hidden in a small alley behind a grocery store. They spoke directly with the gallery owner, who invited the candidates to return once they started teaching. The PSTs were enthusiastic as they described the gallery as a place they might take their future students on a field trip. In their presentation to the class, the group reported that "art can be found throughout the entire [Rural] community. [Rural] promotes student involvement in the areas of art, dance, and music." The group not only recognized the presence of art in the community--a presence that they said they had not expected to find, but they also saw the possibility of using the art as a way to engage their students in the assets of the community. For the PSTs, the art gallery represented a community fund of knowledge, an asset belonging to the community that their students might have experience with or that their students could potentially have experience with in the future. Discovering this resource helped to begin to shift the PSTs' views of Rural as a place that was lacking to a place with cultural assets. In addition, the group found both an educational organization that provided STEAM activities to children in the community and a dance studio.

Although several of the PSTs had grown up in Rural or close by, being provided the opportunity to examine Rural using the lens of a funds of knowledge perspective allowed them to see the town in a new way. They learned about the resources of Rural, which several described as "hidden." Their newfound knowledge of the cultural assets of Rural contrasts with the resources the PSTs' listed in their initial funds of knowledge inventory. During that first activity, many of the PSTs struggled to identify the funds of knowledge of their students and the community. Based on what they shared during the Community Walk presentations, it became clear that the PSTs' views of the Rural community had begun to shift.

6.2. Turning Theory into Practice

As they shared their findings from the Community Walk, some of the PSTs began to make links between the resources they found and how they could incorporate those resources into their instruction. In doing so, they demonstrated their developing thinking of how to build on funds of knowledge for instructional purposes.

After participating in the Community Walk activity, two of the five groups of PSTs made specific connections to their future classrooms by providing examples as to how the community resources could be used. For example, as one group shared a picture of a neighborhood market, they discussed the various ways the market could provide opportunities for math instruction. They shared pictures of different market items and talked about how elementary math teachers could apply these pictures to adding or subtracting. The PSTs felt that using images from a location familiar to students would demonstrate to students that their teachers valued the community in which they lived and, hopefully, serve to further engage the students in the lesson.

Another group identified opportunities to connect science instruction to the local agricultural community. The group shared that "students in [Rural] Unified are surrounded by agriculture, ranches, and local business. Therefore, students may have funds of knowledge in many subjects including animal science (life cycle of a goat), agriculture (growing seasons of peaches), and understanding business practices (cost of food per pound). Teachers can utilize these funds of knowledge in the classrooms to teach science." The PSTs recognized the wealth of knowledge students accumulated by simply living and interacting in a community supported by the agriculture industry. By providing a specific example of how they would incorporate that knowledge of agriculture into instructional activities, the PSTs were demonstrating their developing ability to employ the funds of knowledge perspective in their instruction.

6.3. Reluctance to Engage

Discussions on race, culture, gender were an integral part of the content of the course and the learning sequence. Throughout, the PSTs were critically engaged in examining their previously held beliefs and thinking about how to engage their students' funds of knowledge. As the instruc-

tion progressed, however, an unexpected incident disrupted the cohort's cohesiveness and worked against the development of their asset-based perspective.

One of the five groups struggled in identifying community-based assets related to their assigned content area. This group was also unable to identify how to leverage the assets for learning. During the class discussion, one of the team members explicitly demonstrated deficit-based thinking. The preservice teacher, a white, female cohort member who was native to the town of Rural, made racial and deficit comments regarding the content of the course and about a faculty member who taught in the program. Additionally, this preservice teacher expressed a deficit-based perspective of the students and their families, openly airing her perspective in the group discussion. The preservice teacher's views permeated the entire cohort and cohort members shared feelings of frustration.

Although the goal of the course was to disrupt these types of perspectives, this incident revealed that, in fact, the instructional sequence neglected to do so for all students. After the incident, other cohort members shared that this student had not engaged in the Community Walk, instead taking advantage of the time to leave the group and do something on her own. Cohort instructors were then forced to confront the situation. They met with the preservice teacher to discuss the actions and her dispositions, with specific steps laid out in an attempt to facilitate shifts in her thinking.

7. Discussion

The findings of this study demonstrated the need for repeated opportunities to engage with the funds of knowledge framework. Each step in the learning sequence yielded increased understandings and ongoing shifts in PSTs' perspectives about students and the affordances of their cultural backgrounds and community. Developing new frameworks and perspectives requires repeated exposure - multiple activities, multiple times, over multiple courses.

Many of the PSTs in this study needed support in understanding and applying the funds of knowledge concept when it was initially introduced, and they benefited from having multiple and various opportunities to engage with the topic. During the first day of instruction, the PSTs

were able to identify their own funds of knowledge without much struggle during the inventory activity. When asked to consider the funds of knowledge of their students, however, they struggled and needed additional support. The reading and discussion of the Last Stop on Market Street provided another opportunity to engage with the framework from a theoretical perspective, and we noted an increase in the PSTs' comprehension of the funds of knowledge framework, as they began to understand the ways in which historically-accumulated knowledge can be passed on from one generation to the next. The Community Walk (Aguirre et al., 2013) activity then served as a starting point both for realizing the community funds of knowledge to which their students potentially had access and for later discussions about how they could integrate funds of knowledge--including linguistic and cultural resources--from the students and their communities into classroom activities.

This study reveals the importance of disrupting PSTs preconceived notions early, possibly even prior to entering the program and continuing during teacher preparation coursework. As highlighted in the framework informing this study, PSTs come to teacher preparation with their own knowledges and experiences that color how they view the content introduced in their teacher preparation coursework; our responsibility as teacher educators is to support them in interrogating their own identities and belief systems so that they are better equipped to recognize who their students are as individuals (Parker et al., 2017). As teacher educators, our work with PSTs begins by identifying where they are, what knowledges and experiences they bring with them to the learning space, and then planning instruction that furthers their trajectory, just as we teach them to do with their students. Only then will they be able to plan instruction that builds on those identities and supports students in their academic growth. In order to do this, we need to create opportunities for the preservice teacher educators to engage in deep, self-reflective work (Gay, 2010). Once they explore their own identities, they can begin to interrogate them and consider how their biases may shape their belief systems. But that alone is not enough.

After PSTs have begun to examine their belief systems, they then need to consider who their students are as individuals--culturally and academically--before they can begin to plan meaningful instruction. Yet, as our findings demonstrate, the PSTs need multiple opportunities to engage in this work. Even then, the multiple opportunities may not be enough. As

our results showed, one of the PSTs did not engage in the opportunities provided in a meaningful way, which led to her lack of development of a funds of knowledge perspective. She continued to view her students and the community through a deficit lens, even though--or perhaps because--she was a native of the community. It may have been that her pre-existing belief systems of the individuals in the community were so ingrained that she was unable to move past them in the limited opportunities provided. Perhaps if more explicit attention had been made to examine the cohort members' existing views prior to engaging in the Community Walk (Karabon, 2021), followed by a deconstruction of deficit-based perspectives, this preservice teacher may have demonstrated more engagement in the classroom communities and further development of an asset-based perspective. These findings do not mean that she will never develop an asset-based perspective, but it does highlight that the opportunities provided to her were not enough. This points to the need for education to continue into the field as PSTs transition into their roles as teachers of record. Having such opportunities would benefit both the preservice teacher who saw little shift in her belief system and those who saw more significant shifts. As PSTs move into their roles as teachers, there can be false assumptions that the growth that happened during teacher education will be sustained, but this growth cannot be taken for granted. When met with the existing culture of a school site, many new teachers revert back to their previously held beliefs or they shift to adapt to the existing culture, even when that goes against what they learned in their teacher preparation program (Cochran-Smith et al., 2015). Once these opportunities for additional knowledge development are enacted, educational research should also be carried into the field to examine the impact of these efforts on teachers' knowledge development (Sleeter, 2016).

8. Conclusions and Implications

The data presented provide a vision of both the possible and the challenges in developing PSTs' asset-based perspectives of their students and their communities. Building on the idea of Community Walks (Aguirre et al., 2013), this study offers one approach to guiding PSTs in their development of a funds of knowledge perspective early in their teacher preparation coursework. Data indicate that the majority of the students did in

fact develop this asset-based perspective and began to consider ways to incorporate their students' lives and communities into their classrooms.

Yet the data presented here also reveal the challenges in doing so. This study also did not explore the sustained impact of this work as the candidates continued with their preservice preparation and moved into the role of classroom teacher. The data presented in this study was collected during the first semester of a three semester long post-baccalaureate program. The framework that the candidates developed in their learning sequence could continue to develop over the course of the program if it is nurtured and supported. However, if not explicitly addressed, the learning could remain stagnant or, even worse, candidates could revert back to previously held beliefs. Previous research has demonstrated the necessity of engaging in this work over time in order to really shift belief systems (Berliner, 1994; Darling-Hammond et al., 2017): This study provides a snapshot of what occurred in just one semester-long course.

This study highlights the first step in a learning trajectory. These beliefs are developed overtime, and cannot quickly be dismantled in four days. Teacher education is a continuum. Developing a funds of knowledge perspective cannot be accomplished in a one-stop shop. In order to really support PSTs in shifting their belief systems, the development needs to begin early in their preparation, continue through their coursework, and then be further built upon once they enter their own classrooms and begin to draw on their newfound belief systems to plan instruction for their own students. Even more, the focus on funds of knowledge cannot just happen in a single course in a program phase but needs to be discussed and built upon in all courses in a program.

In thinking about how best to support PSTs' in the development of asset-oriented frameworks, teacher education programs can collaborate across program phases and courses to articulate and align course content and learning goals to build on current understandings in subsequent courses. No course within a teacher education program exists within a vacuum. The learning among courses both within a phase and across phases should be connected so that what gets introduced in one course gets reinforced and built upon in another. These connections can also be thought of as extending into the early phases of teaching, which calls for deeper and more meaningful collaborations with induction programs and P12 partners.

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