

Article

Partnerships as Professional Learning: Early Childhood Teaching Assistants' Role Development and Navigation of Challenges Within a Culturally Responsive Robotics Program

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Abstract: Theory and practice related to computing education with racially/ethnically and linguistically diverse groups of preschoolers remain in nascent stages. Accordingly, early childhood educators both require substantial support when integrating culturally responsive computing into curriculum and instruction and offer valuable perspectives on emerging practices. The purpose of this research study is to explore how educator voice-directed efforts support the implementation of a culturally relevant preschool robotics program through multi-year professional development. Through qualitative analyses, we examined how educator voice, conceptualized as perspectives and participation, guided the direction of professional learning situated within a larger research-practice partnership using design-based research (DBR) methodology. By comparing voice across these sessions, we were able to identify what roles educators assumed within the partnership and how those roles shifted over time. Further, we are able to identify the structural and systemic factors that may have affected their participation and implementation. Findings show a contrast in roles across the different stages of the partnership, suggesting implications for embedding professional learning within broader partnership work as a way to cultivate educator leadership and to realize culturally responsive computing education in sustainable ways.

Keywords: teaching assistant professional learning; educator voice; research–practice partnership; design-based research; culturally relevant robotics



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1. Introduction

The role of the teaching assistant (TA) has historically been to support the lead teacher, taking over classroom responsibilities so the lead has time to collaborate with others, plan lessons, and work alongside children (Cramer & Cappella, 2019; Hall-Kenyon et al., 2014; Mowrey & Farran, 2022). Large educational shifts, accountability policies (e.g., No Child Left Behind, standardized assessments; Bassok et al., 2016; Im, 2021; Whyte & Coburn, 2022) and increasing nationwide access to public pre-kindergarten have resulted from political and societal pressure for preschool-aged children to be ready for formal education services (e.g., the K-12 school system; Im, 2021; Whyte & Coburn, 2022). This pressure, in turn, has contributed to drastic shifts in roles and job demands of teaching assistants, some of which

include taking on lead teacher responsibilities without appropriate compensation or formal preparation (Thompson et al., 2024).

Teaching assistants, specifically in public pre-kindergarten (pre-k) classrooms, possess unique positions in comparison to K-12 assistants that remain understudied and misunderstood. Pre-k teaching assistants are often the unseen backbone of the classroom, sharing deep connections to the community—mirroring ethnic and racial backgrounds of the young children they serve, and possessing personal associations to the neighborhoods where they teach (Cramer & Cappella, 2019; Kim et al., 2024; McLean et al., 2021; Whitebook et al., 2006). In recent years, shifting responsibilities have left teaching assistants taking on more physical and mental work of daily classroom tasks (McLean et al., 2021). For example, teaching assistants are spending increasing amounts of time providing direct instruction and supporting children with challenging behaviors. They also complete other invisible duties such as cleaning the classroom between activities and assisting with care tasks for less compensation and less access to resources than their counterparts (CSCCE, 2022; McLean et al., 2021; Press et al., 2024).

1.1. Teaching Assistants and Early Care

Due to inconsistent education and job role requirements, many teaching assistants lack opportunities for upward mobility through comprehensive pay or paid time off to engage in professional learning opportunities. Teaching assistants are ubiquitous in early care spaces and yet are a deeply overlooked part of the early care and education workforce (Sosinsky & Gilliam, 2011). The current literature has identified structural and systemic challenges that affect the workforce as a whole (e.g., educator burnout and turnover; De Los Santos et al., 2023) that are exasperated daily by low pay and lack of collegial supports (Cramer & Cappella, 2019). These challenges may be further compounded based on the role and educational status of the educator (i.e., teaching assistant contrary to lead teacher). In addition, challenges faced by educators have been further amplified by the effects of COVID-19 and socio-political factors in the United States (CSCCE, 2022; Kim et al., 2022). However, recent, post-pandemic literature about challenges that affect teaching assistants is still in its infancy. More studies are needed that amplify the voices of teaching assistants and describe their daily experiences in their unique roles. A powerful way to learn more about the lived experiences of teaching assistants and work alongside them in supportive ways that honor their voices and unique contributions to education is through inclusive research–practice partnerships (Farrell et al., 2023; Taylor, 2013).

1.2. Study Purpose

Research–practice partnerships (RPPs) are long-term collaborations among practitioners and researchers designed to investigate problems of practice and develop solutions to improve educational systems (Farrell et al., 2019). In education, RPPs also serve as professional learning opportunities that can lead to educational improvement for children (Penuel & Hill, 2019) and long-form professional support and advancement for early childhood educators (Datnow et al., 2023). RPPs involve navigating the complex social dynamics of diverse stakeholders, each with their own roles and organizational identities (Farrell et al., 2019; Farrell et al., 2023). Trust is a key component of successful RPPs and requires building authentic solidarity, particularly if the partnership includes a marginalized group (Lezotte et al., 2022). This is especially true in professional learning settings in which educators are exploring new content that was not often included in their training, such as STEM or culturally relevant robotics (CRR; Barenthien et al., 2020). In order to bridge the gap between research and practice (Bryk, 2017) and develop symbiotic relationships between schools and universities (Lezotte et al., 2022), a variety of voices need to be represented,

including community partners, university researchers, school administrators, families, lead teachers, and teaching assistants.

The purpose of this research study is to describe how pre-k teacher assistant voice was represented through distinct roles that revealed (1) their growth within a research–practice partnership (RPP) and (2) challenges they faced while implementing a culturally relevant robotics (CRR) program. This study is iterative and a sister study to [Caudle et al. \(2024\)](#), furthering the argument that voices of partners have to be amplified in order to make substantial change. Secondly, this study responds to two larger gaps in the current early childhood education literature by identifying the structural and systemic challenges educators face and how these challenges are amplified by the specific role of the educator. This study explicitly highlights the voices and experiences of pre-kindergarten teaching assistants who have been historically underrepresented in both early childhood and RPP literature ([De Los Santos et al., 2023](#); [Weisenfeld et al., 2023](#)). Teaching assistant voice is critical to the function and sustainability of early classroom environments as well as the broader early care and education field. Further, understanding the lived experiences of all early childhood educators contributes to a more holistic understanding of educator well-being, retention, and the long-term stability of the early care sector ([Cramer & Cappella, 2019](#); [Press et al., 2024](#)).

1.3. Educator Voice in Partnerships

RPPs can be transformative, social justice-oriented means of educational improvement when they are built from theoretical frameworks that emphasize mutuality and reciprocity while amplifying voices of all partners ([Farrell et al., 2022](#); [Vetter et al., 2022](#)). Often, educator voice, especially among early childhood educators, has been missing from policy, curriculum decisions, and other critical educational initiatives ([Datnow et al., 2023](#); [McLean et al., 2021](#)). [Atkinson and Rosiek \(2008\)](#) argue the collective consciousness and the creative means of educators have been removed from the pedagogical process, relying on process–product means of education which dismiss the cultural and community knowledge of educators and responsive systems of care. Additionally, societal systems of oppression embedded within educational systems have further diminished the opportunity for varying, cultural perspectives and the intersectional identities that contribute to the care for young children and educators that come from diverse backgrounds ([Mercer-Mapstone et al., 2021](#)). [Henrick et al. \(2017, 2023\)](#) provide a conceptual framework that values the voices of all partners actively contributing to RPPs. In order to amplify all voices, we must address hierarchical power structures and dismantle means of societal oppression within partnership communities. Henrick et al.'s conceptual framework provides intentional space for culturally responsive pedagogy and practices that recognize the intersectional identities of early childhood educators.

The construct of voice, as described by [Mazzei and Jackson \(2008\)](#), is situational within critical pedagogy and qualitative research methodologies, adding to the discourse of the multiple realities of educators. Further, representation of voice and the experiences of educators are related to the co-construction of the lived realities of individuals participating within RPPs. Post-structural perspectives of contributions to research must be emphasized within partnerships, ensuring educators whose voices are represented have opportunities to be co-contributors at all stages, including dissemination. Educator voice is needed to conceptualize the intersectional identities of educational assistants. Voice is an important way educators bring cultural and community knowledge and care practices into partnerships, which is particularly important for educators, children, and families who belong to BIPOC communities ([Atkinson & Rosiek, 2008](#); [Mercer-Mapstone et al., 2021](#)).

1.4. Intersectional Perspectives

Intersectionality, conceptualized by [Crenshaw \(1989, 1994\)](#), is a framework that examines how varying forms of oppression intersect and shape individuals' experiences and multi-faceted identities. Invisible power relations impact the complex, emerging positionalities of educators ([Pugach et al., 2019](#)). Applying an intersectional lens allows us to conceptualize multiple identities of teaching assistants and understand how their developing voice and perspectives contribute to individual growth as they adopt varying roles. Further, this lens provides an emerging understanding of the identified systemic and structural challenges (i.e., institutional factors) that affect the everyday experiences of these early childhood educators ([Dhamoon, 2011](#); [Hancock, 2007](#); [Pugach et al., 2019](#)).

1.5. Practitioner Inquiry and Critical Reflection

Practitioner inquiry should be a key component of RPP work as it supports the growth and development of educators as they critically reflect on practices and experiences ([Marsh & Deacon, 2024](#)). Practitioner inquiry is a participatory model and complements RPPs that utilize design-based research (DBR), highlighting the goal of improving educational practice and outcomes for young children, families, communities, and the educators themselves ([Brydon-Miller & Maguire, 2009](#); [Marsh & Deacon, 2024](#)). Practitioner inquiry is both situational and participatory as educators are working to identify, solve, and adapt problems of practice within their specific classroom environments through critical reflection and investigation of practice ([Marsh & Deacon, 2024](#)).

1.6. Educators and RPPs

In RPPs, educators should have informal and formal opportunities to critically reflect on their practices and intentions in the classroom. Large and small group communities of practice allow educators to reflectively build responsive relationships among themselves as they develop local knowledge. To support the long-term development and sustainability of partnerships, educators should have control and ownership over the inquiry process related to the implementation of new classroom experiences, including curricula, assessments, lessons, learning experiences, and teaching practices. During both formal (i.e., planned professional learning activities) and informal (i.e., text messages, unstructured classroom visits) practices, educators should be encouraged to ask questions of themselves and their colleagues, investigate their own pedagogy through large group communities of practice and reflective conversations and, in turn, innovate, gaining perspectives from others' experiences and implementation practices. Additionally, educators should reflect with their co-researchers, expanding the critical consciousness of their embedded practice. In this study, practitioner inquiry and the embedded implementation of the reflective practices that follow were shaped by the educators' professional voice and their first-person narratives of the classroom.

2. Materials and Methods

2.1. Background of the Family–School–University Partnership

The Culturally Relevant Robotics a Family and Teacher Partnership for Computational Thinking in Early Childhood (CRRAFT) began over four years ago when Harper partnered with a university STEM hub with the goal to increase STEM education opportunities in early childhood in the local community ([Caudle et al., 2024](#)). Over several years, relationships were strengthened through collaborative efforts and participation in community events (i.e., family STEM nights) between university researchers, a Title I instructional coach, and the administration of a participating preschool. More information about the formation of our partnership can be found in [Caudle et al. \(2021, 2024\)](#) and [Harper et al. \(2023\)](#).

CRRAFT demonstrates a joint effort to build young children’s identity and sense of belonging in STEM through culturally responsive, hands-on means of computational thinking and computer science. Our partnership promotes a sense of belonging in computer science in Black and Latinx children along with their families and educators through the co-development of a culturally relevant robotics (CRR) program for school and home. Participating children were between the ages of three and five and attended six pre-kindergarten classrooms in a midsize school district in the southeastern region of the United States. Our family–school–university partnership is a testament to the strength of relationships among a diverse network of administrators, teachers, teaching assistants, Title I instructional coaches, children, their caregivers, and university teacher educators and researchers who have come together over the past four years to build and sustain the partnership.

2.2. Participants

There have been a total of twenty-one pre-kindergarten educators, including seven teaching assistants, involved in CRRAFT. To closely investigate the experiences of educational assistants in this study, we chose to highlight the experiences and growth of three educators (titled teaching assistants in their positions), Mrs. Davis, Callie, and Nora, and how they developed within their roles throughout the partnership. All three educators are teaching assistants working in pre-kindergarten classrooms across three different pre-k or pre-k-5 schools in the participating school district (see Table 1 for educator demographics). Mrs. Davis is one of the original partnership educators, while Callie and Nora joined the partnership two years into classroom implementation. In efforts to promote equity and inclusivity in early childhood educational research, from this point forward, this study will primarily refer to teaching assistants as educators. Making the term educator more inclusive accomplishes two important goals: First, it removes a hierarchical power structure that exists within the field of early childhood education; each teaching assistant is an early childhood stakeholder in their own right; they are educators who contribute to the classroom and the partnership. Secondly, it allows for a more cohesive language and establishes an understanding that the voices amplified throughout this study are active contributors; their title is a misconception and does not define their role, rather it can contribute to misunderstandings and stereotypes.

Table 1. Educator demographics.

Educator	Mrs. Davis	Callie	Nora
Age	70–75	35–40	30–35
Race/Ethnicity	Black	White	White
Higher Education	Some higher education credits	Associates, working towards Pre-K-3 Bachelors	Some higher education credits
Years in PARTNERSHIP	Three years	Two years	Two years
Years in ECE	30 or more	Less than 5	Less than 5
Type of School	Pre-kindergarten classroom within a Pre-K school.	Stand-alone pre-kindergarten classroom within a Pre-K-5 school.	Stand-alone pre-kindergarten classroom within a Pre-K-5 school.

Note: All educator names, partnership, and county names are pseudonyms.

2.3. Design-Based Research

Design-based research (DBR) methodology (Armstrong et al., 2020) focuses on the cycle of design and implementation of intervention to solve problems of practice. This DBR model emphasizes the design of the CRR program implementation, starting with co-development

between university partners and educators. Next, formative evaluations took place during each phase through means of both qualitative (i.e., classroom observations) and quantitative (i.e., surveys) evaluations. After the evaluation period, piloting occurred across four new classrooms, leading to revision and continued refinement through practitioner inquiry and sensemaking among partners (See illustration in Figure 1). Professional learning sessions were conducted during both formative evaluation and revision of the DBR cycle.

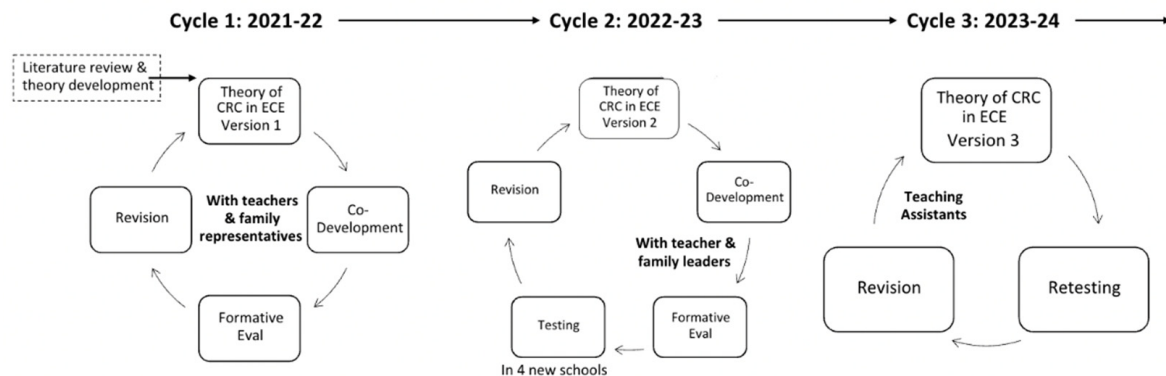


Figure 1. CRR program design-based research cycles.

2.4. Professional Learning Opportunities

Professional learning sessions were held at least four times across each academic year to facilitate communities of practice and continued opportunities for educators to learn and reflect on the design and implementation of the CRR program. All school and university-based partners were invited, including lead teachers, teaching assistants, the Title 1 instructional coach, and university researchers. Sessions were held in person, when possible, and acted as a catalyst for educators to come together through means of co-inquiry and sensemaking (Datnow et al., 2023). They held space for—and encouraged opportunities for—shared inquiry. Rich conversations led to deeper understandings of the educators’ role development and how they grew into other roles throughout the academic years. Each session explored a phase corresponding to the CRR program unit. Additionally, these PL activities complemented the design-based learning cycles that occurred throughout the partnership, allowing room for educators to co-design and develop knowledge that led to improvements in practice within their classroom and school contexts (Armstrong et al., 2020). PL activities surrounding classroom implementation evolved throughout the partnership from the university–research demonstration and explanation to educator-led sessions, utilizing practitioner inquiry models where educators took the lead directing conversations and demonstrating the skills needed for classroom implementation of the CRR program.

The CRRAFT Partnership learning opportunities evolved outside the group meetings to include smaller, informal gatherings facilitated by both university partners and educators, ultimately cultivating educator leadership and increased sustainability of CRR program use. The summers offered time for informal PL extensions and collaborative refinement of the CRR program. All educators were compensated for participation in PL activities that occurred outside the typical school day. In-classroom supports (e.g., modeling, coaching, co-teaching, observation and reflection, and co-inquiry) provided by university partners were tailored to the needs of the educators and children in each participating classroom. Educators were offered opportunities to engage in collaborative dissemination efforts, which included presenting at national and local conferences (e.g., regional STEM conference, The National Association for the Education of Young Children Annual Conference), leading district-wide learning days, and facilitating family nights at the local children’s museum.

2.5. Data Collection

All materials for data analysis came from two in-person professional learning sessions that were recorded using OWL 360-degree cameras and Zoom. These meetings were held across two academic years, 2022–2023 and 2023–2024, which were significant classroom implementation years of the CRR program. Two DBR cycles were analyzed, one at the beginning of the DBR Cycle 2 (2022–2023) and one at the end of the DBR Cycle 3 (2023–2024). There were fewer formally documented instances of partnership activities with educators in the role of teaching assistant in comparison to lead teachers. Most instances were found to be in large group communities of practices or informal means of communication, which are systematically hard to record and study (Caudle et al., 2024; Farrell et al., 2019). The limited data sources for this study highlight the continued need for university researchers and educational institutions to emphasize the importance of equitable opportunities for all partners. Though there were few instances of formal data reflecting the teaching assistants' experiences, over six hours of data were analyzed for this study. The length of each transcript was significant. PL session one was over 80 pages of data while the transcript from PL session two was over 30 pages of data. Reflexive, reflective practices and opportunities to slow down and analyze practices and progress within the RPP itself have to be embedded to ensure, throughout all stages (i.e., co-development, collaboration, and sustainability), equitable partnership practices occur.

2.6. Professional Learning Session 1

The first professional learning session occurred on 15 February 2023, during DBR Cycle 2. This session took place in person at a local community center from 1:00–5:00 p.m. Lead teachers, teaching assistants, the Title I Instructional coach, graduate research assistants, and university researchers were all in attendance. This was a large group session in which all participants joined in both large and small group conversations and activities. During this professional learning session, university researchers guided both lead teachers and teaching assistants through phase three of the CRR program. Partners had the opportunity to engage in hands-on activities as they learned how to teach the computational thinking skills of modularity and algorithms. This included learning how to code the KIBO robot.

2.7. Professional Learning Session 2

The second professional learning session occurred on 17 April 2024, during DBR Cycle 3. This session took place in person at a local community center from 4:00–6:00 p.m. This was a split large and small group session. The data analyzed included a transcript from an hour-long small group session with the teaching assistants, Mrs. Davis, Callie, and Nora, in which the Professional Learning Experiences of Early Childhood Educators (PLEECE) Questionnaire (Quinn & Thompson, 2023) was administered qualitatively to prompt discussion that was situated as a small group, semi-structured interview. The PLEECE Questionnaire is a mixed methods survey that focuses on barriers to the early care and education workforce, based on the Theoretical Domains Framework by Cane et al. (2012). This survey identifies current individual and group barriers to the workforce regarding multiple forms of professional learning. See Figure 2, for an example of CRRRAFT professional learning session.



Figure 2. CRRAFT professional learning session.

2.8. Data Analysis

Data analysis plans were developed that reflected key components of [Henrick et al.’s \(2017, 2023\)](#) discourse practices needed to analyze the sustainability and equitability of research–practice partnerships. Analysis steps followed a similar progression to [Caudle et al.’s \(2024\)](#) study and included qualitatively analyzing roles and voice-directed implementation efforts of educators and university partners. The first author was the lead analyst of a hybrid coding process ([Xu & Zammit, 2020](#)) and met regularly with the other authors to discuss analytic procedures. All transcripts were cleaned and uploaded to Dedoose (9.0) for analysis. Hybrid coding processes were utilized, first, by adapting the final iteration of the [Caudle et al. \(2024\)](#) codebook (i.e., codebook version 3.0) to the selected data. This a priori, deductive coding approach ([Swain, 2018](#)) allowed for a baseline understanding of the role development throughout the partnership. Pre-established codes (i.e., teacher as educator, teacher as co-designer, teacher as leader, teacher as learner, and facilitator codes) from Caudle et al. were utilized to allow for in-depth knowledge of the application of the initial codes. Additionally, this clarified the need for expanded, inductive coding practices as themes were identified and noted through reflexive memoing on the part of the researcher ([McGrath, 2021; Razaghi et al., 2015](#)).

At the conclusion of the first round of deductive coding with the a priori codebook, researcher memos were used to identify consistently occurring patterns and themes. These themes were negotiated and refined by Thompson and Caudle. New codes were developed and applied to the data using inductive coding practices ([Braun & Clarke, 2022; Clarke & Braun, 2017](#)). In vivo codes were used to create a coding scheme for further analysis related to educator development. The second codebook had 18 total codes, with ($n = 8$) codes relating to educator positionality and ($n = 3$) codes relating to educator experiences, in addition to pre-established facilitator (university–partner) codes. Critical qualitative analysis allows for both deductive and inductive coding approaches, hence instating a hybrid coding approach that added to the depth of the data examined and accounted for intersecting factors that affected this specific subset of early childhood educators.

Once all codes were established and agreed upon by the authors, they were added to codebook version 2.0. This codebook was the final iteration, expanding to include structural and systemic challenges, specific barriers to teaching assistants, positive reflections, and teachers as advocates, and additionally, a code specifically highlighting when educator reflection was included, *educator as reflector*. These codes were developed to ensure edu-

cator voice and role development were kept central to this work. Similar to Caudle et al. (2024), critical forms of participation and intersectional positionalities of educators were acknowledged (Laughlin, 2021). All further developed codes reflected the means of practitioner inquiry (i.e., educator experiences, challenges, and voiced concerns) and partner positionalities, reflecting the role of educator partners and the challenges that affected their success in the implementation of the CRR program and overall ability to thrive within the early care and education sector (Sjölund et al., 2022; see Appendix A for code definitions and examples). The most commonly occurring codes included *teacher as learner*, *teacher as educator*, *teacher as advocate*, *structural and systemic challenges to the early care sector*, and lastly, *structural and systemic challenges* that are specific to the experiences of educational assistants.

The facilitator code, *revoicing*, (i.e., responding to discussion by repetition, restating, expanding, reporting and/or confirming what teachers shared) was frequently used, which is a comparable finding from Caudle et al. (2024). Revoicing connects to the use of practice-based coaching and reflexive interviewing practices (Hsiung, 2008) often applied in early childhood communities of practice (Caudle et al., 2014; Kuh, 2012). These strategies establish decorum and encourage in-depth exploration and reflection on the part of the educator. Revoicing efforts represent established reciprocity and mutual respect for the work of the educators by amplifying their voices through co-collaboration and shared understanding emphasized during professional learning opportunities. More information about code development, definitions, and example excerpts about the role development of educators can be found in Appendix A.

3. Results

The purpose of this research study is to describe how pre-k teacher assistant voice was represented through distinct roles that revealed (1) their growth within a research–practice partnership (RPP) and (2) challenges they faced while implementing a culturally relevant robotics (CRR) program. Framed by the structural and systemic challenges faced by each of the educators, data analysis resulted in the amplification of educator voice shown through their role development and adoption. The roles the educators were able to adopt (learner, educator, reflector, and advocate) are recursive and non-linear. The educators were able to step in and out of these roles throughout partnership progress (see Figure 3). The results are presented in a way that ensures teaching assistant voice is recorded in the current early childhood and RPP literature.

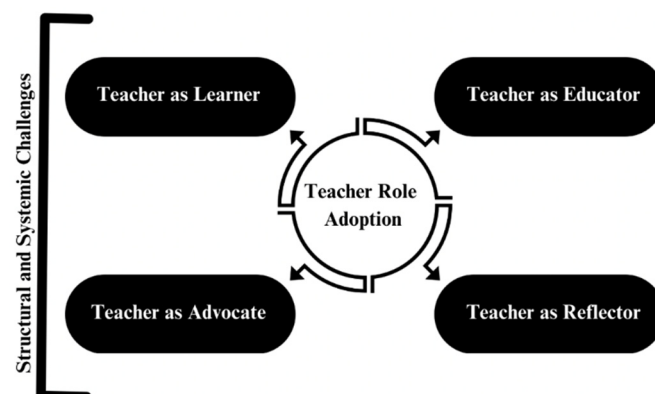


Figure 3. Teacher role adoption and development.

Stated clearly by a university partner during the second professional learning session in the third design-based research cycle, *Our goal is to better understand the experiences of [teaching] assistants. . .in our literature [early childhood education, teacher education] there is not a lot, it is not your stories and not your words and [teaching] assistants are not talked about.*

The results are organized to reflect the complex role development of Mrs. Davis, Callie, and Nora across different stages of the partnership. As evidenced in the data, Mrs. Davis, who has been a part of CRRAFT the longest, identified consistently across all four roles the following: teacher as learner, educator, reflector, and advocate. However, for Callie and Nora, the roles of teacher as learner and teacher as educator were not evident in the first professional learning cycle, instead emerging as teacher as reflector and teacher as advocate in the second professional learning session. Furthermore, during the professional learning sessions, university researchers regularly sought out both formal and informal feedback from all educators about their implementation experiences and reflections of their own role development throughout the partnership. A consistent theme identified throughout the data was that, while engaged in partnership work, Mrs. Davis, Callie, and Nora felt they were positioned as lead teachers, implying that they felt valued within the classroom environment. As a result, the partnership's approach to professional learning shifted to focus on the trajectory of growth that can occur when individuals feel valued, seen, and are able to engage in long-term partnership work.

As one educator shared,

And I think that I feel like an actual teacher when I do CRRAFT. And because I had my classes at the university. I feel like when we're learning about something, and we have to have evidence I do when I do CRRAFT. I use my CRRAFT [experiences] as my evidence practice with my students. Like, oh, we did robots today. This is what I did in my small group, all of my lab experience has been teaching CRRAFT.

3.1. Structural and Systemic Challenges

A major theme identified in both of the professional learning sessions analyzed was the co-occurrence of structural and systemic challenges educators face on a daily basis. These challenges exist for many educators within the early care and education sector but are especially exacerbated for teaching assistants. In this study, structural and systemic challenges contributed to the capacity of educators to implement the CRR program and what roles they adopted throughout the partnership. Though the structure of PL session one did not explicitly ask educators to share about structural or systemic challenges they were facing in the classroom, they were naturally brought up in the small group conversations. Identified throughout both professional learning sessions, educators voiced the structural and systemic factors they felt affected their participation and implementation. For the educators, voicing these challenges is a form of advocacy. They were able to voice their needs and the challenges they have experienced within the partnership with their lead teacher and in their classroom environment. Within the roles of advocate and reflector, the educators found common ground in their positions as teaching assistants and discovered they were heard when sharing their personal experiences. As we explore the stories of each educator, the structural and systemic challenges they faced are embedded within each narrative.

3.2. I Don't Want to Leave, but Something Is Pulling Me to—Mrs. Davis

Having been part of CRRAFT the longest, Mrs. Davis identified with each of the roles, recursively stepping in and out of the roles throughout the partnership. Early on in the partnership, Mrs. Davis adopted the role of teacher as learner and teacher as educator. Due to the recursive nature of the roles, Mrs. Davis' narrative shared specifically about her roles as advocate and reflector, rather than learner and educator; these roles were identified the most within the data analyzed for this study.

3.3. Teacher as Advocate—Mrs. Davis

During the partnership exchanges, Mrs. Davis stepped into the role of teacher as advocate. This was especially evident in the April 17th small group session, PL session two, DBR Cycle 3. Mrs. Davis spoke freely about the structural and systemic challenges she has faced during her thirty-plus years as an early childhood educator, *I've been in Glen County since 1992*, and how more recent challenges have affected the everyday classroom experiences and her capacity to implement the CRR program. The more recent challenges Mrs. Davis shared reflect the current state of the early childhood sector as a whole. Early childhood educators are leaving the field at a rapid rate; this is a known challenge. Due to a lack of a national database about early childhood educators, the turnover and attrition rates are often unclear. Though multiple sources suggest there was a 12% attrition rate before the COVID-19 pandemic, that is now trending toward a turnover rate of between 20–30% with most educators leaving the field at the end of their second year (Bassok et al., 2021; Bryant et al., 2023). Mrs. Davis shared frustration about the high rate of turnover occurring at her school each year and educator absenteeism. Mrs. Davis also shared her recurring experiences having to step into the lead teacher role in her classroom without additional compensation. She disclosed that the compounding circumstances at her school, lead teacher turnover, and the increased challenging behaviors of young children with little support were impacting her decision to remain in the field.

So I mean, I don't want to leave [it] seems like something is just pulling at me too. Yeah, yeah, I don't want to, but then to know too, honey it might be a whole new staff again who knows. And so, and I'm not going to go in again next year and set up a whole classroom again. I'm not going to do that.

Mrs. Davis shared, at the start of the past school year, a lead teacher was not yet assigned to her classroom. She had to take on setting up the classroom by herself and spent her own money to ensure the children had the materials needed to start the school year. Mrs. Davis and Callie reflected about how, when they spent their own money for classroom materials, they were not compensated.

So let's say when I went back to work I did not have a teacher right? I had to set up the whole classroom by myself. Yeah, I had to go out and spend my own money to buy everything that I needed for the classroom, bulletin boards, everything. And I didn't get a teacher until September the 18th. Nobody reimbursed or anything.

Mrs. Davis stepped into the role of teacher as advocate as she voiced the challenges she continues to face in the classroom. She commented on how the structural challenges impacted her time, physical resources, and mental energy that she would rather be using to work alongside the children in her classroom or engaging in CRR program implementation.

3.4. Teacher as Reflector—Mrs. Davis

In addition to advocacy, Mrs. Davis stepped into the role of teacher as reflector. This was a developing role that was emphasized during conversations with Callie and Nora during PL session two, DBR Cycle 3. Mrs. Davis, having been an early childhood educator for over thirty years, was an asset to our partnership, out-pacing almost all known statistics about early childhood educator classroom longevity. As her role within the partnership continued to develop and a deeper sense of trust was fostered with the university partners, Mrs. Davis made connections between the structural and systemic challenges that affected her capacity to implement the CRR program in her classroom. During PL session one, Mrs. Davis shared about her implementation schedule and how it shifted throughout the week based on her in-classroom availability. The schedule shifts were two-fold, first, to meet the needs and schedule of the children in her classroom, and second, to meet the needs and

care schedule of her aging partner. Her intersecting identity as caregiver impacted the days she was in the classroom each week and, in turn, the days she had capacity to implement the CRR program along with her other assigned responsibilities.

It's hard for young children to understand it, all right. It's hard for them to understand...those are my husband's caregivers. So I don't work Mondays. . .I work all day Wednesdays. Thursday I will be [at school] and I work all day Friday. . .So they know my schedule and I'm glad, you know, because I hate to do it like this. . .but I couldn't do it any other way.

Similarly reiterated in PL session two, DBR Cycle 3, Mrs. Davis shared about her experiences working a second shift or continued labor in the home (Craig, 2007), before and after she finishes in the classroom, as her partner's caregiver. Mrs. Davis: *I'm a caregiver for my husband, my husband is sick.* University partner: *That's full-time work.* Mrs. Davis: *Yes, so I am working around the clock.* Shifting into the role of educator, Mrs. Davis shared how her class built a community robot using recycled materials.

[We] built a robot and they got to help me [however they wanted]. We introduced them to the recyclables in my small group after we did it as a large group. And then they kind of helped me pick the objects for certain parts of the robot. But yeah, like that's how we kind of introduce the whole concept of building the robot. So I learned and I got cans from the cafeteria, the large vegetable and fruit cans that they have, I got those from them and we use all that kind of stuff.

Mrs. Davis was responsive to the needs of the children in her classroom by providing access to materials (i.e., the cans). She was also responsive to her peers about the experience and critically reflected on the areas of growth that needed to occur within her own practice to make this activity fluid and attainable year in and out in her classroom environment.

3.5. I Mean You're Just a Teaching Assistant—Callie

In her second year of participation within the partnership, Callie's role development within the data aligned with the role of teacher as reflector. During the professional learning sessions, she reflected on and voiced the structural and systemic challenges she has faced as an educator, a student, and as a mother. Callie identified how her intersecting roles each demanded time and energy throughout her days. In the role of teacher as reflector, Callie also voiced her concerns and spoke freely about areas of growth concerning the functionality of the partnership. As a result, she identified gaps in which the collaborative could improve and reflected on how to better the experiences with practice partnership work to increase the outcomes specifically for teaching assistants.

I started CRRRAFT last year and they did a whole meeting with the [lead] teachers at the beginning of the school year. And all the [lead] teachers, especially the new teachers who started, who had never been introduced to it. And they said that the teaching assistants would go at a later date, that date never came, we never got a meeting. I never got to go and learn how to use the materials. So my teacher Autumn had to teach me, or I just read the lessons and I've read the book, the CRRRAFT book [a binder set up for each teacher with the needed materials].

Callie goes on to share her desire for continued support in the classroom, which she had received during her first year in the partnership.

But I feel like I enjoyed [the] CRRRAFT a lot more last year than I have this year. But now no one's really come into our classroom this year to help, and it's mostly because of our schedule and our schedule has changed. Like now. So no one schedule can work with the time we do our CRRRAFT activities.

Callie expressed how the challenges and limited support affected her implementation strategy of the CRR program throughout the school year.

And so for a while we didn't do it. So my kids had a huge gap where we stopped at phase three and we haven't moved on because we were supposed to be doing only curriculum and practice only for small groups. Only when we need something extra to add there to the so I haven't really gotten to do much, but now we're on phase four. We just started yesterday, so I was like, I would really like to finish this. I need to finish it. They need to finish the stuff they have learned.

As Callie continued within her role of teacher as reflector, she reflected on school district demands and how perceived school priorities stifled the progress and the learning trajectories of the children in her classroom due to the inflexible interpretation of only implementing school-based curriculum work. *Honestly, as a [TA] like they don't care what you're wanting to teach these kids. I mean you're just a [TA].* In addition to improving educational practices as a whole, shared authority and critical reflection of partnership practices are needed in order to improve educator position and outcomes occurring within an RPP. Callie's shared areas of growth for the partnership highlight a very nuanced gap in current practice partnership literature in spaces that value mutuality and reciprocity. Her voice demonstrates how critical reflections are navigated and, in turn, should be shown the same support as positive feedback.

3.6. What I Bring Home Is Not Livable—Callie

There are many examples of structural and systemic challenges Callie faced that affect the early care and education sector and are emphasized within their roles as teaching assistants. While it is common knowledge that early childhood educators are not paid a living wage, often work multiple jobs, and rely heavily on social safety nets ([Schaack et al., 2022](#)), the impacts of these life circumstances are often not heard directly from the educators. Callie expressed frustration that teaching assistants are at the bottom of the pay scale for their school district.

I know that we make more than a step zero in the cafeteria, but after they reach step one, they make more than we do. Help us. And that's in the cafeteria. They're starting to up the cafeteria [staff]. They need to start looking at [teaching assistant] pay.

Additionally, Callie and Nora shared, without having reliable partners or multiple jobs outside of the pre-k classroom, they would not be able to stay in the early care field as they would not be able to afford their basic needs. Nora commented about these challenges. *The school pays my [house] bills. . . my tutoring job pays for my gas, my groceries,* Callie followed up with a similar experience. *What I bring home is not livable.* Callie disclosed how she has two other jobs to make ends meet.

Callie also shared how teaching assistants are expected to take on multiple responsibilities throughout the day, without compensation, such as riding the bus before their contracted hours and supporting older students transition in the hallways at the end of each school day. Additionally, the educators are expected to take over as the lead classroom teacher when a sub is needed. *Not only are we doing our expected [duties] and covering when our [lead] teachers are out. We also have morning and afternoon duty. I do the bus every morning.* These structural and systemic barriers impacted the way in which Callie adopted her role as teacher as reflector and her capacity to implement the CRR program in her classroom.

3.7. We Play All Day—That's What Everybody Says Here—Nora

Highlighted in the second professional learning session, Nora adopted the role of teacher as advocate. Nora used *revoicing* as a tool defined as responding to discussions

by repetition, restating, expanding, reporting, and/or confirming what others shared to advocate for her peers, the children in her classroom, and for herself as a teaching assistant. During the second professional learning session, Nora, Callie, and Mrs. Davis had the opportunity to spend time together reflecting on their experiences in the partnership, their experiences implementing the CRR program, and the changes that have occurred over time for teaching assistants in the field of early childhood education.

Within this role, Nora advocated both for herself in the partnership and in the classroom as she reflected on her experiences with Hope, her co-teacher, and how she expected to be part of and implement the CRR program in the classroom as an equitable partner. *I mean, I was expecting, you know, it was my job is to literally assist Hope.* Callie responded by sharing, *You know, honestly we do more than assist, we teach.* In this instance, Nora used revoicing as a tool to advocate for and support her peers in reflecting about the systemic challenges that affect them in the classroom and their day-to-day experiences. For example, Callie discussed how she is covering multiple duties in the morning, all while having to be in the classroom by 7:30 a.m. after riding the bus. The contracted morning time is supposed to be set aside for her to complete daily tasks that support classroom function. Advocating for Callie to speak with her administration, Nora goes on to explain how she and Hope were able to advocate for themselves and the children in their classroom, working alongside the school administration to make a change to their schedule. This change allows the children to start coming into the classroom at 7:10 a.m. instead of having morning duties which has created opportunities for her to have more flexibility in the mornings to complete the needed tasks. Nora encourages Callie to advocate with the school administration for more reasonable daily schedules and the opportunity to see value in and implement the CRR program.

Further, Nora encouraged Callie to talk to the administrators to encourage parents to pick up their children on time each day. Late pick-ups take away from the 30 min lunch break the teaching assistants receive between scheduled classroom hours and afterschool duties, *again, your admin needs to be advocating for your parents to come pick up on time.*

Within her role as teacher as advocate, Nora reflected on the changes that have occurred to the roles of teaching assistants over time in early childhood education,

So in like the 90s, early 2000, a teaching assistant made copies, laminated, and cut stuff. That is no longer the deal. Nor has it been for the past 10, 15, maybe 20 years.

She goes on to share how now, instead of supporting with background tasks, teaching assistants are responsible for the academic outcomes of children as they are taking on more responsibility without the planning time or resources that should be required.

We have two or three small groups everyday. And we have days where you're given a book with curriculum and it's yours you're in charge of teaching them. Those kids are tested every two weeks on the computer, and they are looked at [like] data. Like you're responsible for it. It's not like you can sit there and just play around for thirty minutes.

Nora discussed boundaries she has set in place to ensure that she is effective in the classroom and CRR program implementation. In doing so, there is recognition that the work they do as teaching assistants is complex and never-ending. Yet, Nora advocated for her peers to leave work at school when Callie expressed that, *I take stuff home with me,* sharing that she completes what she is able to in the day. Additionally, Nora responded by encouraging her peers to care for themselves and their well-being because the work they do is wearing on the body, after Mrs. Davis shared, *I'm getting tired and like I said, being a caregiver for my husband too, it is getting beneath me. Ya'll forget that I'm old.*

Within her role as advocate, Nora also led conversations about their roles as teaching assistants and how their professional standing is consistently dismissed by others in

their school environments (i.e., teachers from older grades) and those outside the early care sector.

No, no [laughs]. We play all day. That's what everybody here says. I wish we could play all day. And I'm like ya'll have no idea. Mrs. Davis responded by sharing, it's like either that or they're just like, I could never do it.

For Nora, expressing the impacts of the structural and systemic challenges faced is one of the ways in which her voice-directed efforts to support the implementation of the CRR program and demonstrate how professional learning opportunities held space for Nora to adopt the role of advocate.

3.8. Advocating for Self—Nora

In her role as advocate, Nora actively advocates and cares for herself, intentionally prioritizing her own well-being by setting boundaries around contract hours. *My contract time ends at 2:45 so I am home by 2:50. I have my own daughter. . . so I don't take it home with me or even on [days like] today when I am off.* However, Nora goes on to share that she does think about the children when she is away from the classroom for longer periods of time. *I'm like, hey did this kid show up today?*

While advocating for herself, Nora also advocates for the children in her classroom and the importance of implementing the CRR program. Throughout her time in the partnership, Nora informally shared that she feels the computational thinking work the children are engaging in in the classroom is important for their future career trajectory. In adopting the role of teacher as advocate, Nora compassionately explained how she supports children who are struggling with challenging behaviors during CRR program implementation and throughout the school day.

These are our COVID babies. Like they were born when the world shut down. And so we have three kids whose birthdays were in March. And I was like, wow, they were all born in March of 2020. That is literally when we shut down. I couldn't imagine being a mom at that moment.

Nora shared about a specific child advocating for educators to understand challenging behaviors as a response from stimuli within the environment rather than a reaction. *So, our little one with behaviors, not only is he a March 2020 baby, he was in foster care for two years.* Nora goes on to reflect on the effects of compounded trauma that the children in her classroom may be facing that contribute to struggles in the classroom.

To conclude, Nora advocated for the educators to show compassion to children who are struggling with challenging behaviors during the implementation time of the CRR program. She noted how these children, even in the most stable classrooms, still have to navigate the effects of structural and systemic challenges that affect the early childhood classroom and workforce. These challenges are in addition to the residual effects of everyday stress and impact of COVID-19, unstable home lives, shifting classroom schedules to accommodate older grades, and having to participate in active intruder drills.

4. Discussion

In this study, we engaged teaching assistants in reflective practices through cultivating responsive partnership relationships that fostered both trust and shared authority (Henrick et al., 2023). Shared authority over lived experiences and understanding of implementation led to a shifting structure of conversations that met the needs of all educators. These shifts were documented in the structural changes of the PL sessions and through informal means of communication that fostered a sense of comfort and pattern of communication between university partners and educators. This study stands on a transformative, social

justice-oriented theoretical frame that amplifies the voices of educators by ensuring they were actively engaged as co-collaborators with the PARTNERSHIP as evidenced by their experiences throughout iterative cycles of learning. To ensure the collective conscious and educators were involved in the pedagogical process of inquiry, educators were posited as experts of cultural and community knowledge and contextualized community systems of care (Atkinson & Rosiek, 2008; Farrell et al., 2022; Farrell et al., 2023; Vetter et al., 2022). We sought to understand how teaching assistant voice was represented through the distinct roles they adopted within a long-term professional learning environment. In addition, we investigated the structural and systemic challenges they faced while implementing the culturally relevant robotics program. The educators, Callie, Nora, and Mrs. Davis, all adopted and developed into multiple roles throughout the partnership. Teacher as learner, teacher as educator, teacher as reflector, and teacher as advocate are recursive roles that were identified in the data. Structural and systemic challenges were found to impact the roles of the educators and their development along with acting as barriers to implementation of the CRR program.

The outcomes of this study demonstrate the growing need for teaching assistants' voices to be amplified in partnership work and early childhood literature more broadly. The teaching assistants in this study demonstrated ways in which educators can come alongside one another to advocate for their needs both in and out of the classroom. There is a need for more colleague–colleague support for TAs in particular due to an imbalance of structural and systemic challenges faced by educators in assistant roles. Providing the physical space, time, and monetary resources for TAs to get together is important to this work and is valuable not only because the educators get to learn from each other's experiences, but to provide a supportive, responsive community of peers. Encouraging TAs to build community among their peers is a form of advocacy that allows for understanding of the intersecting identities and differing roles of each educator and contributes to how they care for the young children and communities in their classrooms (Mercer-Mapstone et al., 2021). Teaching assistant voice not only reflects the current challenges prevalent within the early care and education sector as a whole but provides more in-depth insights into the challenges and daily realities of teaching assistants, an often forgotten population of educators. Further, this study demonstrates that intentional research–practice partnership design situated in responsive relationships, mutuality, and reciprocity is an effective tool to professional learning and role development of educators.

4.1. Implications

Implications from our study include the importance of shared authority, critical reflection, and the importance of amplifying educator voice and shared narratives. There remains a need for educator voice to be forefront in the establishment of responsive RPPs and even in short-term professional learning experiences. Further implications include the importance of equitable partnerships where inclusive patterns of communication and discourse are established between all parties, fostering responsive relationships at the group and individual level (i.e., university–researcher, educator). Additionally, to ensure holistic functioning during the initial DBR Cycles, iterative open-ended conversations have to guide professional learning sessions. Lastly, educators should take part in recognizing their own and others' work and have critical conversations that systematically investigate their own practice through descriptions of praxis (Marsh & Deacon, 2024).

4.2. Future Research Directions

Future studies that identify the structural and systemic challenges that occur in early childhood classrooms and the sector as a whole should consider the following. Unless

teaching assistants' voices are represented in the literature, we, as the field of early childhood education, cannot say we fully understand what is happening in the early childhood classroom or the challenges that affect the workforce. In order to tell the full story of the early childhood classroom, teaching assistants must be included in the conversation. Their voices are valuable and hold power to change classroom outcomes and the field of early childhood education as a whole. There are, of course, limitations to our study, as more data were collected on the lead teachers and the partnership as a whole. Data were not individually collected on teaching assistants until after DBR Cycle 2. This was due, in part, to the fact that lead teachers more routinely engaged in formal, documented meetings with university partners while meetings with only teaching assistants were fewer. Additionally, teaching assistants' communication often occurred in more informal contexts, through text or phone calls, or while engaging with university researchers in their classroom spaces. Though a significant amount of data were analyzed for this study, it was limited to the voices of three teaching assistants. If earlier data had been analyzed from DBR Cycle 1, more teaching assistant voices and role development may have been identified. Finally, research–practice partnerships have to be built with equity in mind in order to foster trusting relationships that allow for educator role development; these partnerships take a significant amount of time, investment, and care, which can make them unattainable in some educational contexts.

5. Conclusions

Finally, research–practice partnerships and community-engaged research cannot be the only approach to shifting current conversations about the changes that are needed to build a sustainable early childhood workforce or act as the only spaces for educator role development. Our partnership and RPP model provides a small-scale example of what equitable positioning of educators can look like and demonstrates how, when teaching assistant voice is amplified and role development is valued, change happens, having the potential to positively impact the outcomes of children and the educators themselves.

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Appendix A

Table A1. Code development, definitions, and example Excerpts.

Code	Definition	Example Excerpt
Educator as reflector	When educators share about their past experiences with the CRRAFT partnership.	Educator: <i>“You know, all the whole team. And back when I started, the teacher, my teacher partner that I was working with then, you know, we had a lot of meetings and stuff and then we had to go to over to, you know, UNIVERSITY. And I enjoyed all that because getting together with everybody that was on the team and meeting people.”</i>
Structural, systemic challenges	References and reflections about known structural and systemic barriers to the early care and education workforce (i.e., working more than one job, pay inequities).	Educator: <i>“No, no [laughs]. We play all day. That’s what everybody here says. I wish we could play all day. And I’m like ya’ll have no idea.”</i>
	This also includes information about their home lives—i.e., not being able to pay bills or livable wages.	Educator: <i>“It’s like either that or they’re just like, I could never do it.”</i> Educator: <i>“They’re just so little. I just couldn’t do it.”</i>
	This includes statements that affect both lead teachers and educational assistants and the ECE field generally, i.e., “I feel like there was a shift in education from 1999 to 2001.”	Educator: <i>“So I mean, I don’t want to leave [it] seems like something is just pulling at me too. Yeah, yeah, I don’t want to, but then to know too, honey it might be a whole new staff again who knows. And so, and I’m not going to go in again next year and set up a whole classroom again. I’m not going to do that.”</i>

Table A1. Cont.

Code	Definition	Example Excerpt
Positive reflections	Positive reflections about the workforce.	Educator: “And I think that I feel like an actual teacher. I do CRRAFT and because I had my classes at [the] UNIVERSITY. I feel like when we’re learning about something and we have to evidence for something, when I do CRRAFT, I use my CRRAFT as evidence practice with my students. Like, oh, we did robots today. This is what I did in my small group, all of my lab experience has been teaching CRRAFT.”
Reflections structural barriers to teaching assistants	These are structural or social barriers within school systems that affect educational assistants’ experiences or abilities to advocate for themselves.	Educator: “I know that we make more than a step zero in the cafeteria, but after they reach step one, they make more than we do. Help us. And that’s in the cafeteria. They’re starting to up the cafeteria. They need to start looking at [educational assistant] pay.”
Teacher as advocate	When educators are revoicing and encouraging peers to advocate for themselves, peers, and children. Or the educators are advocating for themselves and their experiences in the partnership.	Educator: “Again, your admin needs to be advocating for your parents to come pick up on time.”
Teacher as educator	Teacher provides practical strategies/instruction about program to others; this also includes when they share about how children engage in the program activities (e.g., “the children were intrigued to see how the mouse would move if they clicked the right arrow button twice.”)	Educator: “And I introduced it to a small group. That’s where I’d sit on the floor, you know, with each group, everybody had a chance to program it out of [this] many blocks, you know, use that one to start. I use one blue, one red, and one yellow. And in the end, everyone got a chance to program and do what they did with the blocks, you know, mix them up or whatever.”
Teacher as co-designer	Teacher as co-designer with university partners; provides input from practice on re-design; adapts design to fit local context.	Educator: “Like along with everything’s a little bit different video because all everybody is all over and its big you know it’s just a mess. So, you would like to meet more often than just once per phase?”

Table A1. Cont.

Code	Definition	Example Excerpt
Teacher as decision maker	Teacher shares decisions or choices regarding CRR program participation or implementation that supports development of epistemic agency and authority; typically focused on self or self in relation to others (e.g., “I haven’t really explored the code-a-pillar at all, but I have been using the robot mice often.”) OR (i.e., “And I enjoyed all that because getting together with everybody that was on the team and meeting people but now, I mean, it’s like, I don’t know, we didn’t have that kind of connection anymore to me.”	Educator: “And so for a while we didn’t do it. So, my kids had a huge hap where we stopped at phase three, and we haven’t moved on because it was [when] we were supposed to be doing only curriculum and practice only for small groups. Only when we need something extra to add there to and so I haven’t gotten to do much, but now we’re on phase four. We just started yesterday, so I was like, I would really like to finish it. They need to finish the stud they have learned.”
Teacher as advisor for design/ implementation	Teacher provides direct feedback about program design/implementation that may or may not include suggestions. (“is there a way to integrate the suggested plans into the lesson plans already being used and connect to standards?”)	Educator: “I also wanted to say that I know all of the [lead] teachers got to do like a big [training] at the beginning of the year, but it would have been nice to have one. So, I knew what was happening. Like we could, it would be more beneficial for us to have one to if we’ve going to help [lead] small groups.”
Teacher as leader	Teacher engages as leader in formal or informal contexts (e.g., “T06 suggests it would still be helpful to break into smaller groups to plan out sequences rather than completing as a single group. T06 states “it would lead to richer discussions” when we return as a large group and discuss differences between groups’ sequences”).	Educator: “No, no, no, lord, no. So, let’s say when I went back to work, I did not have a teacher right? I had to set up the whole classroom by myself. Yeah, I had to go out and spend my own money to buy everything that I needed for the classroom, bulletin boards, and everything. And I didn’t get a teacher until September the 18th. Nobody reimbursed, or anything.”
Teacher as learner	Teacher engages as learner in formal or informal contexts.	Educator: “I started the CRRAFT last year and they did a whole meeting with the teachers at the beginning of the school year. And all the teachers especially the new teachers who started, who had never been introduced to it. And they said that the teaching assistants would go at a later date, that day never came, we never got a meeting. I never got to go and learn how to use the materials. So my teacher Autumn had to teach me, or I just read the lessons and I’ve read the book, the CRRAFT book [a binder set up for each teacher with the needed materials].”

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