

RESEARCH ARTICLE

Examining Interdisciplinary Collaboration within a Comprehensive Early Childhood Education Framework

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This article describes a study on interdisciplinary collaboration within a Head Start framework in an urban program in the Northeast. This one-year qualitative study explores the experiences of the interdisciplinary team directly involved in implementing an agency-wide literacy project. The goal of this research was to deepen the current knowledge base about the benefits and challenges of an interdisciplinary approach to support optimal child outcomes by learning from practicing professionals' perspectives. Findings are discussed in terms of literatures relevant to advancing young children's school readiness with an emphasis on the collaborative process. This article also identifies next steps useful to professionals and scholars interested in initiating or studying interdisciplinary collaboration within comprehensive early childhood education programs.

Keywords: interdisciplinary collaboration, early childhood education, perspectives

The number of children with disabilities served in federally-funded programs is now over 13.9 percent of the total enrollment (U.S. Department of Education, 2011). Recent estimates are that one in every five children and adolescents in the United States is experiencing difficulties with social and emotional development (NIMHCM Foundation, 2005) and 30% of children have at least one chronic illness (Allen & Vessey, 2004). These academic, psycho-social, and physical health issues invariably get in the ways of children's ability to be successful in school (Bronstein, Anderson, Terwilliger & Sager, 2012). A primary focus of early childhood programs, particularly those that offer comprehensive services, is to improve outcomes for young children and positively impact school readiness (Anderson, Shinn, Fulilove, Scrimshaw, Fielding, Normand, & Carande-Kulis, 2003).

In the current education climate, early childhood programs, especially those that are publically funded, are increasingly being held accountable for the immediate and long-term academic success of the children they serve (Brown, 2011). As the nation's largest federally sponsored early childhood education program, Head Start's goal is to reduce socio-economic disparities, especially around school readiness (Puma, Bell, Cook, Heid, & Lopez, 2005). In this climate of increased accountability, the critical role emergent literacy plays in positive school outcomes has come to the national forefront of early childhood educational issues (Hutinger, Bell, Daytner, & Johanson, 2006). One significant trend is a focus on integrating literacy across

content domains. Because of the connection between literacy and other content area domains, studies suggest that current classroom practices that involve isolating literacy instruction should instead involve practitioners using literacy as the foundation for developmentally appropriate integrated instruction (Strickland, 2010). In order to accomplish Head Start's goal of reducing socio-economic disparities around school readiness, however, it is increasingly important to more effectively address the complex academic, psycho-social, and health needs of today's young children using an interdisciplinary approach (Adelman & Taylor, 1996; Lawson & Briar-Lawson, 1997; Anderson-Butcher & Ashton, 2004).

It is now widely accepted that promoting school readiness involves supporting young children across the physical, cognitive, language, and social domains (Blair, 2002; Doyle & Bramwell, 2006). Attaining positive outcomes for young children, however, can no longer effectively be accomplished through the singular effort of any one person (Allensworth & Kolbe, 1987). Although it is universally acknowledged that early childhood teachers play a critical role in supporting young children's development, professionals from across disciplines now play an important role in establishing and achieving collaborative goals that support optimal academic, psycho-social, and physical health outcomes (Friend & Cook, 2010). Effective collaboration between teachers and other Head Start professionals (e.g. family advocates, nurses, nutritionists, bus drivers, etc.) is critical for providing adequate supports and services.

Almost fifty years ago, Popper (1965) referred to need for interdisciplinary collaboration as one of inescapable urgency. The need for interdisciplinary collaboration is even more urgent today (Bronstein & Abramson, 2003). Working collaboratively across disciplines can effectively encourage problem-solving, mediate challenging situations, and facilitate positive changes in staff members' beliefs in their capacity to address a wide range of children's needs (Kransdorf, Doster, & Alvarez, 2002; O'Conner & Korr, 1996). As non-academic barriers to learning increasingly impede that ability of many young children to be successful in school, early childhood professionals from across disciplines need the knowledge and skills to feel confident working the "whole child" within an educational context (Kransdorf, Doster, & Alvarez, 2002). Although collaboration is best presented along a continuum, interdisciplinary collaboration can be distinguished as the "integration of the knowledge and expertise of professionals to reach a common goal through shared decision-making and practice" (Mellin, 2009, p.5). Such collaboration is now considered so central to early childhood education that it can be viewed as the "glue" that holds programs together (Snell & Janney, 2000).

Interdisciplinary collaboration in comprehensive early childhood programs, such as Head Start and Early Head Start, involves teachers, nurses, family advocates, bus drivers, and other professionals sharing information, validating each other's roles, and providing input around which strategies promote positive outcomes for all children (Anderson-Butcher & Ashton, 2004). Despite the need to work together across disciplines to more effectively support young children's development, challenges such as pre-existing responsibilities (Weist, Proescher, Prodent, Ambrose, & Waxman, 2001); a lack of shared culture or values and beliefs among professionals (Rappaport, Osher, Anderson-Ketchmark, & Dwyer, 2003); and, profession-driven differences in expectations (Bronstein & Terwilliger, 2007) can make such collaboration difficult. In order to create a culture of interdisciplinary collaboration, however, each person must have the opportunity to develop the knowledge, skills, and dispositions to collaborate (Friend & Cook, 2010). According to Friend and Cook (2010), collaboration is a style of interaction that can only occur when people engage in a specific process, task or activity. Therefore, it is essential that

early childhood programs create opportunities that bring together staff members from across disciplines to participate in interdisciplinary tasks or activities.

In an effort to reduce socio-economic disparities and improve school readiness for children attending Head Start and Early Head Start, the Little Read literacy program was developed with a primary goal of building agency capacity for a more integrated and interdisciplinary approach to literacy using thematic-based and developmentally appropriate practices based on a classic piece of literature. Using a naturalistic setting, this qualitative study gathered information about what staff members' perceive as some of the benefits and challenges of interdisciplinary collaboration during the Little Read program. This qualitative design aimed to gain a better understanding of the program through the interpretations of the individuals within in it (Denzin & Lincoln, 2000). This design enabled us to deepen our understanding of some of the potential benefits and challenges of participation at the stakeholder level as well as to evaluate the potential for this project to evolve into a year-long, agency-wide, interdisciplinary, integrated literacy program.

THE CURRENT STUDY

This paper reports on a one-year study involving Head Start and Early Head Start staff members from across disciplines (education, health services, family services, special education services, nutrition, and transportation) in an agency in the Northeast. This study can be considered exemplary for its innovative practices within a broader goal of improving school readiness by expanding opportunities for interdisciplinary collaboration around literacy initiatives within comprehensive early childhood programs. Responding to Friend and Cook's (2010) claim that collaboration is a style of interaction that can only occur when people engage in a specific process, task, or activity, this study uses qualitative data to explore what staff members from across disciplines perceive as some of the benefits and challenges of participating in an agency-wide, literacy program.

Agency Context

In operation for over 20 years, this agency offers a range of programs and services, including Head Start and Early Head Start programs. The Head Start and Early Head Start programs serve a diverse group of young children from birth to age 5, many of whom are experiencing difficulties with development, domestic violence, or homelessness. In the Head Start and Early Head Start programs in which this study was conducted, 120 staff members from across disciplines serve the approximately 400 children in 23 classrooms (15 Head Start classrooms and eight Early Head Start classrooms). The demographic breakdown for the children served by the Head Start and Early Head Start programs is as follows: 37% White; 23% Black; 2% Asian; 9% Hispanic; and, 29% Mixed Race. Over 90% of the families with children attending these programs meet Federal poverty guidelines.

These Head Start and Early Head Start programs use the Creative Curriculum (Dodge, Colker, Heroman, & Bickart, 2002). This curriculum is designed to balance teacher-planned and child-initiated learning with recognizing and emphasizing children's strengths, interests, and

learning styles. It aims to address all areas of learning, from social-emotional and math to technology and the arts, and incorporates them throughout every part of every day. In addition, these Head Start and Early Head Start programs recently adopted new learning standards based on the Head Start Child Development and Early Learning Framework and Pre-Kindergarten Foundation to the Common Core. The six-week literacy program that provided the central focus for this study was developed to enrich and complement the broad educational programming provided by Creative Curriculum.

METHODS

Program Procedure

In 2009, the National Endowment for the Arts and the Institute of Museum and Library Sciences provided support for this agency to implement the "Big Read" project. The overarching goal of this grant-funded program was to support community-wide exploration of a classic piece of literature. As part of this grant, the Head Start and Early Head Start programs collaborated with a local school district to develop an eight-week literacy project centered around *The Adventures of Tom Sawyer* (Twain, 1998). After this grant ended and during 2010-2011, a group of Head Start and Early Head Start teachers developed a similar six-week project that they named the "Little Read" for implementation within their programs. Based on feedback from classroom staff, in 2012, the agency broadened the scope of this six-week project by engaging staff members from across disciplines (e.g. health services, nutrition, transportation, special education services, etc.) Conducted during 2012-2013, this study aimed to explore what staff members from across disciplines perceive to be some of the benefits and challenges of using an interdisciplinary approach to the "Little Read" project.

This study began in September, 2012 with the assembling of a Little Read project committee that consisted of at least one representative from each discipline (e.g. education, health services, nutrition services, special service, family services, transportation services, and a community representative). The committee members met on a bi-weekly basis from September - March to plan Little Read events around the classic, *Dr. Dolittle* (Lofting, 2006), develop a packet of suggested children's activities for use by staff during the six-week project, and to serve as a liaison to their respective agency components.

During January - February 2013, staff members from across agency components engaged Head Start and Early Head Start children in a range of Little Read project activities. Examples include weekly scavenger hunts by classrooms for Dr. Dolittle clues around the entire building; bus monitors using Dr. Dolittle character puppets on the bus ride to and from school; nurses providing classroom-based activities on healthy bones for children and Dr. Dolittle's animals; family advocates delivering a Dr. Dolittle book and modeling early literacy activities during home visits; nutrition staff collaborating with classroom staff around Little Read cooking projects; and, two agency-wide family events (movie night for viewing of *Dr. Dolittle* and a "museum night" for displaying children's work during the six-week project).

Participants

This study was approved, monitored, and reviewed by the University's Internal review Board (IRB). The purpose of the IRB is to assure, in advance, that appropriate steps were taken to protect the rights and welfare of participants. Following IRB approval, and with informed consent, all agency staff members were invited to complete a questionnaire and interviews were conducted using purposeful sampling. Based on Merriam's (1998) definition, this purposeful sampling assumed that if we wanted to better understand the perspectives of staff members from across disciplines participating in the Little Read project, we needed to select individuals from whom the most could be learned.

As part of this study, interviews were conducted pre- and post project with 12 staff members (nurse; director of special services; director of transportation; staff assistant; assistant Head Start teacher; Head Start teacher; Early Head Start teacher; Early Head Start family advocate; Head Start family advocate; literacy specialist; developmental specialist; and, community representative from the public library) and lasted approximately 30-45 minutes each. The nutrition staff member declined to be interviewed for this study due to scheduling constraints. The length of experience working at the agency varied considerably from 3 months to 18 years. The average length of experience was approximately 9 years.

Interviews

Based on Fontana & Frey's (2000) qualitative research framework, this researcher used semi-structured interviews as a means of data gathering for their "universal mode of systematic inquiry" (p. 646). Interviews were conducted by a research assistant and aimed at eliciting Little Read committee members' experiences during the Little Read project and what they perceive to be some of benefits and challenges of interdisciplinary collaboration. (See Appendix A for a list of interview questions). In reporting interview data, pseudonyms have been used for all participants.

Analytic Procedures

Interview data involved the identification and examination of the themes emerging around interview questions, which focused on what staff members from across disciplines perceived to be the benefits and challenges of interdisciplinary collaboration. The researchers engaged in open and axial coding of the interview data (Creswell, 1998) to achieve a rigorous data analysis process. Data credibility and trustworthiness were considered early in the process by having interviews transcribed by a non-coding assistant. Once interviews were transcribed, the primary investigator and research assistant read, coded, and memoed the data independently to reduce persuasion or bias. Each researcher employed an inductive approach, using open coding, reading each of the interviews, and documenting themes. After independent analysis of the interview data, the researchers engaged in collaborative discussion of the themes they developed individually. The collaborative discussions increased the credibility and trustworthiness of the findings as common, overlapping, and frequently identified themes were identified in an effort to

finalize themes. This process continued until reaching a point of "theoretical saturation," at which point additional data no longer increased understanding (Corbin & Strauss, 2008).

RESULTS

Based on 24 semi-structured interviews (11 pre- and post- project) with 12 Little Read committee staff members from across disciplines (nurse; director of special services; director of transportation; staff assistant; assistant Head Start teacher; Head Start teacher; Early Head Start teacher; Early Head Start family advocate; Head Start family advocate; literacy specialist; developmental specialist; and, community representative from the public library), four primary themes emerged.

Theme 1: Interdisciplinary collaboration offers new opportunities for supporting young children's development

Participants from across disciplines affirmed the value of collaboration within a comprehensive early childhood education framework as well as the complexities inherent in its implementation. Across interviews, participants characterized the prevailing value of interdisciplinary collaboration as a way to engage staff members from across disciplines in supporting young children's development. Sherri, a Head Start family advocate for two years, remarked,

I think it [interdisciplinary collaboration] made the entire project well rounded. Children's learning was supported from the minute they got on the bus, in the classroom, throughout the building, on their way home, and in the home. It was continuous with each child for the six week project.

Jean, a developmental specialist for four years, summarized the benefits of an interdisciplinary approach this way, "It [an interdisciplinary approach] is great because now we are getting the whole agency involved, different departments, which is a really nice thing and we're incorporating transportation, health services, food services." Kim, a literacy specialist for 8 years described how using an interdisciplinary approach to the Little Read project also encouraged the development of a shared goal,

There is the benefit that we are all working together toward a common goal. That is kind of neat because it doesn't always happen. We get wrapped up in our own particular jobs. When people get involved, they start believing in it[an interdisciplinary approach] and talking to others about it.

Michelle, an Early Head Start Advocate for three years, noted the ways in which working across disciplines helped to reduce professional barriers, "I think it helps get everyone more involved in what the classrooms are doing. It makes us more of a whole group instead of this is the teacher and this is her classroom."

In addition to strengthening relationships among staff members from across disciplines, participants also highlighted the ways in which interdisciplinary collaboration created new opportunities. Beth, a veteran administrator in her second year at this agency remarked,

For the first time, it wasn't 'oh this activity' is a fun little classroom thing'. It [interdisciplinary collaboration] also has a lot of power attached to it in terms of opening up opportunities for discussion in team meetings ...that there are kids with diverse needs."

For Mary, an Early Head Start teacher for three years, collaborating across disciplines fostered new ideas for expanding collaborative efforts,

Throughout the agency, everybody is participating - transportation, the kitchen, teachers, and so forth. A goal is that at the end everybody can get together and share at the museum. Like transportation would have a table where they could show the songs they sing on the bus as part of Little Read, and nutrition could have a table with a Little Read snack on it. Then people can really see like - wow.

Across interviews, participants also highlighted the benefits of using an interdisciplinary collaboration to increase levels of engagement around literacy initiatives. Karen, a Head Start assistant teacher for 16 years, described the excitement for children,

It is exciting to see all of the staff get excited, the children get excited, and for the children to be able to see something about Dr. Dolittle in all of the hallways and bathrooms, everywhere outside of the classroom. It was fun to see the connections that the children were starting to make around literacy activities on the bus together or that type of thing.

Janice, a director of transportation, shared,

"The children would come down to my office [as part of the Little Read scavenger hunt] and say, 'Do you have a minute? Do you have a minute? we got to show you what we did. So then other days the children would be pulling me into the classroom a lot more than I anticipated and I really enjoyed it. "

Mary, an Early Head Start teacher for three years, noted that although the interdisciplinary collaboration can be beneficial, opportunities are very limited. She described, "We [agency staff] don't have much time to actually sit down and collaborate with each other. With this year's Little Read project, we were able to do that. It was awesome. "

Theme 2: Mixing staff with different responsibilities presents challenges to interdisciplinary collaboration

Across interviews, participants described how the mixing of staff members with different schedules and responsibilities presented significant challenges to interdisciplinary collaboration.

Challenges around scheduling were highlighted by the majority of participants. Jean, a developmental specialist for four years, remarked, "I think a challenge is that it [interdisciplinary collaboration] is a time consuming. It can sometimes feel like extra work to a certain degree, with everything else that we are required to do." Michelle, an Early Head Start family advocate echoed, "My schedule is already really busy. Working with staff from other areas requires a lot of extra time."

For some participants, collaborating across disciplines resulted in the need to juggle additional responsibilities. Mary, an Early Head Start teacher for three years shared,

It's hard to balance the work outside of my classroom and the work inside my classroom. I work with other staff on the committee usually when the children are napping. But, this is my work time and it's when I use my computer and get my classrooms plans prepared.

This challenge was shared by Kim, a literacy specialist for eight years, described,

There is a lot of work. It is a lot of time and the bigger it [Little Read project] gets, the more work that's involved. So it is really time consuming and takes my attention away from my other projects.

For some participants, the challenge went beyond different schedules and responsibilities to include difficulties communicating effectively across disciplines. Ashley, a staff assistant, shared,

Communication is a challenge. Departments may normally have little to do with each other. Trying to figure out how we can all work together even though we are from very different agency components.

In spite of the challenges to interdisciplinary collaboration, participants highlighted the ways in which it deepened their understanding and appreciation. Sherri, a Head Start family advocate for two years remarked, "If you aren't on the committee, you don't really understand the wholeness of the project. It's neat to be part of something that is growing and to be part of the planning process and what it will look like. To plan something and see it put into action.

In expressing their commitment to using an interdisciplinary approach, some participants offered suggestions for overcoming some of the challenges. Beth, a special services coordinator, shared,

I think timing is an issue...maybe it could be changed so that much of the planning is done over the summer...let everyone in the agency know the theme farther ahead of time. It put a huge burden on some staff from certain disciplines to produce the activity packets.

For other participants, collaborating across disciplines helped clarify their potential role in future projects. Donna, from the public library, described, "By participating on the committee, I have a better idea of what to expect next year like a better book list for this theme or additional activities for when children come to the library with their classmates or families."

Theme 3: Across disciplines, agency staff members view interdisciplinary collaboration as a vehicle for supporting family literacy initiatives

Participants from across disciplines noted the challenges many families are facing and the ways in which interdisciplinary collaboration can help strengthen existing efforts to support literacy activities in the home. Michelle, an Early Head Start family advocate for three years described,

I think for many of our families life is a challenge. Their child's education may not always be the most important thing. Children go home and we say 'tell your mom and dad about Little Read' and the advocates can provide activities in the home, but sometimes it just isn't a priority for the families based on what they are facing in their live at that time. With everyone [in the agency] doing the Little Read project, families can come to the school and watch a movie or go the museum night and see the excitement from their child's point of view and walk away from the stress of life even if it is just for a few minutes.

Participants also noted the ways in which interdisciplinary collaboration can help strengthen home-school connections.

I think it is exciting for families to see hear about Little Read from their children...talking about the stories because everyone [at the agency] is reading the same stories at school. And, they are going to have the book at home so they are going to be able to tell their families about what is going on in the story.

Kim, a literacy specialist also highlighted the importance of collaborating across disciplines to select a book that is familiar to families. She described, "One way to grab the interest of the parents is a classic story they heard as a child. It is a good way to connect the home component and the school component because the parents also get engaged. They [parents] recall the stories like where they were [when they read it] or the age they were." Dawn, a nurse for 6 years, shared: "You know, finding ways to encourage families to participate [in literacy activities]. It takes everyone [at the agency] really getting on board."

Across interviews, participants also noted the ways in which interdisciplinary collaboration can help generate excitement about literacy. Jean, a developmental specialist for 4 years described,

"It [interdisciplinary collaboration] really gets everyone in the agency excited about literature and helps instill in children and families that it is something they could do as pleasure in their free time...instill a joy of reading for the rest of your life.

Sherri, a Head Start family advocate for two years shared,

"It [an interdisciplinary approach to the Little Read project] gives us a jumping off point to talk to parents about literacy...it is a more specific way to talk to parents about literacy because the children are talking about it in the classroom and at home, so we [family advocates] can reinforce early literacy over and over."

Theme 4: For staff members from across disciplines, interdisciplinary collaboration fosters new understandings of how children learn

Across interviews, participants described the ways in which interdisciplinary collaboration fostered new understandings of young children's development. Donna, an employee at the public library for three years, described,

Through collaboration, I learned how to take every little piece of the story and turn it into a learning activity. Like I had animal footprints with numbers on them [at the library] and the teachers would ask the children why they think a footprint belongs to a certain animals, what the numbers are, and really integrated it like it was second nature. I wish I had a little more of that in my own brain.

Beth, a special services coordinator for one year, shared,

It [interdisciplinary collaboration] broadened thinking beyond literacy because it brought in math, social and emotional development, and physical health. It took what we [classroom teachers] do to support children's learning up a step that was really great...to evaluate if what we are doing with children is appropriate.

Dawn, a nurse, described, "I don't have a background in childhood education. I think it [interdisciplinary collaboration] sort of helps me to be aware of how children should be educated and how to include the concepts of our health teachings into the activities in the classroom." Ashley, a staff assistant for one year, echoed, "I come from a minimal educational background so this [literacy] is something that I am getting into and it is helping me get my feet wet." The Director of transportation and a former Head Start teacher for 15 years, Janice, remarked,

At first, the bus monitors were very, very negative about doing literacy activities on the bus. By the end, they were encouraged and their perspective changed as their understanding changed. A lot of the bus monitors got really excited to have an activity to do with children that they could take onto the bus...like those monkeys on sticks...they were really great. The monitors used to say 'that's for the classroom.' Now they understand that every moment of a child's life should be educational whether it is on the bus or waiting for a turn to use the bathroom, they [children] need to have that education.

For some participants, these new understandings also brought a greater awareness of what young children know and are able to do. Mary, an Early Head Start teacher for three years, described,

I asked the children, what happened in the book? They were able to tell me that the shark was hugged. They were actually able to comprehend what happened in the book. I was actually amazed. I was really blown away because I never thought they would be able to tell me exactly what happened in the book.

Michelle, an Early Head Start advocate, shared, "I realized that kids can do a lot more than you give them credit for. I mean just listening to everyone's success stories, you really get a

sense of how much kids can actually do." Jean, a developmental specialist for four years, remarked, "I hear staff say 'oh three and four years olds can't sit for these stories or attend to this activity' but they are doing it and that is a really cool thing."

DISCUSSION

Although data from a small qualitative study conducted has limited generalizability, participants did highlight some themes that are echoed in research on interdisciplinary collaboration and their remarks shed light on some of the benefits and challenges of working across disciplines in comprehensive early childhood programs. This study suggests that Head Start and Early Head Start staff members recognize the benefits of interdisciplinary collaboration, but the experience of working across disciplines can be very challenging. Participants expressed frustration with the additional time and effort often required for effective collaboration. Participants also shared the belief that opportunities for interdisciplinary collaboration in the current early childhood educational climate are limited, primarily due to a lack of shared meeting times. Despite these challenges, participants expressed how meaningful it was for them to experience firsthand some of the potential benefits and challenges of working across disciplines. As one participant described, "I mean just how important it is to get everybody involved, get everyone excited, and get them to understand why interdisciplinary collaboration is so important, how it touches every area of children's lives."

This study also suggests that early childhood staff members from across disciplines are very interested in having additional opportunities to collaborate. As one participant described, "Before, I knew a little bit about it but I didn't know how important it is. Now I feel like it is really important to work together. If I am asked to be a part of this again, I would definitely do it next year." Participants also expressed the important role these interdisciplinary opportunities provide in helping staff connect with each other. As one participant described, "It is nice to hear what everyone is doing, their success stories, what they are proud of, and their take on things. "

One significant challenge to interdisciplinary collaboration in comprehensive early childhood programs, especially around an agency-wide literacy project, is that it is still in the very early stages of development. This challenge can be exaggerated in Head Start and Early Head Start programs where it may also be seen as "project specific", an "add on" to a current role, or where organizational structures such as scheduling difficulties, pre-existing responsibilities, and turf issues may not fully support it.

Several of the themes that emerged from this study are consistent with other findings in the literature on interdisciplinary collaboration. The perception that opportunities for interdisciplinary collaboration in educational settings are limited due to lack of time is now widely accepted (Anderson, 2013; Friend & Cook 2010; Bronstein & Abramson, 2003). However, with increased need for agency-based academic, mental health, and health supports and services to improve school readiness, building the capacity for early childhood staff members from across disciplines to collaborate is critical.

In order to more effectively address these long-standing challenges to interdisciplinary collaboration, creating opportunities for interprofessional training is essential. As early childhood agencies look to improve outcomes for young children using an interdisciplinary approach, it is important that all disciplines receive professional development to assist them in developing the

attitudes, knowledge, and skills necessary to work effectively across disciplines. Although the literature supports these efforts, there continues to be very little information to guide this process with the education staff, special services, transportation, family services, and nutrition staff classroom members from comprehensive early childhood programs.

This study also revealed the need to create additional opportunities for agency staff and families to become more engaged in a collaborative process. Although the agency involved staff members and families in the Little Read project, the point is well taken that greater staff and family involvement in all aspects of the project design, implementation, and evaluation could substantially improve the collaborative process.

A novel theme that emerged from this study is how interdisciplinary collaboration can foster new understandings of young children's development. For the majority of participants, with these new understandings came a greater awareness of what young children may know and be able to do. With new early childhood learning standards encouraging the integration of literacy, math, social studies and science concepts throughout the daily routine (e.g. on the bus, during lunch, on the playground, in the nurses office, etc.), it is critically important that every person develop a foundational understanding of child development and developmentally appropriate practices.

Limitations

Three limitations require mention. First, this study's small sample size may not be representative of staff members from across disciplines in other Head Start and Early Head Start programs. Also, this study did not measure participants actual use of the Little Read program. As a result, this study did not examine the fidelity of implementation of the literacy program.

Next steps

The participants in this study highlighted many points that warrant follow up. First, they noted the value of interdisciplinary collaboration, but we also heard about some of the barriers that came with this involvement. In recognition that no one profession can address the complex needs of many of today's young children, it is critical to address these barriers. Greater attention must be given in comprehensive early childhood programs to moving away from an emphasis on discipline-specific training toward creating additional opportunities for interdisciplinary dialog and practice (Weist, Evans & Lever, 2003; Anderson & Bronstein, 2012)

This study also supports earlier findings that interdisciplinary collaboration can positively impact the delivery of services in early childhood programs (Pollard, Miers, & Rickaby, 2012). If we are to achieve positive child outcomes and improve school readiness, engaging early childhood staff members from across disciplines must become the rule, not the exception (Anderson, 2013).

Lastly, participants in this study voiced ideas about ways to improve interdisciplinary collaboration. Clearly, the qualitative findings from this study are only one part of the kinds of research that needs to inform interdisciplinary collaborative efforts, particularly around literacy initiatives. In this study, we were particularly interested in participants' experiences in this innovative collaborative process. In the future, it would be useful to employ an instrument

designed to measure interdisciplinary collaboration (e.g. Mellin et al, 2010) to see the ways in which effective collaboration can support improved outcomes for young children, and then determine the optimal ways working across disciplines in comprehensive early childhood programs can more effectively support these efforts.

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APPENDIX A – INTERVIEW QUESTIONS

1. What is your current position at the agency?
2. How long have you been in this position?
3. Can you please briefly describe your role?
4. How long have you been on the Little Read committee?
5. How would you describe your role in the Little Read project?
6. What do you think are some of the benefits to using an interdisciplinary approach to the Little Read project?
7. What do think are some of the challenges to using an interdisciplinary approach to the Little Read project?
8. What expectations do you have for this project?
9. How will you measure its level of success?