

Crane Center for Early Childhood Research and Policy

Ready 4 Success

Evaluation Report

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Table of Contents

Executive Summary.....	3
Introduction.....	4
Program Context and Background	4
Evaluation Aims.....	4
Methods.....	5
Population.....	5
Research Design and Procedures	5
Data Collection Tools.....	6
Data Analysis	8
Results.....	8
Aim 1: To characterize the literacy and math skills of children in R4S settings in the fall of the pre-kindergarten year.Aim 1	8
<i>Figure 1. GRTR and PENS-B performance levels of children receiving ESC funds.....</i>	<i>8</i>
Aim 2: To what extent do ESC teachers participate in R4S-related services (PD and coaching)?.....	9
<i>Table 1. Online PD participation.....</i>	<i>9</i>
<i>Table 2. Number of classrooms receiving coaching in each tier.....</i>	<i>10</i>
<i>Table 3. Teachers’ years of experience with R4S and coaching.....</i>	<i>10</i>
Aim 3: To what extent is teacher participation in R4S activities (PD and coaching) associated with child-level and teacher/classroom-level characteristics?.....	81
<i>Table 4. Bivariate correlations among outcome and predictor variables.....</i>	<i>81</i>
	Error! Bookmark not defined.
Discussion.....	82
Interpretation of Results.....	82
Implications.....	9
Limitations and Recommendations	9
Conclusion.....	14
References.....	15
Author Note.....	16



Executive Summary

This report presents the available data from the 2019-2020 academic year of the **Ready 4 Success (R4S)** initiative, which was funded by the city of Columbus. The primary goal of R4S is to improve early childhood programming in the city of Columbus and support the kindergarten readiness skills of four-year-old children attending prekindergarten programs.

- In the 2019-2020 academic year, we sought to implement some changes to enhance project activities and improve preschool instructional practices, and continued to implement practices that were successful in previous years. First, R4S staff strongly encouraged, and supported, teachers to use the Read It Again – Mobile (RIA – M) curriculum supplement in all community-based Early Start classrooms by offering a free online professional development course, a tablet for monitoring children’s progress, and accompanying book kits. Second, a total of 5 free online professional development courses were available for Early Start teachers to complete, for credit. Finally, R4S coaching programming continued to utilize a multi-tiered framework to provide individualized coaching support services based on children’s fall scores and observed instructional practices in literacy and math.
- Similar to last year, enrollment in online PD courses was very high, with over 100 teachers completing the Social-Emotional focused course, and approximately 50 teachers completing content courses related to math and vocabulary instruction.
- The multi-tiered approach to coaching allowed for teachers to receive a level of coaching supports specific to classroom needs.
- Due to the COVID-19 pandemic, year-end assessments of children’s literacy and math scores, as well as year-end classroom observations, could not be completed. In addition, although R4S staff sought to maintain contact with ES providers after childcare centers were ordered to close, teacher responses were variable as many teachers had been laid off or furloughed.
- Although there is much uncertainty for the upcoming year, we offer some suggestions for how teachers and children can continue to be supported, regardless of possible changes to classroom environments. These suggestions include increased online and virtual coaching and community building amongst providers, additional online PDs for teachers in math and for addressing challenging behaviors, and facilitating methods for teachers to assess and evaluate their students’ growth in literacy and math throughout the year.



Introduction

Program Context and Background

For the past several years, the city of Columbus has supported a kindergarten readiness program, called Ready for Success (R4S), for children who qualify to receive reduced or free tuition to attend high-quality pre-kindergarten programming in Franklin County. Based on a growing body of research suggesting that children's gains in academic achievement is positively associated with attendance at high-quality prekindergarten programs (Howes et al., 2008), particularly for children from under-resourced backgrounds (Christian et al., 1998), the need for this program is evident. The goals of R4S are two-fold and interrelated: a) provide rich and robust support to teachers to enhance the instructional quality in prekindergarten classrooms, and b) improve the foundational academic skills of four-year-old children. Teachers who have at least one student in receipt of Early Start Columbus (ESC) funding are eligible to take free online professional development (PD) courses specifically created for ESC teachers, and receive individualized, job-embedded coaching to support their literacy- and math-focused instruction.

In previous years, R4S met the project objectives through four main activities. First, children were assessed on literacy and math screeners in the fall and spring to determine overall growth in these key academic areas. Second, systematic classroom observations of shared book reading sessions and math learning sessions (e.g., circle time) were conducted to understand the types of literacy- and math--focused instruction that regularly occurs in prekindergarten classrooms and identify areas in which teachers could use additional supports and ideas. Third, online professional development courses were made available in the areas of social-emotional classroom climate, math instruction, vocabulary building, and print-focused read-alouds. Finally, a three-tiered coaching model was used to provide an efficient and individualized level of coaching to interested teachers that varied according to classroom needs.

Unfortunately, due to pandemic restrictions, several of the above activities could not be conducted. However, new online PDs focused on diversity, equity and inclusive practices were created for teachers to complete, and virtual coaching opportunities were provided throughout the year in order to support teachers' instructional practices. In addition, teachers did complete the Kindergarten Transition Summary (KTS) in the spring of 2021, which provides information regarding children's overall kindergarten readiness, as well specific areas of strengths.

Below we provide detailed information regarding teacher participation in PD and coaching throughout the year and a comparison of KTS scores from the 2020-2021 cohort and a previous pre-pandemic cohort.

Evaluation Aims

The evaluation report for the 2020-2021 year of R4S focused on three aims:

Aim 1: To what extent do ESC teachers participate in R4S-related services (PD and virtual coaching)?

Aim 2: To what extent do children served in ESC classrooms demonstrate kindergarten readiness generally and across content areas?



Aim 3: To what extent is kindergarten readiness different for children served during the pandemic year versus pre-pandemic years?

Methods

ESC funding is available through the city of Columbus to children who are or will be 4 years of age by September 30th of the current academic year, and whose families reside in the city of Columbus and meet the income level requirements (at or below 300% of the federal poverty guidelines). ESC funding allows families to receive free or low-cost tuition for their child to attend 3-, 4-, or 5-star rated prekindergarten programs in Columbus.

Population

From the 143 classrooms serving children who received ESC funding, 71 were community-based classrooms, and 72 were in Columbus City School district locations. A total of xx teachers completed a short questionnaire gathering basic demographic information and data concerning classroom characteristics. Of the teachers who completed the questionnaire, 27% had an Associate's degree, 48% had earned at least a Bachelor's degree, 13% had a Master's degree, and 10% had earned or working towards a Child Development Associate credential.

The KTS was administered to all children in eligible classrooms, regardless of whether they specifically received ESC funding or not. In total, teachers completed the KTS for xx children. In the 2020-2021 year, this included 516 girls and 567 boys. Of those who were screened, 617 children were in receipt of ESC funding, either in isolation or in combination with an additional funding streams; 67% ($n = 411$) of children receiving ESC funding attended preschools in the Columbus City Schools (CCS) district. The average age in months of children receiving ESC funding was 54.16 months ($SD = 3.49$, $Range = 48 - 62$ months) at the time of pretest screening.

Research Design and Procedures

For the 2020-2021 year, R4S staff focused on supporting teachers, via virtual formats, in several ways.

- R4S staff contacted all site directors to schedule zoom meetings to review R4S services and discuss available supports with teachers.
- R4S provided individualized coaching and support paired with online PD modules and resources responsive to teachers expressed needs.
- R4S staff maintained contact with teachers through scheduled Zoom meetings, emails, and phone calls.

Information regarding children's kindergarten readiness was also used to determine overall school readiness for children during this pandemic year. Data from a previous pre-pandemic year was also used to compare possible differences across each domain.

Data Collection Tools

Primary Outcome Measures



One measure of children’s kindergarten readiness and two measures of teacher participation in R4S were the primary outcomes of interest.

Child Outcomes

Kindergarten Transition Summary (KTS). The KTS is a 54-item comprehensive evaluation that is usually completed by teachers at the end of the prekindergarten year for each child. However, because preschools and childcare centers remained closed from March through June, teachers or center directors were asked to complete the KTS based on their recollection of children’s abilities in mid-March. The KTS assesses five developmental areas, specifically Social-Emotional Development, Approaches to Learning, Cognitive Development, Language and Literacy Development, and Physical Development. Total scores range from 0-114 and scores are classified as representing skill levels that are: a) *not yet evident*, b) *in progress*, or c) *proficient*. KTS data for most of the children who were receiving ESC funding was submitted at the time of this evaluation ($n = 547$, 88.65%).

Teacher Outcomes

Participation in R4S professional development services. Teachers had several options for PD opportunities throughout the year. In particular, teachers were required to complete a 4-hour course on equitable and inclusive practices in the classroom. The course was available online, in two separate modules, and teachers received OCCRAA credit for doing so. Previously created online PDs remained open for teachers to take. The full list of available PDs, and the number of ESC teachers who took each, is shown in Table 1.

In addition to online PD, individualized virtual coaching was also offered throughout the year. R4S staff met with teachers via Zoom to review objectives learned in online PD courses and discuss ways these strategies are being implemented into daily classroom activities. Coaching, support and resources were also provided to address expressed personal goals during virtual coaching sessions.

Data Analysis

Descriptive statistics were used to determine the participation rates in R4S services. Similarly, we used descriptive statistics to evaluate children’s relative areas of strengths of kindergarten readiness across the five KTS domains as well as areas that children may need continued support, and inferential statistics to compare the kindergarten readiness of children from this year to pre-pandemic years.

Results

This section addresses the specific evaluation aims of the R4S initiative for the 2020-2021 academic year.

Aim 1: To what extent did ESC teachers participate in R4S-related services (PD and virtual coaching)?



As noted above, ESC teachers were required to take the two new PD modules focused on issues of diversity, equity and inclusive classroom practices. Teachers who were new to R4S, or had not taken other R4S modules were encouraged to do so. The total number of teachers who completed each of the PD offerings is shown below in Table 1.

Table 1. Online PD participation

PD Course	Total number of participants
Understanding the Social and Emotional Climate of Your Classroom	17
Challenging Behaviors	7
Effective and Authentic Math Instruction	11
Power Words: Enhancing Children's Vocabulary Development	16
Print-Focused Read-Alouds for Literacy	9
Read it Again - Mobile	14
Diversity 101: Module 1	106
Diversity 101: Module 2	92

Out of the 71 *community-based providers* served by R4S this year, fewer than usual ($n = 29$, 41%) opted to participate in coaching. In previous years, R4S coaches worked with teachers to design a coaching plan that was specific to the needs of the classroom and teachers' professional goals; for the 2020-2021 year, virtual coaching did not allow for that level of detail in the same way. Still, coaches met with teachers as often as desired, and for some teachers, the virtual format was more convenient (whereas for others it was more difficult). Overall, teachers who participated in coaching engaged in an average of three coaching meetings (*Range* = 1-8). It should be noted that of the 71 providers, nearly half ($n = 34$, 48%) were new to R4S; of those new teachers, however, only 11 new teachers (32%) participated in coaching.

Aim 2: To what extent do children served in ESC classrooms demonstrate kindergarten readiness generally and across content areas?

We addressed this aim in several ways. First, we considered the total number of children receiving ESC funds, whose KTS scores were considered to be "Not Yet Evident", "In Progress", or "Proficient", as indicated by their teacher in the spring of 2021. As seen in Figure 1 below, nearly half of children had scores in the below average category on the GRTR and nearly three-quarters of children scored in the below average category on the PENS-B. The average GRTR raw score for ECS children in the fall of 2019 was 12.96 ($SD = 4.93$, *Range* = 0-25), and the average PENS-B raw score was 7.64 ($SD = 4.78$, *Range* = 0-23). The overall scores, which consider all skills areas, ranged from 20-114 ($M = 94.83$, $SD = 16.78$). The vast majority were categorized as "Proficient" ($n = 489$, 89%), with a much smaller percentage classified as "In Progress" ($n = 54$, 10%), and 4 children whose overall kindergarten readiness skills were deemed to be "Not Yet Evident" (1%). When considered by domain, the proportion of children categorized as "Proficient" was similarly large for Social Emotional Skills (82%), Approaches to Learning (77%), Cognitive Development (75%), Language and Literacy (80%), and Physical Development (97%).

Figure 1. KTS performance levels of children receiving ESC funds



Aim 3: To what extent is kindergarten readiness different for children served during the pandemic year versus pre-pandemic years?

Given the extremely unusual circumstances of this past academic year, it was of interest to consider the extent to which children's kindergarten readiness, as determined by their teachers, was different for this group of 4-year-olds, compared to 4-year-olds attending ESC classrooms in a pre-pandemic year. Indeed, there are numerous factors that may have influenced how children performed this year, many of which we are not able to control for; however, attempting to understand the initial impact the pandemic might have had on young children in this important year before kindergarten is critical to consider.

As a first step, we

Discussion

Interpretation of Results

Our review of available information for this year yielded several interesting outcomes. First, results showed that, similar to last year, children who qualify for ESC services demonstrate limited knowledge of basic early literacy and math concepts. Just under one-half of children scored in the "below average" range on the measure of literacy, and nearly three-quarters of children scored in this category on the measure of math. For reference, data from prekindergarten children in the 2018-2019 year showed that 52% and 72% were below average on the literacy and math measures, respectively. In general, these data align with research suggesting children from low-SES backgrounds are at risk for lags on the foundational academic skills that they will need as they start formal schooling (Morgan et al., 2011). As well, these data further substantiate the need for high-quality prekindergarten programming for the young children in our city to boost their learning trajectories. More specifically, the consistent finding that children struggle with early math concepts warrants our current and sustained efforts towards improving math-focused instruction. Research suggests that coaching teachers on math instruction can result in improved outcomes for young children (Rudd, Lambert, Satterwhite, & Smith, 2009); thus, to the extent possible, R4S services will continue to focus heavily on supporting teachers to integrate intentional math-focused instruction in their classrooms.

A second outcome of interest relates to the large proportion of variance in teacher participation in PD and coaching that was attributed to their classroom's site or location. Previously, the focus of our reporting has been on examining children's outcomes and understanding the ways in which coaching and PD support is associated with gains in children's literacy and math skills. To date, we have not explored the mechanisms that drive the decisions to engage in these services. Thus, although it seems logical to expect that teachers working in the same building would behave similarly with respect to these types of PD opportunities, this is important information which can inform future investigations for improving our outreach to all teachers who can benefit from R4S services.



Perhaps relatedly, a final key finding from this report pertains to the fact that we observed notable teacher turnover for the 2019-2020 year. Although most of the site locations remained consistent from last year, R4S staff had the opportunity to work with many new teachers. This is not unexpected, as research suggests that preschool teachers have a turnover rate of 25–50% per year (Burton et al., 2002, Miller & Bogatova, 2009). Pertinent to the present work, however, is that this can have a significant impact on engagement in R4S services. For example, teachers who have had access to R4S services for several years may eventually opt out of coaching, and might have completed most of the online PDs. Conversely, new teachers may be more likely to engage in these services; yet, if turnover is high and teachers leave, then the longer-term impact of knowledge and skills gained via coaching will not be realized in these classrooms for future cohorts of children. This point may be particularly relevant for the 2020-2021 academic year, for which there may be even more turnover than usual, and perhaps, children with even greater needs to be met throughout the year. We will consider these issues as we move forward in planning for ways to continue to serve prekindergarten teachers and students through these unprecedented times.

Implications

The implications from this year of R4S data extend to both children and teachers. First, we see year after year that children in Columbus demonstrate relatively low levels of literacy and math knowledge at the beginning of the school year. On the one hand, this confirms the need for continuing to provide access to high-quality prekindergarten programming for these young children. It is likely that prekindergarten experiences may be especially important for children in this fall, who may be returning to the classroom after an extended time at home, due to COVID-19. It remains unclear how this time will impact children's early academic skills, and more importantly, their social-emotional skills. We expect that for both children and teachers, there may be additional or new areas for which support is needed as schools re-open, and hope to both understand and meet those needs.

A second and important implication from these data relates to the fact that teacher participation in coaching and PD was largely attributable to their site location. As discussed above, this is a logical outcome, but indicates the need for a broader perspective for understanding the processes that underlie teacher engagement in R4S services. Indeed, the overarching goal of R4S is to improve children's outcomes by supporting instructional practices. However, we have traditionally experienced variable engagement from teachers, and now have a better understanding for what contributes to that variability. It is outside the scope of this work to understand whether this variability stems specifically from site director support at the administration level or not. For example, some locations may engage in outside coaching services or curriculum and thus opt-out of R4S services. Therefore, although overall participation in coaching and PD may never be at 100%, due to teacher retention or higher-level decision-making, we will incorporate a systems-level approach to increase our knowledge and improve our reporting of this focal aspect of R4S.

Limitations and Recommendations



Limitations from the present academic year primarily concern the lack of year-end data for both children and teachers. As we have now started to gather information about the number of years teachers are in R4S, however, we can continue to use those data to understand the longer-term impacts on children's outcomes. For example, it might be the case that teachers who have participated in R4S services for several years may be more adept at delivering strong literacy and math instruction, which might relate to children's outcomes. Despite our inability to explore those associations this year, the data reported in this evaluation do highlight several aspects of R4S that can be adapted to meet the needs of what may be newly-imagined prekindergarten classrooms across Franklin County. Below, we outline several recommendations for ways to continue to support teachers and children in ESC classrooms for the 2020-2021 academic year.

First, even if face-to-face interaction between R4S staff and children and teachers is not permissible, coaches can continue to develop additional online PDs and resources for R4S teachers. Important areas for sustained guidance will be math instruction, but also social-emotional development and family engagement. The impacts of the COVID-19 crisis on young children's emotional development is unknown, but it is possible that after extended time away from a classroom environment, children may need stronger support to become re-familiarized with school routines and social behaviors. In turn, teachers may also need new and inventive ideas for managing challenging behaviors and meeting children's needs. Partnerships with families may be more important than ever, particularly if there is a mid-year shift to at-home learning again and/or blended models in which children's time is balanced between home and school during the week.

Second, coaches will be able to continue to provide virtual coaching and have started to develop creative ways for facilitating a virtual community of learners. One-on-one Zoom coaching sessions and observations will certainly be possible. Further, through the use of these technologies, coaches can create discussion boards for teachers to share ideas and topics, host Q&A sessions and webinars, and hold virtual town hall meetings to provide a safe and open community for teachers to engage with coaches as well as their peers.

Finally, if R4S staff are unable to enter classrooms for the 2020-2021 year, we will explore methods to administer the GRTR and PENS-B virtually. Although working with young children on a virtual platform will be challenging, we will investigate remote testing and possibly teacher-administered assessments.

Conclusion



R4S collects valuable information and offers much-needed support for Columbus area children by developing their kindergarten readiness skills. R4S also supports their teachers by providing individualized coaching and PD. Data show that many children in Columbus begin their prekindergarten year at a remarkable disadvantage compared to their peers. Due to the global pandemic, we are unable to estimate possible gains in literacy and math this year, but these circumstances of educational uncertainty for many children warrants the need for continuing to support the learning trajectories of our youngest citizens. The R4S program meets a critical need among young children in Columbus and the early childhood education programs they attend. Our work must continue to encourage and facilitate effective teacher instructional practices. These efforts may be more important than ever for the 2020-2021 year; thus, we will ensure that the supports we provide are flexible and adaptable to the sudden and unpredictable shifts that may continue to occur. The primary recommendation and plan for the upcoming academic year is to increase the accessibility to online PD and to capitalize on the use of technology to create a community of learners among prekindergarten teachers, who have the indispensable job of preparing our youngest for academic success.



References

- Barnett, W. S., Lamy, C., & Jung, K. (2005). *The effects of state prekindergarten programs on young children's school readiness in five states*. New Brunswick, NJ: National Institute for Early Education Research.
- Burton, A., Whitebook, M., Young, M., Bellm, D., Wayne, C., Brandon, R. N., & Maher, E. (2002). Estimating the Size and Components of the US Child Care Workforce and Caregiving Population. Key Findings from the Child Care Workforce Estimate. Preliminary Report.
- Christian, K., Morrison, F. J., & Bryant, F. B. (1998). Predicting kindergarten academic skills: Interactions among child care, maternal education, and family literacy environments. *Early Childhood Research Quarterly, 13*, 501-521.
- Howes, C., Burchinal, M., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008). Ready to learn? Children's pre-academic achievement in pre-Kindergarten programs. *Early Childhood Research Quarterly, 23*, 27-50.
- Justice, L. M., & McGinty, A. S. (2009). Read It Again-PreK! Columbus: The Ohio State University.
- Miller, J. A., & Bogatova, T. (2009). Quality improvements in the early care and education workforce: Outcomes and impact of the TEACH Early Childhood® Project. *Evaluation and Program Planning, 32*, 257-277.
- Morgan, P. L., Farkas, G., & Wu, Q. (2011). Kindergarten children's growth trajectories in reading and mathematics: Who falls increasingly behind?. *Journal of Learning Disabilities, 44*, 472-488.
- Purpura, D. J., & Lonigan, C. J. (2015). Early numeracy assessment: The development of the preschool early numeracy scales. *Early Education and Development, 26*, 286-313. doi:10.1080/10409289.2015.991084
- Rudd, L. C., Lambert, M. C., Satterwhite, M., & Smith, C. H. (2009). Professional development+ coaching-enhanced teaching: Increasing usage of math mediated language in preschool classrooms. *Early Childhood Education Journal, 37*, 63-69.
- Whitehurst, G.J. & Lonigan, C.J. (2001). *Get Ready to Read! Screening tool*. New York, New York: National Center for Learning Disabilities.
- Wright, C., Diener, M., & Kay, S. C. (2000). School readiness of low-income children at risk for school failure. *Journal of Children and Poverty, 6*, 99-117.



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The Crane Center for Early Childhood Research and Policy (CCEC)

The Crane Center for Early Childhood Research and Policy (CCEC), in the College of Education and Human Ecology at The Ohio State University, is a multidisciplinary research center dedicated to conducting high-quality research that improves children's learning and development at home, in school, and in the community. Our vision is to be a driving force in the intersection of research, policy and practice, as they relate to children's well-being.

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