

# Putting Research to Work for Military Families



Focus:  
Civilian

## Children's Classroom Engagement and School Readiness Gains in Prekindergarten

Chien, N. C., Howes, C., Burchinal, M., Pianta, R. C., Ritchie, S., Bryant, D. M., ... Barbarin, O. A. (2010). Children's classroom engagement and school readiness gains in prekindergarten. *Child Development*, 81(5), 1534-1549.  
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**SUMMARY:** Data were utilized to classify pre-kindergarten children into profiles based on their classroom engagement. These profiles were then used to predict gains in language, literacy, and math, from fall to spring of the pre-kindergarten year. Sociodemographic differences, including poverty status, across the class engagement profiles and in terms of educational gains were also examined. Results indicate that students gains varied based on their profile and that sociodemographic factors influenced student's academic gains.

### KEY FINDINGS:

- Four distinct patterns of classroom engagement were found: Free play profile (51% of children), individual instruction profile (9%), group instruction profile (27%), and scaffolded learning profile (13%).
- Children in the free play profile exhibited smaller gains across the prekindergarten year on indicators of language and literacy and mathematics, compared to other children.
- Children in the individual instruction profile made greater gains than other children on the Woodcock Johnson Applied Problems test.
- Lower socioeconomic children in the individual instruction profile fared better than higher socioeconomic children in that profile; however, in all other profiles, lower socioeconomic children fared worse than higher socioeconomic children.

### IMPLICATIONS FOR MILITARY PROFESSIONALS:

Military professionals could:

- Collaborate with other professionals in the field of school readiness to facilitate efforts to promote school readiness among military children
- Help develop modules to inform staff regarding best practices related to educational learning activities and school readiness to best help military students prepare for and succeed in school

### IMPLICATIONS FOR PROGRAMS:

Programs could:

- Provide individual instruction within school-based curriculum to increase military children's educational gains
- Develop curriculum based on the needs of military students from different sociodemographic backgrounds or based on other factors that may influence a child's educational attainment

### IMPLICATIONS FOR POLICIES:

Policies could:

- Continue to support schools that work with military children to provide high-quality pre-kindergarten experiences
- Encourage the development and continuation of programs that support military children struggling academically

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## METHODS

- Data were from the National Center for Early Development and Learning Multi-state Study and the State-wide Early Education Programs Study
- Data from the Multi-state Study included 40 programs from six different states and were collected in fall 2001, while data from the State-wide study included 100 programs from five different states and was collected in fall of 2003.
- This article focuses on classes with primarily civilian children.

## PARTICIPANTS

- This study included 2,751 students enrolled in pre-kindergarten programs across the United States.
- Forty-nine percent of the children were male.
- Most children were White (41%) or Latino (27%), and have an average age of 4.62 years.
- The majority of children (58%) were from families living below the federal poverty line

## LIMITATIONS

- The study sample was at higher demographic risk than the national average; hence, without a comparison group, it is unclear whether the outcomes are truly related to the program.
- Study data came from two different studies and data collection methods, recruitment methods, and samples may have differed in important ways that could impact study results.
- Researchers may have intentionally or unintentionally influenced the findings (e.g., overlooked unexpected occurrences, asked leading questions).

## AVENUES FOR FUTURE RESEARCH

Future research could:

- Explore how specific caregiver-child interactions and classroom models may have direct and indirect effects on the outcomes of military children
- Examine peer interactions in early childhood in an attempt to identify types of interactions and consequent benefits/risks of different peer interactions and their association with classroom engagement and school readiness, particularly for military youth
- Investigate whether different models of early childhood education (e.g., free-choice play, instructional) are best suited for different domains of learning

## ASSESSING RESEARCH THAT WORKS



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