

THE ALABAMA DEPARTMENT OF EARLY CHILDHOOD EDUCATION

First Class Pre-K

Issue Brief 5a, February 2018

Special Education Needs: Differences between First Class Pre-K Students and Non-First Class Pre-K Students and Potential Cost Savings

Background

The mission of the Alabama Department of Early Childhood Education (DECE) is to provide state leadership that identifies, promotes, and coordinates efforts and programs for children, their families, and communities. Housed within the Department of Early Childhood Education, the Office of School Readiness administers Alabama's diverse delivery, voluntary, high quality Pre-K program. Classrooms are funded through a grant process in which programs must meet specific quality standards and abide by rigorous operating guidelines. Alabama's First Class Pre-K program has been awarded the highest quality rating by the National Institute for Early Education Research (NIEER) for the past 12 years.

Introduction

Special education is specially designed instruction provided to meet the unique needs of children with disabilities. Special education services include classroom instruction as well as related services such as speech-language pathology, physical therapy, occupational therapy, audiology, and psychological services that assist children with disabilities in benefitting from the educational experience. Children are eligible for special education services in Alabama based on disability categories recognized by the Individuals with Disabilities Education Act and receive services through an Individualized Education Program¹. Special education services have additional costs above those for general education. The purpose of this issue brief is to examine differences in special educational needs between students who received First Class Pre-K and those who did not.

Methods

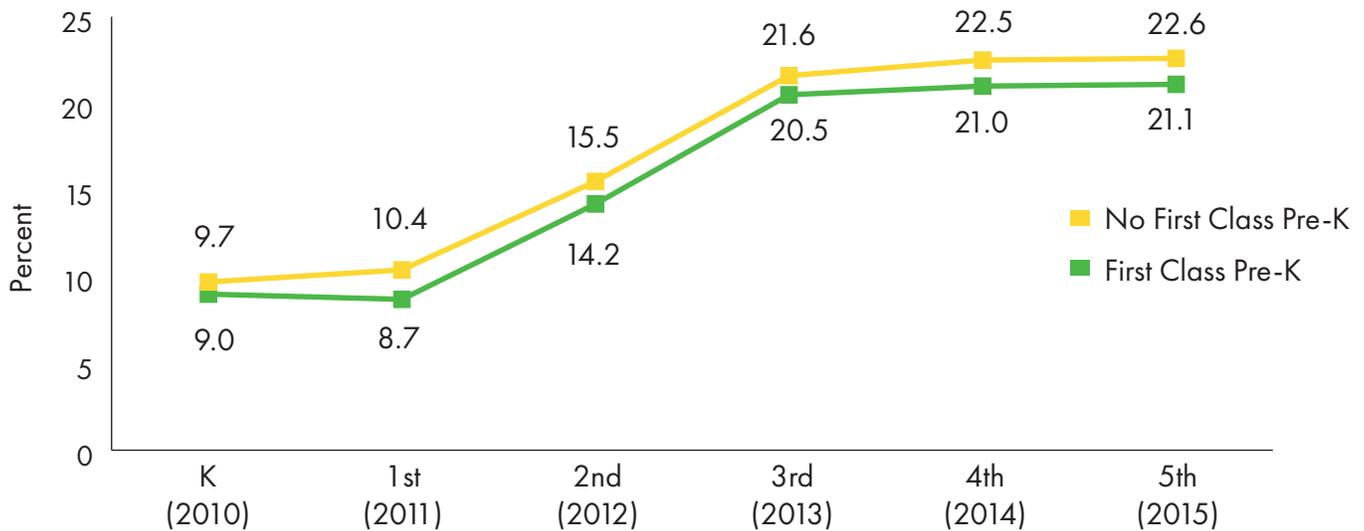
Data include all Alabama children (58,760) who entered Kindergarten in 2010 and who were followed through 5th Grade into the 2016-2017 school year. Data were analyzed with regard to whether the children received a state-funded First Class Pre-K experience in the 2009-2010 school year and whether the children received special education services in any or all school years.

A difference in special education need was calculated based on the number of First Class Pre-K students who would have required special education, assuming they had special education rates equal to those observed for the non-First Class Pre-K group. Cost savings from reduced special education were calculated based on the additional cost for special education above that for general education per student per year (\$8,262 in 2016²) multiplied by the reduction in the number of students requiring special education (rounded up to next whole number). For example, in 5th grade, the difference between rates of special education for First Class Pre-K and Non-First Class Pre-K indicates that 45 additional children would have needed special education ($45 \times \$8,262 = \$371,790$). Projected total cost savings are the sum of the actual savings for K-5th and projected for 6th-12th assuming similar trends.

Findings

Overall, a smaller percentage of children who went to First Class Pre-K started Kindergarten with disabilities than children who did not attend Pre-K. Even as the number of children identified with disabilities increases through the grades, this percentage increase is smaller in every grade. The percentage is for ALL children in the school year, so a 1% increase equals roughly 587 more children per grade. At each grade, children who received First Class Pre-K had lower percentages of special education.

Children who received First Class Pre-K had lower percentages of special education needs at each grade.



The differences in percentages of students who need special education between the First Class Pre-K and Non-First Class Pre-K groups equate to overall reductions in the number of students who require special education services. The potential cost savings through 12th grade from reductions in special education due to First Class Pre-K are \$4,425,678 for this one group of children (followed from Kindergarten through 5th grade).

Impact of First Class Pre-K on Special Education Expenditures, 2010 Cohort

Grade	Non-First Class Pre-K (n=55,662)		First Class Pre-K (n=3,098)		Reductions in # of Students in Special Education	Cost Savings From Reduced Special Education
	# Special Education	% Special Education	# Special Education	% Special Education		
K	5,411	9.7%	278	9.0%	24	\$198,288
1	5,806	10.4%	268	8.7%	56	\$462,672
2	8,613	15.5%	441	14.2%	39	\$322,218
3	12,006	21.6%	635	20.5%	34	\$280,908
4	12,517	22.5%	651	21.0	46	\$308,052
5	12,576	22.6%	655	21.1	45	\$371,790
Actual Total Reductions and Cost Savings K-5					244	\$2,015,928
Projected Total Reductions and Cost Savings K-12					536	\$4,425,678

Implications

At each grade observed in the study, children who received First Class Pre-K needed special education at lower rates compared to children who did not receive First Class Pre-K. By 5th grade, there were 7% fewer students requiring special education services among children who received First Class Pre-K. Whether a child receives special educational services by the end of 3rd grade has been associated with greater deficits in reading and general academic performance³. Further, reductions in the need for special education translate into cost savings. These findings are for one group of children who received First Class Pre-K prior to attending Kindergarten – representing just 5% of the total number of children who started Kindergarten in 2010 – and apply across all racial, ethnic, and income status groups. Expanding First Class Pre-K is expected to result in significantly more cost savings from reduced special education.

References:

- Alabama Administrative Code. Rules of the Alabama State Board of Education, State Department of Education, Chapter 290-8-9 Special Education Services.
- Alabama Department of Education, Current Expenditures, FY 2016.
- Aron, L., & Loprest, P. (2012). Disability and the education system. *Future of Children: Children with Disabilities*, 22(1), 97-122.