Hurst-Euless-Bedford ISD Pre-Kindergarten Study

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Pre-Kindergarten is highly debated among parents, educators, researchers, and politicians. There are many advocates of pre-kindergarten as well as many opponents. We evaluated the effectiveness of Pre-Kindergarten in Hurst-Euless-Bedford ISD to identify if there is a meaningful difference in student achievement performance in later grades on state reading assessment tests between students that attended state-funded Pre-Kindergarten and those who did not, but were eligible for the program. The study included only English Language Learner (ELL) or Economically Disadvantaged (ED) students in grades 3, 4, 5 and 6.

This is one of the few studies evaluating Pre-Kindergarten effectiveness beyond 2nd grade. The results revealed significant performance differences between the two student groups in grades 3, 5 and 6. With Pre-Kindergarten attendees showing higher sustained performance than non-Pre-Kindergarten attendees. While the difference was not statistical, grade 4 also showed higher actual average score performance for Pre-Kindergarten attendees.

Overall, results of the study demonstrated that children who participated in high-quality Pre-Kindergarten continued to build upon a solid foundation of early learning and could attain positive academic results through grade 6.

Year	Grade	Group	Study Population Size	Average (Mean) Scale Score	% Pass Rate	PK Difference
2014- 2015	3	NPK	642	1416	79%	+29 6%
		PK	300	1446	85%	
	4	NPK	655	1497	72%	+17 9%
		PK	263	1514	81%	
	5	NPK	666	1547	81%	+25 6%
		PK	209	1572	87%	
2015- 2016	3	NPK	765	1409	70%	+34 5%
		PK	275	1443	75%	
	4	NPK	466	1498	78%	+21 1%
		PK	250	1519	79%	
	5	NPK	491	1555	79%	+12 1%
		PK	240	1567	80%	
	6	NPK	480	1597	76%	+23
		PK	176	1620	85%	9%

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We also compared students who remained enrolled in our district which removes the factor of mobility and solely compares Pre-Kindergarten attendance as the only variable since the students were all exposed to the same level of quality teaching in grades Kindergarten through their current grade level. Pre-Kindergarten attendees consistently had average reading test scores higher than their non-Pre-Kindergarten attendee peers.

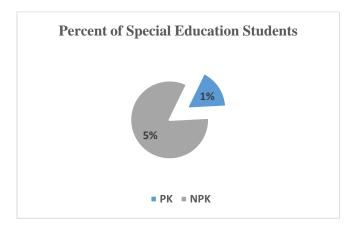
2014-2015 Enrollment in HEB ISD Only Comparison

Grade	PK Average Score	NPK Average Score
3	1447	1435
4	1513	1508
5	1572	1559

In the study population, 99 non-Pre-Kindergarten attendee students repeated a grade level compared to <u>only 1</u> Pre-Kindergarten attendee student who repeated a grade level.

Using the 2014-2015 Texas Academic Performance Report (TAPR), the cost for just teachers of re-educating a retained student is \$1,394 per student.

Also, another 132 (4.9%) non-Pre-Kindergarten attendee students were later identified for Special Education compared to only 34 (1%) Pre-Kindergarten attendee students. The cost of teachers educating the Special Education non-Pre-Kindergarten students is \$3,394 per student, almost 2.5 times the cost of general education.



Attendance in a high-quality Pre-Kindergarten program is a potential mitigant to additional expenditures for student retention and increased service cost in Special Education. HEB ISD's Pre-Kindergarten program is designed to meet research standards for a high-quality program and includes an aligned curriculum based on knowledge of child development, instructional decisions based on individual student data, strong family engagement, enhanced professional development and specific reflections on the learning environment. Expanding the program would likely result in higher participation rates in advanced academics, earlier and less intervention for students, fewer students served in special education, reduced truancy rates, and a lower dropout rate.