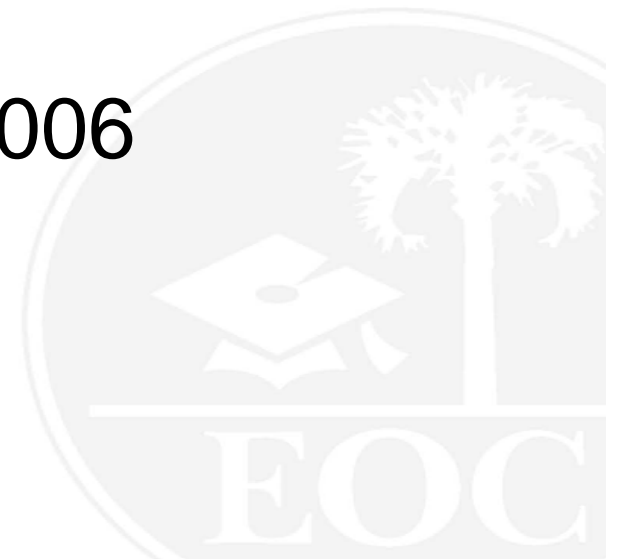




Longitudinal Analysis of Six Years of PACT Achievement Data, 2000-2005

October 9, 2006



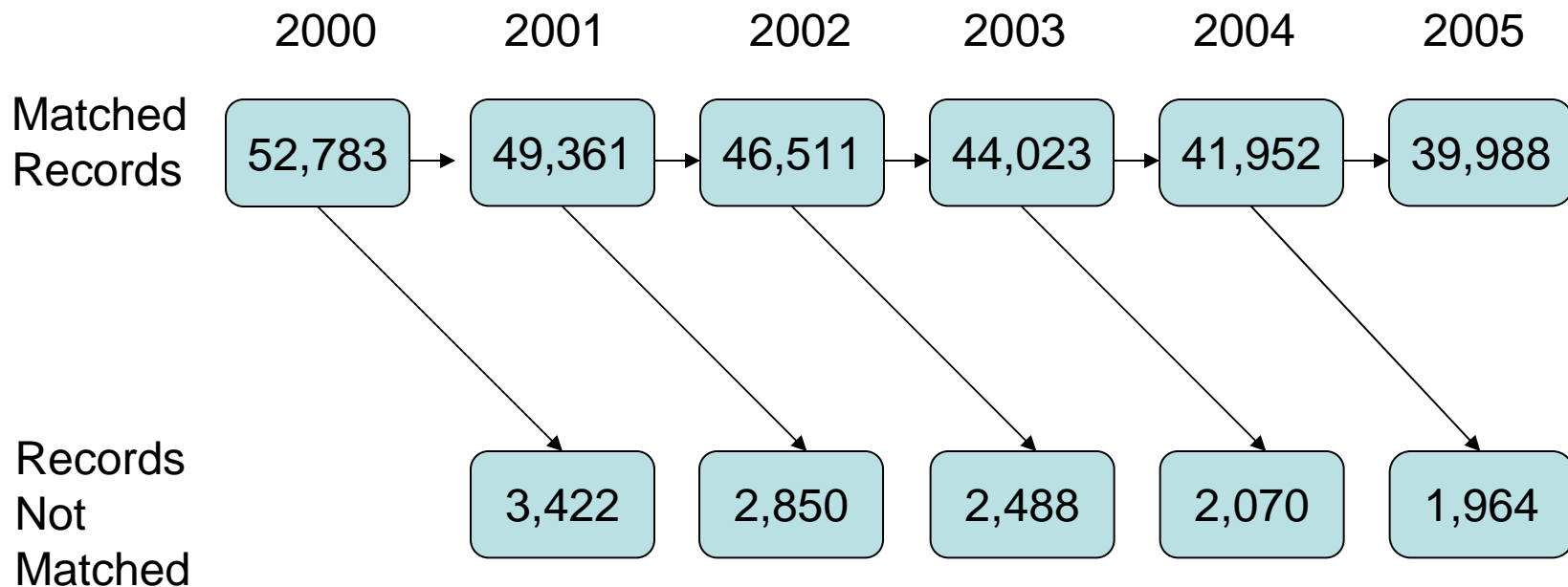
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Columbia, SC 29211

www.sceoc.org

Purposes for Study

- Describe student achievement growth over time
 - School report card Improvement Rating
- Describe student grade promotion or retention over time
- Identify policies in need of review and possible revision
- Study continues previous work

Numbers of Student Records Matched and Not Matched Each Year Grade 3 1999-2000 Cohort 2000-2005 Longitudinal Data



Why Could Records Not Be Matched?

- Students left state; attended private or home school; deceased
- Did not participate in regular testing program because of severe disability (alternate assessment)
- Tested, but identifying information inaccurate or incomplete
- Tested, but promoted two grade levels rather than one

Unmatched Student Records

- Records which could not be matched were more likely to come from students:
 - Having lower previous PACT achievement
 - Who were previously retained in grade
 - Who participate in the federal free- or reduced-price lunch program
 - Who are male

Questions

- How many students repeated one or more grades, and how many were promoted every year?
- What were the demographic characteristics of the promoted and retained students?

Grade Level Promotion/Retention Patterns 2000-2005 Longitudinal Data Students Attending Grade 3 in 1999-2000

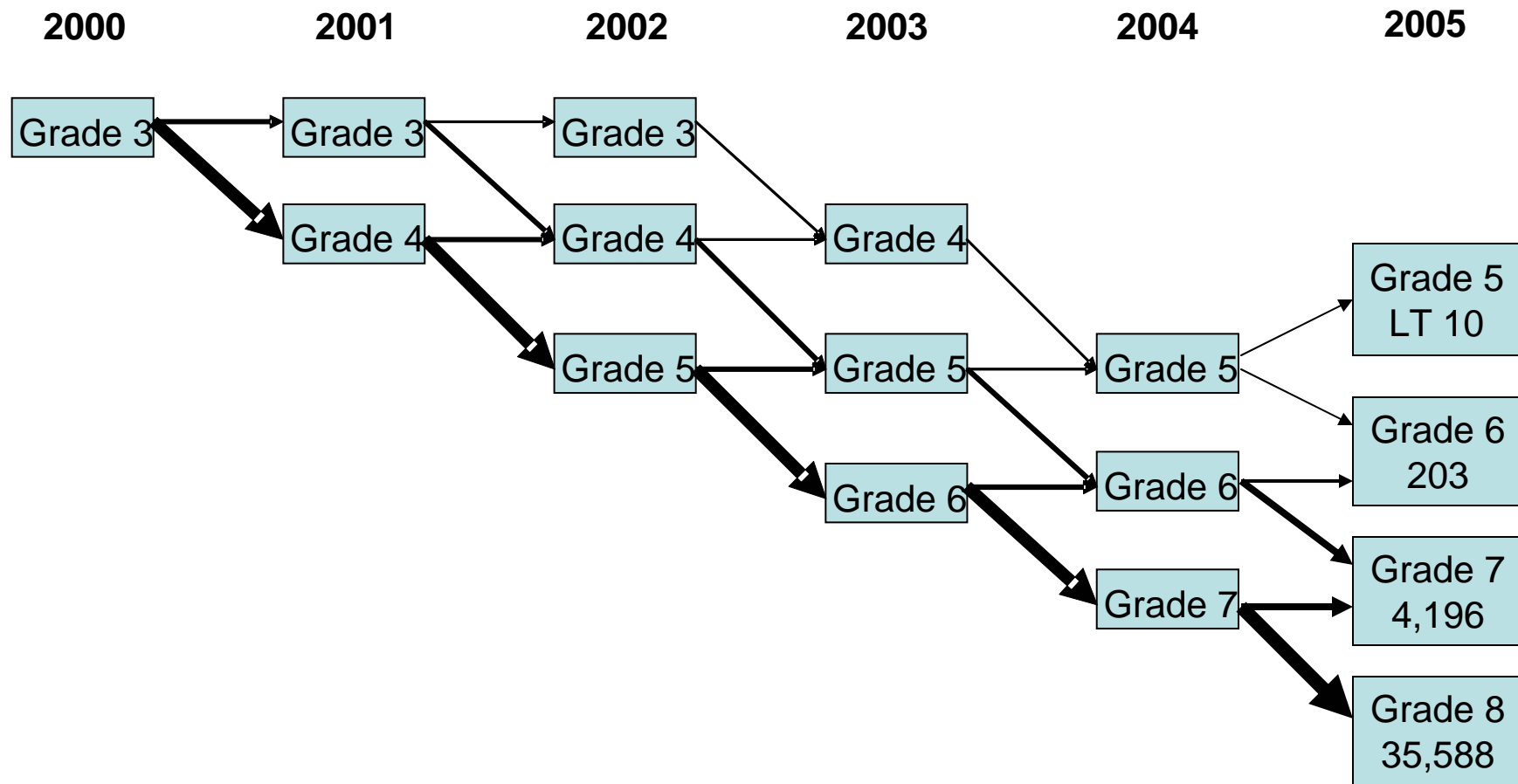


Table 2
Student Age & Grade
Promotion/Retention Status (n=38,511)

	Age When Entered Grade 3 in 1999 – Number (% of total 38,511)		
Grade Promotion/Retention Status	Younger than expected 7 years or younger	At expected age 8 years old	Older than expected 9 years or older
Promoted each year, grade 3 (2000) to grade 8 (2005)	Promoted/Young 3 554 (1.4%)	Promoted/On Age 29,987 (77.9%)	Promoted/Old 3 3,771 (9.8%)
Retained in at least one grade, grade 3-grade 7	Repeat/Young 3 55 (0.1%)	Repeat/On Age 3,307 (8.6%)	Repeat/Old 3 837 (2.2%)
Totals	609 (1.6%)	33,294 (86.5%)	4,608 (12.0%)

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Table 3
Subpopulations Based on Student Age and Grade Retention Status
Six-Year Longitudinal Study, 2000-2005

Demographic Group		Student Age/Retention Group - Number (%)					
		Promoted/ On Age	Promoted/ Old 3	Repeat/ On Age	Repeat/ Old 3	Promoted / Young 3	Repeat/ Young 3
Gender	Female	16,017 (53.4)	1,534 (40.7)	1,214 (36.7)	273 (32.6)	342 (61.7)	28 (50.9)
	Male	13,970 (46.6)	2,237 (59.3)	2,093 (63.3)	564 (67.4)	212 (38.3)	27 (49.1)
Ethnicity	African-American	11,934 (39.8)	1,976 (52.4)	1,979 (59.8)	532 (63.6)	254 (45.8)	38 (69.1)
	White	17,439 (58.2)	1,712 (45.4)	1,286 (38.9)	287 (34.3)	275 (49.6)	16 (29.1)
	Other	614 (2.0)	83 (2.2)	42 (1.3)	18 (2.2)	25 (4.5)	1 (1.8)
Lunch Status	Free	11,145 (37.2)	2,291 (60.8)	2,228 (67.4)	631 (75.4)	168 (30.3)	36 (65.5)
	Reduced	2,604 (8.7)	314 (8.3)	304 (9.2)	62 (7.4)	60 (10.8)	8 (14.5)
	Pay	16,193 (54.0)	1,159 (30.7)	765 (23.1)	141 (16.8)	326 (58.8)	10 (18.2)
Have a Disability	Yes	3,171 (10.6)	1,558 (41.3)	644 (19.5)	300 (35.8)	41 (7.4)	7 (12.7)
Total		29,987 (100)	3,771 (100)	3,307 (100)	837 (100)	554 (100)	55 (100)

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Total		29,987 (100)	3,771 (100)	3,307 (100)	837 (100)	554 (100)	55 (100)

Question

- What percent of students enrolled in grade 8 in 2004-2005 have ever been retained in grade?

Table 4
Distribution of Student Ages
Grade 8, 2004-2005 School Year

Age Level	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Students older than expected for grade 8				
16yrs, 0mos – Older	175	0.31	175	0.31
15yrs, 0mos – 15yrs, 11mos	2062	3.66	2237	3.97
****	****	****	****	****
14yrs, 1mo	1342	2.38	11945	21.20
14yrs, 0mos	1603	2.85	13548	24.05
Students at expected age for grade 8				
13yrs, 11mos	3723	6.61	17271	30.65
13yrs, 10mos	3741	6.64	21012	37.29
****	****	****	****	****
13yrs, 1mo	3233	5.74	51753	91.85
13yrs, 0mos	3235	5.74	54988	97.59
Students younger than expected age for grade 8				
11yrs, 0mos – 12yrs, 11mos	1356	2.41	56344	100.00

Question

- What was the PACT achievement of students over the six years studied?

Figure 1
PACT ELA Average Performance Levels, Six-Year Longitudinal Study
By Performance Level in Grade 3 2000 (n=39,173)

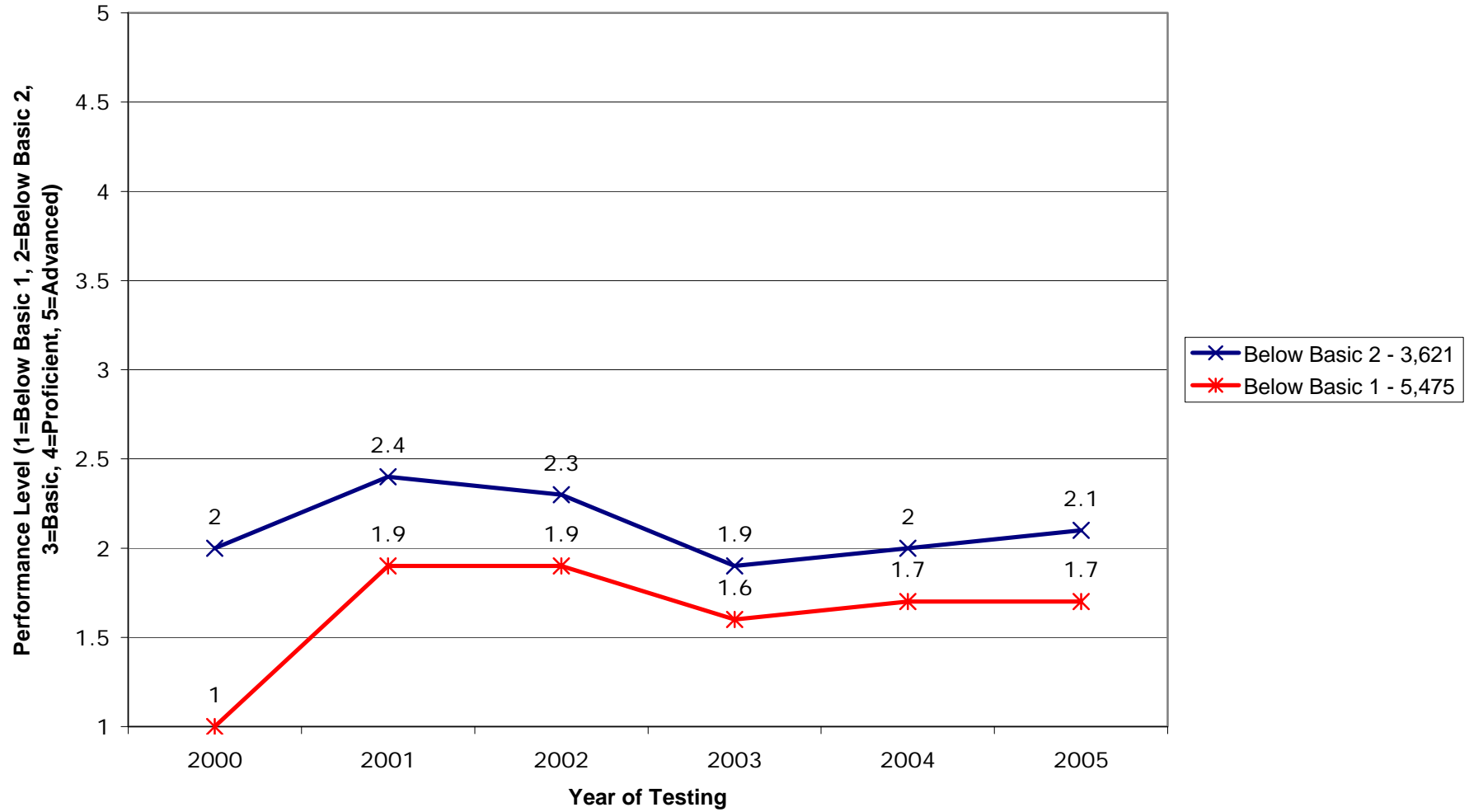


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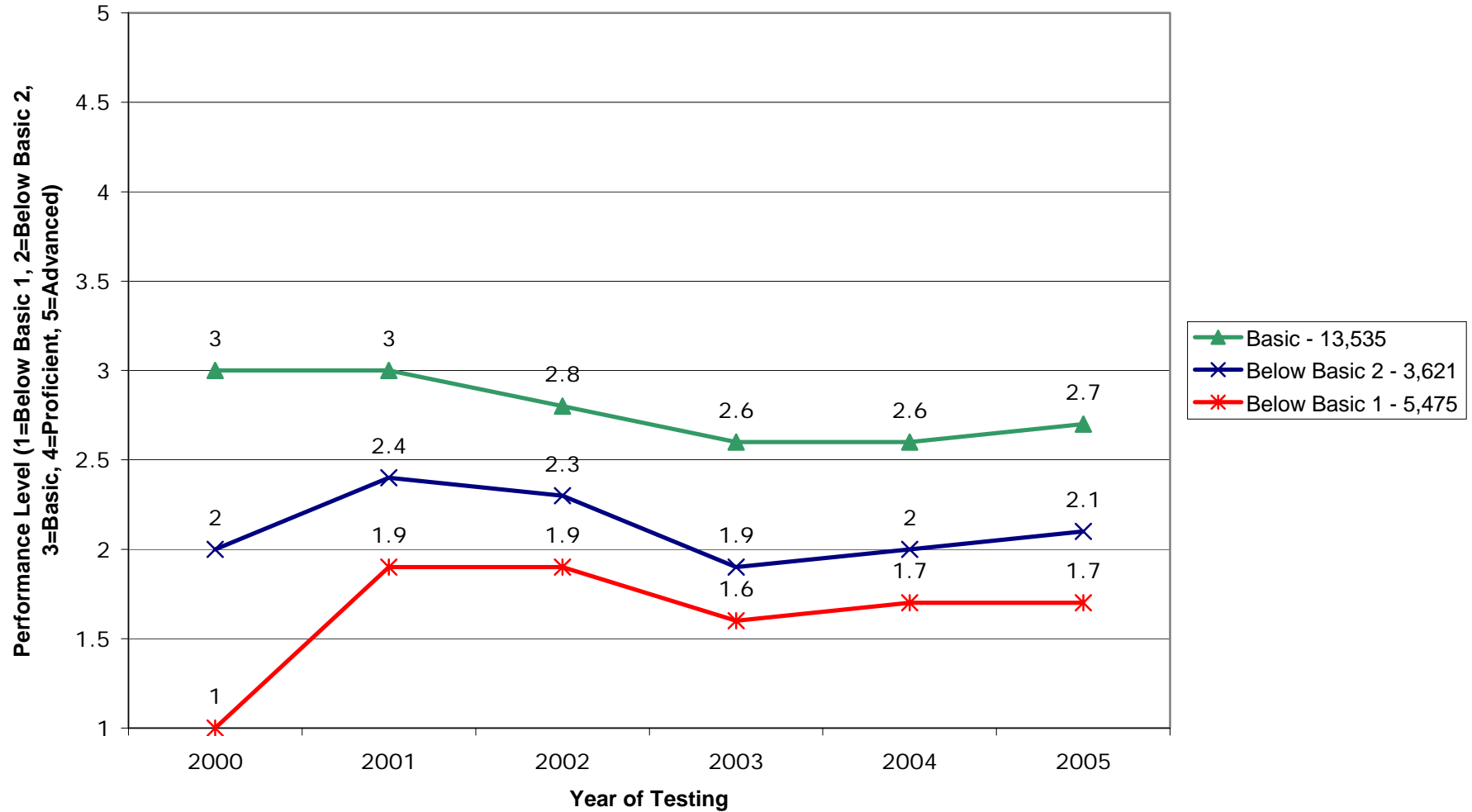


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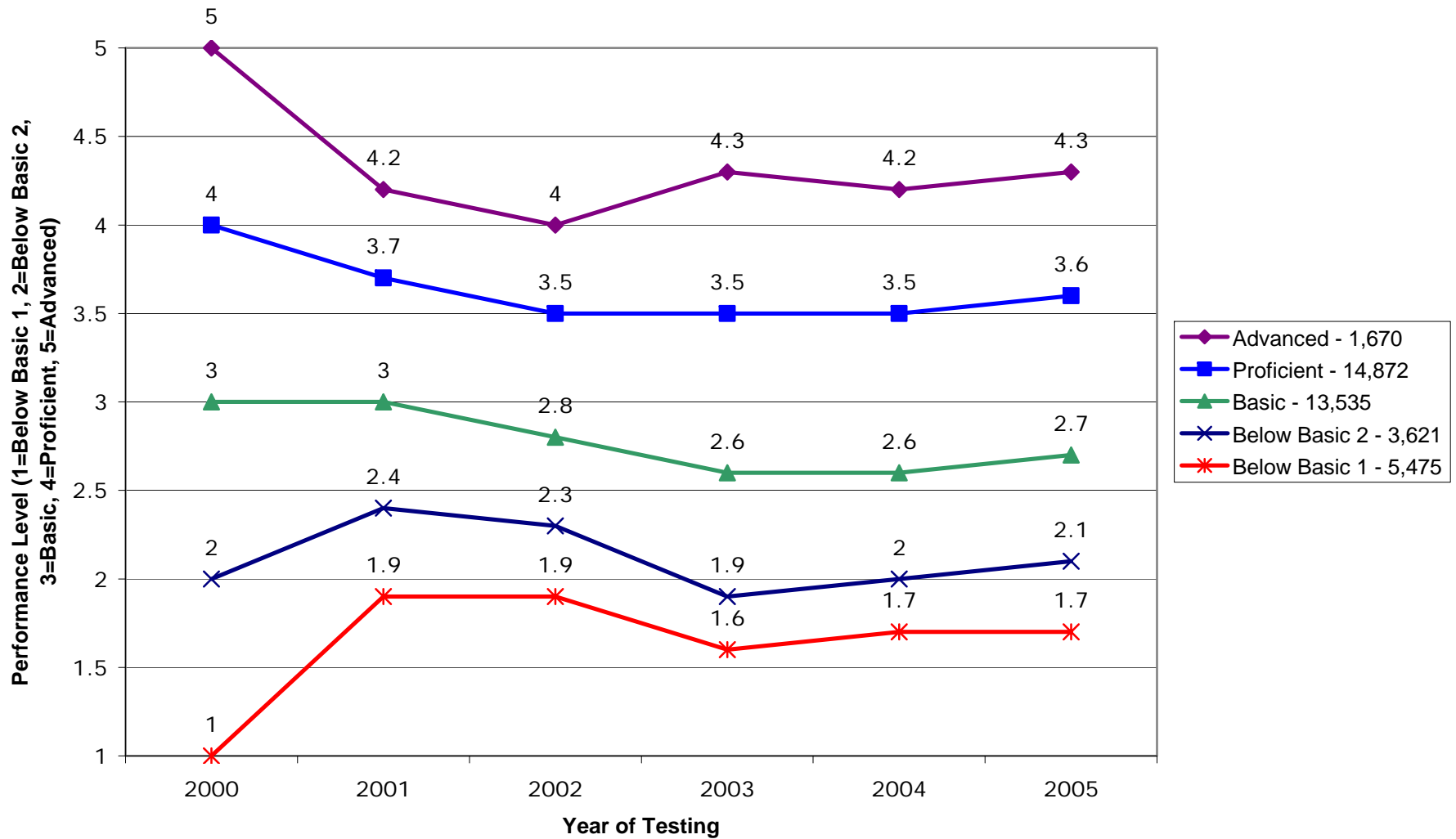


Figure 2
PACT Math Average Performance Levels, Six-Year Longitudinal Study
By Performance Level in Grade 3 2000 (n=39,551)

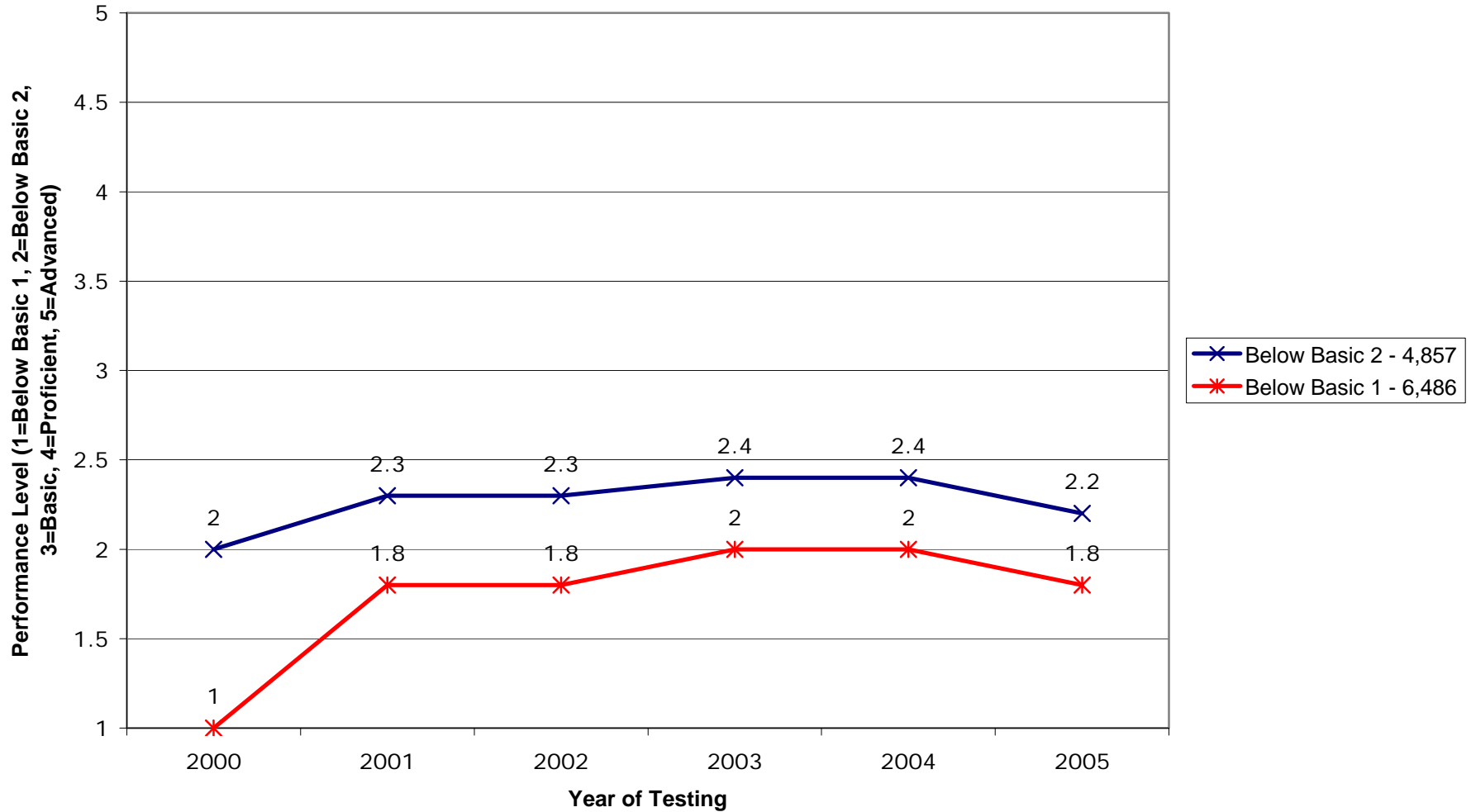


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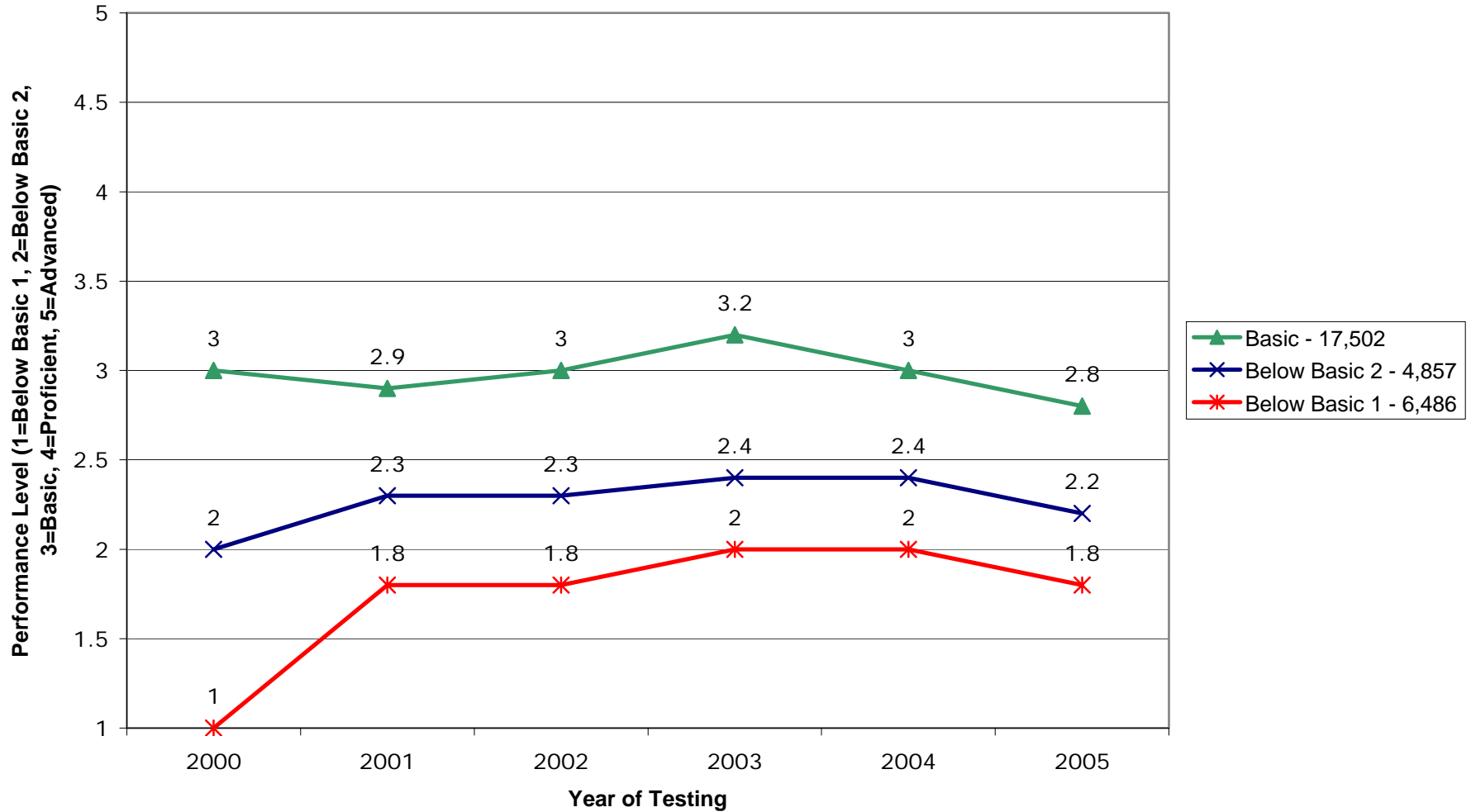
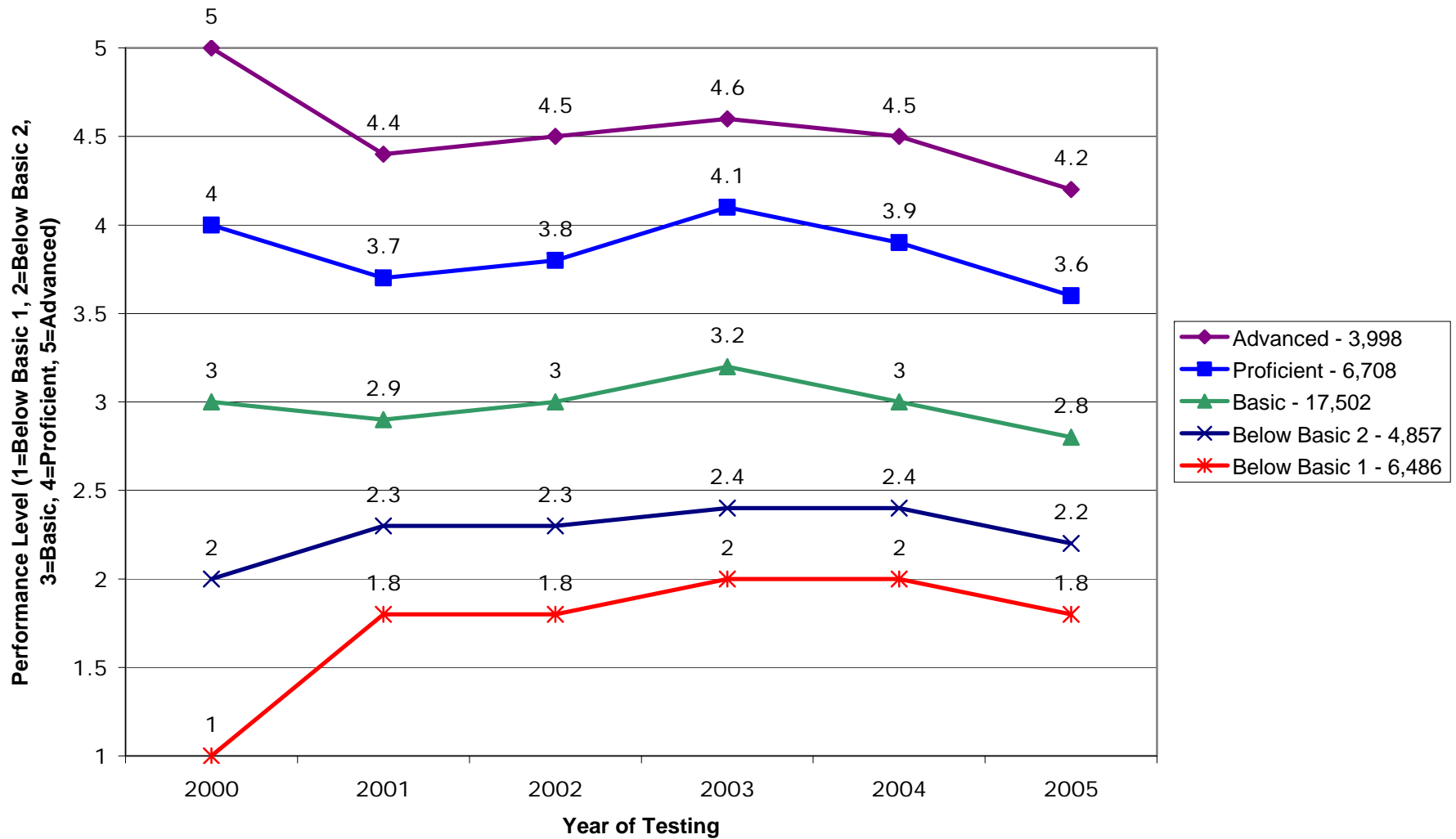


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PACT Math Average Performance Levels, Six-Year Longitudinal Study
By Performance Level in Grade 3 2000 (n=39,551)



Question

- What was the PACT performance of promoted or retained students who were older than expected in 2000 compared to students at the expected age level?

Figure 3
PACT ELA Percent Basic or Above, Six-Year Longitudinal Study
Students Repeating Grade 3 Compared to Students Not Repeating Any Grades 3-8

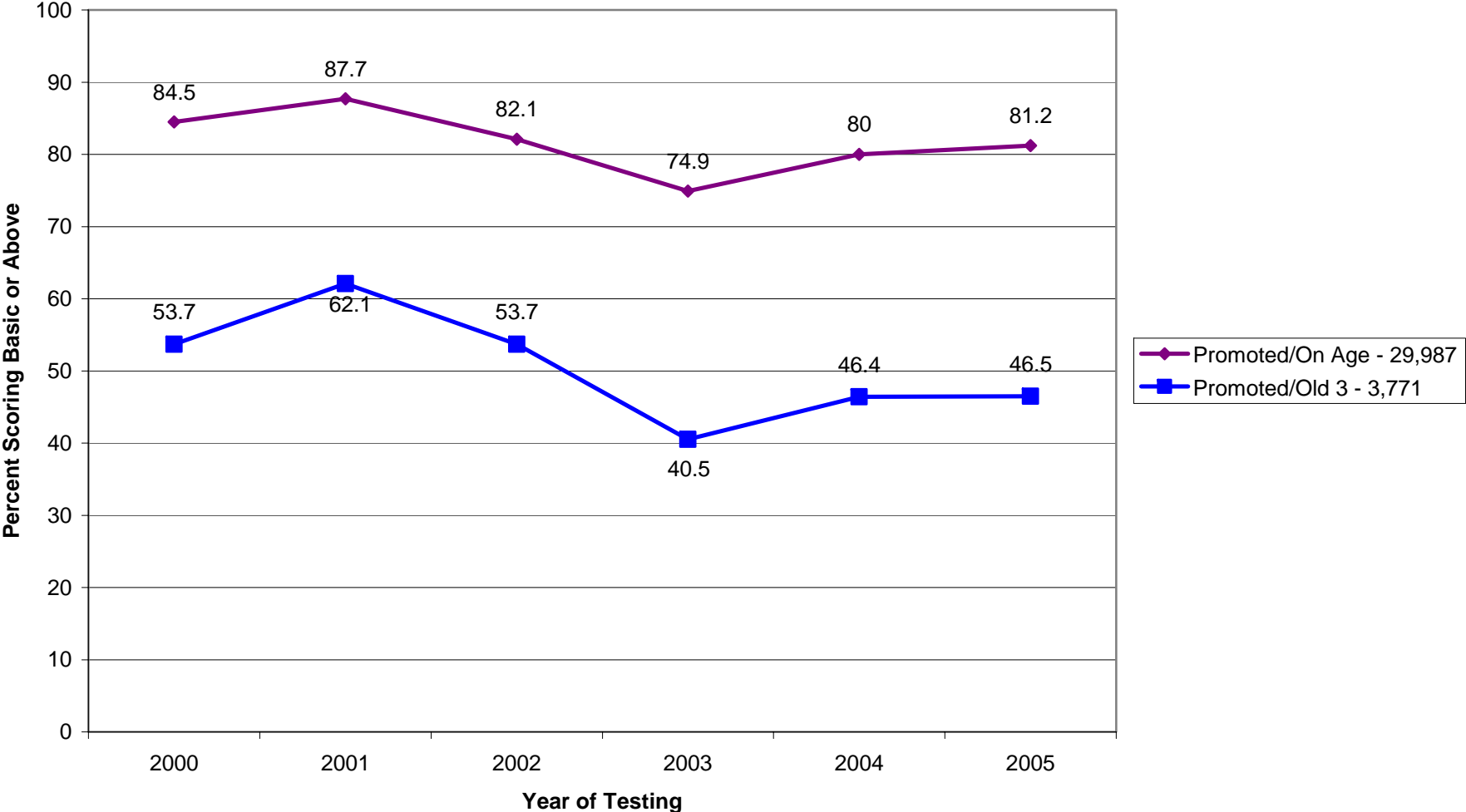


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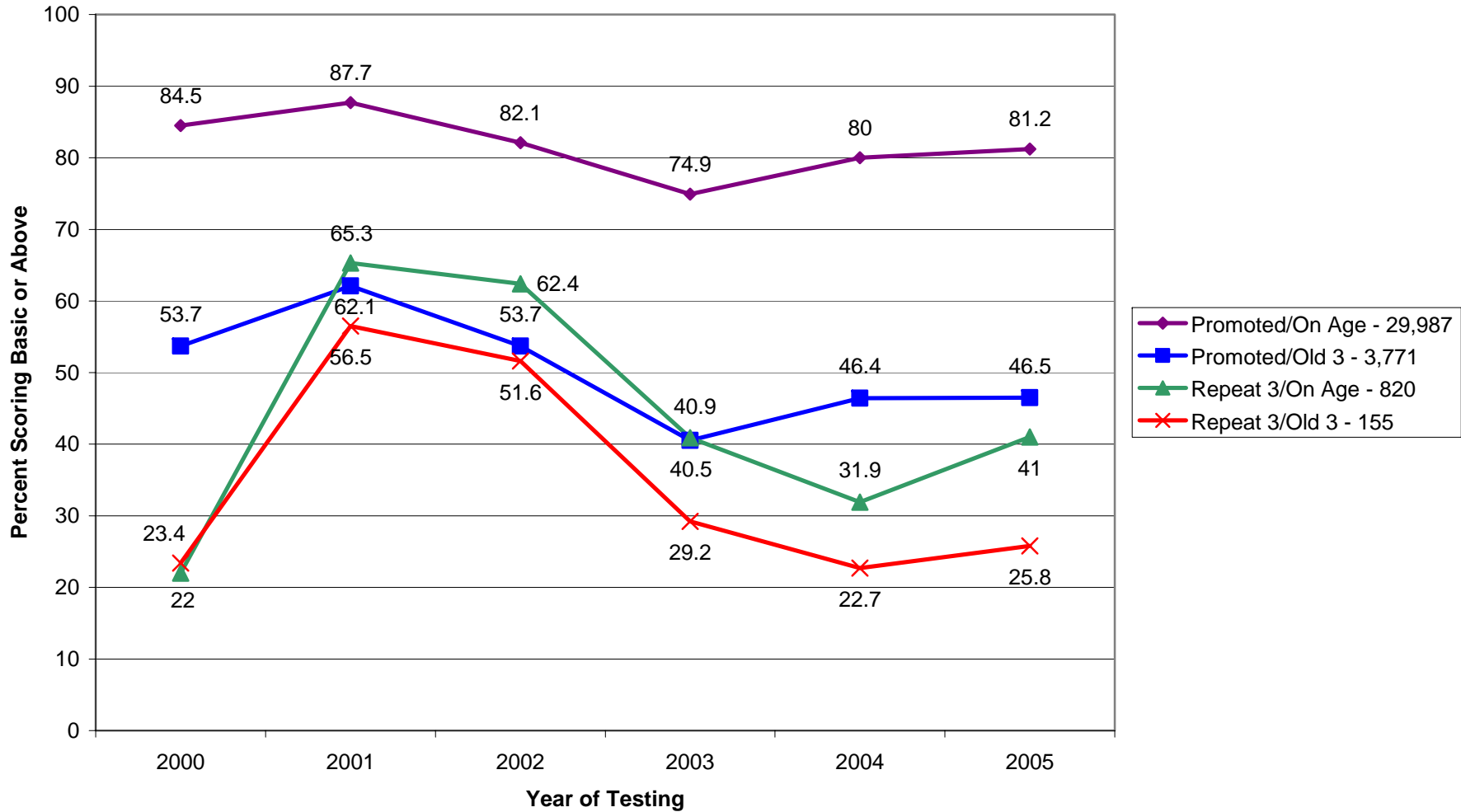


Figure 4
PACT Math Percent Basic or Above, Six-Year Longitudinal Study
Students Repeating Grade 3 Compared to Students Not Repeating Any Grades 3-8

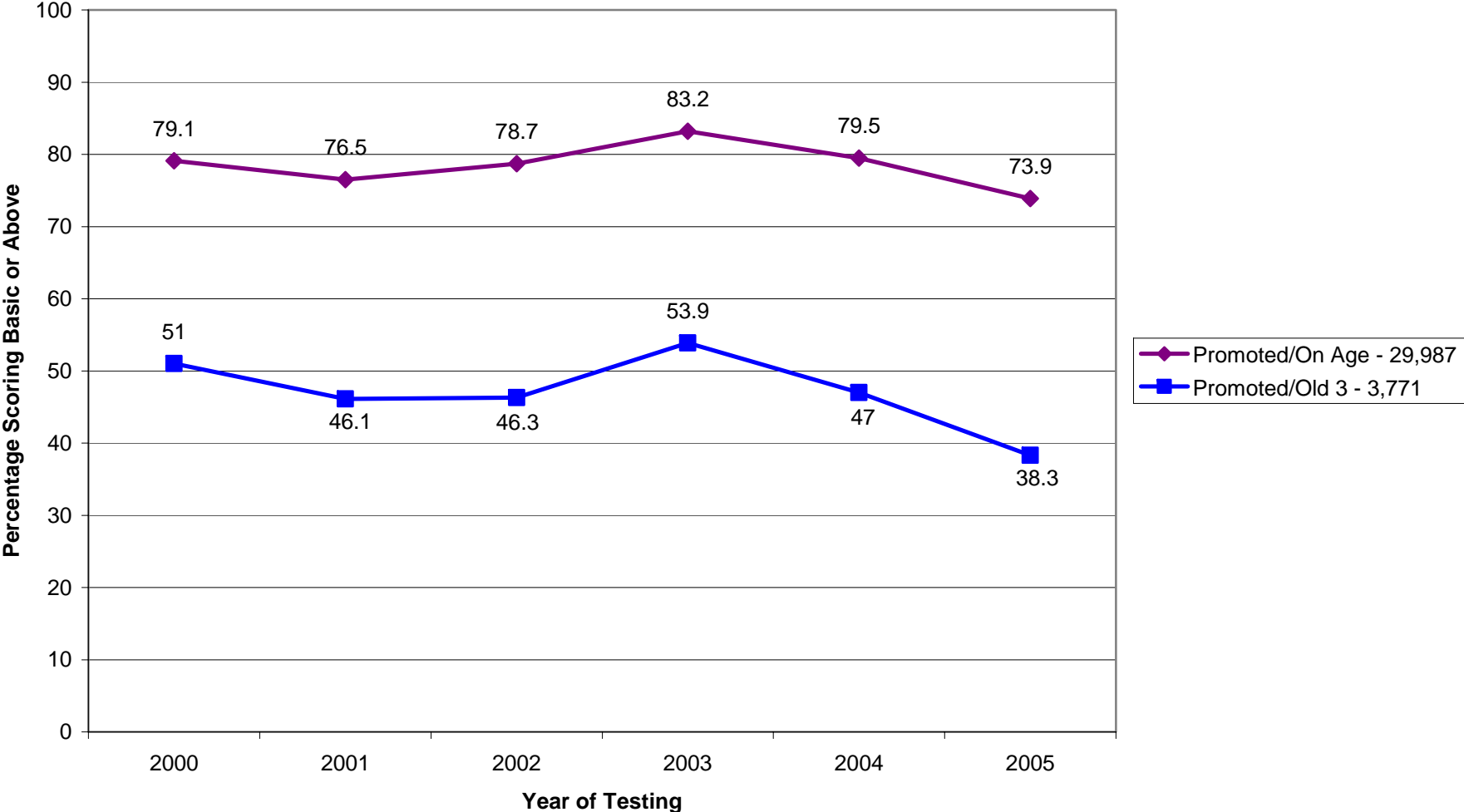


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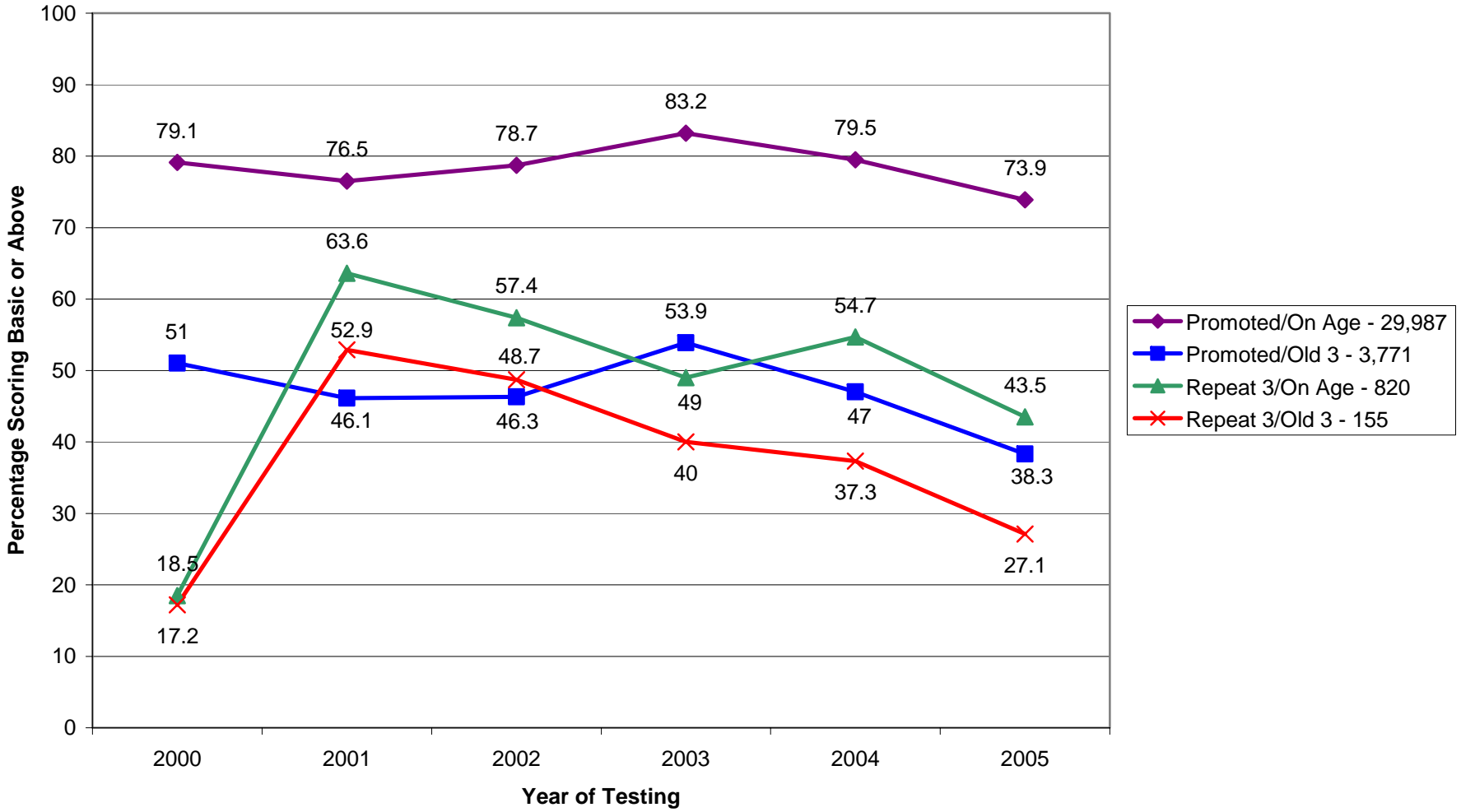


Figure 5
PACT ELA Percent Basic or Above, Six-Year Longitudinal Study
Students Repeating Grade 6 Compared to Students Not Repeating Any Grades 3-8

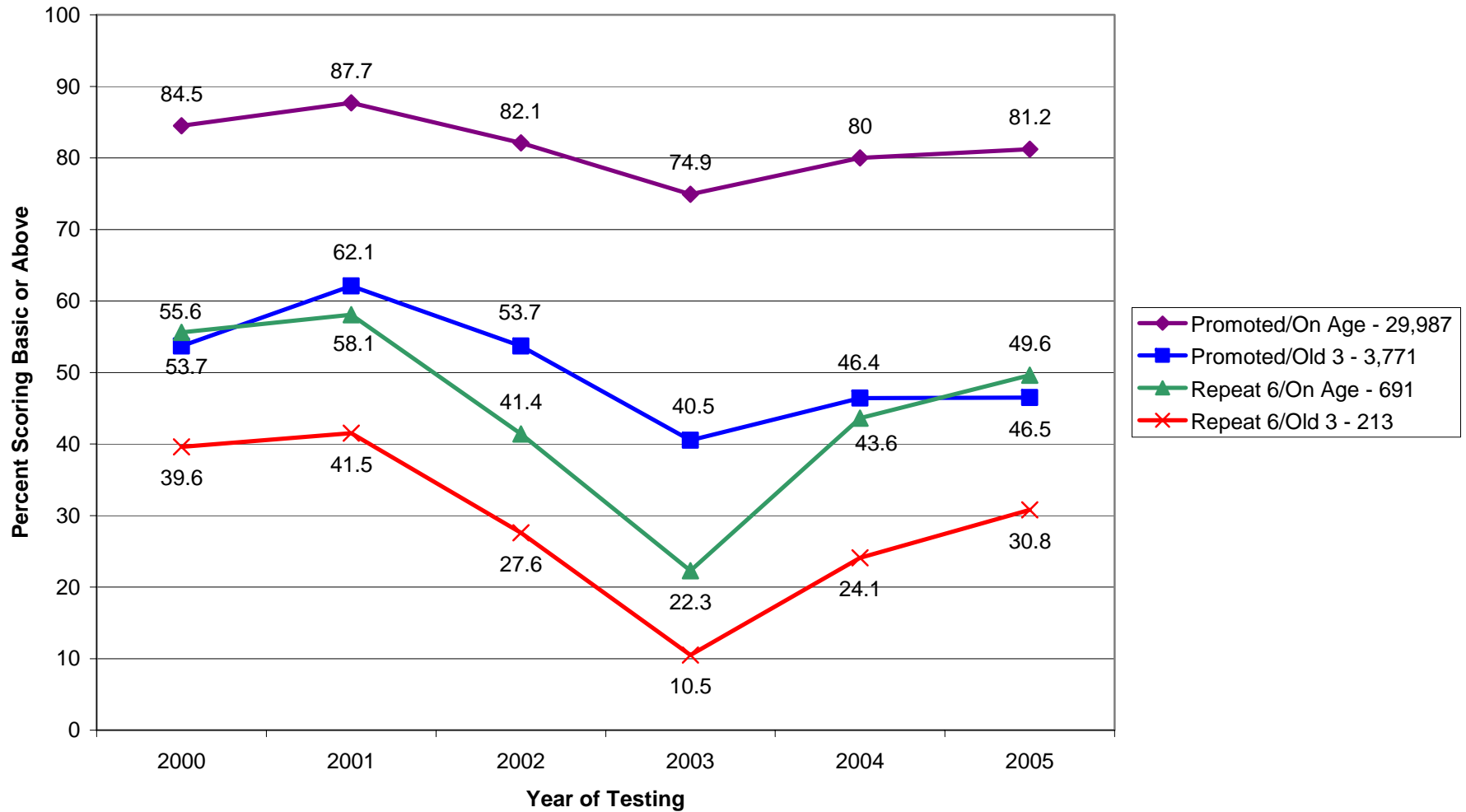
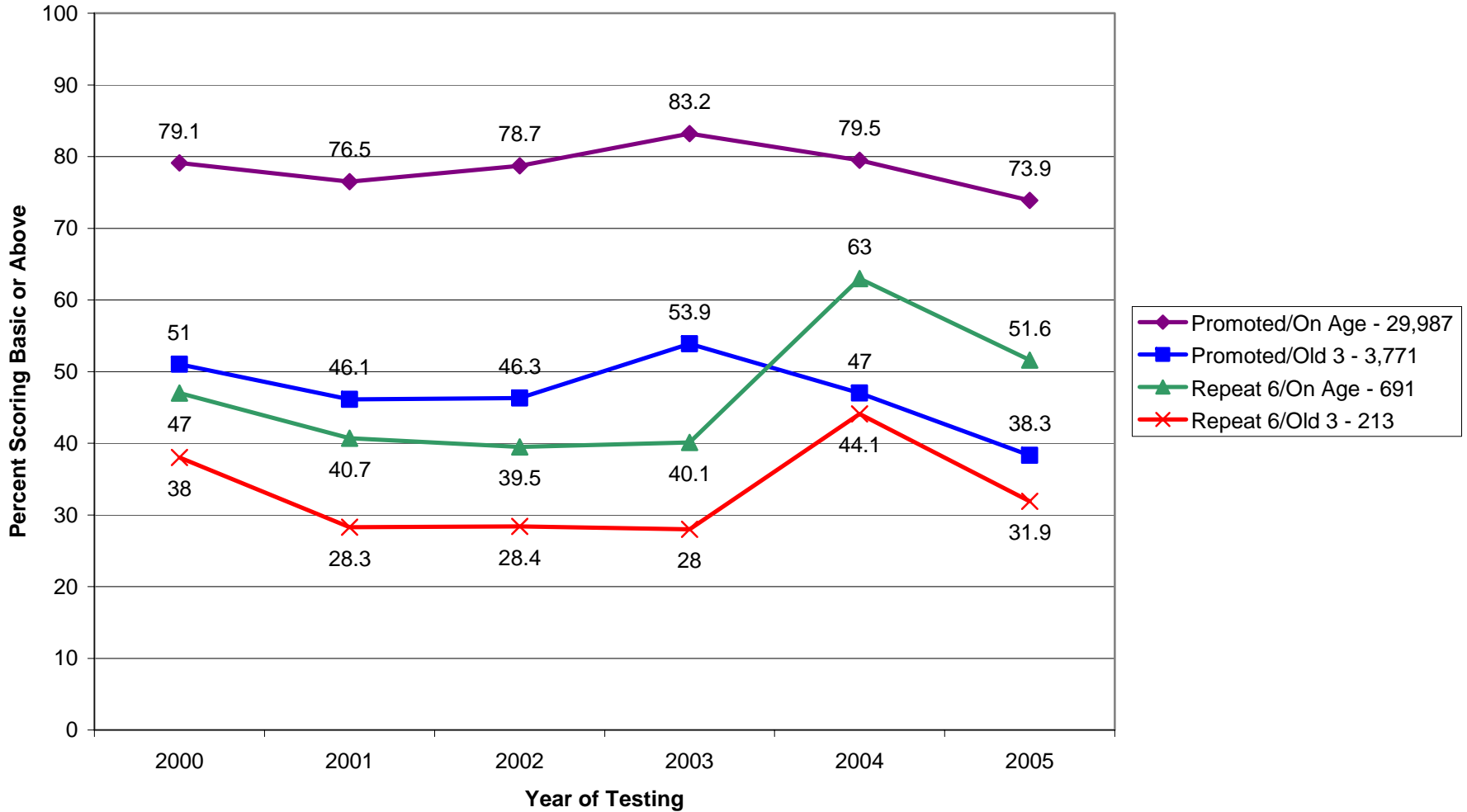


Figure 6
PACT Math Percent Basic or Above, Six-Year Longitudinal Study
Students Repeating Grade 6 Compared to Students Not Repeating Any Grades 3-8



Question

- What were the relationships between students' ages upon entrance to grade 3 in Fall 1999 and their PACT ELA and Math performance in 2000 and 2005?

Table 7
Performance By Age Group, PACT Six-Year Longitudinal Data
ELA 2000 & 2005 Performance by Age
when Entered Grade 3 in Fall 1999

Age by 9/1/99	Number of Students	2000 %Basic or Above	2005 %Basic or Above	2000 %Proficient or Advanced	2005 %Proficient or Advanced	Date of Birth
Students older than expected in grade 3 1999-2000						
11yrs, 0mos – 11yrs, 6mos	122	51.7	29.5	6.7	0.8	<9/88
10yrs, 0mos – 10yrs, 11mos	34	54.5	23.5	9.1	2.9	<9/89
****	****	****	****	****	****	****
9yrs, 1mo	639	51.9	46.4	17.8	10.1	7/90
9yrs, 0mos	784	57.9	52.5	22.4	14.4	8/90
Students at expected age in grade 3 1999-2000						
8yrs, 11mos	2928	81.6	77.9	50.7	33.3	9/90
8yrs, 10mos	2984	82.4	79.0	49.6	33.7	10/90
****	****	****	****	****	****	****
8yrs, 1mo	2647	76.9	76.4	40.7	28.7	7/91
8yrs, 0mos	2692	76.3	76.6	38.6	27.8	8/91
Students younger than expected age in grade 3 1999-2000						
7yrs, 11mos	306	83.7	83.0	49.0	37.6	9/91
7yrs, 0mos – 7yrs, 10mos	303	83.4	86.1	50.0	38.0	>9/91

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Table 8
Performance By Age Group, PACT Six-Year Longitudinal Data
Math 2000 & 2005 Performance by Age
when Entered Grade 3 in Fall 1999

Age by 9/1/99	Number of Students	2000 %Basic or Above	2005 %Basic or Above	2000 %Proficient or Advanced	2005 %Proficient or Advanced	Date of Birth
Students older than expected in grade 3 1999-2000						
11yrs, 0mos – 11yrs, 6mos	122	46.3	25.8	4.1	0.0	<9/88
10yrs, 0mos – 10yrs, 11mos	34	38.2	23.5	0.0	5.9	<9/89
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9yrs, 0mos	784	52.7	42.7	14.7	11.2	8/90
Students at expected age in grade 3 1999-2000						
8yrs, 11mos	2928	76.1	71.6	34.1	26.8	9/90
8yrs, 10mos	2984	79.1	72.3	33.8	26.0	10/90
****	****	****	****	****	****	****
8yrs, 1mo	2647	69.7	71.5	24.6	23.9	7/91
8yrs, 0mos	2692	69.8	70.5	23.8	23.2	8/91
Students younger than expected age in grade 3 1999-2000						
7yrs, 11mos	306	72.5	75.8	27.5	30.7	9/91
7yrs, 0mos – 7yrs, 10mos	303	77.9	78.1	28.7	33.4	>9/91

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Issues from Study

- Too little improvement over time to meet goals
- Low achievement is too persistent
- Children's low achievement manifests at different times for different reasons
- Use of retention in grade as a remediation strategy should be critically examined
- Increasing achievement over time will require instructional and institutional change

What Next?

- EOC staff meet with educators at state and local levels
- Identify needed changes in policy and practice