

Examples of Year-to-Year Improvement, Consistency in Improvement, and Achievement Gaps for Broward County Schools, 2001-2004

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Individual level description, Broward Math FCAT 2001-2004

Table 1

Broward Four Years of Proportion Proficient Math FCAT
for Indicated Grade Ranges and Student Groups

Grades Included	2001	2002	2003	2004	Improvement '01-04
Grades 2-5					
All Students	0.547	0.591	0.602	0.65	0.104
SD Students	0.379	0.44	0.446	0.514	0.135
SD Students in HighSD Schools	0.351	0.409	0.406	0.477	0.126
Grades 2-8					
All Students	0.533	0.562	0.574	0.608	0.074
SD Students	0.354	0.397	0.414	0.462	0.108
SD Students in HighSD Schools	0.323	0.366	0.382	0.432	0.108
Grades 9-10					
All Students	0.559	0.545	0.571	0.597	0.039
SD Students	0.369	0.371	0.42	0.46	0.091
SD Students in HighSD Schools	0.289	0.259	0.371	0.386	0.097
Grades 3-10					
All Students	0.539	0.558	0.573	0.605	0.067
SD Students	0.356	0.394	0.415	0.462	0.106
SD Students in HighSD Schools	0.323	0.363	0.382	0.431	0.108

Improvement 2001-04 Grade-by-grade for
Student Groups

Grade	All Students	SD Students	SD Students in HighSD Schools
3.	0.083	0.117	0.111
4.	0.173	0.225	0.219
5.	0.053	0.064	0.046
6.	0.075	0.096	0.095
7.	0.045	0.093	0.106
8.	0.022	0.059	0.068
9.	0.044	0.096	0.1
10.	0.043	0.093	0.101

Improvement 2001-04 Grade Cohorts

Grade	All Students	SD Students	SD Students in HighSD Schools
3.	-0.064	-0.061	-0.063
4.	0.05	0.08	0.095
5.	0.07	0.071	0.061
6.	0.103	0.155	0.125
7.	0.128	0.188	0.131

Artificial Cohort Comparisons

Grades 3-5 In 2001	2001	2002	2003	2004	Improvement '01-04
All Students	0.547	0.543	0.532	0.566	0.02
SD Students	0.379	0.381	0.372	0.409	0.03
SD Students in HighSD Schools	0.351	0.351	0.342	0.382	0.031

Table 2

Broward Four Years of Math FCAT, weighted category index [200,400,600,800,1000]
for Indicated Grade Ranges and Student Groups

Grades Included	2001	2002	2003	2004	Improvement '01-04
Grades 2-5					
All Students	529.403	554.378	557.353	586.717	57.314
SD Students	437.461	467.914	468.92	506.108	68.647
SD Students in HighSD Schools	421.917	452.077	447.943	487.004	65.087
Grades 2-8					
All Students	523.25	539.103	545.018	567.085	43.834
SD Students	421.222	443.906	452.582	479.453	58.231
SD Students in HighSD Schools	404.233	427.573	435.491	463.882	59.649
Grades 9-10					
All Students	550.588	536.464	551.196	566.366	15.778
SD Students	440.218	437.301	463.834	483.824	43.606
SD Students in HighSD Schools	381.862	376.695	440.558	439.442	57.58
Grades 3-10					
All Students	528.809	538.518	546.433	566.912	38.103
SD Students	423.42	442.983	454.317	480.181	56.761
SD Students in HighSD Schools	403.674	426.139	435.619	463.2	59.526

Improvement 2001-04 Grade-by-grade for
Student Groups

Grade	All Students	SD Students	SD Students in HighSD Schools
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3.	49.576	59.488	55.905
4.	91.529	110.502	110.263
5.	31.078	35.657	28.666
6.	46.794	57.604	59.599
7.	26.379	53.687	63.449
8.	20.468	36.116	40.117
9.	18.278	43.148	53.891
10.	19.462	50.729	69.789

Improvement 2001-04 Grade Cohorts

Grade	All Students	SD Students	SD Students in HighSD Schools
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3.	-19.761	-24.766	-24.605
4.	44.402	46.427	54.507
5.	30.841	23.633	20.236
6.	66.274	92.173	71.079
7.	76.531	114.883	84.416

Artificial Cohort Comparisons

Grades 3-5 In 2001	2001	2002	2003	2004	Improvement '01-04
All Students	529.403	531.729	530.52	547.875	18.471
SD Students	437.461	438.76	436.416	452.254	14.793
SD Students in HighSD Schools	421.917	422.644	421.051	438.348	16.431

Table 3

Broward African-American Students, Proportion Proficient Math FCAT
for Indicated Grade Ranges and Student Groups

Grades Included	2001	2002	2003	2004	Improvement '01-04
Grades 2-5					
All Students	0.351	0.409	0.414	0.478	0.127
SD Students	0.306	0.367	0.363	0.433	0.126
SD Students in HighSD Schools	0.3	0.361	0.35	0.423	0.122
Grades 2-8					
All Students	0.33	0.373	0.388	0.43	0.099
SD Students	0.277	0.324	0.335	0.38	0.103
SD Students in HighSD Schools	0.269	0.32	0.33	0.379	0.109
Grades 9-10					
All Students	0.333	0.318	0.362	0.407	0.074
SD Students	0.278	0.274	0.312	0.358	0.08
SD Students in HighSD Schools	0.27	0.216	0.311	0.347	0.078
Grades 3-10					
All Students	0.331	0.36	0.382	0.424	0.093
SD Students	0.277	0.317	0.331	0.376	0.099
SD Students in HighSD Schools	0.269	0.316	0.329	0.377	0.108

Improvement 2001-04 Grade-by-grade for
Student Groups

Grade	Improvement 2001-04 Grade Cohorts			2001	Improvement 2001-04 Grade Cohorts		
	All Students	SD Students	SD Students in HighSD Schools		All Students	SD Students	SD Students in HighSD Schools
3.	0.113	0.111	0.107	3.	-0.061	-0.076	-0.076
4.	0.215	0.221	0.225	4.	0.082	0.085	0.101
5.	0.051	0.043	0.032	5.	0.072	0.047	0.049
6.	0.074	0.071	0.074	6.	0.114	0.132	0.128
7.	0.087	0.109	0.125	7.	0.141	0.149	0.157
8.	0.06	0.063	0.078				
9.	0.086	0.1	0.078				
10.	0.067	0.058	0.085				

Artificial Cohort Comparisons

Grades 3-5 In 2001	2001	2002	2003	2004	Improvement '01-04
All Students	0.351	0.359	0.35	0.383	0.032
SD Students	0.306	0.312	0.297	0.325	0.019
SD Students in HighSD Schools	0.3	0.306	0.292	0.325	0.025

Table 4

Broward White Students Proportion Proficient Math FCAT
for Indicated Grade Ranges and Student Groups

Grades Included	2001	2002	2003	2004	Improvement '01-04
Grades 2-5					
All Students	0.705	0.738	0.75	0.787	0.083
SD Students	0.532	0.582	0.595	0.651	0.119
SD Students in HighSD Schools	0.514	0.561	0.561	0.627	0.113
Grades 2-8					
All Students	0.698	0.716	0.729	0.753	0.055
SD Students	0.513	0.533	0.557	0.597	0.084
SD Students in HighSD Schools	0.488	0.5	0.527	0.566	0.078
Grades 9-10					
All Students	0.731	0.736	0.743	0.761	0.03
SD Students	0.555	0.553	0.571	0.622	0.067
SD Students in HighSD Schools	0.395	0.385	0.578	0.443	0.048
Grades 3-10					
All Students	0.705	0.721	0.732	0.755	0.05
SD Students	0.517	0.536	0.559	0.601	0.084
SD Students in HighSD Schools	0.487	0.498	0.527	0.564	0.077

Improvement 2001-04 Grade-by-grade for
Student Groups

Grade	Improvement 2001-04 Grade Cohorts			Grade	Improvement 2001-04 Grade Cohorts		
	All Students	SD Students	SD Students in HighSD Schools		2001	All Students	SD Students
3.	0.072	0.104	0.104	3.	-0.058	-0.076	-0.099
4.	0.124	0.187	0.173	4.	0.03	0.033	0.039
5.	0.05	0.064	0.059	5.	0.071	0.079	0.068
6.	0.068	0.09	0.081	6.	0.11	0.171	0.04
7.	0.024	0.054	0.074	7.	0.107	0.202	0.055
8.	-0.003	0.013	0.01				
9.	0.035	0.064	0.056				
10.	0.031	0.081	0.062				

Artificial Cohort Comparisons

Grades 3-5 In 2001	2001	2002	2003	2004	Improvement '01-04
All Students	0.705	0.696	0.687	0.72	0.016
SD Students	0.532	0.511	0.503	0.542	0.011
SD Students in HighSD Schools	0.514	0.494	0.482	0.515	0.002

Table 5

Descriptive Statistics for School-Level Longitudinal Data and Year-to-Year Improvement: FCAT Math Proportion Proficient 2001-2004 all Broward Schools

Broward Schools (n=192)

percentile	Yearly School Scores				Year-to-Year Improvement		
	2001	2002	2003	2004	'01-02	'02-03	'03-04
10th	0.319	0.35	0.37	0.43	-0.027	-0.041	-0.013
25th	0.403	0.436	0.442	0.487	-0.002	-0.016	0.006
50th	0.508	0.553	0.552	0.599	0.025	0.014	0.036
75th	0.649	0.687	0.705	0.716	0.059	0.041	0.068
90th	0.75	0.764	0.777	0.803	0.084	0.065	0.099
Mean	0.523	0.555	0.564	0.603	0.032	0.009	0.04

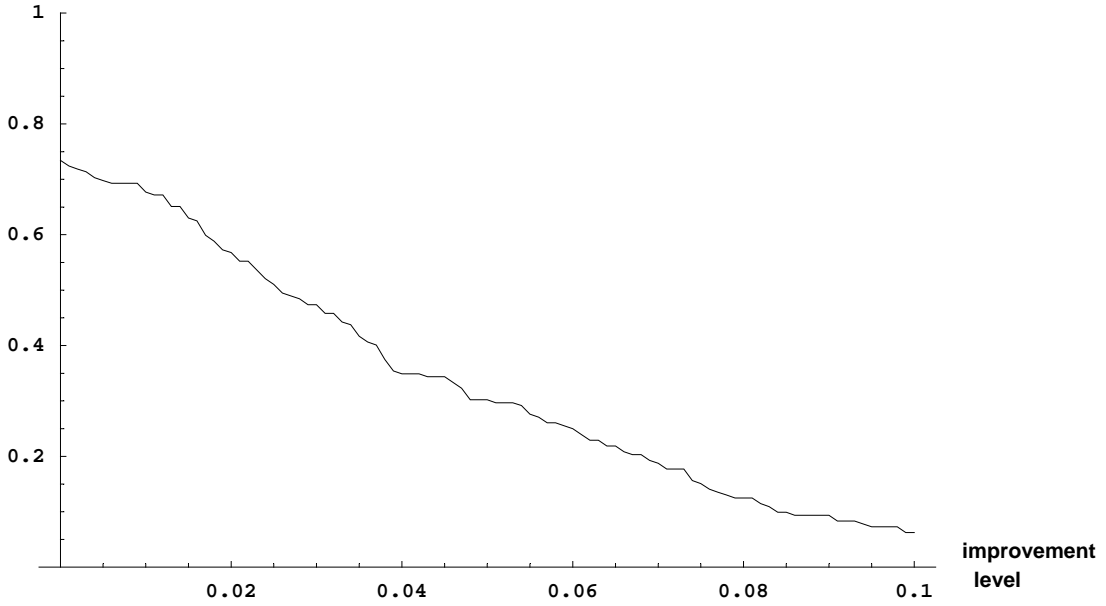
Table 6

Consecutive Improvement for Broward Schools (n=192), Math Proportion Proficient

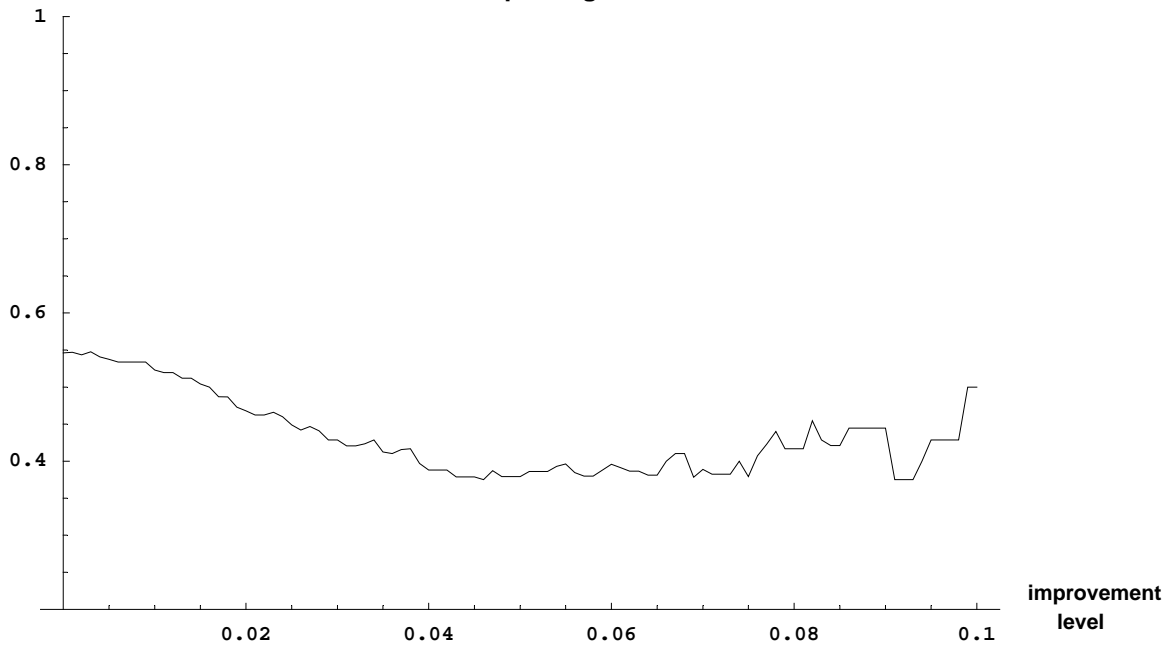
Three year Improvement 2001-2003			
ImpLevel 2001-2002	Number exceeding ImpLevel	Proportion of those improving 2002-2003	Amount of Improvement 2002-2003 {lowest decile lower quartile median upper quartile}
0	141	0.468	-0.04 -0.02 0.01 0.03
.025	98	0.418	-0.05 -0.03 0 0.02
.050	58	0.362	-0.06 -0.04 -0.01 0.02
.075	29	0.379	-0.14 -0.04 -0.02 0.03
.10	12	0.5	-0.17 -0.09 0 0.04
Fourth-year Improvement, 2001-2004			
ImpLevel 2001-2002 and 2002-2003	Number exceeding both ImpLevels	Proportion of those improving 2003-2004	Amount of Improvement 2003-2004 {lowest decile lower quartile median upper quartile}
0	77	0.675	-0.02 0 0.03 0.07
.0125	52	0.673	-0.02 0 0.03 0.07
.025	24	0.667	-0.03 -0.01 0.04 0.07

Figures 1-4. Consistency in Improvement

proportion improving
implevel 2001-2002



proportion
improving
2002-2003



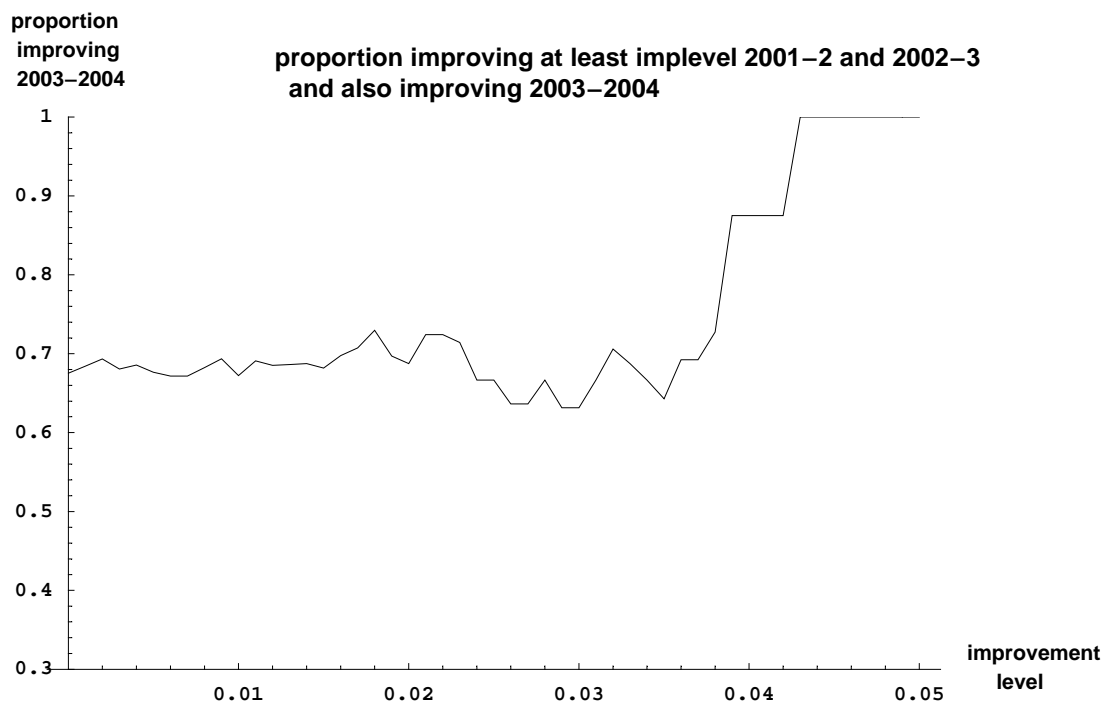
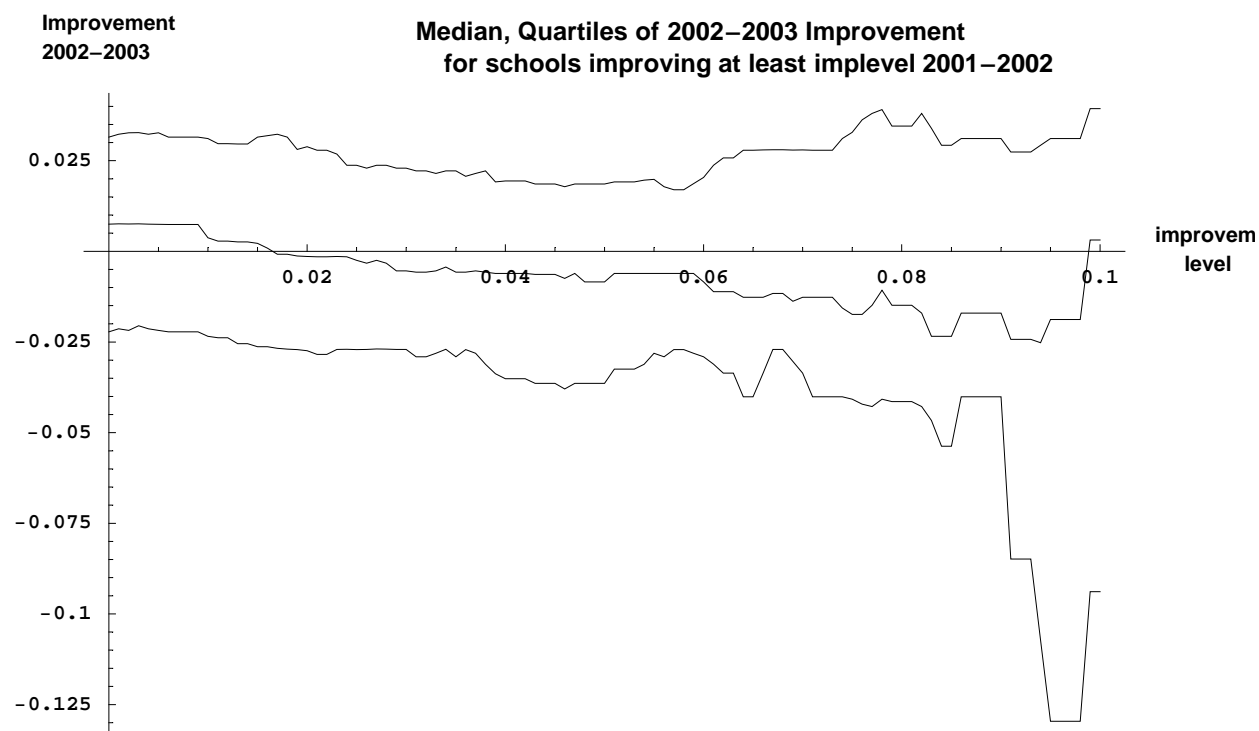


Table 7. Achievement Gaps, differences in percents and differences in percentiles, White vs African American, Grade 4 Math, 2001-2004

White vs African American, 2001-2004

Proportion at or above FCAT Achievement Level							
2001				2004			
	Level2	Level3	Level4		Level2	Level3	Level4
Afam	0.572	0.302	0.075	Afam	0.788	0.517	0.169
White	0.862	0.677	0.312	White	0.942	0.809	0.443
gap	0.290	0.375	0.238	gap	0.153	0.292	0.274

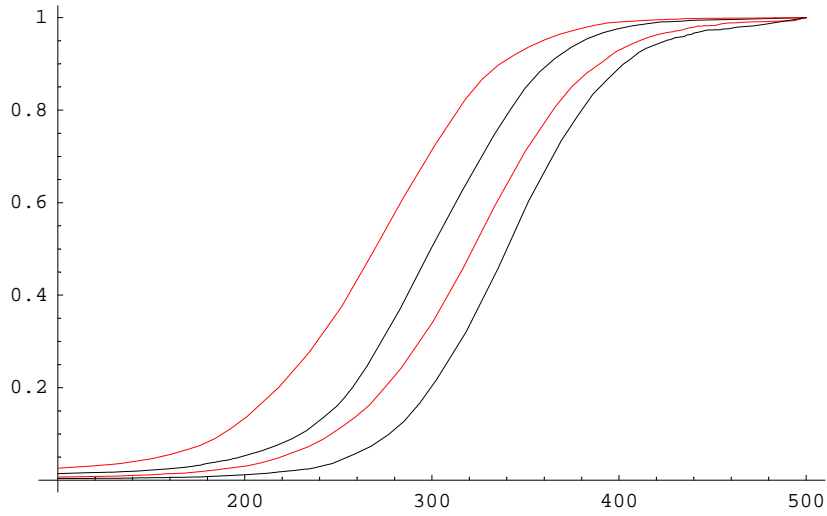
diff2004 - diff2001		
Level2	Level3	Level4
-0.137	-0.083	0.036

Percentiles of SS Distribution										
2001						2004				
	10th	25th	50th	75th	90th	10th	25th	50th	75th	90th
Afam	188.	228.8	269.4	305.4	336.4	229.5	265.9	299.6	333.8	362.3
White	246.	285.1	321.6	355.8	389.4	277.5	307.7	340.1	371.3	402.6

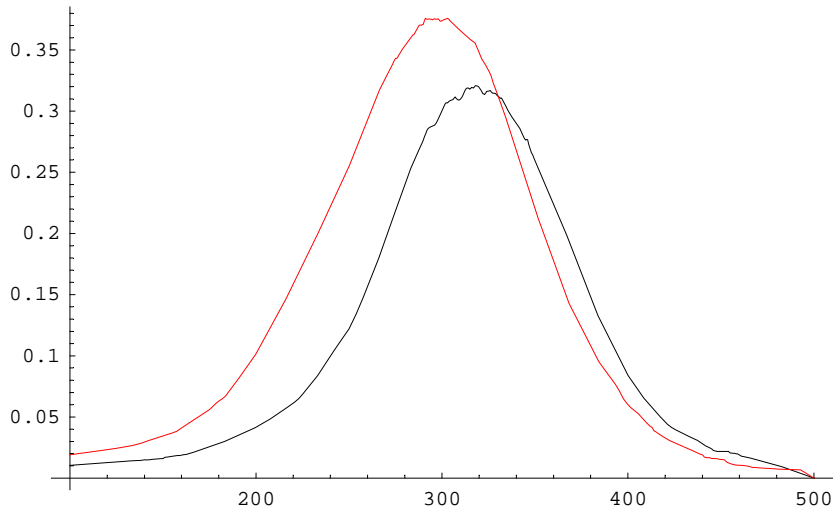
Proportion of minority distribution below median of majority distribution
 2001 .842; 2004 .789

Figures 5-9. Achievement gap plots, Broward grade 4 math

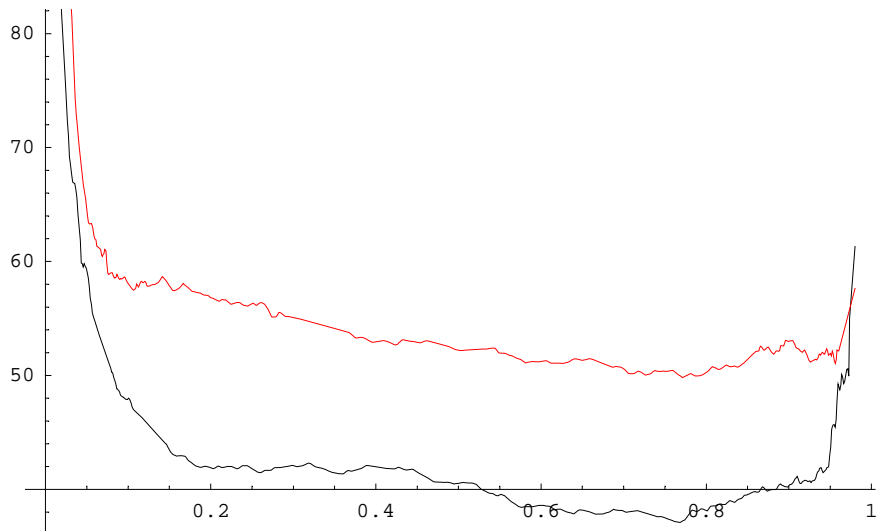
cdf math grade 4, 2001 (red) 2004
white afam



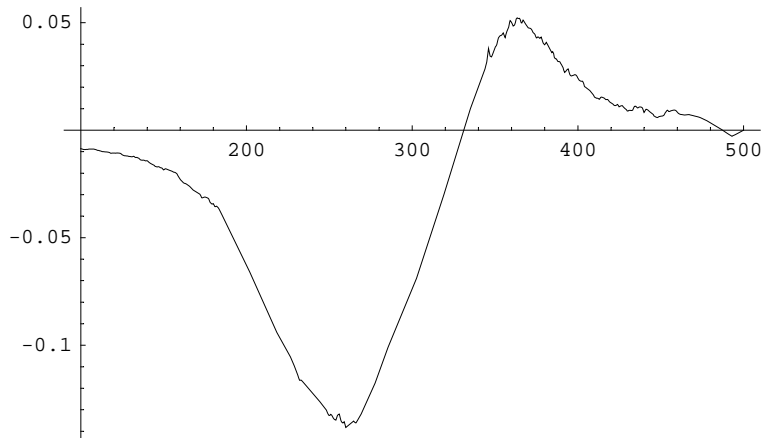
(vertical) difference in percents math grade 4, 2001 (red) 2004
white afam



(horizontal) difference in percentiles math grade 4, 2001 (red) 2004
white afam



vertical, difference in percents gap closing (negative) 2001, 2004



horizontal, difference in percentiles, gap closing (negative) 2001 2004

