

WHAT ABOUT GROWTH? EVIDENCE FROM IOWA'S 2009 GROWTH DATA

Thomas E. Deeter, Ph.D., Consultant

Context:

- NCLB Growth: Are non-proficient students making progress toward proficiency?
- What about the students who are already proficient? Does their growth continue?

Methodology:

- Test Used: Iowa Tests of Basic Skills.
- Any student meeting growth criteria was designated such during AYP data analysis.
- Students were expected to improve one achievement level to be counted as having met growth.
- NCLB - only non-proficient students.
- Current analysis - any student meeting growth (no Alternate Assessment).

Achievement Levels:

- Level 1 - Weak. <9 PR
- Level 2 - Lo Marginal. 10 to 29 (+/-2)
- Level 3 - Hi Marginal. 30 (+/-2) to 40
- Level 4 - Moderate. 41 to 75
- Level 5 - Skilled. 76 to 89
- Level 6 - Accomplished. 90 to 94
- Level 7 - Distinguished. 95 to 99

More Methods:

- Matched Data
 - Grades 3, 4, 5, 6, 7 from 2008
 - Grades 4, 5, 6, 7, 8 from 2009
- 155,000 students; 31,000 per grade
- Vertically aligned scale scores. Vertically articulated content standards.

Findings from earlier, grade-by-grade analysis:

- Students at all levels are improving.
- Students with the most room to grow, grow the most.
- Teachers are addressing needs of learners at all levels of the achievement spectrum, and in reading and mathematics.

Table 1—Grade 5 Mathematics Results *EXAMPLE*

		2009 Achievement Level (and PR range)						
2009	2008	1	2	3	4	5	6	7
Grade	Achievement Level	<9	10 to 29(2)	30(2) to 40	41 to 75	76 to 89	90 to 94	95 to 99
5	1 (<9)	36.6	46.2	9.2	7.4	0.5	0.0	0.1
	2 (10 to 29)	11.9	45.4	18.7	22.4	1.1	0.2	0.1
	3 (30 to 40)	2.3	30.0	22.2	42.7	2.4	0.2	0.2
	4 (41 to 75)	0.4	6.4	9.4	61.9	17.3	3.3	1.3
	5 (76 to 89)	0.0	0.6	0.9	31.4	40.5	15.2	11.4
	6 (90 to 94)	0.0	0.1	0.1	9.7	33.9	25.0	31.1
	7 (95 to 99)	0.0	0.0	0.1	3.0	13.6	19.0	64.2
	Total		2.4	10.5	7.4	35.6	19.9	9.3

Table 2—Grade 4 Mathematics Results *EXAMPLE*

		2009 Achievement Level (and PR range)						
2009	2008	1	2	3	4	5	6	7
Grade	Achievement Level	<9	10 to 29(2)	30(2) to 40	41 to 75	76 to 89	90 to 94	95 to 99
4	1 (<9)	24.8	47.5	13.0	13.1	1.5	0.1	0.0
	2 (10 to 29)	9.3	37.4	19.4	30.4	2.9	0.4	0.1
	3 (30 to 40)	2.5	20.0	17.8	51.3	6.9	1.0	0.4
	4 (41 to 75)	0.5	4.9	6.8	53.8	25.5	5.4	3.1
	5 (76 to 89)	0.1	0.6	0.8	21.4	40.2	18.2	18.7
	6 (90 to 94)	0.0	0.2	0.4	7.6	30.2	20.7	40.9
	7 (95 to 99)	0.0	0.0	0.1	2.7	13.5	17.0	66.6
	Total		2.2	9.6	7.1	33.9	22.0	9.2

Interpretation:

- Blue Cells - percent of students who were not proficient in 2008 and proficient in 2009.
- Orange and Blue Cells - percent of students who were not proficient in 2008 and improved in 2009.

Table 3—Mathematics Results

Group	Not Proficient 2008 Proficient 2009	Not Proficient 2008 Improved 2009
All Students	31.0	46.6
Low SES	26.1	43.0
IEP	17.2	36.4
ELL	23.5	42.1
African-American	19.3	37.5
Asian	34.5	32.5
Hispanic	25.8	43.6
Native American	26.9	41.9
White	33.7	48.5

Table 4—Reading Results

Group	Not Proficient 2008 Proficient 2009	Not Proficient 2008 Improved 2009
All Students	33.1	50.8
Low SES	27.2	46.4
IEP	16.8	39.1
ELL	21.7	43.5
African-American	21.1	41.3
Asian	34.5	51.6
Hispanic	24.3	44.3
Native American	27.2	47.4
White	36.1	53.1

Table 5—Grade 5 Mathematics Results *EXAMPLE*

		2009 Achievement Level (and PR range)						
2009	2008	1	2	3	4	5	6	7
Grade	Achievement Level	<9	10 to 29(2)	30(2) to 40	41 to 75	76 to 89	90 to 94	95 to 99
5	1 (<9)	36.6	46.2	9.2	7.4	0.5	0.0	0.1
	2 (10 to 29)	11.9	45.4	18.7	22.4	1.1	0.2	0.1
	3 (30 to 40)	2.3	30.0	22.2	42.7	2.4	0.2	0.2
	4 (41 to 75)	0.4	6.4	9.4	61.9	17.3	3.3	1.3
	5 (76 to 89)	0.0	0.6	0.9	31.4	40.5	15.2	11.4
	6 (90 to 94)	0.0	0.1	0.1	9.7	33.9	25.0	31.1
	7 (95 to 99)	0.0	0.0	0.1	3.0	13.6	19.0	64.2
	Total		2.4	10.5	7.4	35.6	19.9	9.3

Interpretation:

- Green Cells - percent of students who were improved from 2008 to 2009.
- Gray Cells - percent of students who were stayed at the same level from 2008 to 2009.
- Yellow Cells - percent of students who went down levels from 2008 to 2009.

Table 6—Mathematics Results

Group	Percent Improved	Percent Same	Percent Declined
All Students	30.0	45.2	24.8
Low SES	27.7	46.2	26.1
IEP	27.7	44.5	27.8
ELL	28.5	15.9	55.6
African-American	25.3	46.2	28.5
Asian	53.6	5.0	41.4
Hispanic	27.4	28.6	44.0
Native American	25.6	30.1	44.3
White	30.5	45.0	24.5

Table 7—Reading Results

Group	Percent Improved	Percent Same	Percent Declined
All Students	33.3	42.3	24.4
Low SES	31.0	43.6	25.4
IEP	31.6	42.7	25.7
ELL	31.3	45.0	23.7
African-American	28.6	9.4	62.0
Asian	33.1	43.6	23.3
Hispanic	29.4	45.4	25.2
Native American	28.6	29.0	42.4
White	34.0	41.8	24.2

Table 8—Grade 6 Mathematics Results *EXAMPLE*

2009 Achievement Level (and PR range)								
2009 Grade	2008 Achievement Level	1 <9	2 10 to 29(2)	3 30(2) to 40	4 41 to 75	5 76 to 89	6 90 to 94	7 95 to 99
6	1 (<9)	44.9	45.7	5.5	3.3	0.4	0.1	0.0
	2 (10 to 29)	18.6	54.4	13.5	12.5	0.7	0.0	0.1
	3 (30 to 40)	5.5	39.3	22.4	30.9	1.7	0.2	0.0
	4 (41 to 75)	0.9	10.5	12.5	61.4	12.4	1.8	0.6
	5 (76 to 89)	0.0	0.9	1.4	41.1	37.7	12.0	6.8
	6 (90 to 94)	0.0	0.2	0.2	16.1	38.3	22.9	22.3
	7 (95 to 99)	0.1	0.0	0.0	3.8	17.6	22.8	55.7
	Total		3.7	13.7	8.3	37.1	18.1	8.2

Interpretation:

- Green Cells - percent of students who stayed at the same level or improved from 2008 to 2009.
- Yellow Cells - percent of students who went down levels from 2008 to 2009.

Table 9—Mathematics Results

Group	Percent Same or Improved
All Students	75.2
Low SES	73.9
IEP	72.2
ELL	44.4
African-American	71.5
Asian	58.6
Hispanic	56.0
Native American	55.7
White	75.5

Table 10—Reading Results

Group	Percent Same or Improved
All Students	75.6
Low SES	74.6
IEP	74.3
ELL	76.3
African-American	38.0
Asian	76.7
Hispanic	74.8
Native American	57.6
White	75.8

Summary:

- Students in all subgroups are improving; SWD lagging behind in proficiency.
- Need to examine disparities among some subgroups, instructionally and culturally, to understand the context surrounding their achievement challenges.
- Need to dig deeper to examine group differences in specific districts.

Is Iowa’s Growth Model Working?

Schools/Districts Meeting AYP

- 2006-2007:
 - 128 schools (8.6%) [121, 8.1%, SINA]
 - 77 districts (21.1%) [12, 3.3%, DINA]
- 2007-2008:
 - 65 schools (4.4%) [136, 9.2%, SINA]
 - 9 districts (2.4%) [13, 3.5%, DINA]
- 2008-2009:
 - 69 schools (4.8%) [293, 20.3%, SINA]
 - 35 districts (9.7%) [24, 6.6%, DINA]

Table 11—Mathematics Counts

Group	Number of Students	Percent of All
All Students	155,682	
Low SES	53,869	34.6
IEP	20,720	13.3
ELL	6,113	3.9
African-American	8,591	5.5
Asian	3,554	2.3
Hispanic	9,995	6.4
Native American	1,362	0.9
White	132,718	85.2

Table 12—Reading Counts

Group	Number of Students	Percent of All
All Students	156,108	
Low SES	54,099	34.7
IEP	20,808	13.3
ELL	6,153	3.9
African-American	8,485	5.4
Asian	3,330	2.1
Hispanic	10,140	6.5
Native American	1,294	0.8
White	133,086	85.3