

Instructional Data Warehouse News

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Vertical Alignment of Grade 3-8 Assessments The Return of Vertical Alignment Means Growth Measures Are Back

by Fred Cohen

In introducing its Next Generation Learning Standards, NYSED assures parents and teachers that the new standards have fully aligned curricula. We have also been assured in the past that the grade 3-8 assessments are vertically aligned for proficiency. This means that the scale scores used to determine a student's performance levels will be based on the same four-point scale for each grade: Level 1 (below standard), Level 2 (partially proficient), Level 3 (proficient), and Level 4 (exceeds proficiency).

Unfortunately, in recent years, both before and after the pandemic, it seemed that proficiency scores at different grade levels were imperfectly aligned. A review of scores for 2019 and 2022 in both Nassau County and New York State show that proficiency levels in grades three through eight have a wide range of proficiency percentages in different grades, especially in ELA. Look at the 2022 table below for Nassau County which has well over 8,000 test takers per grade. (We can ignore the Grade 8 Math scores because so many Nassau County students take Algebra 1 instead.)

2021/2022 NYS Snapshot - Regional

Related Report Links

Subject	Test	# L1	# L2	# L3	# L4	Total	L3+L4	% L1	% L2	% L3	% L4	L3+L4%
ELA	Grade 3 ELA	949	3,093	5,760	1,141	10,943	6,901	9%	28%	53%	10%	63%
	Grade 4 ELA	1,325	3,179	3,439	2,776	10,719	6,215	12%	30%	32%	26%	58%
	Grade 5 ELA	1,794	3,455	2,870	2,433	10,552	5,303	17%	33%	27%	23%	50%
	Grade 6 ELA	1,378	1,554	2,562	4,513	10,007	7,075	14%	16%	26%	45%	71%
	Grade 7 ELA	1,387	2,641	3,019	2,315	9,362	5,334	15%	28%	32%	25%	57%
	Grade 8 ELA	1,079	2,232	2,447	2,327	8,085	4,774	13%	28%	30%	29%	59%
Mathematics	Grade 3 Math	1,651	2,210	4,034	3,156	11,051	7,190	15%	20%	37%	29%	65%
	Grade 4 Math	1,666	2,287	3,010	3,889	10,852	6,899	15%	21%	28%	36%	64%
	Grade 5 Math	2,385	2,319	2,629	3,046	10,379	5,675	23%	22%	25%	29%	55%
	Grade 6 Math	1,983	2,143	2,572	3,100	9,798	5,672	20%	22%	26%	32%	58%
	Grade 7 Math	1,977	2,279	2,301	2,319	8,876	4,620	22%	26%	26%	26%	52%
	Grade 8 Math	1,112	927	612	324	2,975	936	37%	31%	21%	11%	31%

To the right are New York State scores for 2022 represent almost 200,000 students per grade who participate the ELA assessments. (Page 2 shows scores for 2019—before the pandemic). Note that grade 5 proficiency is below grades 4 and 6 proficiency, such that many students tend to lose proficiency in grade 5 and regain it in grade 6, producing a yoyo effect not truly indicative of any real progress students might have made.

Grade 3	46%
Grade 4	42%
Grade 5	38%
Grade 6	57%
Grade 7	48%
Grade 8	50%



Upcoming IDW Events

IDW Trainings

IDW HS Training
2/28/24
9:00am-10:30am

IDW 3-8 Training
3/6/24
9:00am-10:30am

To book an in-district training, please call Stephanie Witt 516-608-6623



Department of Curriculum, Instruction and Technology

Questions? Contact: Stephanie Witt, Supervisor II, Instructional Data Warehouse
Phone: 516-608-6623 • Email: switt1@nasboces.org

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Note too the same “yoyo” patterns for 2022 ELA assessments were also **evident below in 2019** for both Nassau County and for New York State. Note the drop in proficiency in grade 5 and the increase in grade 6.

2018/2019 NYS Snapshot - Regional

Related Report Links														
Subject	Test	# L1	# L2	# L3	# L4	Total	L3+L4	% L1	% L2	% L3	% L4	L3+L4%	NY State	
ELA	Grade 3 ELA	833	2,833	5,891	1,146	10,703	7,037	8%	26%	55%	11%	66%	3	52%
	Grade 4 ELA	1,122	2,845	3,928	2,508	10,403	6,436	11%	27%	38%	24%	62%	4	48%
	Grade 5 ELA	2,305	2,711	2,821	2,369	10,206	5,190	23%	27%	28%	23%	51%	5	38%
	Grade 6 ELA	1,852	1,909	1,955	3,790	9,506	5,745	19%	20%	21%	40%	60%	6	47%
	Grade 7 ELA	1,774	2,358	2,596	1,868	8,596	4,464	21%	27%	30%	22%	52%	7	40%
	Grade 8 ELA	985	1,971	2,128	2,152	7,236	4,280	14%	27%	29%	30%	59%	8	48%

To see if individual students dropped in proficiency from 2018 to 2019, we can go to an Instructional Data Warehouse (IDW) report, called the “Performance Level Change - This Year vs Last Year” report” for Nassau County.

Count of Students		2017/2018							
		Grade 4 ELA							
2018/2019	Grade 5 ELA	Level 1	Level 2 L	Level 2H	Level 3 L	Level 3H	Level 4 L	Level 4H	Total
		676	524	338	136	54	11		1,739
		206	273	452	331	212	67	5	1,430
		14	64	223	248	176	88	9	822
		15	88	300	428	559	472	62	1,924
		7	7	39	103	165	179	36	529
		1	7	75	200	477	843	301	1,904
					6	22	109	84	222
		796	963	1,428	1,452	1,665	1,769	497	8,570
		533 gained proficiency			1,337 lost proficiency				

The report shows Level scores for all students in Nassau County who took **both** the Grade 4 ELA test in 2017-18 and the Grade 5 ELA test in 2018-19. Grade 4 tests from 2017-18 are shown vertically and Grade 5 horizontally. The **533 students who gained proficiency** in 2018-19 (in Grade 5) are circled in white. The **1,337 who lost proficiency** in Grade 5 are circled in blue. That means that **more than twice as many lost proficiency** entering 5th Grade. Why?

Count of Students		2017/2018							
		Grade 5 ELA							
2018/2019	Grade 6 ELA	Level 1	Level 2 L	Level 2H	Level 3 L	Level 3H	Level 4 L	Level 4H	Total
		853	283	121	58	13	8		1,336
		244	254	178	106	37	19		838
		104	183	165	142	39	32	1	666
		92	224	316	288	139	125	4	1,188
		17	60	90	143	56	75	1	442
		28	155	346	673	504	943	90	2,739
				13	44	88	334	98	579
		1,338	1,161	1,229	1,454	876	1,536	194	7,788
		1,343 gained proficiency			455 lost proficiency				

And what happened that year when students **left Grade 5 for Grade 6**? In this case, **proficiency gainers outnumbered proficiency losers by a margin of 1,343 to 455**, about three to one. Does this say something about these students, or does it say something about the actual vertical alignment of the Grade 4, 5, and 6 assessments?

Fortunately, NYSED has created New Generation Learning Standards (NGLS) for the 2023 assessments and has appropriately suggested that 2022 assessments cannot be compared to the 2023 assessments. Thus we have a new base year to begin comparisons again, and the prospect for a new vertical alignment is off to a great

start.

Take a look at the Nassau County vertical alignment shown below and the accompanying State Comparisons. The range in proficiencies for **ELA tests in Nassau County has been reduced from 21 percentage points in 2022 to just 7 percentage points overall**. In Math, the range is only 4 percentage points (not including Grade 8). And

2022/2023 NYS Snapshot - Regional

2022-2023 WPS Chapter Report

Related Report Links

Subject	Test	# L1	# L2	# L3	# L4	Total	L3+L4	% L1	% L2	% L3	% L4	L3+L4%
ELA	Grade 3 ELA	1,940	2,703	4,162	2,546	11,351	6,708	17%	24%	37%	22%	59%
	Grade 4 ELA	1,296	2,737	3,900	2,840	10,773	6,740	12%	25%	36%	26%	63%
	Grade 5 ELA	1,505	2,799	4,127	2,282	10,713	6,409	14%	26%	39%	21%	60%
	Grade 6 ELA	1,529	2,400	3,457	2,664	10,050	6,121	15%	24%	34%	27%	61%
	Grade 7 ELA	1,650	2,073	3,304	2,360	9,387	5,664	18%	22%	35%	25%	60%
	Grade 8 ELA	967	1,747	2,900	2,472	8,086	5,372	12%	22%	36%	31%	66%
Subject	Test	# L1	# L2	# L3	# L4	Total	L3+L4	% L1	% L2	% L3	% L4	L3+L4%
Mathematics	Grade 3 Math	782	2,627	4,975	3,128	11,512	8,103	7%	23%	43%	27%	70%
	Grade 4 Math	1,135	2,069	4,997	2,841	11,042	7,838	10%	19%	45%	26%	71%
	Grade 5 Math	1,410	2,044	4,441	2,874	10,769	7,315	13%	19%	41%	27%	68%
	Grade 6 Math	1,312	1,824	4,447	2,416	9,999	6,863	13%	18%	44%	24%	69%
	Grade 7 Math	1,060	1,776	2,965	3,264	9,065	6,229	12%	20%	33%	36%	69%
	Grade 8 Math	842	494	1,044	358	2,738	1,402	31%	18%	38%	13%	51%

NY State

Grade Prof. %

3	45%
4	49%
5	45%
6	46%
7	48%
8	55%

look how ap-

3	54%
4	54%
5	50%
6	48%
7	52%
8	41%

propriate the

grade 4, 5, 6 configuration has become.

For State scores, the total range in ELA scores has now been **reduced from 19 percentage points in 2022 to 10 percentage points in 2023**, indicating that vertical alignment has been restored statewide and making it more fruitful to measure individual student growth from one grade to the next. Thus, 2023 will serve as a more reliable base year for all performance level change reports.

Perhaps, more important is the current absence of any yoyo effect in **consecutive grades**. Look at any consecutive grade proficiency scores for **Nassau County**. The biggest variation is now just **6% from Grade 7 ELA to Grade 8 ELA (7% at the state level)**. In Math, the biggest variation is from **Grade 4 Math to Grade 5 Math of 3% (4% at the state level)**. Just a year ago in **2022** (see page 1), in **Nassau County**, there was a **21% proficiency drop from Grade 4 ELA to Grade 5 ELA with an increase of 14% in Grade 6**. Statewide, it was a 4% drop in Grade 5, combined with a 19% increase in Grade 6.

So as students move from one grade to the next, schools can once again assume that the growth or decline in proficiency does indeed measure a student's actual growth (or decline), rather than a difference in a possible mis-alignment in proficiency between grade levels. Similarly, the "Performance Level Change - This Year vs



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Last Year” report will again be a useful tool in measuring a school’s cohort as it moves from one grade to the next. Although we will have to wait until next year to use the report because of the introduction of the NGLS, the ability to measure growth in proficiency using this year’s assessments has returned to the IDW toolkit.

In addition, now that the Common Core has been replaced by the NGLS, we might see a reduction in student test-refusals allowing for greater student participation. And, of course, greater student participation means additional instructional insights gleaned from the many available IDW reports. Both the Gap Reports and the Wrong Answer Summary Analyses will be more robust with the hopeful addition of more test takers.

As always, IDW personnel are available to provide telephone assistance as well as virtual and in-district training for any district seeking to learn more about this newsletter, or about other best data practices. To schedule a training session or ask any IDW-related questions, please call Stephanie Witt at (516) 608-6623, Fred Cohen at (516) 608-6640, Tammy Mazza at (516) 608-6633, or Dr. Wanda Toledo at (516) 608-6648.

***What's
New in
the IDW?***

- ELA & Math Refusal Dashboards are now available.
- Check out our new Comparison Reports based on the State Report Card Data Base. New reports create new opportunities for IDW users.
- Don’t forget to check out our IDW training schedule and schedule a training opportunity for all staff members.
- Coming for the new calendar year: Third party test navigation training