Reflecting Back AND Looking Forward

In Florida’s school accountability system, “learning gains” describes a student’s growth from one year to the next based on his/her performance on the FCAT-SSS for two consecutive years. The state system defines these student learning gains, or “adequate progress”, in three ways:

1. Increasing his/her performance one or more achievement levels
   (1 to 2, 3 to 4, 2 to 4, etc.)
2. Maintaining high performance - remaining in Level 3, or Level 4, or Level 5
   (3-3, 4-4, 5-5)
3. For students remaining in Level 1 or Level 2, performance must increase “more than a year” (defined as a prescribed minimum point increase on the developmental scale)

With the data now available, a teacher can quickly determine which of his/her students increased their achievement levels; maintained a level 3, 4, or 5; or increased sufficiently within Levels 1 or 2. Of course, the data will also demonstrate which students decreased in achievement levels, failed to maintain their high performing levels, or failed to show adequate progress within Levels 1 or 2.

At the end of the 2001-02 school year, data were analyzed for three fifth grade classrooms at a Florida elementary school. While, on the whole, the classes were comparable based on the previous year’s test results (“pretest”) and number of students in the class (24-25), it was discovered, after a year of instruction, that:

- Thirteen (13) students in one classroom had DECREASED in reading achievement levels from one year to the next,
- Sixteen (16) students in a second classroom had MAINTAINED Levels 3, 4, or 5, or INCREASED mathematics achievement levels from one year to the next, and
- All students remaining in Levels 1 or 2 in the third classroom had failed to make adequate progress.

Clearly different performance results occurred. Reflecting back on instructional practices, individual student situations, and other variables associated with the classroom context would be appropriate.
NOTE: On the following page you will find a collection of data from an actual class of seventh graders at a north Florida middle school. The students are numbered to maintain their privacy. The columns are both numbered and labeled. The labels are described below:

**LEGEND**

Enrolled Grade – Current Grade  
S – Gender  
R – Race  
Pri – Primary Exceptionality  
Grade 00 – Grade the student was in in 2000  
Grade 01 – Grade the student was in in 2000  
Grade 02 – Grade the student was in in 2000  
02 CG -- Curriculum Group in 2002  
Writing TYP – Narrative (N) or Expository (E)  
00 (wherever used) – 2000  
01 (wherever used) – 2001  
02 (wherever used) – 2002  
Nat %ile – National Percentile Rank  
Scale Score – FCAT Conventional Scale Score  
Ach Lvl – FCAT Achievement Level  
Dev Scale – Developmental Scale Score
| ID # | LAST NAME | FIRST NAME | MI | ENR. GR. | ENR. SCH. | S | R | PRI | Oth | LEP | O2 | CG | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|------|-----------|------------|----|----------|----------|---|---|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 103  | M         | B          | B  | 04       | 05       | 06 | S  |     | 3   | 2   | 1   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 104  | M         | B K        | E  | 05       | 06       | 06 | E  |     | 2   | 3   | 2   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 105  | M         | F B        | S  | 04       | 05       | 06 | S  |     | 2   | 7   | 4   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 106  | M         | F B        | S  | 04       | 05       | 06 | S  |     | 3   | 9   | 4   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 107  | F         | B          | S  | 04       | 05       | 06 | S  |     | 2   | 3   | 2   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 108  | M         | W          | S  | 04       | 05       | 06 | S  |     | 5   | 3   | 2   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 110  | M         | W G        | S  | 04       | 05       | 06 | S  |     | 4   | 2   | 1   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 117  | M         | B G        | S  | 04       | 05       | 06 | S  |     | 3   | 6   | 2   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 127  | M         | B G        | S  | 05       | 06       | 05 | S  |     | 3   | 6   | 2   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 128  | F         | W          | S  | 04       | 05       | 06 | S  |     | 8   | 1   | 0   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 129  | M         | B          | S  | 04       | 05       | 06 | S  |     | 3   | 2   | 1   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 130  | F         | W L        | E  | 05       | 06       | 06 | E  |     | 8   | 3   | 0   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 131  | M         | W          | S  | 04       | 05       | 06 | S  |     | 2   | 6   | 4   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 132  | M         | W          | S  | 04       | 05       | 06 | S  |     | 2   | 6   | 4   | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
MAINTAINING HIGH PERFORMANCE  The reader will note that students 103, 105, and 106 each have maintained the same high performance in reading across the last two years. (Go horizontally across the 103 line to columns 20 and 21. Note the two threes recorded there. Do the same for students 105 and 106.)

INCREASING ACHIEVEMENT LEVELS  The reader will note that students 104, 110, and 111 each have increased their achievement levels from 2001 to 2002. (Again, go horizontally across the 104 line to columns 20 and 21. Note the number 1 under 01 and the number 2 under 02. Do the same for students 105 and 106.)

DECREASING ACHIEVEMENT LEVELS  Again, the reader will note that students 107, 113, and 121 each decreased in their achievement levels from 2001 to 2002. (Go horizontally across the 107 line to columns 20 and 21. Note the number 3 in column 20 and the number 4 in column 21. Do the same for students 113 and 121.)

ADEQUATE PROGRESS WITHIN LEVELS 1 AND 2  The State of Florida has provided a means to determine if students in Level 1 and 2 have gained a year’s learning even though their scores stayed within Level 1 or Level 2 across the two years.

Look at students 117 and 119. Note in columns 20 and 21 that each of these students scored within Level 1 or 2 both years. To determine gain in these cases, the teacher must use the Developmental Scales in columns 22 and 23. Students who were 5th graders in 2001 and 6th graders in 2002 must gain 134 Development Scale Score points in Reading and 96 points in Mathematics. (The minimum values for each grade are included in Handout 6.)

Go horizontally across line 117 to columns 22 and 23. Subtract the value in column 22 from the value in column 23. If it is more than 134, the student is credited with having gained over the year. The actual result is 1443 – 1213 or 230 so the student gained. Do the same with student 119.

The same process has to be repeated to compute learning gains in Mathematics. On the sample data, you would use columns 26 and 27 for achievement levels and columns 28 and 29 for Developmental Scale values.

The same process to compute the learning gains for a teacher’s previous class is used to examine the past year learning gains for an incoming group in August. We refer to the first as Teacher Reflection. We refer to the second as Learning Momentum.

Learning Momentum got its name from the fact that this analysis exposes the momentum – success or lack of success in reading and mathematics from the previous year. No one will dispute the fact that a group of students, all of whom had experienced success in learning for the previous year would place instructional demands on the teacher that would be very different from a group of students, all of whom, had NOT experienced success in learning.
A student coming to you at Level 3 who had been at Level 1 the previous year is a very different student when compared with another student at Level 3 who had been at Level 5 the previous year. Looking at previous gains from one year to the next and developing instructional strategies appropriate to those gains, or lack thereof, is key to successful instructional preparation.