

Sam Drury
210 East Sterne Boulevard
Centennial, Colorado 80122-1026

June 26, 2008

Board of Education
Littleton Public Schools
5776 South Crocker Street
Littleton, Colorado 80120

Dear Board Members:

The purpose of this letter is to critique some aspects of the LPS “on or above grade level” approach. As you know, I had requested to speak about agenda item “Grading Practices Update” at the June 12 Board meeting. However, I then discovered that my interest in “grade inflation versus proficiency” was outside the scope of the agenda item. Therefore, I withdrew my request to speak and told you then that I would write a letter to you.

That “on or above grade level” approach is shown in the LPS Annual Report 2006-2007 by these verbatim excerpts (page 34):

- **What does it mean to “be on or above grade level?”** Littleton Public Schools believes that it takes a “body of evidence” – a number of different sources of data – to determine how a student is performing. Students are on or above grade level if they are meeting the expectations for their age peer group on the defined “essential learnings.” Essential learnings guarantee a common curriculum for all students and provide common assessments both within a school and across all schools in the district. On or above grade level is measured in three different ways:
 - Performance on state tests (Colorado Student Assessment Program – CSAP);
 - Performance on other large-scale assessment tests (MAP, CBLA, and second grade writing assessments);
 - Classroom performance
- This process of determining student performance levels is unique to LPS. Because it takes a three-pronged approach, it uses CSAP and other assessment data appropriately and proportionately along with other daily measures of performance.
- **How are we doing?** This year’s data gives us a “baseline,” or a beginning point from which to work. This baseline data indicates that currently, as a district, 78.5% of students are performing on or above grade level. This means that many students across the district already are performing on or above grade level, and some students across the district need additional help to achieve at higher grade levels. These results fall within the expected range and are a good indicator of where we need to go.

The baseline data “fall within the expected range” in terms of overall summary number for 2007 (*i.e.*, the 78.5% LPS Student Achievement Index result is within 10% of the 70.7% overall CSAP average for 2007). However, I believe that overall result is not “a good indicator of where we need to go.” The major flaw in the so-called LPS Student Achievement Index (SAI) is the “classroom performance” portion (about one-third), which is very biased by “grade inflation” rather than “essential learnings” performance.

As a result of “The Accountability Journey” presentation at the September 27 Board meeting, I had some questions on October 11 for Board consideration and response:

- Why did LPS administration change the District Achievement Goal deadlines?
- What are the individual assessment (*i.e.*, CSAP, MAP, etc.) summary data for each subject category at each grade level?
- How were the assessment summary data converted to show percent proficient?
- When will similar data from each school be available for public review?

The attached four-page handout (SDHBoE071011.pdf) has more information on my “LPS Student Academic Achievement Progress” presentation at the October 11, 2007 Board meeting. As shown on the handout, I estimated the relationships between CSAP subtotals and the rest-of-the-index subtotals: Those “index – CSAP” subtotals estimates were about 10% more than CSAP for Reading & Writing (Grades 3-10), 15% more for Mathematics (Grades 3-10), and 15% more for Science (Grades 3, 5, and 8).

On November 1, I received the 10/29/07 “Grade Level Determination” report, which does show the individual assessment (*i.e.*, CSAP, MAP, etc.) summary data for each subject category at each grade level. I really do appreciate the visibility of the “Grade Level Details” tabulations that are associated with the “Overall Grade Level” tabulations for each subject category at each grade level. The next day I received the relative weights (recipes) for the “Grade Level Details” data (ingredients) that produced the 22 “Overall Grade Level” tabulations (conversion of the assessment summary data to show percent proficient). Those two documents demonstrate the comparative effects of each measure of performance used for the SAI calculations.

I have some comments about the attached three-page handout (SDHBoE071108.pdf) that I provided at the November 8 Board meeting and again provided to you on June 12:

- The inclusion of report card “assessments” increased the baseline index for every one of the 11 grades (K-10) compared to all grade level assessments without report card assessments.
- The tabulation provides numerical precision for comparison of the proficiency percentage data for all grade level assessments versus without report card assessments (the former average is about 6% higher than the latter).
- The “grade inflation” effect from report cards data is quite different from the rest of the data for each grade level.
- The K-10 district average for report card “assessments” (91.44%) is much higher (18.18%) than the average for the rest of the assessments (73.26%).
- That “grade inflation” factor of about 18% exists in both elementary (K-5) and secondary (6-10) groups.

The current SAI is not a valid measure of LPS student academic achievement progress:

- As you know, LPS officials have established the Student Achievement Index as an overall expression of results from assessments of individual students.
- I believe that transparency and prompt reporting of detailed objective results is essential for credible public visibility and accountability.
- The current “classroom performance” portion (about one-third of total score) is very biased by “grade inflation” rather than “essential learnings” performance.
- That “grade inflation” factor of about 18% falsely increases the otherwise-valid SAI scores by about 6% for 2007.
- If and when there is significant reduction in the “grade inflation” effects, the SAI scores will decrease at the same time that actual proficiency is increasing, thereby misleading SAI users who measure LPS student academic achievement progress (and *vice versa* for significant increase in the “grade inflation” effects).
- Therefore, I recommend eliminating use of the current SAI (with “grade inflation” effects) as a valid measure of LPS student academic achievement progress.

I still have two unanswered questions that I asked at the October 11 Board meeting:

- Why did LPS administration change the District Achievement Goal deadlines?
- When will similar data from each school be available for public review?

What questions and/or comments do you have for me?

Sincerely,



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Attachments

cc: Scott Murphy

LPS Student Academic Achievement Progress

Recent information from Sam Drury

- SD 9/13/07 letter presented to LPS Board of Education on September 13.
- SD 9/19/07 letter mailed to LPS Board of Education on September 19.
- SD 10/8/07 letter mailed to LPS Board of Education on October 8.

As a result of “The Accountability Journey” presentation at the September 27 Board meeting, I have some questions for your consideration and response:

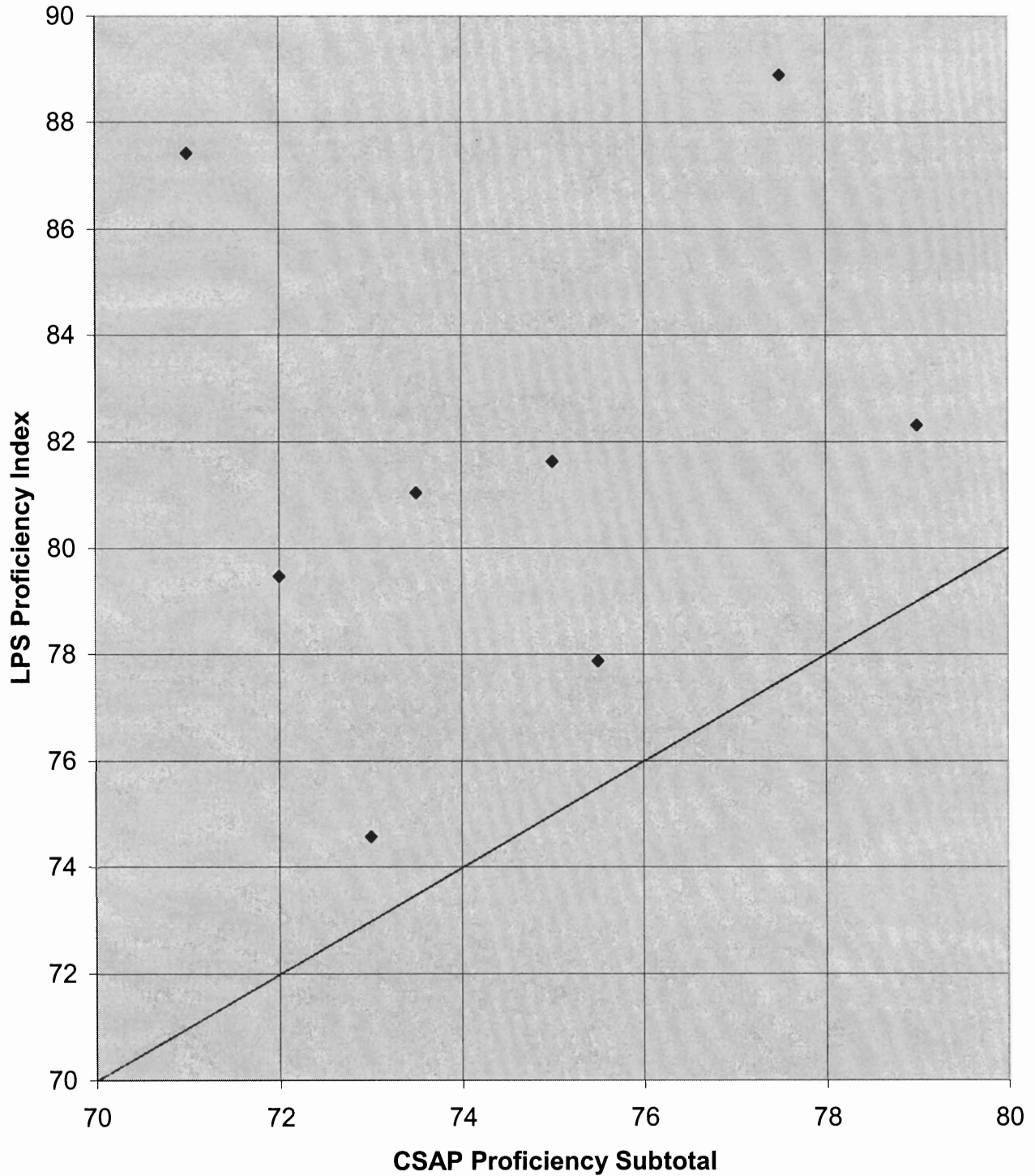
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- When will similar data from each school be available for public review?

Relationships of CSAP subtotals and LPS Proficiency Indices for 2007

- Data sources and calculations
 - CSAP: CDE 7/31/07 report of LPS 2007 percentage proficient and advanced
 - Index: LPS 9/27/07 report of proficiency index for District Achievement Goal
 - Index – CSAP differences: rounded-off subtractions of CSAP from Index (and arithmetic mean of the differences)
- Reading & Writing (Grades 3-10)
 - CSAP: 75.0, 71.0, 77.5, 79.0, 75.5, 73.0, 73.5, 72.0.
 - Index: 81.63, 87.42, 88.89, 82.31, 77.87, 74.57, 81.04, 79.47.
 - Index – CSAP differences: +7, +16, +11, +3, +2, +2, +8, +7 (+7 mean).
 - Low positive correlation (+0.19); refer to attached scatterplot.
 - If CSAP is 1/3, then rest of Proficiency Index is about 10% more than CSAP.
- Mathematics (Grades 3-10)
 - CSAP: 81, 83, 78, 71, 61, 61, 52, 43.
 - Index: 84.82, 88.85, 87.30, 80.51, 71.77, 72.89, 63.55, 60.00.
 - Index – CSAP differences: +4, +6, +9, +10, +11, +12, +12, +17 (+10 mean).
 - Very high positive correlation (+0.99); refer to attached scatterplot.
 - If CSAP is 1/3, then rest of Proficiency Index is about 15% more than CSAP.
- Science (Grades 5, 8, 10)
 - CSAP: 56, 67, 65.
 - Index: 78.11, 72.63, 66.90.
 - Index – CSAP differences: +22, +6, +2 (+10 mean).
 - High negative correlation (-0.76); refer to attached scatterplot.
 - If CSAP is 1/3, then rest of Proficiency Index is about 15% more than CSAP.

Your questions and comments about the above information and other issues are welcome.

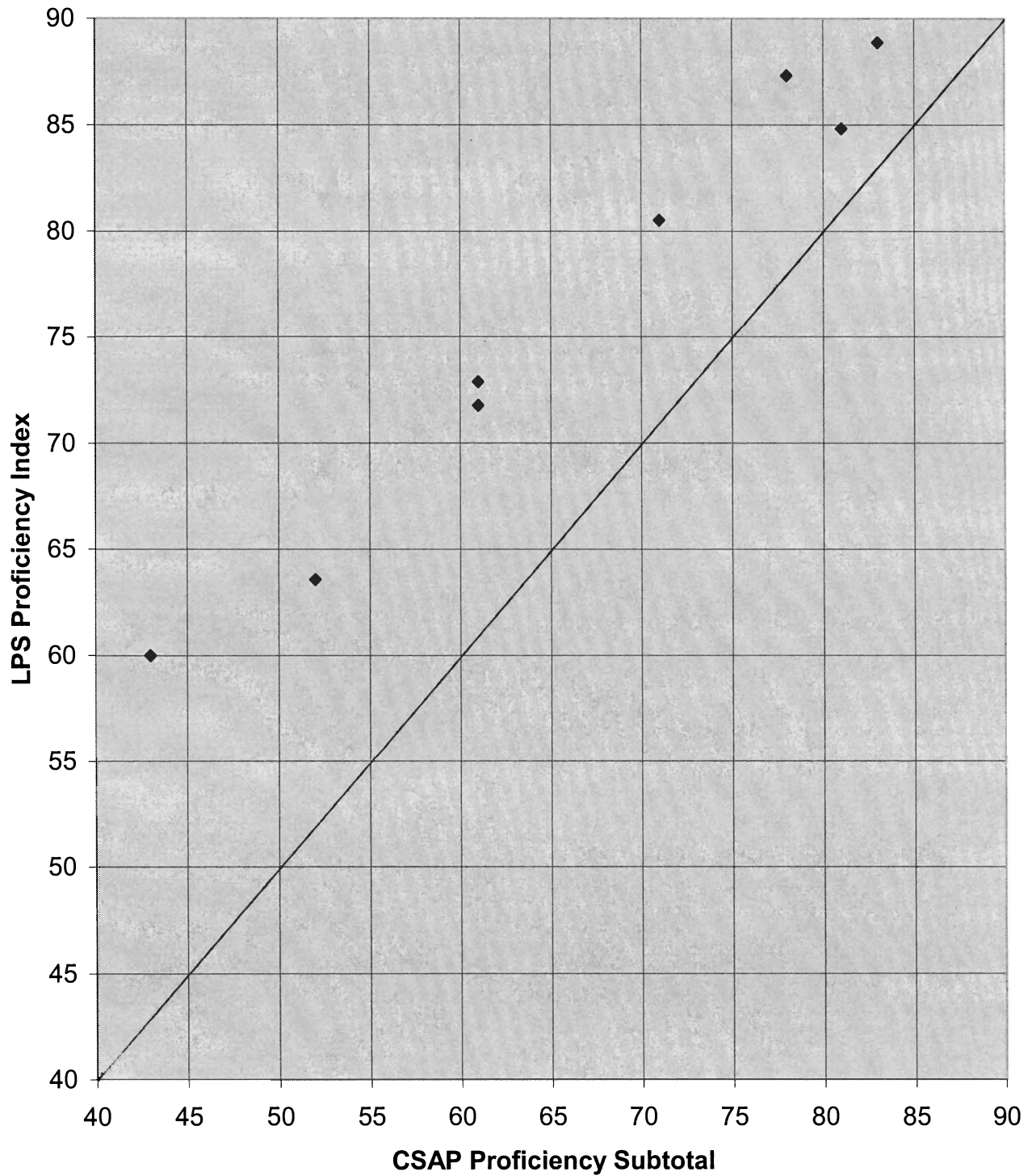
Reading & Writing LPS Index vs. CSAP Subtotal



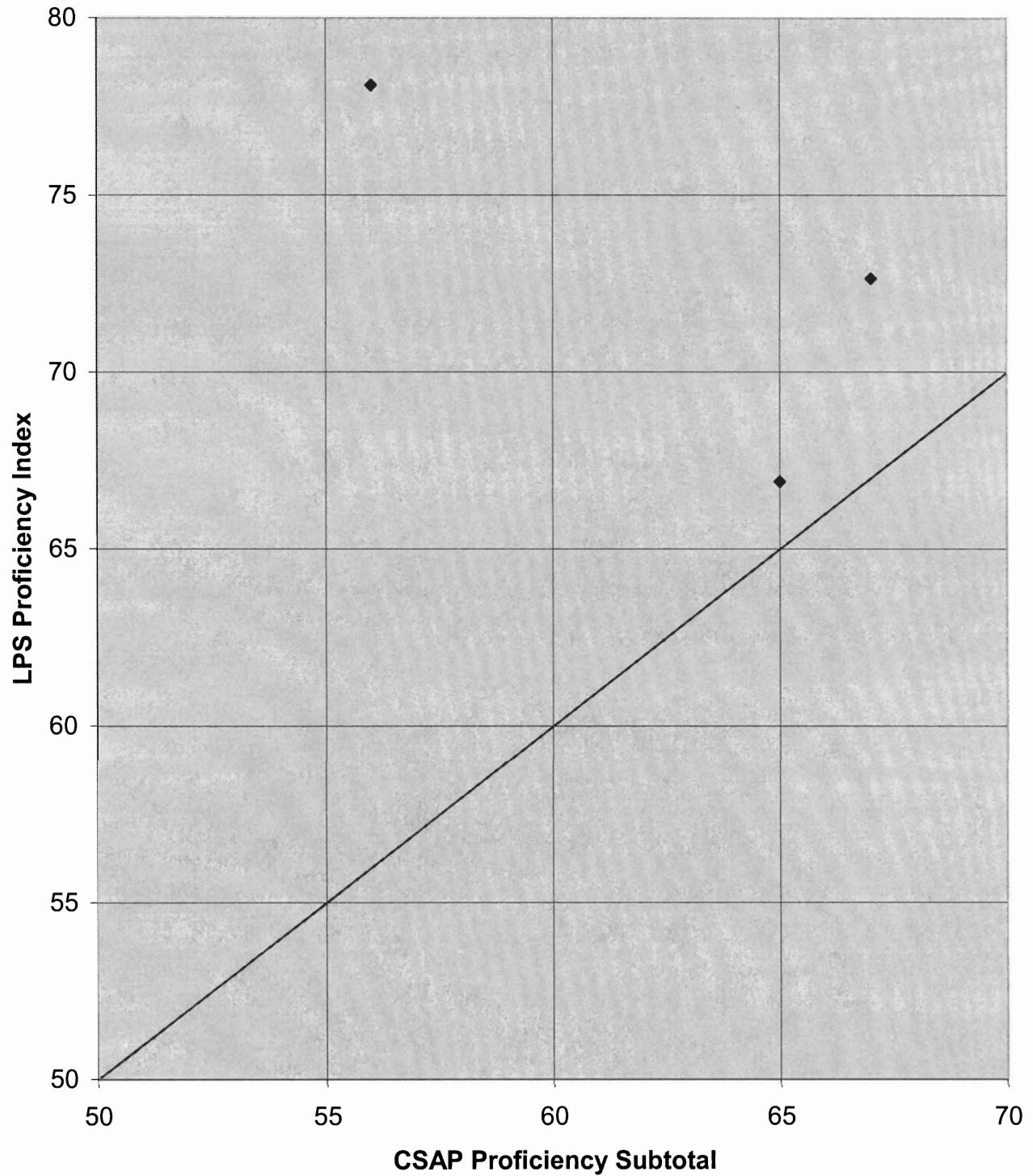
Littleton Public Schools
District Achievement Goal Proficiency Indices for 2007

10/11/07

Mathematics
LPS Index vs. CSAP Subtotal



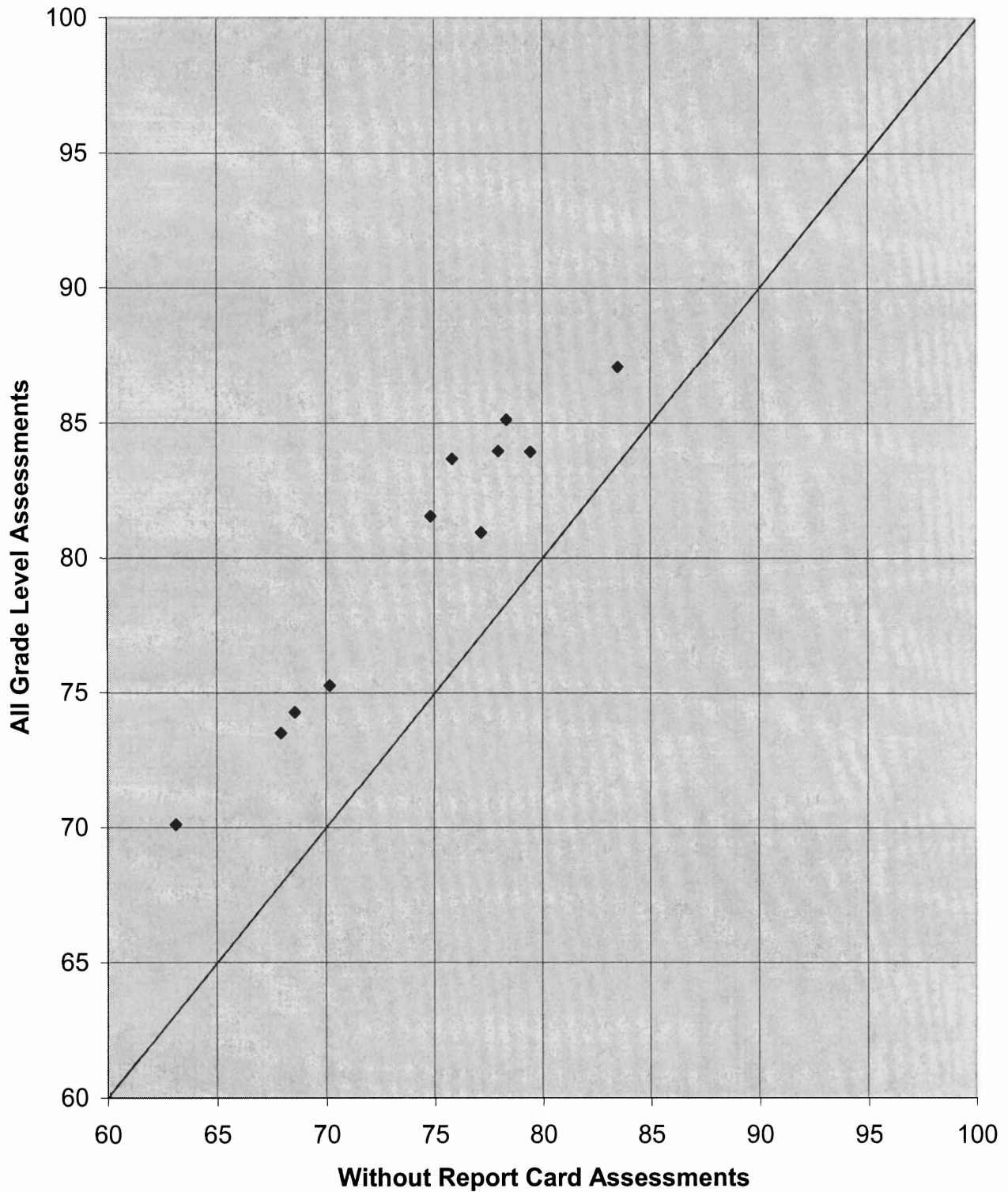
Science LPS Index vs. CSAP Subtotal



Littleton Public Schools
District Achievement Goal Proficiency Indices for 2007

11/8/07

Grade Level Proficiency



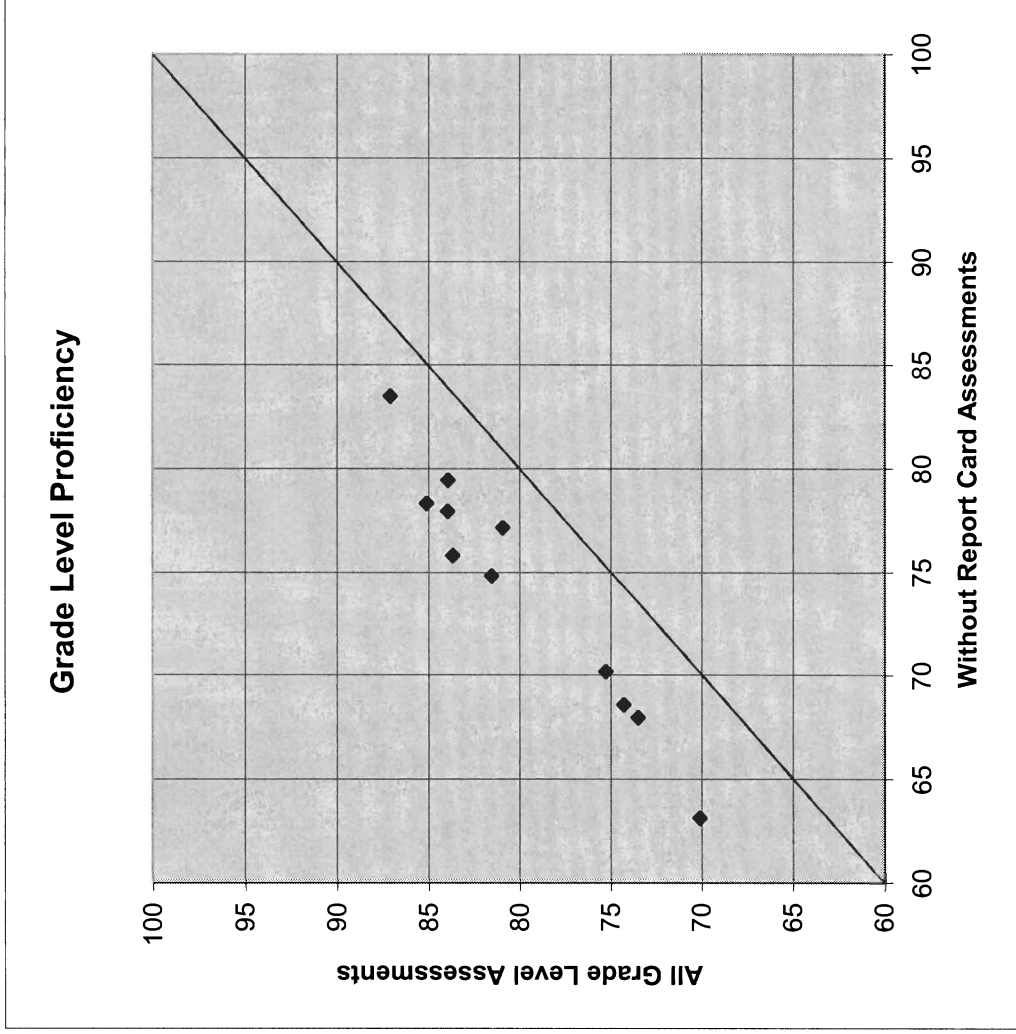
LPS Proficiency Index

11/8/07

Grade Level	w/o RC	all GLA
K	83.50	87.09
1	74.84	81.54
2	79.46	83.93
3	77.97	83.96
4	78.36	85.12
5	75.84	83.67
6	77.18	80.94
7	70.18	75.27
8	68.57	74.28
9	67.94	73.50
10	63.14	70.10
Mean	74.27	79.95

Correlation

	Column 1	Column 2
Column 1	1	
Column 2	0.975455	1



LPS Proficiency Index

11/8/07

Grade Levels	all GLA	w/o RC	only RC
K	87.09	83.50	94.28
1	81.54	74.84	94.93
2	83.93	79.46	97.35
K-2	84.16	79.29	95.52
3	83.96	77.97	95.95
4	85.12	78.36	96.39
5	83.67	75.84	95.41
3-5	84.20	77.33	95.86
K-5	84.19	77.91	95.78
6	80.94	77.18	90.37
7	75.27	70.18	87.99
8	74.28	68.57	85.72
6-8	76.61	71.76	87.70
9	73.50	67.94	87.39
10	70.10	63.14	84.03
9-10	71.59	65.32	85.37
6-10	74.55	69.14	86.73
K-10	79.24	73.26	91.44