

Wireless Writing Program (WWP): Peace River North

Summary Report on Grade 6 Achievement: 2008

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Context

The Wireless Writing Project, initiated in 2001, provides laptop computers to all grade 6 and 7 students in Peace River North School District. Students use their laptops throughout the day, and are able to take them home. The WWP is designed to improve and sustain student achievement, particularly writing. District and provincial assessments, along with teacher action research projects and classroom assessment have shown strong gains for students in the WWP, although results in 2006-2007 were less robust than in earlier years. Previous reports are available on the Peace River North website: prn.bc.ca.

In 2007-2008, all grade 6 teachers submitted student writing samples from two assessments conducted in the fall and the spring. Samples were received from approximately 370 grade 6 students in 14 schools (26 different classrooms.) Results reported here are based on results for 285 regular classroom students for whom both fall and spring samples were submitted.

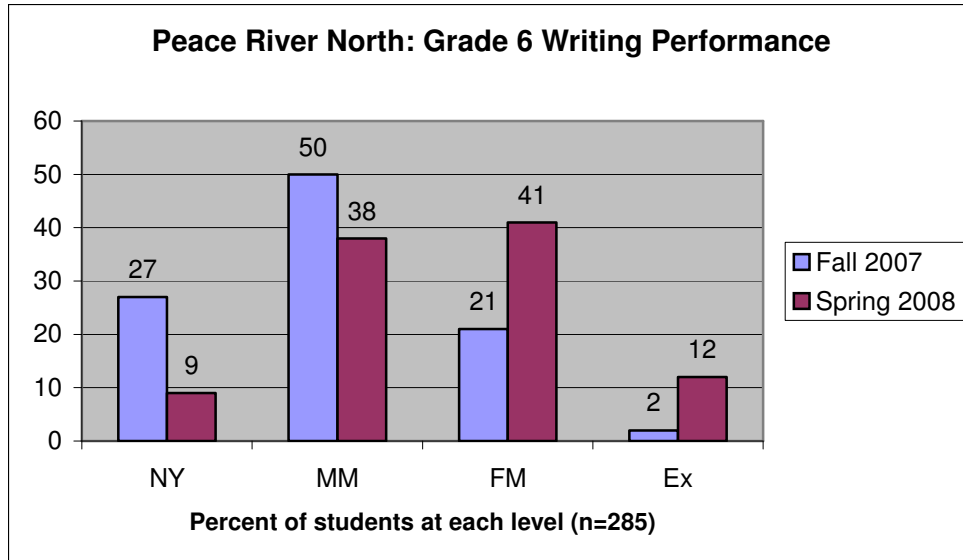
A district marking committee assessed the writing. Fall and spring writing samples were mixed together; each writing sample was assessed by two independent markers, using the Grade 6 BC Performance Standards (Impromptu Writing.) Discrepancies of more than one scale point were assessed by a third marker. Markers were extremely consistent; only 5 of the samples assessed required a third assessment. Students with missing data were deleted from the analysis.

Results

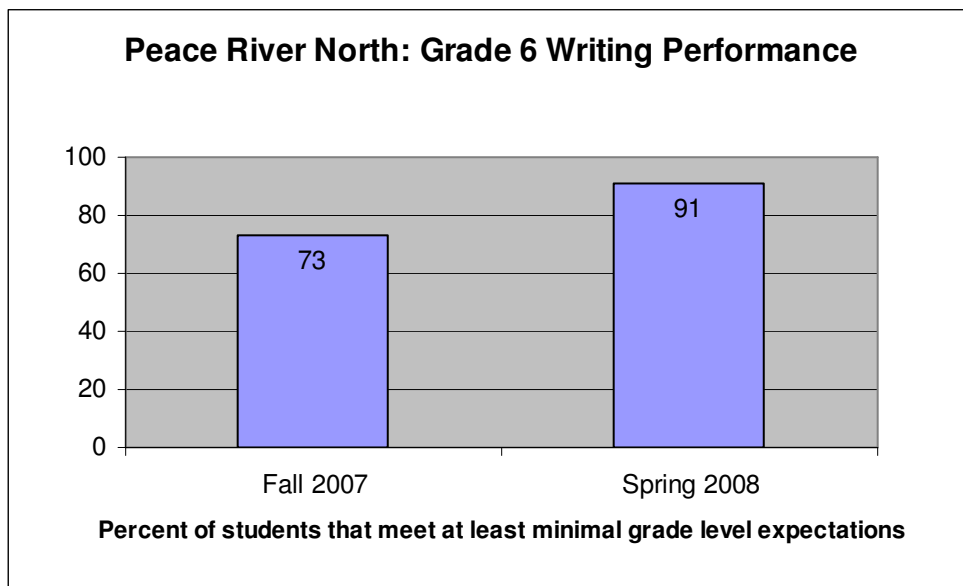
Overall writing achievement

Grade 6 students in 2007-2008 showed strong gains in overall writing performance. The improvement is both statistically and educationally significant:

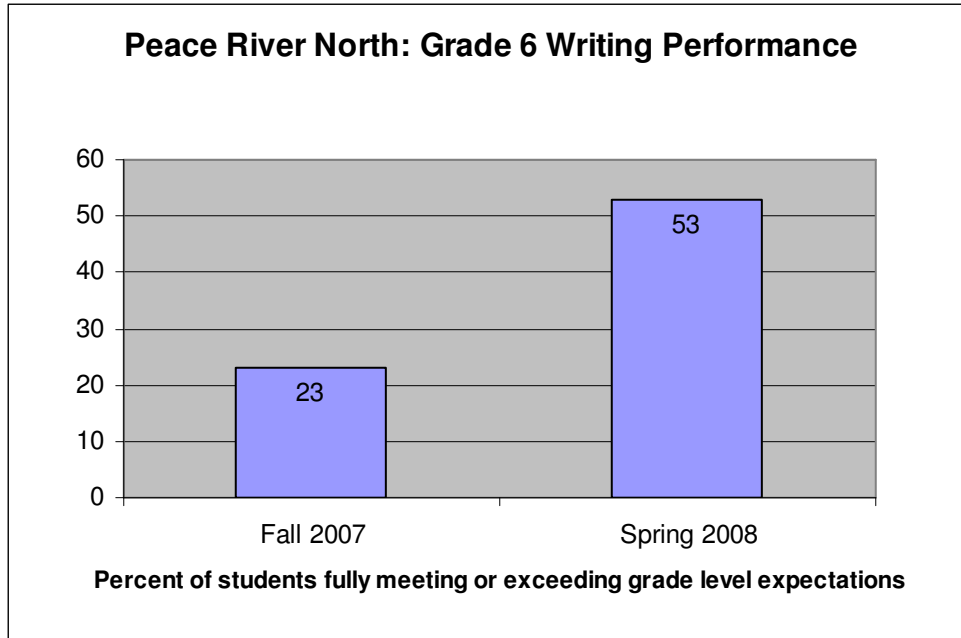
- The percent of students not yet meeting expectations decreased from 27% to 9%. The percent of those minimally meeting expectations also decreased, while there was a substantial increase in the percent of students at the upper end of the scale: in spring, 53% of student writing samples were assessed as fully meeting or exceeding expectations, compared with 23%. In fall.



Note: on this and subsequent graphs of this type, NY=not yet within grade-level expectations; MM = meeting minimal expectations; FM=fully meeting expectations; Ex=exceeding expectations

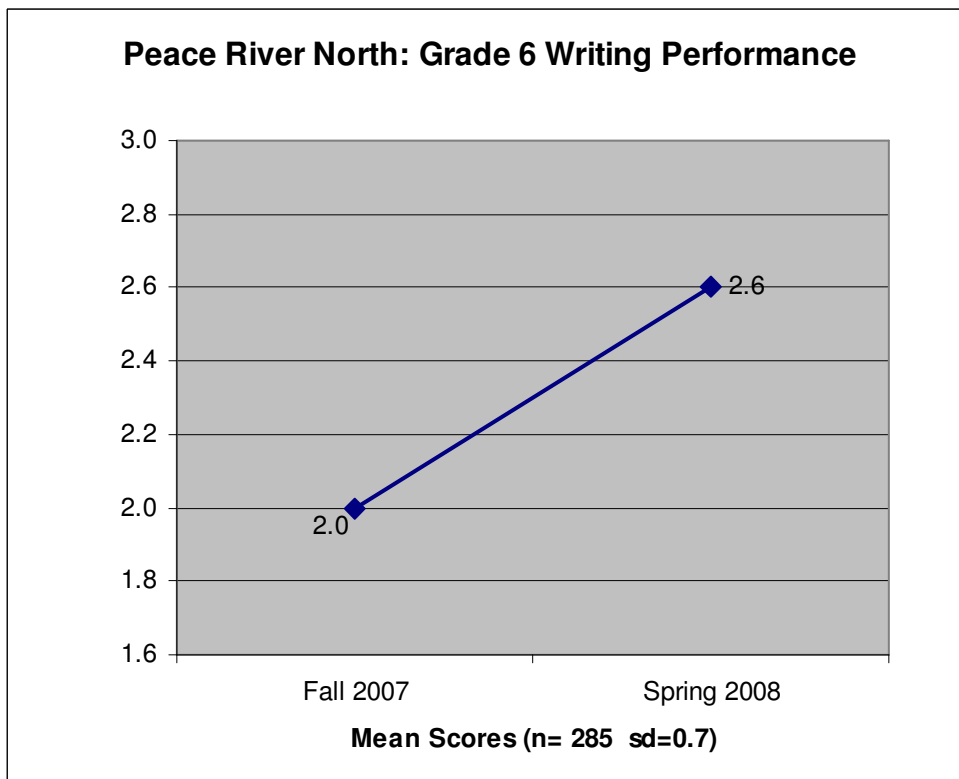


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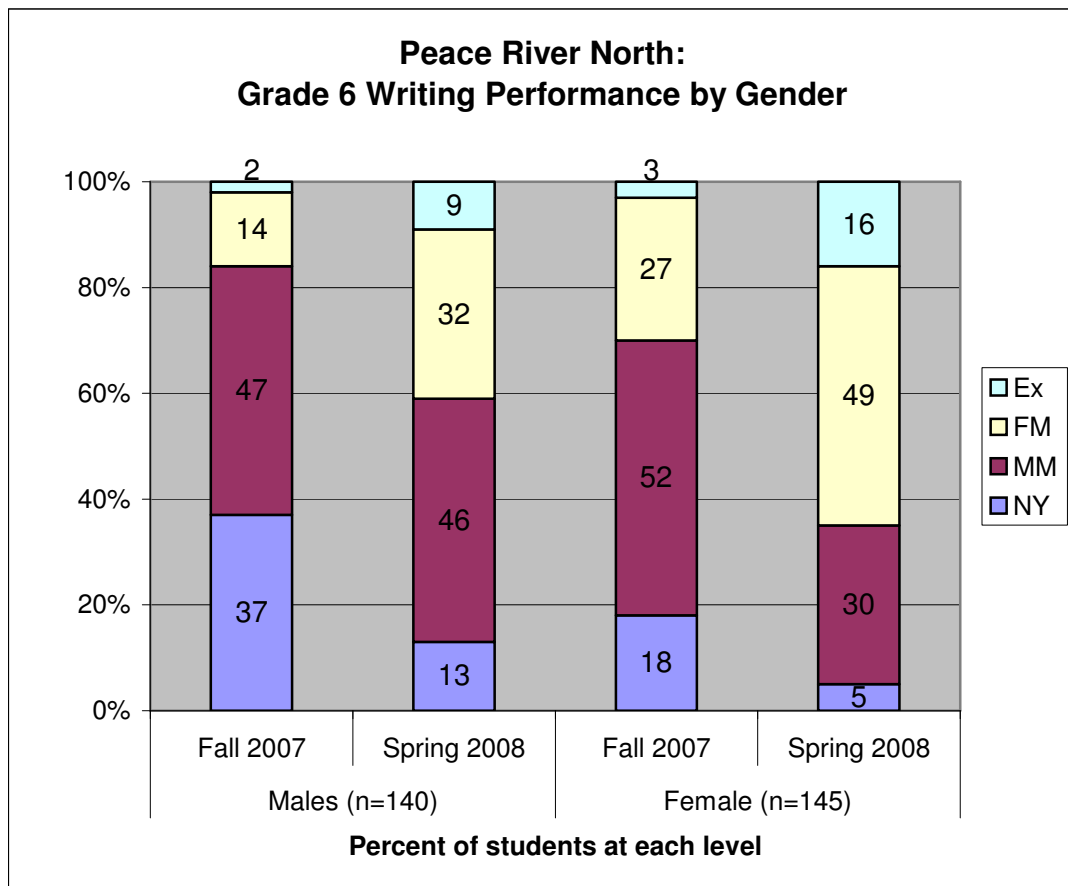
- The average score on a four-point scale improved from 2.0 in fall 2007, to 2.6 in spring 2008. This is a gain of almost a full standard deviation.



Writing achievement by gender

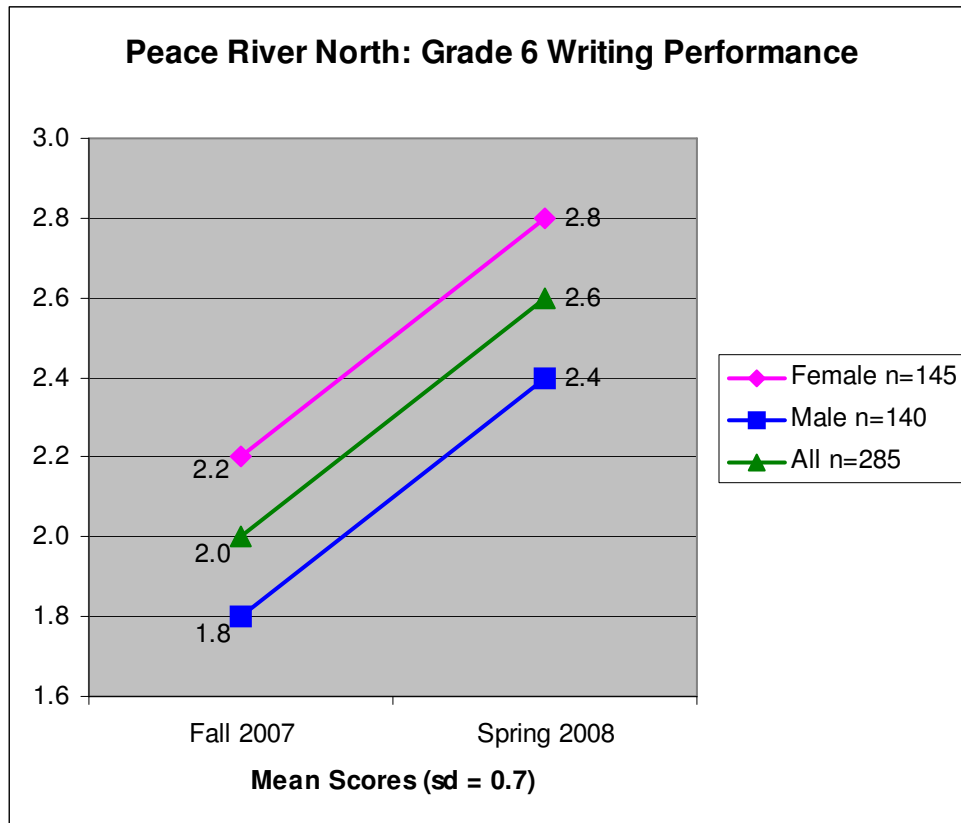
Female students received higher ratings than their male counterparts on both fall and spring writing samples. Overall, both groups improved and the gap did not decrease.

- From fall to spring, the percent of male students meeting at least minimal expectations increased from 63% to 87%; female students, increased from 82% to 95%. This shift favours male students (24% increase compared with 13%); however, the very high percent for female students may represent a ceiling effect.
- In fall 2007, only 16% of male students provided writing samples that fully met grade-level expectations; by spring, 2008, that increased to 41%. For female students, this number increased from 30% to 65%. This shift favours female students (35% increase compared with 25%)



Note: on this and subsequent graphs of this type, NY=not yet within grade-level expectations; MM = meeting minimal expectations; FM=fully meeting expectations; Ex=exceeding expectations

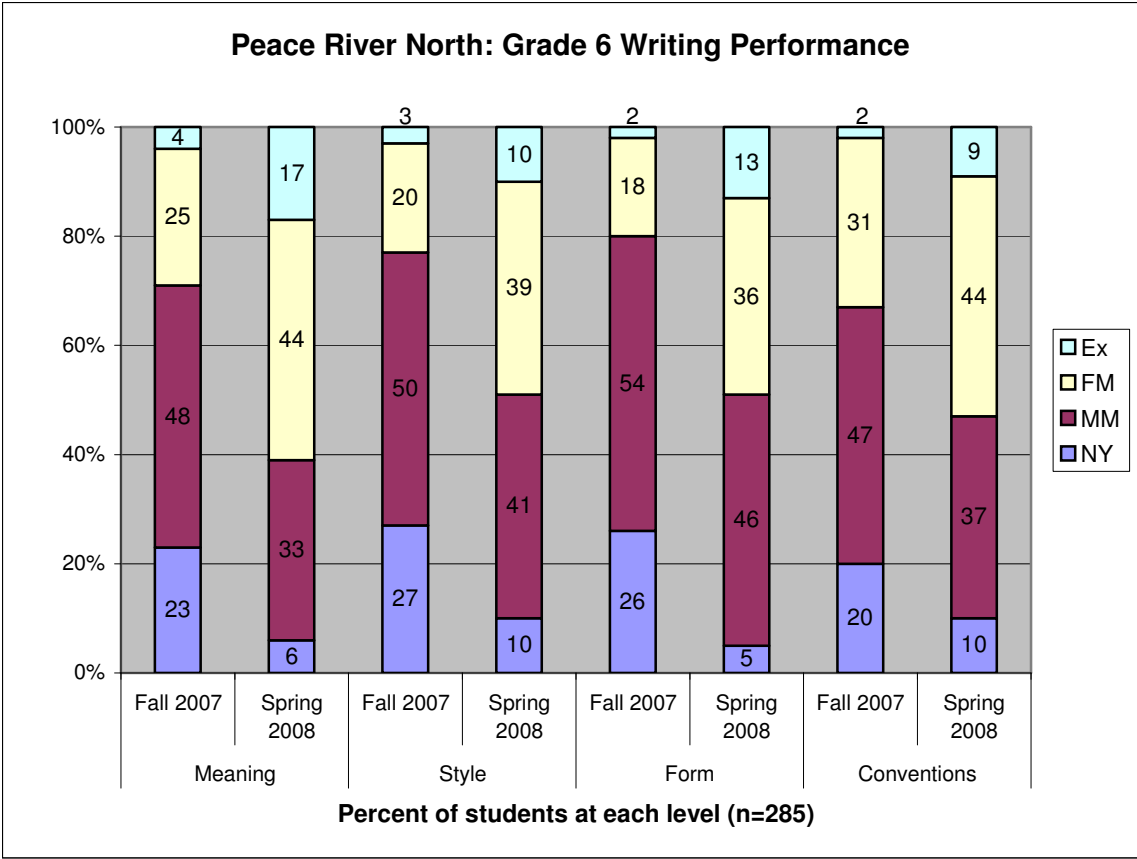
- In terms of average score, both male and female students improved .6 on a 4-point scale –again, close to a full standard deviation. Female students scored, on average, .4 or more than half a standard deviation above their male counterparts, on both fall and spring writing samples.



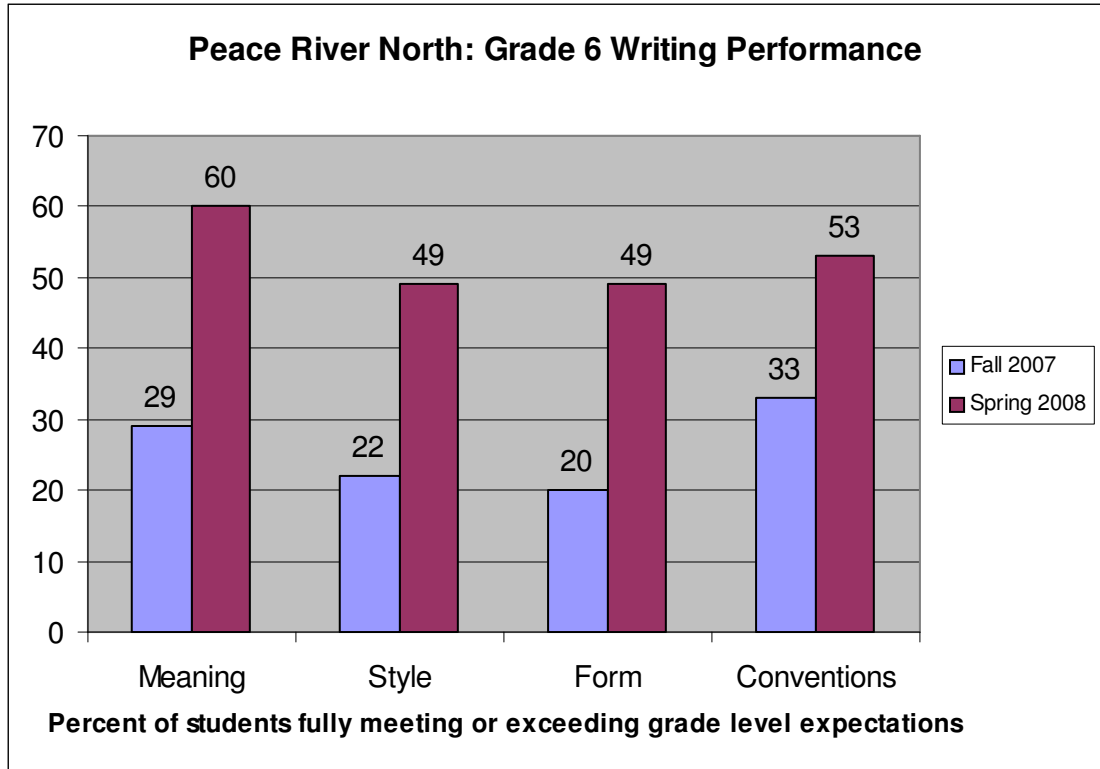
Changes in specific aspects of writing

Each writing sample was rated in terms of overall quality, and four specific aspects: meaning, style, form/organization, and conventions. Student writing improved in all aspects, with the greatest improvement in meaning and form; the least improvement in conventions (correct use of language.)

- From fall to spring, the percent of students meeting at least minimal expectations on meaning increased from 77% to 94%; for style, from 73% to 90%; for form/organization, from 74% to 95%; and for conventions, from 80% to 90%. In fall, overall, the highest ratings were assigned to conventions; in spring, conventions received the lowest ratings.

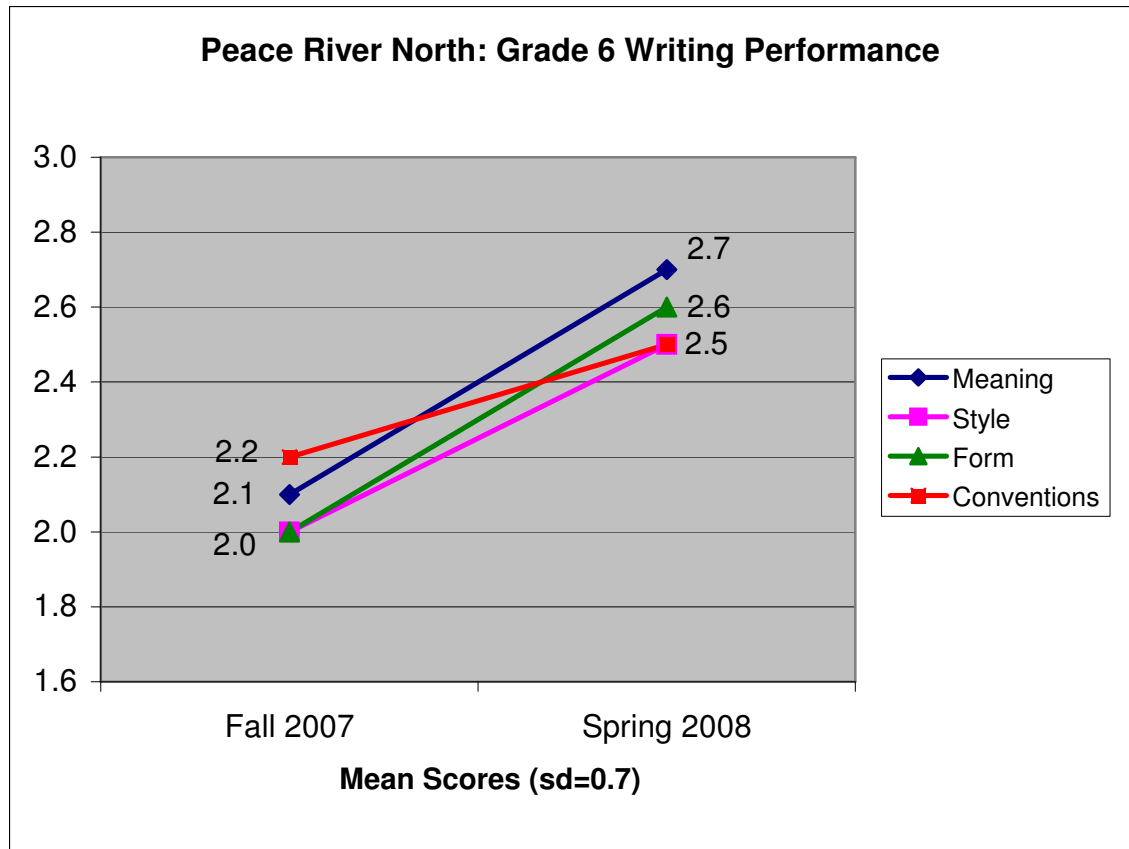


- Between fall and spring, approximately 30% of students moved from the bottom half (not meeting or minimally meeting) to the top half (fully meeting or exceeding) of the scale for meaning, style, and form. The gain was somewhat less for conventions, at 20%.
- In spring, 60% of student writing samples fully met or exceeded grade-level expectations in terms of meaning; 53% for conventions; and 49% for both style and form.



n=285

- Average scores for various aspects of writing increased from .3 (conventions), to .6 (meaning and form) between fall and spring. On the fall samples, conventions received the highest average rating (2.2), followed by meaning (2.1); then, style (2.0) and form (2.0). For the spring samples, meaning received the highest average rating (2.7), followed by form (2.6); then style (2.5) and conventions (2.5.) Most of these differences are not statistically significant; however, the improvement in meaning and form is appreciably greater than the improvement in conventions – a similar result to previous years. This finding is important in studying the effects of 1:1 programs, as it suggests that improvements in writing reflect real change in students’ written communication that go beyond surface level improvements in spelling or grammatical correctness.



Conclusions

- Grade 6 students in the WWP continue to show gains in writing achievement. For 2007-2008, the gains are substantial and beyond what would normally be expected in a year of schooling.
- Improvements are greatest in the core aspect of written communication – meaning. By spring, most students were able to express, develop, and organize their ideas at a relatively high level.
- Female students outperformed male students in both fall and spring. Both groups demonstrated approximately the same level of improvement; thus, the gender gap did not decrease.