Catalyst Schools Research Study Report

The Learning School Approach and Student Proficiency in ELA and Math: Preliminary Findings

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The Learning School initiative completed its pilot testing in June 2016, with 28 schools, called catalyst schools, taking part. Catalyst schools were located in all eight regional education service agencies (RESAs) and were supported by RESA staff in implementing the Learning School approach. Five schools had been part of the program for 2 years and 23 schools for 1 year. The purpose of the Learning School initiative was to allow greater levels of teacher decision making with regard to their own professional learning in order to meet the learning needs of their students in a model of continuous school improvement. For more information about the Learning School initiative, see other reports in this series (Hammer, 2016a; 2016b; 2016c; & 2016d).

This brief report provides preliminary findings about possible positive associations between the Learning School initiative and student performance in catalyst schools. These findings should be viewed with caution, as they involve a small number of schools after a very brief intervention. Further, research has shown that benefits of a professional development program typically do not become evident in student performance until it has been in place for 2-3 years (Johnson, Kahle, & Fargo, 2007). Additionally, fidelity of implementation was highly uneven in catalyst schools across the state (Hammer, 2016d).

Figure 1 shows that while catalyst schools tended to outperform noncatalyst schools in math and English/language arts (ELA) both years on the West Virginia General Summative Assessment (WVGSA), the gain from the 2015 to the 2016 assessment was nearly the same for the two sets of schools. The catalyst schools' apparent stronger performance may be due to their having been selected to be part of the pilot because they were already engaged in some of the practices called for in the Learning School initiative and were, in that sense, high fliers.

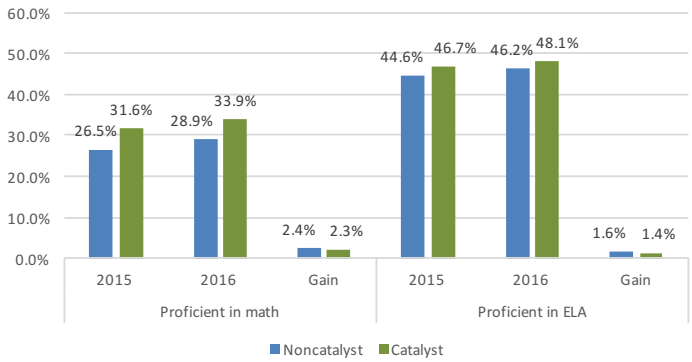

Figure 1. Comparison of Percent Proficient in Math and ELA in Noncatalyst and Catalyst Schools

Data source: West Virginia General Summative Assessment scores for 2015 and 2016

However, catalyst schools exhibited varying levels of implementation of the range of Learning School practices. The Catalyst School Research Study examined several aspects of implementation, including (a) time allotted for professional learning communities (PLCs), (b) the quality of activities included in catalyst school PLC agendas, (c) results of a teacher survey using a valid and reliable instrument, and (d) an assessment of each school's stage of implementation by RESA and West Virginia Department of Education staff. A composite implementation score was assigned to 18 catalyst schools for which at least three of these four measures were available (Hammer, 2016d). Of these, only four were middle schools and one was a high school. Consequently, a second analysis focuses on the largest group of schools, the thirteen elementary schools.

Based on the composite score, each of the 13 elementary schools was assigned a higher implementation score (above the mean composite score for elementary schools) or lower (at or below the mean) implementation score. In this analysis, the percent of students scoring at proficient in math and ELAs on the WVGSA was compared for higher- and lower-implementation catalyst elementary schools and noncatalyst elementary schools.

As can be seen in Figure 2, lower-implementation catalyst schools had proficiency levels in math and ELA that were about equal to or slightly higher than noncatalyst elementary schools. However, the higher-implementation catalyst schools had percentages of math and ELA proficiency that ran 4% to 5% higher than noncatalyst elementary schools. Again, in this analysis, the 2015-2016 gains were comparable for all three sets of elementary school, with the exception of lower-performing catalyst schools, which lagged behind in math.

It is notable that half of the higher-implementation catalyst elementary schools received school-wide Title I funding, indicating high levels of student poverty. These elementary schools' relatively higher proficiency rates suggest that they may be outperforming other schools facing similar challenges and even some with better-off student populations.

The effect of the Learning School initiative on teachers and their students in catalyst and other schools warrants continued monitoring. A more thorough and rigorous analysis is planned for 2018 after teachers and administrators have had more time to incorporate Learning School practices.

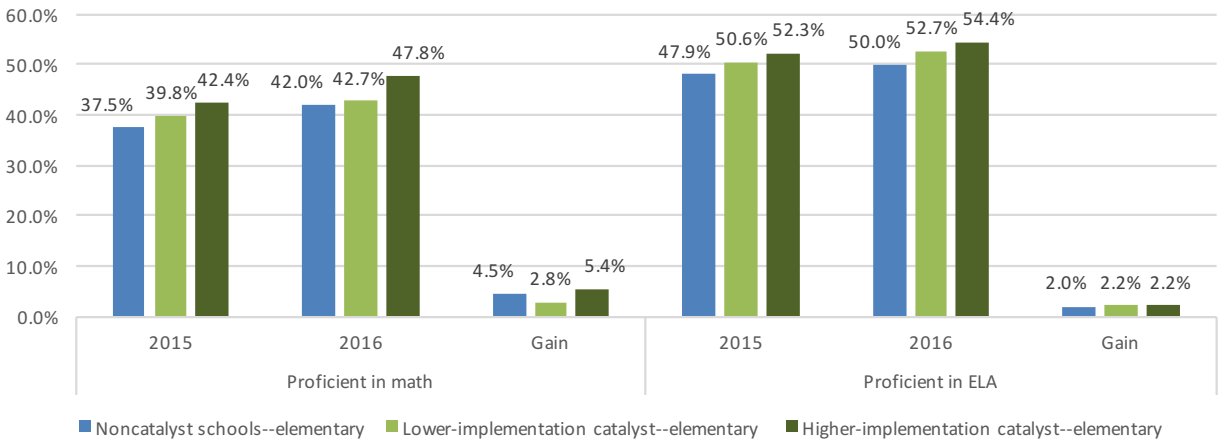

Figure 2. Comparison of Percent Proficient in Math and ELA in Noncatalyst Elementary Schools and Catalyst Elementary Schools Having Lower- and Higher-Level Learning School Implementation Levels

Data source: West Virginia General Summative Assessment scores for 2015 and 2016

Limitations of the Study

The most serious limitation in this preliminary analysis is the small number of schools, especially in the comparison of the 13 lower- and higher-implementation catalyst elementary schools with the remaining 500 or more noncatalyst schools. Also, as mentioned above, the great majority of catalyst schools have experienced only a year of participation, which research suggests is too brief a timeframe to expect to see impacts on student performance.

References

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