

Student Achievement #1

Oregon Mentoring Program (OMP)

Oregon is committed to an educational system that recruits and retains educators of the highest quality in order to provide all children with effective teachers and administrators. One of the supportive programs that the Oregon Department of Education (ODE) funds is grants-in-aid to individual and various consortia of school districts each year to establish and support evidence-based mentoring programs for beginning teachers and beginning administrators in their first two years. A primary goal of the Oregon Mentoring Program is to impact student learning and growth. This is the first in a series of briefs to share information about mentoring beginning teachers and how mentoring contributes to student achievement.

Student Achievement

Understanding what students know and can demonstrate is essential to the education process. States use assessment instruments to measure what students know in different content areas. In 2008-2009 Oregon public schools began using the Oregon Assessment of Knowledge and Skills (OAKS) as a statewide testing instrument in reading and literature and math for grades 3 through 8



and 11 and in science and social studies for grades 5, 8, and 11. This brief refers to OAKS student achievement data as one way to determine if the OMP is making progress toward reaching the goal of impacting student achievement.

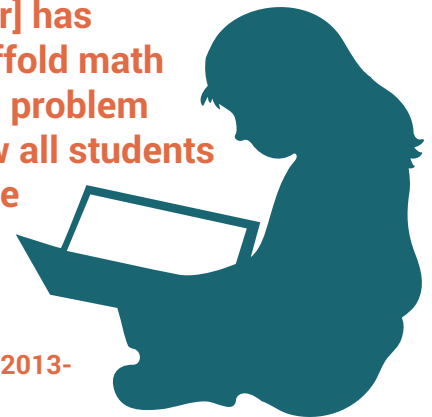


“ She [my mentor] helped me with math strategies, such as structured student math talk. We also sorted out writing groups and worked on getting all students to the next level.”
- Beginning Teacher, 2013-2014

It is important to note the limitations of this methodology. First, assessment scores reflect a single measure of student achievement. This measure may be a more or less accurate or reliable measure of achievement for each individual student. Further, student achievement data does not directly reflect the beginning teachers' skill or techniques in the classroom. State testing occurs after only about 8 months of the students' being in the mentored beginning teachers' classroom. It is inappropriate to conclude that a particular teaching practice directly “causes” a change in a student's score. Therefore, student achievement scores are an indirect measure of the successes of mentored beginning teachers in the classroom.

In order to assess the impact of the Oregon Mentoring Program, an analysis of student achievement scores was conducted for four school districts (**study districts**) that had participated in the mentoring program between 2008-2014. This analysis was conducted on the OAKS data for reading & literature and math. Student achievement scores from students of mentored beginning teachers in each of the four study districts were compared to scores of students of beginning teachers in similar, matched districts (**comparison districts**) that did not participate in the ODE mentoring program during the same years. The comparison districts were chosen using a comparison index¹ developed by ODE that is used in the annual school report cards. This index was used to identify similar districts based on five factors: number of students, percent of students identified as economically disadvantaged, percent identified as “ever English learners”, percent belonging to an underserved racial ethnic group, and percent identified as mobile within a school year.

“ She [my mentor] has helped me scaffold math instruction and problem solving to allow all students to become more proficient in problem solving.”
- Beginning Teacher, 2013-2014



¹ ODE Report Card Resource Archive <http://www.ode.state.or.us/search/page/?=4332>

The student achievement analysis included an examination of the average OAKS (RIT²) scores in reading and math, for students of mentored beginning teachers in grades 3-8 and 11, across six years. In the **comparison districts**, the analysis used scores from students of beginning teachers that were in their first through third years of teaching, when possible.

The analysis also included a **within-district comparison** (same district comparison). Scores of students with mentored beginning teachers were compared to scores of students of all other teachers including veteran teachers, in the same grade level, within the same district. This provided the opportunity to compare the scores of students in the same district environment.

The results showed a benefit for students in some classrooms with mentored beginning teachers. Across the years, the results indicate that the mentoring program is having an influence on reading & literature and math scores in the upper middle school grades, particularly the 7th and 8th grades. This brief will focus on these two grade levels with selected results across the years as shown in the charts below.

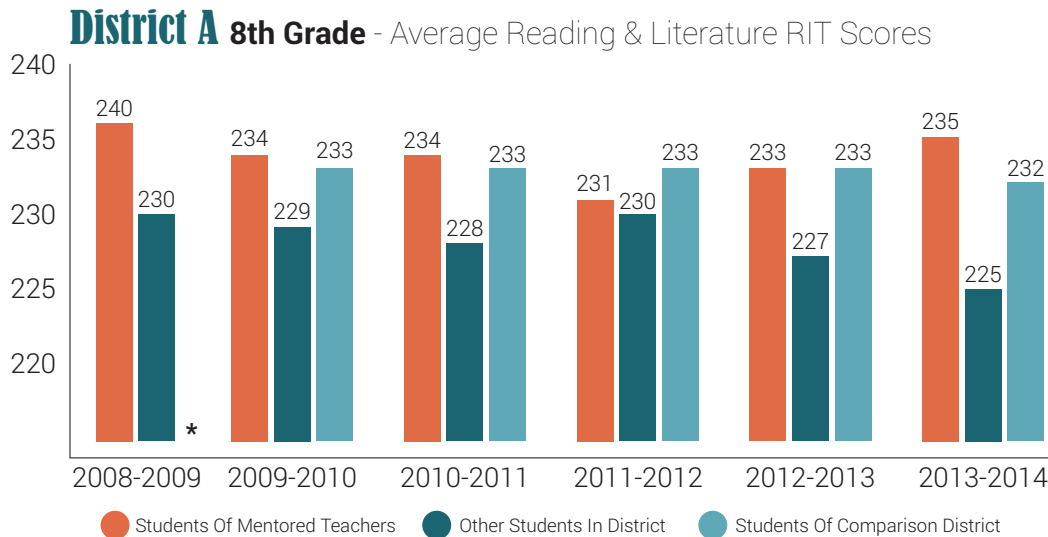


Figure 1 shows the results for District A that serves a population of over 5,000 students with more than 15 schools in the district. As this figure shows, District A 8th grade reading & literature average scores were consistently higher (across the six years) for students in mentored beginning teachers' classrooms compared to students in other classrooms **within the same district** (including veteran teachers). Further, the students of mentored beginning teachers' average scores were similar to or higher than the average scores of students in the **comparison district** in all but one year (2011-12).

Figure 1. District A 8th Grade Average Reading and Literature RIT Scores

*Insufficient number of students in comparison district to calculate average

Research shows that due to lack of experience students in classrooms with first and second year teachers often have lower average achievement scores (Darling-Hammond, 2012; Ingersoll & Strong, 2011). However, in this study in most years the results showed that average RIT scores for students in classrooms with mentored beginning teachers were equal to or above the average scores **within the district** and in the **comparison districts** in the 7th and 8th grades, showing positive influence of the mentoring program.

District B is a large district of over 39,000 students and more than 60 schools. The **comparison district** did not have data available for 2009-10 or 10-11. Figure 2 shows the math results for District B. In this district, the **within district comparison** showed that students with mentored beginning teachers had average math

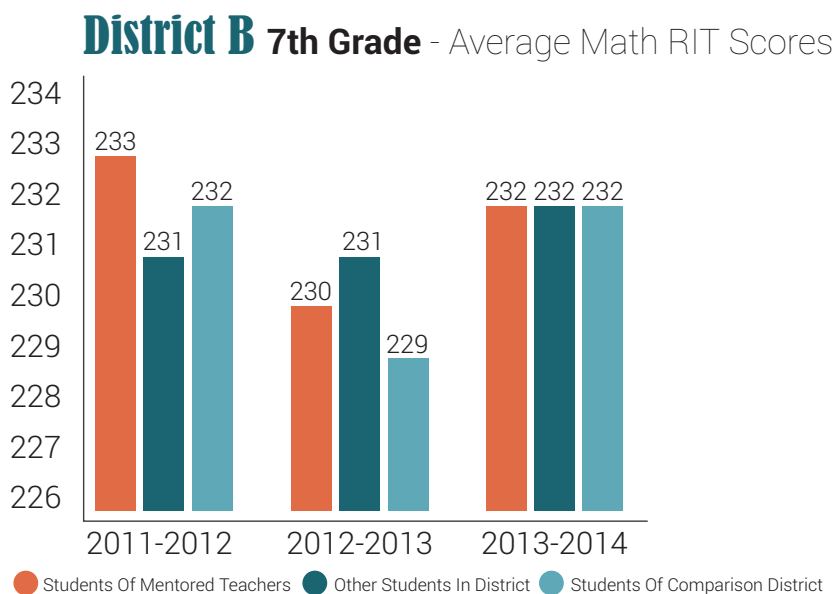


Figure 2. District B 7th Grade Average Math RIT Scores

² The term RIT score is short for Rasch Unit. <http://www.ode.state.or.us/apps/faqs/index.aspx?#88>

scores similar to other students of all other teachers in their own district. In addition, the students of mentored beginning teachers had average math scores that were similar or higher than scores of students in the **comparison district**.

Figure 3 shows the 7th grade reading scores for District C that has over 20,000 students and more than 30 schools. As this figure below shows, students of mentored beginning teachers had average reading scores that were higher than students **within their own district**, each year except 2009-10. When students of mentored beginning teachers were compared to students in the **comparison district**, the results show the average scores were slightly lower in the first three years. However, in 2011-12 and 2012-13 school years, students of mentored beginning teachers had average scores that were equal to students in the **comparison district**, and they had higher scores than the students in the comparison district in 2013-2014.

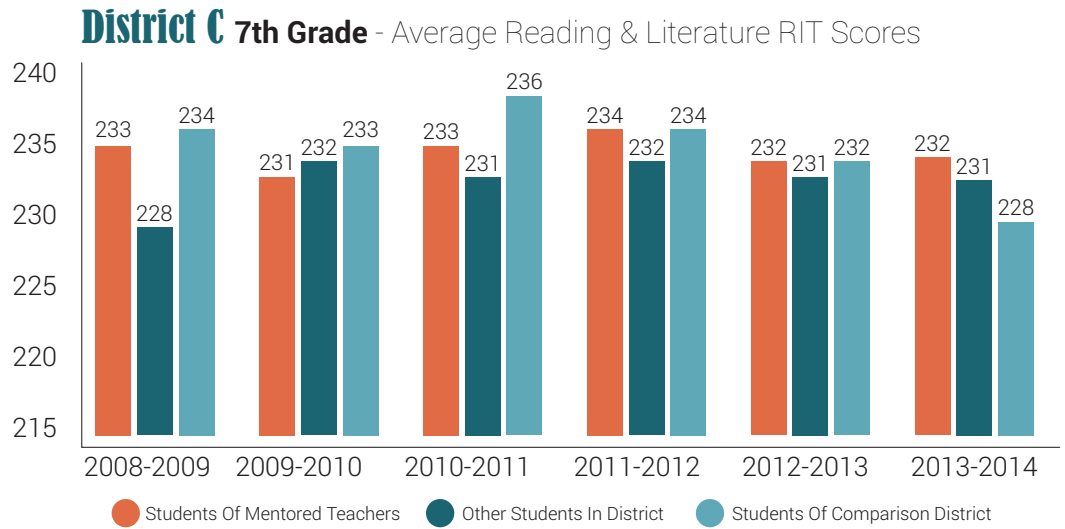


Figure 3. District C 7th Grade Average Reading & Literature RIT Scores

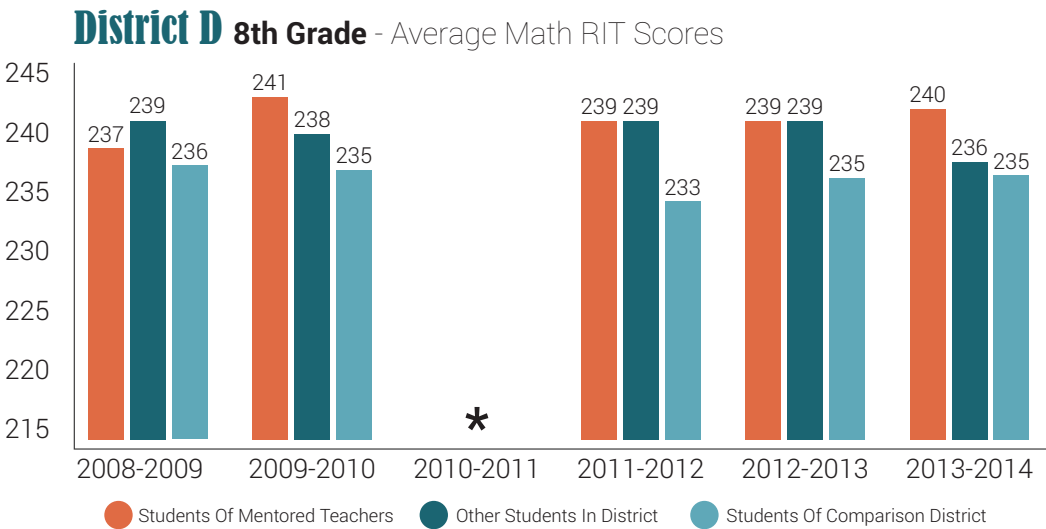


Figure 4. District D 8th Grade Average Math RIT Scores

*District D did not participate in the mentoring program in 2010-2011

District D has over 9,000 students and more than 15 schools. Figure 4 shows the results for District D. The figure shows that across all years, the average math scores of students of mentored beginning teachers were higher than the average scores of the students in the **comparison district**. Further, the **within district comparison** showed the average math scores of students of mentored beginning teachers were equal to or higher than the average scores of other students in their own district for all years except the first year (2008-09).

Conclusions

The results showed that 7th and 8th grade students in mentored beginning teachers' classrooms had average scores that were similar to or higher than other students in their own district and students in the comparison districts. This data indicate that mentored beginning teachers are having a positive influence on reading and math scores in the upper middle school grades. This brief illustrates the impact of Oregon's investment in the Oregon Mentoring Program, and the positive influence it is having on K-12 student achievement.

“ I learned a lot of different kinds of teaching strategies from my mentor which not only broaden my teaching knowledge but also helps improve my students' academic achievement.”

– Beginning Teacher, 2012-2013

“ My mentor helped me plan a reading lesson centered on using the strategy compare and contrast. The exit slip used at the end of the lesson provided data that most of my students did in fact meet my learning objectives for the lesson.”

– Beginning Teacher, 2013-2014

“ I have learned many reading, writing, and content strategies. I have also learned how to utilize stronger content language in my classroom and lessons.”

– Beginning Teacher, 2014-2015

References:

Darling-Hammond, L. (2012). *Creating a Comprehensive System for Evaluating and Supporting Effective Teaching*. Stanford Center for Opportunity Policy in Education. Stanford, CA.

Ingersoll, R., and Strong, M. (2011). The Impact of Induction and Mentoring Programs for Beginning Teachers: A Critical Review of the Research. *Review of Education Research*, 81(2), 201-233.

Oregon Mentoring Program

Brief #1 <http://triwou.org/centers/cepe/mentor>

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ODE is required by law to allocate a portion of funding to evaluate the effectiveness of the mentoring program.