

Effects on Student Learning

This group of researchers, they took 643 studies of professional development interventions related to math in grades K–12, and using the “What Works Clearinghouse” review process, they went through those studies trying to find which ones actually had statistically significant data and what was valid research and research methods. Of those 643 studies, five of them met the “What Works Clearinghouse” measurement. Out of those five, two showed positive effects on student math proficiency. One of those was Lesson Study.

These graphs were done by Catherine Lewis who is a Lesson Study guru, and one of the things that they did was—part of Lesson Study which may be overlooked is thinking about building capacity for content knowledge for teachers. So, what they did was provide teachers with research and information on fractions. Things like possible misconceptions, here’s what students are coming in with, here’s where students typically get confused with fractions, and that’s what the Resource Kit is.

They did a pretest and the Resource Kit group—here’s where their results—and the blue is the control group. After they went through Lesson Study and used the tools given to them—the research—here was the post-test results for teachers’ content knowledge on fractions. You can see that it had a huge impact on teachers’ knowledge of fractions. Here are the results for the students of the Resource Kit group. So, they did this for grades 2 and 3, grades 4, and grades 5, and it’s obvious that the teachers that went through the Lesson Study process, versus the control group where they did not go through the Lesson Study process, had huge impact on students’ learning.