Using Instructional Practice Data to Alter Strategies

Center on Instruction

Large-scale efforts to improve professional development for practicing teachers have emerged in recent years. Administrators face the central question "What decisions will create positive changes in classroom practice?" Good decision making relies on student performance data and teacher instructional practice data. One method that utilizes instructional practice data is Japanese Lesson Study, which has three core components: teacher observations by colleagues, critical analysis, and constructive feedback. These instructional practice data inform the teacher of strengths and weaknesses during lessons that would be addressed and corrected in the next lesson.

Teacher study groups also utilize instructional practice data by incorporating a five-phase process: Debrief, Discuss the Focus Research Concept, Compare Research with Practice, Plan Collaboratively, and Make an Assignment. During each session, participants begin by debriefing the lesson they collaboratively planned in the previous session. Teachers describe the lesson they taught, report on any adjustments they made while teaching the lesson, and discuss how students responded. Next, teachers read and discuss a current focus research concept. Afterwards, they compare how the research aligns with the instructional design of their current reading program. Last, they incorporate the focus research concept into the lesson they collaboratively plan and then teach the lesson.

Coaching cycles present another method for collaborative use of instructional practice data. Literacy and math coaches follow a deliberate cycle to scaffold teachers' ability to implement new ideas effectively. The cycle involves holding a pre-observation conference to discuss the goals of the lesson; observing a lesson that focuses on the aspects that have been jointly agreed upon; and debriefing to analyze the instructional data. The cycle continues with a discussion about changes the teachers will make to future lessons. During this process, coaches encourage teachers to use reflective practices. The more they learn about teaching and learning, the more accurately they can reflect on what they are doing well and what needs improvement (Darling, Hammond, & Bransford, 2005).

The most traditional and widely used method of collecting instructional data to alter strategies is the teacher evaluation. Although classroom observations and feedback are the most common practices, examining lesson plans, self-assessments, portfolio assessments, and review of student work samples can also be used.

Action Principles

For District

- 1. Develop a district-wide plan for collecting, analyzing, and interpreting instructional practice data. Organize district leadership teams responsible for developing protocols or other instruments that can be used as data gathering tools.
- 2. Provide ongoing professional development and support to administrators, coaches, and instructional leaders so they will be able to effectively implement systems that utilize instructional practice data. Situate learning within a triadic model of assisted performance where administrators provide assistance to coaches; coaches to teachers; and teachers to students (Tharp & Gallimore, 1988).
- 3. Allocate resources to support the method (e.g., materials, released time, and stipends).
- 4. Redesign traditional teacher evaluation systems to use instructional practice data including self-assessments, portfolios, and teacher reflection.

For School

1. Determine which method for using instructional practice data will be used and provide ongoing professional development (Hall & Hord, 2001; Gersten, Dimino, Jayanthi, Kim, & Santoro, 2009; Watanabe, 2002; Hasbrouck & Denton, 2005).

- 2. Identify the group or individual teachers who will participate. This is often based on identifying classrooms where student need is the greatest.
- 3. Allocate time to implement the method.
- 4. Provide consistent administrative support (Hall & Hord, 2001). Make adjustments that create blocks of time for teachers to collaborate; find appropriate ways to acknowledge teachers who try to improve their practices, ranging from informal appreciation (such as a "thank you") to more concrete rewards such as stipends or graduate credit.

References and Resources

- National Science Foundation on Research and Evaluation on Education in Science and Engineering. *Japanese lesson study.* (n.d.). National Center for Education Research: Department of Education Institute for Education Sciences. Retrieved from http://www.lessonresearch.net
- Lewis, C. (2000, April). *Lesson study: The core of Japanese professional development*. Paper presented at the Special interest group on Research in Mathematics Education at American Educational Research Association meetings, New Orleans, LA. Retrieved from http://www.lessonresearch.net/aera2000.pdf
- Lewis, C., Perry, R., Hurd, J., & O'Connell, P. (2006, December). Lesson study comes of age in North America [Electronic version]. *Phi Delta Kappan*, 273-281. Retrieved from http://www.lessonresearch.net/LS_06Kappan.pdf
- Lewis, C., Perry, R., & Hurd, J. (2004, February). A deeper look at lesson study [Electronic version]. *Educational Leadership*, 18-22.
- Tanner-Smith, T., & Kosanovich, M. (2008). *Leading for reading: An introductory guide for K-3 reading coaches. Facilitator's guide.* Portsmouth, NH: RMC Research Corporation, Center on Instruction. Retrieved from www.centeroninstruction.org/files/00-FG%20Title%20page.pdf
- Tanner-Smith, T., Jordan, G., Kosanovich, M., & Weinstein, C. (2009). *Principal's reading walk-through: Kindergarten-grade 3. Professional Development Module*. Portsmouth, NH: RMC Research Corporation, Center on Instruction. Retrieved from http://centeroninstruction.org/resources.cfm?sort=title&category=reading&subcategory=materials&grad e_start=0&grade_end=12#203
- Watanabe, T. (2002). Learning from Japanese lesson study. Educational Leadership, 59(6), 36-39.

Coaching

- Bean, R. M. (2004). *The reading specialist: Leadership for the classroom, school, and community*. New York: The Guilford Press.
- Darling-Hammond, L., & Bransford, J. (Eds.). (2005). Preparing teachers for a changing world. San Francisco: Jossey-Bass.
- Hasbrouck, J., & Denton, C. (2005). The reading coach: A how-to manual for success. Longmont, CO: Sopris West.
- Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, and schooling in social context.* New York: Cambridge University Press.

Teacher Study Groups

- Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. S. (2000). Designing professional development that works. *Educational Leadership* 57, 28-33.
- Boggs, H. (1996). Launching school change through teacher study groups: An action research project. Retrieved from http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/14/d1/b1.pdf
- Gersten, R., Dimino, J., Jayanthi, M., Kim, J., & Santoro, L. (2009). An investigation of the impact of the teacher study groups as a means to enhance the quality of reading comprehension and vocabulary instruction for first graders in Reading First schools: Technical report. Los Alamitos, CA: Instructional Research Group. Retrieved from http://www.inresg.org/downloads/TSG Technical Report.pdf
- Hall, G. E., & Hord, S. M. (2001). Implementing change: Patterns, principles, and potholes. Boston, MA: Allyn and Bacon.

Teacher Evaluation

Coggshall, J., Max, J., & Bassett, K. (2008, June). Using performance-based assessments to identify and support highly qualified teachers. Retrieved from http://www.tqsource.org/publications/keyIssue-June2008.pdf

- Goe, L., Bell, C., & Little, O. (2008). Approaches to evaluating teacher effectiveness: A research synthesis. Washington DC: National Comprehensive Center for Teacher Quality. Retrieved from http://www.tqsource.org/publications/teacherEffectiveness.php
- Mathers, C., Oliva, M., & Laine, S. W. M. (2008, February). *Improving instruction through effective teacher evaluation: Options for states and districts.* Washington DC: National Comprehensive Center for Teacher Quality. Retrieved from http://www.tqsource.org/publications/February2008Brief.pdf
- National Comprehensive Center for Teacher Quality. (2009, March). *Methods of evaluating teacher effectiveness*. Washington DC: National Comprehensive Center for Teacher Quality. Retrieved from http://tqcenter.learningpt.org/publications/RestoPractice_EvaluatingTeacherEffectiveness.pdf
- National Comprehensive Center for Teacher Quality. (2009, April). *Evaluating teacher effectiveness: A workshop connecting research to policy and practice*. Washington DC: National Comprehensive Center for Teacher Quality. Retrieved from http://www.tqsource.org/webcasts/teacherEffectivenessWorkshp/index.php