Classroom interaction between students and teachers is at the heart of the teaching/learning process. However, in Latin America and the Caribbean, very few countries have good information on how classroom dynamics work in practice or how those dynamics impact learning. How teachers manage their classrooms—from time spent on instruction, to use of materials, to the teaching strategies they employ and how well they capture student attention—affects students’ opportunities to learn and determines education results. Understanding classroom dynamics has important implications for policy.

From 2009-2012, the World Bank’s education team worked with partner governments in seven Latin American and Caribbean countries to observe and document the classroom practice of over 15,000 randomly-selected teachers in representative samples of schools. The findings, presented in *Great Teachers: How to Raise Student Learning in Latin America and the Caribbean* by Barbara Bruns and Javier Luque, suggest that low levels of student learning in the region are at least partially due to the low percentage of class time dedicated to instruction and low levels of student engagement. Teachers tend to rely on traditional learning methods (like the blackboard), spend 20-35% of time with students engaged in seatwork rather than active instruction, and make little use of existing ICT resources. However, classroom dynamics vary tremendously across and within schools, suggesting that school administrators and system managers have ample room to promote better instruction by regularly observing teachers’ performance, providing individual and system-level feedback, sharing best practices, and helping schools and teachers use information to improve their performance. A more detailed summary of the study and its policy implications follows.

PREAL Policy Briefs provide nontechnical overviews of key education policy topics. In this issue, Inter-American Dialogue Senior Education Associate Tamara Ortega Goodspeed summarizes the findings from the World Bank’s 2009-2012 classroom dynamics study, presented in the book *Great Teachers: How to Raise Student Learning in Latin America and the Caribbean* by Barbara Bruns and Javier Luque.

Based on systematic observations of over 15,000 classrooms in seven Latin American and Caribbean countries, the study reviewed how teachers used class time, materials and core pedagogical practices to engage students, how those practices influenced learning, and implications for policy. *Great Teachers* is available in English here. An overview is also available in Spanish and Portuguese. The full book in Spanish and Portuguese will be available in August.

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What the Classroom Dynamics Study Did

From 2009-2012, trained teams of observers in partner countries collected globally comparable data on teachers’ practice in over 15,000 different classrooms in more than 3,000 schools in Brazil, Colombia, Honduras, Jamaica, Peru, the Dominican Republic and Mexico’s Distrito Federal. Teams focused on grades and subjects covered by student achievement tests to see how classroom dynamics affected learning. Schools and classrooms were selected randomly from representative samples in the participating school systems.

Observers used an adapted version of the Stallings classroom snapshot—an established tool for recording classroom dynamics that requires relatively little training to use and has high reliability across raters. The Stallings method measures four areas of teacher performance: 1) use of instructional time; 2) use of materials (including ICT); 3) pedagogical practices; and 4) ability to engage students. It focuses on techniques rather than content and does not capture the quality of teacher interactions.

Through ten different, 15-second observations over the course of a single class, researchers recorded:

- Whether the teacher was engaged in instruction, class management or other actions, including if the teacher was absent, engaged with others, or uninvolved;
- If engaged in instruction, which pedagogical practice was being used—reading aloud, exposition/demonstration, discussion, practice/drills, cooperative projects, seatwork, or copying.
- Which instructional materials were being used (none, textbook, notebook, blackboard, learning aids, ICT)
- How many students were visibly engaged in the activity being led by the teacher and/or how many were visibly not engaged (looking out the window, doodling, chatting, or otherwise “off-task”)

Researchers then aggregated the observations to report the percent of total class time spent on different activities, complemented by information on class demographics, infrastructure, materials, and start/end times. They also interviewed school directors for information on the student body, teachers, school priorities, and perspectives on policy and reforms.

What Did the Study Find?

LOW USE OF INSTRUCTIONAL TIME

Research by Jane Stalling and Stephanie Knight—who developed the Stallings observation method—found that well-prepared teachers in the United States spend an average of 85% of class time on instruction, with 50% of class time going to active instruction and no more than 35% to seatwork or copying. They spend only 15% of their time on classroom management, and students are off-task less than 6% of the time.

Taking those results as a point of reference, no country in the LAC study comes close to the Stallings benchmarks (Figure 1). At most, teachers averaged 65% of class time on instruction, 20% less than the Stallings goal: this translates into roughly one day per week of “lost” instruction.

Teaching methods are also very traditional. On average, LAC teachers used active instruction only 36% of class time with passive instruction like copying from the blackboard and seatwork occupying 25% of class time. A quarter to over a third of teachers’ time went to classroom management, suggesting that improvements in this area can increase time available for instruction.

“Higher time off-task by students and teachers is consistently correlated with lower student achievement.”
Every country in the study had at least 9% of classroom time lost to off-task activities (the Stallings benchmark assumes none). Over a 200-day school year, this is equivalent to approximately 20 full days of class, or one full day every two weeks. Half of the lost time is due to absences, late arrival/early departure or “conducting other business during class time” (p.108). Higher time off-task by students and teachers is consistently correlated with lower student achievement.

TEACHERS RELY HEAVILY ON THE BLACKBOARD AND MAKE LITTLE USE OF ICT

Most students in observed classrooms had workbooks, writing materials, and texts, and a growing share of classrooms had visible ICT. However, around one third of the time, teaching activities involved blackboard use and nothing else. Between 12-24% of the time, teachers used no materials at all, making it harder to organize content and maintain student interest.

Overall, teachers used ICT for only 2% of class time, and only 1% of the time in Honduras and Peru, which have invested heavily in laptops for every child. However, improvements in teacher use of technology in the classroom in Pernambuco and Rio de Janeiro, Brazil, suggest that training teachers to use the new technologies can help.

STUDENTS ARE UNENGAGED

We know that “teachers who successfully involve the majority of the class in the task at hand have better control of the class, less problems with discipline, more time to impact student learning and afford a larger share of students the opportunity to learn” (p. 114). However, across the classrooms observed, most teachers were unable to keep the entire class engaged in learning for more that 25% of the class period (Figure 2). Most commonly, this reflected whole class activities designed for the average student that left smart children bored and slower learners lost, rather than a deliberate choice by teachers to use small groups to support learning. Observers also noted that many teachers needed support in addressing the special challenges presented by classes with students of different ages and learning levels.

AVERAGE CLASSROOM PRACTICE VARIATES TREMENDOUSLY ACROSS SCHOOLS

Every country studied had large variations across schools, with some schools averaging instructional time of more than 85% while others averaged only 20% (or less than one school day per week on instruction).

Comparisons in almost all countries show large statistically significant differences in instructional time between schools in the top and bottom 10% of student achievement. For example, in top-performing schools in Honduras, 68% of class time was spent on instruction vs. 46% in low-performing schools. In Mexico’s D.F., the gap was narrower, but still nearly 10 percentage points different. In Rio de Janeiro, top-performing schools averaged 15% more class time on instruction, around 10% less time on class management, and about 5% less time off-task than in the lowest performing schools. Over a 200-day school year, this amounts to a difference of around 32 days of instruction.
Practice also differed by regions within a country. In Honduras, teachers in Copan averaged 83% of class time on instruction, while in Colon the average was 33%. Rural schools where a single teacher covers multiple grades presented a particular challenge in Honduras and Peru, averaging less time on instruction than regular schools. In Colombia, however, where the Escuela Nueva model has provided rural multi-grade teachers with special support for years, multi-grade schools averaged more instruction time than regular schools.

**AVERAGE CLASSROOM PRACTICE VARIES TREMENDOUSLY WITHIN SCHOOLS**

Variations in classroom practice among teachers in the same school were almost as big as variations across schools, and, within a single school, researchers found teachers with nearly 90% of their class time devoted to instruction and others with none.

Three findings are of particular note. First, even in schools where average “time-on-task” is very low, there are individual teachers who manage to dedicate a high percentage of their class time to learning. Second, good schools showed less variance in terms of the share of class time individual teachers used for instruction, providing more consistent performance within the same school. Finally, such large differences in how teachers are managing class time, using materials and keeping students engaged should be obvious to administrators, even without applying a standardized instrument, and have serious ramifications for students in terms of learning opportunities.

**Policy Implications**

The World Bank study suggests several opportunities for improving classroom dynamics, many of which governments in participating countries are already acting on.

- **Make periodic classroom observations a regular part of the system.** Jamaica has trained all its supervisors in the Stallings method and Peru scaled up Stallings observations to a national sample of schools in 2012. The city of Rio de Janeiro incorporated training in classroom management and an observation of classroom practice as part of new teacher selection. Peru’s Ley de Reforma Magisterial 2012 makes regular performance evaluations, including classroom observation, mandatory for all teachers.

- **Give comparative classroom observation data back to schools as an input to their development planning.** Mexico D.F., for example, has created a computerized version of the Stallings instrument to give real time data on classroom dynamics that allow comparisons with prior performance, other classes in the same school and other schools in district. Observations also suggest that helping teachers manage heterogeneous classrooms, teaching them techniques for increasing student engagement, and mitigating structural barriers (like having elementary students change classes or having teachers commute between multiple schools) have the potential to improve the use of class time.
• Explore new forms of teacher training based on videotaped examples of good and weak teacher practice. Several countries are returning to videotape high Stallings-rated classrooms in order to let teachers see what good practice looks like. Videotaping can also help less prepared teachers view and analyze their own performance.

• Foster more exchange of practice within schools by providing teachers time to observe and critique each other, collaborate on curriculum and evaluation of student work, and analyze test results. Such strategies can often be more cost effective than traditional teacher training (because they happen onsite and without hiring outside trainers), and have the added advantage of providing peer recognition, informal feedback and rapid diffusion of best practices. The city of Rio de Janeiro’s ginásios cariocas.

• Help school directors become stewards for effective instruction. Wide variations in teacher performance and interviews with school directors suggest that improving classroom instruction is not a priority, and principal training in the region seldom covers promoting effective classroom practice. This is beginning to change, however.

Brazilian school systems in Rio de Janeiro and Minas Gerais are training school directors to help teachers improve their performance as a key leadership skill, and Chile’s “Framework for Good School Leadership” sets criteria for principal training that includes instructional leadership. Recent surveys in Chile suggest that more principals now consider themselves responsible for improving instruction as well as management.

In short, broader use of classroom observations to monitor and improve classroom dynamics gives countries new opportunities to strengthen instruction and increase student learning.

ENDNOTES

1 Bruns, Barbara, and Javier Luque. 2014. Great Teachers: How to Raise Teacher Quality and Student Learning in Latin America and the Caribbean (Advance Edition). Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0 IGO.

2 The Dominican Republic conducted a small-scale pilot only.
