Profiles of Educational Quality in First Grade

Megan W. Stuhlman and Robert C. Pianta

This study found that children who may be at greatest risk for difficulties in the early grades due to demographic factors or lower levels of academic skills before entering school are the least likely to be enrolled in high-opportunity classrooms and are more likely to be enrolled in classrooms with the lowest quality.

Children's early educational experiences are widely believed to affect their future social and academic development. However, recent observational studies of prekindergarten classrooms have found significant variation in the nature and quality of instructional and social experiences offered to children. Such variation suggests that not all children have equal access to high-quality educational experiences. In the present study, researchers at the Center for Advanced Study of Teaching and Learning sought to add to existing knowledge about early elementary classrooms. They analyzed profiles of classroom observations to characterize the emotional and instructional climate experienced by first graders across the U.S.

Considerable evidence has linked children's social and academic competencies to both the kinds of instruction teachers provide and the emotional support provided by teacher-student interactions. The manner in which teachers present information, give feedback, and manage children's time and behavior—referred to as instructional support—affects classroom quality. The relationships between children and their teachers—referred to as the emotional climate of the classroom—has been linked to children's academic and social development, as well. Teachers' ability to engage with children in a sensitive, responsive manner and to provide a positive classroom emotional climate are crucial.

Previous research has concluded that these instructional and social interactions between teachers and children are far more accurate indicators of learning opportunities for younger children and may ultimately be more accurate indicators of their performance than are standardized tests. Focusing on opportunities to learn in addition to or even instead of test scores could be key to improving early education.

The goal of this study was to provide information to policy makers and school personnel about the different educational opportunities to which first graders have access. The researchers used a sample of 820 first-grade classrooms from over 700 schools in 32 states that were part of the Study of Early Child Care and Youth Development funded by the National Institute for Child Health and Human Development.

The researchers analyzed data describing observed classroom quality. To obtain this information, trained data collectors completed observations using the Classroom Observation System for First Grade. They also collected information about some of the characteristics and beliefs of teachers, the structural features of schools, maternal, child, and family characteristics, and children's preschool skills.

**Results**

Based on the classroom observations, the researchers were able to classify classroom climate into four categories.

**Type 1. Positive Emotional Climate, Lower Academic Demand: 31%**

These classrooms attained scores above the mean on many positive indicators of quality, including sensitive/positive classroom climate, classroom management, and literacy.

<table>
<thead>
<tr>
<th>Observed Classroom Types</th>
<th>(Out of 820 First-Grade Classrooms)</th>
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<tbody>
<tr>
<td>23%</td>
<td>Overall High Quality</td>
</tr>
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instruction. Negative emotional climate and overcontrol were also below average. However, teachers in these classrooms fell below the average in terms of providing evaluative feedback that helped students engage in learning by giving them feedback that focused on mastery, developing understanding, or trying new strategies. Thirty-one percent of classrooms fit this category.

Type 2. Overall High Quality: 23%
In this type of classroom the positive indicators, including evaluative feedback and emotional factors, were scored above average, and the two negative indicators were below average. Teachers in these classrooms were rated as frequently demonstrating desired qualities. They showed sensitivity, implemented effective behavior management, and provided effective feedback. They infrequently or never engaged in interactions characterized by overcontrol or negative emotional climate. Twenty-three percent of classrooms were scored as having overall high quality.

Type 3. Mediocre: 28%
In this classroom type, all six indicators fell slightly below the average. These classrooms had slightly less sensitive and positive environments, were slightly less well managed, and had less literacy instruction and a bit less evaluative feedback than the average classroom. However, the classrooms in this sample were also somewhat less negative and overcontrolling than the average as well. Teachers in mediocre classrooms were generally rated as sometimes demonstrating the positive indicators of emotional quality, management, and literacy instruction; rarely demonstrating any indicators of evaluative feedback or overcontrol; and never demonstrating any indicators of an overtly negative emotional climate. Twenty-eight percent of classrooms were scored as having overall high quality.

Type 4. Overall Low Quality: 17%
This group was characterized by below-average ratings on all four positive indicators of emotional and instructional quality and markedly above-average ratings on the two negative indicators. In these classrooms teachers did not evidence the highest levels of negativity or overcontrolling behavior, but there was a tone of annoyance or sarcasm toward children, and children were not allowed to regulate their activities in a way that would allow them to learn through exploration. Notably, these were the most negative, low-quality classrooms in terms of both emotional climate and instructional support. Seventeen percent of classrooms were scored as overall low quality.

Correlations
Children with the lowest standardized test scores in preschool were more likely to be in the low overall quality classrooms than in high overall quality classrooms. Children from working poor families were more likely to be placed in low overall quality classrooms and less likely to be in high overall quality classrooms.

The reverse pattern was found for children whose family income-to-needs ratio placed them in the middle class or above. Twenty-four percent of all poor children in this sample were in low overall quality classrooms, as compared to 14% of all middle-class or above children.

Children whose preschool achievement scores were lowest, who were from poor or working-poor families, and whose ethnicity was non-white were about twice as likely to be in the low overall quality classrooms than they were to be in the high overall quality classrooms.

Minority groups (predominantly African American in this sample) were more likely to be exposed to low overall quality classroom environments in first grade. Twenty-seven percent of nonwhite children were placed in low overall quality classrooms compared to 15% of white children.

Teachers in high emotional quality, low academic demand classrooms had higher levels of education than those in mediocre quality classrooms.

Teachers in low overall quality classrooms reported more problems preparing students for success, more family challenges that were barriers to parent involvement, and more students below grade level in reading than did teachers in any of the other classroom types. Teachers in high overall quality classrooms reported greater parent involvement in their classrooms and were more likely to report that they had adequate resources in the classroom. The fact that some at-risk students are enrolled in low overall quality classrooms, however, suggests that even in high-demand teaching situations it is possible to provide a high quality learning environment.

On average, class size was about the same across the different classroom types. Similarly, the different types of classrooms were equally likely to have teacher's aids. Teachers in all classroom types had similar levels of education, credentials, and years of experience. On average, private school classrooms did not offer an advantage to students: more public schools were categorized as high overall quality than would be expected by chance, and equal proportions of public and private schools were in the lowest rated classroom type.

In this study, students most in danger of being in lower quality classrooms tended to be nonwhite, come from poor families, and have low preschool achievement scores. These students were somewhat, but not overwhelmingly, overrepresented in lower quality classrooms and underrepresented in higher quality ones. However, the larger pattern of results showed that quality, particularly instructional features of teacher behavior, was low for everyone.

These findings speak to the need for instructionally focused, effective professional development for a large number of teachers in order to increase quality and reduce variability in the classroom settings to which young students have access.

1The Classroom Observation System for First Grade is an early precursor of the Classroom Assessment Scoring System™.
2The Woodcock Johnson Tests of Academic Achievement in preschool is a nationally normed instrument that has demonstrated reliability with first graders.


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