Parents' Thinking About Standardized Tests and Performance Assessments

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In Palo Alto recently, a group of high-tech parents organized to oppose the new "fuzzy math" curriculum introduced by the California Mathematics Framework. The group wants to restore the teaching of "math basics" and computational skills instead of what one parent called "no-correct-answer math." In Littleton, Colorado, new school board members elected on a "back-to-basics" antireform platform promised to eliminate performance-based high-school proficiency requirements. Opposition to the newly instituted reform reflected a variety of concerns: too much emphasis on self-esteem, too little attention to skills in whole-language instruction, fear that students would be ill prepared for the SAT, and one board member's worry that school-developed performance assessments lacked sufficient reliability and validity evidence to make high-stakes graduation decisions.

Instances such as these are part of a backlash against standards-based reform and new forms of assessment that have arisen nationally. In most cases before reform efforts have gotten off the ground. On the surface, the controversy seems perplexing. Who could be against the rhetoric of the reform—setting high academic standards for all students, developing challenging assessments to reflect the standards, creating the conditions necessary to ensure student learning? Indeed, each side in this many-sided debate claims to be working to ensure academic excellence.

The effort to set standards raises fundamental questions, however, about what students should know, about the nature of subject matter, how best to support learning, and how to measure what has been learned. Most reformers envision a curriculum that fosters thinking and depth of understanding, where the "big ideas" in a discipline are emphasized and skills are learned and applied in authentic contexts. Nonetheless, some standards efforts have produced exhaustive lists of content that could not possibly be taught within the constraints of a normal school year. Some business leaders see the need to broaden school curricula to develop students' communication skills, their abilities to work in groups, to use technology, and so forth. In contrast, many parents and other citizen groups see teaching practices that diverge from their own school experiences as an abandonment of academic rigor. Their fears are sometimes exacerbated by poorly implemented versions of reform. Some groups see the emphasis on thinking per se to be a threat to authority and to a basic-skills definition of achievement. These themes are familiar, but how the lines of dispute are drawn may vary from one community to the next.

Interest in Parents' Thinking About Assessment

Three years ago, a team of researchers from the University of Colorado at Boulder began working with third-grade teachers in three schools to develop classroom-based performance assessments in reading and mathematics. From the beginning of the project, we were interested—along with district leaders—in parents' views about performance assessments, particularly in contrast to their views regarding more familiar standardized tests. Our concern about parent acceptance and support of new forms of assessment had both classroom- and district-level implications. At the classroom level, we had observed teachers refer to parents' expectations as the justification for classroom-assessment practices. For example, teachers might give timed tests on math facts because "parents expect it" or might use chapter pre- and posttests to be able "to defend" grades to parents. Therefore, teachers' willingness to try new forms of assessment in their classrooms could very likely be influenced by anticipated and real parent reactions. At the district level, curriculum specialists were developing their own performance assessments to be used along with standardized tests. Although there was not the same dissatisfaction that arose the next year in neighboring Littleton, enough questions had been raised about curriculum changes to make district leaders wary that controversy might suddenly erupt if assessment changes were perceived as radical. For example, sympathetic members of the district accountability committee asked that we stop using the term alternate assessment because it connoted lack of standards and rigor. We agreed therefore to refer to the assessments we were developing as performance assessments.

The Study

In the context of our work with teachers we used the terms performance assessments, authentic assessments, and direct assessments interchangeably, the idea being to judge what students can do in terms of the actual tasks and end performances that are the goals of instruction. In reading this meant evaluating fluency during oral reading and...
measuring comprehension by having students talk and write about what they had read. In mathematics, newly adopted district frameworks emphasize problem solving and communicating mathematically, and introducing new topics such as geometry and probability, implied a shift in content as well as in the mode of assessment.

In planning a collateral study to collect data from parents, our purpose was to examine systematically the attitudes and thinking about testing some of what we had been trained to know. Is it the case, for example, that parents disclaim the use of performance assessments as less rigorous or objective? We especially wanted to focus parent attention on the content and form of those two types of measures by showing them examples of questions from each measure. By means of both questionnaire surveys and extended interviews, we wanted to learn specifically how parents evaluate the usefulness of standardized tests compared to less formal types of information such as report cards, talking to the teacher, or seeing samples of their child’s work. Do parents value different types of information when judging the quality of the school instead of learning about their own child’s progress? We also wanted to analyze interview data in sufficient detail to understand the reasons behind parent preferences for standardized tests or performance assessments and to see if their preferences vary depending on whether the purpose of testing is for classroom instruction or district accountability purposes.

Interview and questionnaire data were collected in the fall and spring of the first project year using non-overlapping random samples. A total of 46 interviews were conducted with individual parents or parent dyads following regularly scheduled parent-teacher conferences. Questionnaires were also administered in control schools. Detailed analyses of results are provided in technical papers by Shepard and Blem (1993, 1994). In this article we focus on the most important insights gained from talking to parents that might be applicable to other settings where assessment reforms are contemplated. Fall data are emphasized because this was the time when parents were least familiar with the assessment project; therefore, their reactions were more analogous to what first-time en-
counters with performance assessments might be like in other districts.

What Parents Want to Know About Their Child’s Progress in School

We wanted to ask parents questions about testing and assessment in the context of other sources of information used to follow their child’s progress or to judge the quality of their child’s school. An example of one question set from the questionnaire is shown in Table 1 with data from the fall. Overwhelmingly, parents indicated that they learn the most about their child’s progress by talking with the teacher; 77% rated this source of information as very useful. Results were highly consistent, across project schools and control schools, and between survey and interview responses—except that interview data collected just after parent conferences showed an even more “euphoric” endorsement of the value of talking to their child’s teacher.

Given our prior framing set of issues regarding the need for external and objective measures, we were surprised that parents rated informal sources of information—talking to the teacher and seeing graded samples of their child’s work—as much more useful than standardized tests for learning about “their child’s progress in school” and even for judging the “quality of education provided at their child’s school.” Note that we do not promote these findings as an all-time plebiscite for or against traditional standardized tests. A sample of third-grade parents is not likely to respond in the same way as high-school parents, and we confirmed, based on Gallup Poll questions embedded in the survey, that our sample was less favorably disposed toward standardized tests than the national sample. Nonetheless, the pattern of preferences reported here was true even for the subsample who strongly endorsed standardized tests on the Gallup questions. Therefore, what is most important for us to understand is the reasoning behind parents’ valuing of informal sources of information.

In support of their ratings parents offered comments that emphasized the value of receiving specific information about their child’s strengths and weaknesses.

Talking with my child’s teacher is most helpful because I learn firsthand what progress is being made in class, where the shortcomings are, and how I can best help at home.

This way I can see the actual work, the teacher’s response, and evaluate what I understand the child’s level of learning to be.

When the questions were changed to focus on information used to “evaluate the quality of education provided at your child’s school,” the percentage of parents who considered standardized tests to be useful increased (from 34% to 45% in the corresponding fall questionnaire sample). Approximately one third of the interview sample elaborated that it was the normative or comparative information provided by such tests that made them useful for this second purpose.

That is one of the reasons I like the standardized tests. Because to me if

<table>
<thead>
<tr>
<th>Table 1 Parent Questionnaire Ratings of the Usefulness of Different Types of Information for Learning About Their Child’s Progress in School (n = 105)</th>
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<tbody>
<tr>
<td>Type of information</td>
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<tr>
<td>Report cards</td>
</tr>
<tr>
<td>My child’s teacher talking about his/her progress</td>
</tr>
<tr>
<td>Standardized tests</td>
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<tr>
<td>Seeing graded samples of my child’s work</td>
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you have a national standard test for third graders, it shows you when your kid is against national standards. Which doesn’t necessarily say anything about your kid, but it might point out there is a problem here...

Even for the purpose of evaluating the school, however, teachers are finding talking to each other about their students is not useful than standardized tests. Moreover, in follow-up comments parents gave justifications that showed they understood the accountability purpose of the test. Students performed with more knowledge about the quality of education by giving them first-hand information about the school curriculum, what expectations were being set, and how caring the teacher is with students. In particular, parents said that seeing the actual work that students brought home let them judge whether what they were learning was worthwhile.

I can see what kind of work the teacher is handing out. The teacher is the one that’s in there quarter backing the classroom. You know, if she’s handing out pretty basic stuff to the kids to work on then that’s pretty boring, you know, get-me-through-the-school-day type of activities as far as I’m concerned. But if she’s handing out stuff that will keep their interest and get their initiative going as far as keeping them active in school, and wanting more learning, that pretty much sets the tone for the school year and gives me an indication of what kind of quality teachers there are, and what kind of quality programs are here at this school.

Given the arguments for external accountability testing, two things surprised us about parent responses to this series of questions. First, parents seemed consistently to trust teachers and to have confidence in teachers’ professional judgment.

She’s the trained professional, she knows what to look for if something should come up that we should be aware of... To be able to talk with somebody who can see their developments, where there at all times is very important.

Parents’ reported trust in teachers’ first-hand knowledge and ability to judge their child’s progress was especially striking given teachers’ worries throughout our project that they needed to justify and objectify their evaluations to satisfy parents. Second, many parents expressed a need for what we would call normative data but felt this need was met if teachers could tell them how their child was doing in relation to grade-level expectations. This suggests that parents would value even locally developed benchmarks or performance standards. As an example in our own project, teachers developed a grade-level continuum with benchmark examples to evaluate the text difficulty of chapter books being used in their classrooms. This helped parents see not only whether their child was reading with understanding but also whether he or she could handle grade-level material.

Parents’ Evaluations of Standardized Tests and Performance Assessments

On the questionnaire, parents were provided with displays showing multiple-choice questions in reading and mathematics like those on the standardized test used by the district and a sample of more open-ended questions used in performance assessments. Parents were asked to rate their approval or disapproval of each type of measure but were not forced to choose one type of measure over the other. Although the majority of parents approved of both types of measures, performance assessments had higher approval ratings than did standardized tests. For example, in mathematics 18% strongly approved of standardized tests, whereas 38% strongly approved of the use of performance assessments.

Although the quantitative questionnaire data give a systematic summary of parent reactions from both participating and control schools, interview data provided a much richer and elaborated account of parent responses to the two types of measures. Interviews were conducted with sample assessments and test questions on the table as prompts. Figures 1 and 2 show some of the examples provided in mathematics for multiple-choice and performance-assessment questions, respectively. In reviewing, the standardized test examples included vocabulary items, a reading passage, and comprehension questions. The performance assessment in reading included a 15-page booklet with a complete story and attlevative line drawings; open-ended questions with multiple formats were used where students completed a chart, drew a picture, and write about what happened in the story. Parents were asked to indicate whether they approved or disapproved of each type of measure and then to say what they thought they were “the advantages and disadvantages of using tests (or performance assessments) with questions like these.” After parents discussed both types of measures in both reading and mathematics, they were then asked one final pair of questions about which they would prefer to see used in classrooms for instructional purposes.

Apart from insights gained from the data, conducting these interviews was a valuable learning experience for the team of 10 faculty and graduate students. Whereas beforehand we had been mindful of not taking too much of parents’ time, it was our impression that almost all parents were intrigued by the opportunity to have a close look at both standardized test questions and performance assessments for third graders. Despite being presented with these examples near the end of the interview, most parents took time to look through the materials carefully. They “got into it.” They worked through the problems, asked questions about how they were administered typically, and occasionally asked how to do a particular problem (such as the “dot” problem).

The sample interview segment in Figure 3 gives the flavor of how parents talked as they looked through the examples and gave their reactions, often pointing to specific items. We created a notational system to make it clear which structured question had just been asked and how each measure was rated. For example, the transcript segment in Figure 3 begins in response to the question about approval or disapproval of performance assessments in reading.

The respondent previously indicated approval of standardized tests in reading (§Reading+) and strongly approved of performance assessments in reading (DAReading+). The parenthetical notations (ST and DA) are used whenever parents referred to one of the examples in front of them.

Qualitative analysis was used to derive categories representing different positions. Entire transcript segments from this portion of the interview were

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### Computation

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<th>Add.</th>
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<th>7946 + 7746</th>
<th>7906 + ?</th>
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<td>69 - 19</td>
<td>81 - 52</td>
<td>None of these</td>
</tr>
<tr>
<td>Multiply.</td>
<td>3. 6 × 9</td>
<td>63</td>
<td>54</td>
<td>69</td>
</tr>
<tr>
<td>Divide.</td>
<td>4. 8 ÷ 8</td>
<td>2</td>
<td>24</td>
<td>20</td>
</tr>
</tbody>
</table>

### Concepts and Applications

1. What is 763 rounded to the nearest hundred?
   - 700
   - 750
   - 800
   - None of these

2. How much change will you get if you have 84.55 and spend $42.37?
   - $22.23
   - $8.23
   - $11.87
   - None of these

3. What is the perimeter of this shape?
   - 2 ft
   - 4 ft
   - 6 ft
   - 8 ft

### Figure 1: Examples of questions on third-grade standardized achievement tests in mathematics.

read and sorted into categories resulting in the final categorization scheme shown in Table 2. The counts in Table 2 are for the fall interviews. Only 3 of the 33 fall parents or parent dyads preferred the use of standardized tests for both district and instructional purposes. Respondents in this category saw standardized tests as more cut and dried, more aligned to instruction, easier, and providing more support (because having the answers there made it clear what was expected). Figure 4 provides an excerpt representative of responses in this category.

By far the majority of respondents preferred performance assessments. Twelve interview segments were placed in the category “Prefers performance assessments (likes both)” and another 11 responses were in the “Strongly prefers performance assessments” category illustrated by the interview segment in Figure 5. Although the “Prefers PA (likes both)” category was heterogeneous, the dominant response was to approve of both kinds of measures being used for district purposes but to prefer that performance assessments be used for classroom instruction. Across responses in all categories the most frequently mentioned feature of performance assessments is that they make children think. I like the idea that they read the story, and they really have to get into it, and have to answer some questions and think about it a little harder than the standardized one. I think it would make them comprehend it a little more.

Strongly approve. I mean they make the child think. They have to think about what they read. They have to think about what they're going to write. It helps with their work on their writing skills even. This (IST) is just coloring in a box, you know. F: Again I think it gives them a broader understanding of what they're doing, rather than just A + it = C. It's like, well how did you get it? Use logic rather than just being told this is the answer. Use your logic, use your mind, picture... M: It's not just memorization. F: Yeah, exactly, there you go. Be able to work it out instead of just memorizing.

I think in order to learn any kind of subject you have to have concepts down, and I think number 2 (PA) is going to show how to develop the concept better. You need to know those basics... But I do think this (PA) is going to make them think more.

Even respondents who preferred standardized tests often noted that performance assessments would stimulate children's imagination - beyond their overall evaluations of the two types of measures. Parents demonstrated remarkable sophistication in their analysis of the strengths and weaknesses of standardized tests and performance assessments, in many cases anticipating issues of concern to measurement experts. We developed a "key features" coding system to represent issues as they arose in the data. The codes are shown in Table 3 along with response frequencies for the fall interviews. Parents tended to agree on these characterizations regardless of which type of measure they preferred. For example, parents at both ends of the preference continuum noted that standardized tests have clear-cut right or wrong answers (the "Yes/No code") and are easier to observe. They also seemed easier to a number of parents than performance assessments. Less frequently, parents commented that standardized tests are important because they give you normative information. Only parents who preferred standardized tests commented that they measure what you (the students) need to know in real life, especially math skills. In contrast, a number of parents noted that standardized tests limit students to the right answer by guessing, but this characterization was made by parents who preferred performance assessments. As stated previously, making kids "think" was the most frequently cited feature of performance assessments. In addition nearly half of parents also explained that performance assessments could be "diagnostically" by teachers because the way children an-

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EDUCATIONAL RESEARCHER
The other test (PA math) kind of makes them tell you the concept, not just the right answer. I like the "explain your choice," or "what would you tell Adam type" questions... This would give the teacher more information on the concepts that they haven't quite grasped yet.

Parents commented that performance assessments allow students to use their "imagination" and be creative. Performance assessments appear to be harder, prompting several parents to ask if this was really third-grade work, and they were perceived by a number of parents to be potentially "unfair" particularly to the low kids in the class or for kids who have trouble writing. Although reading level and writing demand were mentioned as problems to be resolved, for the most part they did not appear to affect parents' enthusiasm for using performance assessments in instruction. For some parents in the Prefers PA (likes both) category, however, these features were cited specifically as the reason that both types of tests should be used at least for district purposes. "Different children learn in different ways." Some children, especially those who "are not good with words," would be helped by having the answers there so they could see that they understood. Nine of 33 parents or parent dyads commented on the issue of instructional "alignment" (four terms, not their) for performance assessments. They insisted that it would not be fair to test children with these kinds of assessments unless teachers also taught using the same kinds of problems.

I'm assuming that if they were going to be testing this way they would be doing, of course more papers this way in the first place to get them ready for it.

Parents recognized that performance assessments are more "subjective" and therefore more difficult to score, but some said that this was how good teachers should spend their time. Less frequently that in greater numbers than for standardized tests) parents said things like "performance assessments would really tell what students know" and "this kind of problem is what kids need to know in 'real life.'

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FIGURE 2: Examples of third-grade performance assessment questions in mathematics.

FIGURE 3. Sample interview segment illustrating the “Prefers performance assessment (PA) reading (+) vs standardized tests” category.

Note: Ratings in parentheses indicate approval ratings of standardized tests (ST) and performance assessments (PA) on a scale of strongly favor (+) to strongly disfavor (−). Ratings help keep the question being responded to in these shortened excerpts, and PA and ST abbreviations are used when respondents point to a test or assessment in the given example. The ratings range from 1 to 4, with higher numbers indicating greater favor for the PA over the ST.

Parents’ Conceptions of Subject Matter
For some parents, attitudes toward performance assessments and standardized tests appeared to be related to beliefs about subject matter. A distinct subgroup of parents preferred standardized tests for mathematics instruction because “in math there is only one right answer.” We noted in the questionnaire responses that the proportion of parents favoring the use of performance assessments in reading was much larger than in math. In reading, 58% favored performance assessments compared to 21% preferring standardized tests in mathematics.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Parent Interview Categories: Preferences for Standardized Tests or Performance Assessments</th>
<th>(n = 33 Parents or Parent-Dyads)</th>
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<tr>
<td>Preference category</td>
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<td>Strongly prefers standardized tests</td>
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<td>Prefers standardized tests (likers both)</td>
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<td></td>
</tr>
<tr>
<td>Standardized tests/multiperformance assessments reading</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Standardized tests/reading/performance assessments math</td>
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<td></td>
</tr>
<tr>
<td>Both: likes both, wants both in instruction</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Prefers performance assessments (likers both)</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Strongly prefers performance assessments</td>
<td>11</td>
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</table>

Margin was much narrower, with 44% favoring performance assessments versus 31% favoring standardized tests. The same pattern emerged in interview ratings but with collateral parent talk explaining or revealing reasons behind their preferences. As shown in Table 2, a category was created for 4 of 33 parent interviews who favored standardized tests for math and performance assessments for reading. We think this category warrants interpretation not only because the same preference occurred several times but also because the reasoning expressed was highly similar and recurred again in spring cases. For this subgroup of parents, the difference in preference for the two types of measures was associated with differences in their views about the nature of reading and the nature of mathematics or how mathematics is taught in school. Doing well in reading (and writing) allows for individual expression, whereas for mathematics, it is important to know the one correct way.

Instruction (PA reading (+)) In mathematics, I think this type (ST) is probably the best... because math is pretty basic as far as having the right answer, and you have to have the right answer. With this (PA reading) they can use their imagination and they can tell you a story the way they see it rather than, you know, it doesn’t always have to be one way.

Instruction (+) I’d say the performance assessments (in reading) because it still does give him a chance to tell his part. (In math) I would have to say I prefer the standardized because that’s not an option, there’s only one answer, you know.

This same type of response occurred again in spring interviews, but interestingly some of the parents who commented “math is black and white” were willing in the spring to suggest using both types of measures rather than only standardized tests for mathematics. Unfortunately, numbers are too small to claim that this change was reliable, but it is possible that parents were more accepting of open-ended math problems after seeing them used in their child’s classroom during the school year.

Conclusions
The purpose of the study was to examine parent opinions about standard-
(STreading++) Well, I think it's really clear cut what is expected of these kids. It's easy for them to understand, it's easy for them to answer it.

(PAreading-) Well, the disadvantages of it are that there are too many right or wrong answers. I think that is kind of hard for kids that age to comprehend all this. Maybe the advantage of it would be they are more able to use their imagination.

(PAreading++) For one thing, the child might understand how to do something like this but they don't know how to explain it. They have trouble with words.

Just that a test like this might be useful again to get an idea of how they are at comprehending different things but it wouldn't really be fair to grade their learning on this.

(Instruction) Oh. Standardized. Because I feel that is easier to teach and easier for the kids to learn and easier to grade them on it.

FIGURE 4. Sample interview segment illustrating the "Strongly prefers standardized tests" category.

Note. Notations in parentheses indicate approval ratings of standardized tests (ST) and performance assessments (PA) from strong approval (+) to strong disapproval (−). Notations help keep track of the question being responded to in these shortened excerpts; ST and PA abbreviations are also used when respondents point to a test or assessment sample.

(STreading--) M: ...It doesn't really force you to think, I mean, the answers are right there....F: It makes you have one of their choices instead of one of your own choices.

(STreading++) M: ...This one you have also explain. Like right here (ST) you don't really have to think too much about it, and this one (PA) you really have to kind of pull it all together and reason it out....The only problem I see with this is if they were at a lower level of third grade reading, you know, they probably couldn't grasp some of this.

(STmath) (PAmath++) F: If I had the option, something like this (PA) would be a little bit better....M: Yeah. I think this would make them, if they were to teach, obviously they'd have to teach this to take these tests. We'd probably get better quality in teaching. Things would probably stick with them a little bit more...I think you can probably guess more on (ST). One of these (PA) you can't really guess, you know, kind of have to think about it. F: Plus, I think this (PA) makes it a little bit more interesting for the kids. This (ST) is pretty cut and dried.

(Instruction) F: Well, like we said, this one (PA). This one, I think. The kids could relate to this...M: It's more practical. You can apply it; it stresses more of life skills.

FIGURE 5. Sample interview segment illustrating the "Strongly prefers performance assessments" category.

Note. Notations in parentheses indicate approval ratings of standardized tests (ST) and performance assessments (PA) from strong approval (+) to strong disapproval (−). Notations help keep track of the question being responded to in these shortened excerpts; ST and PA abbreviations are also used when respondents point to a test or assessment sample. The abbreviations F and M stand for father and mother, respectively.

ized tests and new performance assessments in greater depth than can be understood from national survey data. The classic Gallup Poll question showing a high percentage of citizens and public school parents in favor of standardized national tests (Elam, Rose, & Gallup, 1992) is often interpreted as a mandate for external, machine-scorable, accountability measures. What was discovered in this study is that parents’ favorable ratings of standardized national tests do not imply a preference for such measures over other less formal sources of information for monitoring their child's academic progress or for judging the quality of education provided at their local school. Approval of standardized tests likewise does not imply disapproval of performance assessments.

In this study, third-grade parents considered report cards, hearing from the teacher, and seeing graded samples of student work to be much more useful in learning about their child’s progress than standardized tests. Though in interview data parents often mentioned the need for comparative information to know how to interpret their own child's progress, they trust the teacher to tell them how their child is doing in relation to grade-level expectations or to other children in the class. These parents of early elementary school children rarely mentioned the need for comparison to external or national norms. Even for accountability purposes, the usefulness ratings for standardized tests increased but did not equate parents' high ratings for talking to the teacher and watching student work. According to parents, seeing graded samples of student work is an important indicator of school quality because it shows them what is being taught and what expectations are set by the classroom teacher.

When parents were provided with specific examples of the types of questions used on standardized tests and on performance assessments, the majority of parents approved of both types of measures, giving stronger approval ratings to performance assessments. Recurring themes in parent interviews were that performance assessment problems "make children think" and that they are likely to give teachers better insights about what children are understanding and where they are struggling. Parents commented frequently about the desirabil-
### Table 3

<table>
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The effects of college on students is a topic of long-standing interest to scholars in the disciplines of psychology and sociology and in higher education as a field of study. Testimony to such interest are the hundreds of studies that have been summarized in such works as Feldman and Newcomb’s *The Impact of College on Students* (1969), Bovens’s *An Investment in Learning* (1977), and Pascarella and Terenzini’s *Reading for Heuristics*.

**References**


