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The Center on Standards, Alignment, Instruction, and Learning (C-SAIL), funded from July 2015 through 2020 by the Institute of Education Sciences, examined how college- and career-readiness (CCR) standards were implemented, if they improved student learning, and what instructional tools measured and supported their implementation.

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Teacher Implementation of College and Career-Ready Standards: Challenges & Resources

Abstract
Because teachers are the primary implementers of college- and career-ready standards, C-SAIL examined the challenges teachers face in using the standards in the classroom, the resources they find to be most helpful, and their attitudes toward the standards. This brief examines these issues using 2016–2017 survey data from Texas, Ohio, and Kentucky.

Keywords
college and career-ready standards, implementation, curriculum, professional development, assessment, students with disabilities, english learners

Disciplines
Education | Educational Assessment, Evaluation, and Research

Comments
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Teacher Implementation of College and Career-Ready Standards: Challenges & Resources

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Roughly seven years have passed since the majority of states adopted college- and career-readiness (CCR) standards. Some states adopted the Common Core State Standards while others adopted their own versions of CCR standards.

Because teachers are the primary implementers of CCR standards, we wanted to understand the challenges they face in using the standards in the classroom, the resources they find to be most helpful, and their attitudes toward the standards. This brief examines these issues using 2016–2017 survey data from Texas, Ohio, and Kentucky.

1. What challenges do teachers face in implementing CCR standards?
2. What resources do teachers find helpful in implementing CCR standards?
3. To what extent do teachers think that the standards are appropriate, rigorous, and flexible?

**Question 1: What challenges do teachers face in implementing college- and career-readiness standards?**

To measure challenges, we provided a list of ten challenges, drawn from previous studies of standards implementation. We asked teachers to rate these items on a scale of 1 to 4, where 1 = not a challenge, 2 = a minor challenge, 3 = a moderate challenge, and 4 = a major challenge. When averaged across teachers, ratings were all between 2 (a minor challenge) and 3 (a moderate challenge), with similar results in all three states.

1 A note about methodology: Survey data are representative of each state. To identify important differences across teachers of different subjects and types of students, we sampled math and English language arts teachers, teachers of students with disabilities, and teachers of English language learners in both elementary and high school. Where differences are reported, they are all statistically significant. Visit c-sail.org to learn more about our sampling methodology and survey analysis.
TOP CHALLENGES ARE RELATED TO STUDENTS AND PARENTS, NOT POLICY

Though class size and planning time receive a lot of attention from policymakers, teachers reported these as minor challenges. They were far more concerned with issues related to individual student differences and parental support than they were with structural issues related to time, resources, and leadership. In all three states, a wide range of student abilities was the top challenge, closely followed by inadequate student preparation in prior grades (see Figure 1).

Figure 1: Top 5 Challenges, All Teachers

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A wide range of student abilities</td>
<td>71%</td>
</tr>
<tr>
<td>Inadequate student preparation in prior grades</td>
<td>62%</td>
</tr>
<tr>
<td>Lack of support from parents</td>
<td>59%</td>
</tr>
<tr>
<td>Insufficient class time to cover all of the content</td>
<td>53%</td>
</tr>
<tr>
<td>Student absenteeism and tardiness</td>
<td>51%</td>
</tr>
</tbody>
</table>

The percentages above are teachers who saw these challenges as either moderate or major.

We then considered whether different types of teachers—specifically, teachers of English language arts (ELA) and mathematics, teachers of students with disabilities (SWD), and teachers of English language learners (ELL)—experienced different challenges. Comparisons between ELA and math teachers revealed no differences, but we found several differences for SWD and ELL teachers compared to ELA and math teachers, and these differences vary by state (see Figure 2).
When looking at challenges by geography and grade, we found a few significant results across all three states, though the top challenges were still ranked in similar order. The differences were largest when comparing student preparation in prior grades by geography as well as when comparing student attendance by grade.

1. **Compared to suburban teachers, urban teachers reported greater challenges in:**
   - Student preparation in prior grades (a difference of +0.28 on the 1–4 scale)
   - A lack of support from parents (+0.21)
   - Attendance (+0.21)
2. Compared to elementary school teachers, high school teachers reported greater challenges in:
   - Student preparation in prior grades (+0.23)
   - Attendance (+0.42)

3. Compared to high school teachers, elementary school teachers reported greater challenges in two areas:
   - Insufficient class time to cover content (+0.15)
   - Planning time (+0.13).

**Question 2: What resources do teachers find MOST helpful in implementing CCR standards?**

To determine which resources teachers find most helpful in implementing CCR standards, we asked teachers if they received specific resources and if they found them useful. We combined these responses in Figure 3. The patterns were similar across states, with teachers naming curriculum, assessments, and digital tools aligned to the standards as the most useful resources. For example, over 70% of teachers in Texas and Kentucky who received standards-aligned curriculum found it to be useful. The percentages exclude teachers who did not receive the resource.

**Figure 3: Percentage of Teachers Who Found Resources Useful**

We asked teachers to report on which resources they wanted more of when implementing the standards. Teachers in all three states listed aligned curriculum and aligned digital tools at the top of their most desired resources, whereas textbooks are at the bottom of the ranking (see Figure 4). Differences between lowest and highest rankings are significant and large (about a 20% difference).
Teachers wanted more curricula and digital tools compared to abstract information about how the standards change instruction, and they reported textbooks as being least useful. This suggests that teachers feel they know what has changed and want guidance on how to make those changes through specific curricula and technologies.

Figure 4: Top Desired Resources, All Teachers

<table>
<thead>
<tr>
<th>Resource</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital tools (e.g. online textbooks, webinars, videos, online communities, apps)</td>
<td>62%</td>
</tr>
<tr>
<td>Curriculum resources aligned to college- and career-readiness standards</td>
<td>60%</td>
</tr>
<tr>
<td>Professional development for CCR</td>
<td>52%</td>
</tr>
<tr>
<td>Information about how CCR change what is expected of teachers' instructional practices</td>
<td>51%</td>
</tr>
<tr>
<td>Formative or diagnostic assessments</td>
<td>51%</td>
</tr>
<tr>
<td>Information about how CCR change what students are expected to learn</td>
<td>50%</td>
</tr>
<tr>
<td>Textbooks aligned to CCR</td>
<td>42%</td>
</tr>
</tbody>
</table>

We also tested the results by geography. Urban teachers across all three states, compared to rural and suburban teachers, on average desired significantly more of the following resources, which they also listed as the most helpful:
1. Curriculum resources aligned to college- and career-readiness standards
2. Digital tools (e.g., online textbooks, webinars, videos, online communities, apps)
3. Formative or diagnostic assessments

**Question 3: To what extent do teachers think that the standards are appropriate, rigorous and flexible?**

To describe the policy environment, we used the policy attributes framework. This framework states that the more specific, authoritative, consistent, powerful, and stable the policy environment is, the stronger and more successful policy implementation will be (Porter, Floden, Freeman, Schmidt, & Schwille, 1988). Here we focus on the attribute of authority. Our authority scale combines 13 questions (a full list of all questions and the attributes can be found at c-sail.org/resources) designed to measure the extent to which teachers believe the standards are appropriate, rigorous and flexible.

We highlight authority because it has previously been shown to predict whether teachers align their instruction to the standards in Texas, one of the states in our study (see Edgerton, Polikoff, & Desimone, 2017).

A recent survey from the RAND Corporation suggests that 9 out of 10 math and ELA teachers believe that the standards are good for instruction. However, we found more mixed results, with no state reaching an authority score of 3.0 (where 1 = disagree strongly, 2 = disagree somewhat, 3 = agree somewhat, and 4 = agree strongly).

- Texas Authority = 2.56
- Ohio Authority = 2.30
- Kentucky Authority = 2.78

These numbers between 2.0 and 3.0 suggest that more work needs to be done to persuade teachers that the standards are appropriate for all students.

**The Takeaway: To bolster teacher support for CCR standards, focus on challenges and resources that matter to them**

Teachers are slightly supportive of CCR standards, but we find the same ambivalence also found in another national survey. If the goal is to have teachers take ownership of the standards and align their instruction to them, we must focus on the challenges and resources that teachers themselves identify as important.

All teachers are more concerned about the students in front of them than structural issues like class size. Specifically, high-quality curriculum and student preparation in prior grades are at the forefront of teachers’ concerns. By developing strategies that focus on these challenges rather than on class size, planning time, or textbooks—three topics that often dominate public conversations—policymakers might succeed in building teacher support for the standards themselves.
REFERENCES
