Standards Implementation in Texas: Local Perspectives on Policy, Challenges, Resources, and Instruction

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Abstract
This report examines select data from a survey administered to districts, principals, and teachers in the state of Texas during the spring of 2016. The results presented focus on responses about the state's standards-based reform policies as described by the policy attributes (Porter, Floden, Freeman, Schmidt, & Schwille, 1988), the theoretical framework that undergirds C-SAIL's research. The framework suggests that five attributes are related to successful policy implementation, and that the stronger each attribute is, the better implementation will be.

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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About the Center on Standards, Alignment, Instruction, and Learning (C-SAIL)

The Center on Standards, Alignment, Instruction, and Learning (C-SAIL) examines how college- and career-ready standards are implemented, if they improve student learning, and what instructional tools measure and support their implementation. C-SAIL is led by Andy Porter, with a team of researchers from the University of Pennsylvania Graduate School of Education, University of Southern California Rossier School of Education, American Institutes for Research, and Vanderbilt Peabody College. The Center is funded through a grant from the Institute of Education Sciences (IES) of the U.S. Department of Education.

C-SAIL research is supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305C150007 to the University of Pennsylvania, Graduate School of Education. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.
The Center on Standards, Alignment, Instruction, and Learning (C-SAIL) examines how college- and career-readiness (CCR) standards are implemented, if they improve student learning, and what instructional tools measure and support their implementation. The Center studies elementary and high school math and English Language Arts (ELA) standards, and has a special focus on understanding implementation and effects of CCR standards for English Language Learners (ELLs) and students with disabilities (SWDs). Established in July 2015 and funded by the Institute of Education Sciences (IES) of the U.S. Department of Education, C-SAIL has partnered with California, Kentucky, Massachusetts, Ohio, and Texas to explore their experiences with CCR standards-based reform.

Data

This analysis examines select data from a survey administered to districts, principals, and teachers in the state of Texas during the spring of 2016. We employed a stratified random sampling technique designed to ensure the sample was representative of districts in Texas. Forty-two Texas districts completed the survey. In every sampled elementary school, we sampled two fifth-grade math teachers, two fourth-grade ELA teachers, one SWD teacher, and one ELL teacher. In high schools, we sampled two ELA teachers and one teacher in each of the following specialties or subjects: SWD, ELL, algebra, algebra 2, and geometry. We chose the three math subjects because they are the most common high school math courses, thus including them maximizes the number of high school target course responses we obtained. Further, we wanted to identify math classes enrolling students who were likely to be required to take the state mathematics assessment. We identified 53 districts. Of those, 42 agreed to participate and completed the survey. This is a 79.2% response rate. In total, 149 principals (or designated staff) out of the 211 eligible principals completed the principal survey in Texas, for a response rate of 70.6%; and 603 out of 1,089 sampled teachers responded, for a response rate of 55.4%.

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1 Our system of releasing waves of districts into the sample, based on stratified probability sampling on critical parameters such as size and poverty, resulted in our ultimate sample being representative of districts in the state of Texas. For technical details on our sampling method, see our Sampling Plan.

2 There were 121 eligible districts released in Texas prior to the identification of 53 districts.
Content of the Report

The results presented here focus on responses about the state’s standards-based reform policies as described by policy attributes (Porter, Floden, Freeman, Schmidt, & Schwille, 1988), the theoretical framework that undergirds C-SAIL’s research. The framework posits that five attributes are related to successful policy implementation:

- **Specificity**: How extensive, detailed, and/or prescriptive a policy is. The explicitness of the goals, guidelines, and resources may help schools implement policies with a greater degree of fidelity. When a policy has specificity, the education system provides clear guidance and support for teachers as they work to align their instruction to content standards.

- **Authority**: How policies gain legitimacy and status through persuasion (e.g., rules or law, historical practice, or charismatic leaders). Policies have authority when state and district leaders, parents, community members, and other stakeholders devote time and resources to the reform initiative, which sends the clear signal that the policy is an institutional priority. Policies are also deemed authoritative when stakeholders participate in the decision-making processes, or when they demonstrate their investment in the reform. When a standard has authority, teachers take it seriously and see it as a meaningful guide for instruction.

- **Consistency**: The extent to which policies are aligned and how policies relate to and support each other. When the policy system is characterized by consistency, key policy instruments such as standards and assessments align with each other.

- **Power**: How policies are reinforced and enacted through systems of rewards and sanctions. Policies that have power include incentives for compliance consistent with policy goals.

- **Stability**: The extent to which policies change or remain constant over time. When policies and reports, including curriculum materials and professional development, are stable over time, it reinforces teachers’ willingness to develop their capacity for teaching to standards.

We present survey findings in three main sections: (1) the policy attributes; (2) challenges to implementing standards as well as the resources respondents use to help them meet the challenges and the resources they report wanting more of in order to continue improving their implementation; and (3) the content of instruction.

These analyses help us answer the following C-SAIL implementation research questions: (1) To what extent is the policy system specific, consistent, authoritative, powerful, and stable, at the state, district, and school levels? (2) What is the nature and quality of support and guidance at the state, district, and school levels (e.g., challenges and resources)? and (3) How are teachers changing the content they cover, and how does this differ for the subjects of ELA and math as well as for teachers of ELLs, teachers of SWDs, and for elementary and high school teachers?
To What Extent Is the Policy System Specific, Consistent, Authoritative, Powerful, and Stable, According to District Officials, Principals, and Teachers?

We measured specificity with a series of questions that asked about the nature of guidance respondents receive on the amount, timing, and sequence of the content in the standards. Consistency reflects responses about the quality of alignment of key elements of the policy system (e.g., standards and assessments). Authority reflects questions about respondents’ buy-in and support for the standards. Power is defined as the number and type of rewards and sanctions respondents indicated were part of their standards policy system. Stability measures respondents’ views of how long aspects of the standards policy system will remain in place.

As Figure 1 shows, responses for district officials, principals, and teachers all fall between 2.35 and 3.35, where 4 is the highest possible response. This reflects a moderate view of the strength of each of the attributes.

**Figure 1. Policy Attributes as Reported by District Officials, Principals, and Teachers**

- **Consistency:** 1=not at all aligned; 2=somewhat aligned; 3=aligned; 4=strongly aligned
- **Authority:** 1=disagree strongly; 2=disagree somewhat; 3=agree somewhat; 4=agree strongly; Respondents indicated their level of agreement with statements that reflected their level of support and buy-in for standards policies.
- **Power:** 1=no rewards and sanctions; 2=some rewards and sanctions; 3=moderate rewards and sanctions; 4=strong rewards and sanctions
- **Stability:** 1=1–2 years; 2=3 years; 3=4 years; 4=5+ years
- **Specificity:** 1=disagree strongly; 2=disagree somewhat; 3=agree somewhat; 4=agree strongly; Respondents indicated their level of agreement with statements asking about the level and type of guidance and supports they received related to their understanding and implementation of standards.

Red circles indicate significance gaps between one group and both other groups. Gray circles indicate significance between only two groups (the highest and the lowest).
There are several statistically significant differences in Texas between respondent groups on how they rated the policy system on the five attributes. Teachers reported significantly less authority compared to principals, meaning that they had lower buy-in around the standards compared to principals. Principals and districts reported significantly higher stability than teachers, meaning that teachers were less likely to see the standards as lasting longer than 4 years. Principals also perceived significantly lower specificity than districts. Finally, teachers reported significantly higher power than both principals and districts, meaning that teachers perceived stronger rewards and sanctions in place in the standards policy system than principals did.

In Figure 2, we compare math, ELA, ELL, and SWD teacher responses about the policy attributes. Scores in the 2.29 to 2.80 range for authority suggest that the policy system could be strengthened in this area. Scores between 2.45 and 2.61 for stability warrant more investigation, to learn why teachers perceive the standards to be likely to change in fewer than 4 years. With authority and stability scores averaging 2.56 and 2.51, respectively, it might be worth considering how to increase teacher buy-in for the standards.

**Figure 2: Policy Attributes as Reported by Math, ELA, ELL, and SWD Teachers in Texas**

**Consistency:** 1=not at all aligned; 2=somewhat aligned; 3=aligned; 4=strongly aligned

**Authority:** 1=disagree strongly; 2=disagree somewhat; 3=agree somewhat; 4=agree strongly; Respondents indicated their level of agreement with statements that reflected their level of support and buy-in for standards policies.

**Power:** 1=no rewards and sanctions; 2=some rewards and sanctions; 3=moderate rewards and sanctions; 4=strong rewards and sanctions

**Stability:** 1=1–2 years; 2=3 years; 3=4 years; 4=5+ years

**Specificity:** 1=disagree strongly; 2=disagree somewhat; 3=agree somewhat; 4=agree strongly; Respondents indicated their level of agreement with statements asking about the level and type of guidance and supports they received related to their understanding and implementation of standards.

Red circle indicates significance gap between one group and all other groups. Gray circle indicates significance gap between only two groups (the highest and the lowest).
The only significant differences between teacher subgroups were on authority and specificity. SWD teachers rated the policy system as less authoritative than all other groups. SWD also rated the policy system as less specific than math teachers. There were no other statistical differences between teacher subgroups.

What Is the Nature and Quality of Support and Guidance at the State, District, and School Levels (Challenges and Resources)?

In this section we show the challenges to standards implementation that our respondents reported. We then provide data on the five most useful resources respondents reported using to help them respond to Texas’s standards. Finally, we indicate which resources respondents reported they would like to have more of in their efforts to respond to Texas’s new college- and career-ready standards.

CHALLENGES TO IMPLEMENTING THE NEW CCR STANDARDS

The survey presented a list of common challenges to implementing standards-based reform, related to students and parents, school organization, and policy. Respondents were asked to indicate whether each was “not a challenge,” “a minor challenge,” “a moderate challenge,” or “a major challenge.” Figures 3 and 4 show the most salient challenges for district officials, principals, and teachers, respectively. Challenges are listed in the order of magnitude that they were reported as challenges by teachers, then principals, and finally district officials.

The factor related to students and parents that districts and teachers most often indicated as a moderate or major challenge is a wide range of student abilities (81% for districts, 71% for teachers). A majority of teachers felt that a lack of support from parents was an issue (55%), but a majority of districts did not (44%). Additionally, 63% of teachers felt student preparation in prior grades was a problem.

The organizational factors most salient were related to the lack of ample time for reform-related activities. Districts and teachers indicated most frequently that insufficient class time was a challenge (42% and 52%, respectively). And teachers and principals both indicated that “lack of teacher planning time built into the school day” was a major or moderate challenge (39% and 57%, respectively).

There are several notable statistically significant differences in responses between district officials, principals, and teachers, which may reflect the salience of particular issues at different levels of the education system. Thirty-six percent (36%) of teachers felt that large class sizes were an issue, whereas only 9% of district officials felt that this was an issue. Further, 57% of principals felt that a lack of teacher planning time built into the school day was an issue, but only 39% of teachers felt this way, a split that continued when citing the lack of guidance in teaching content to SWDs and ELLs—principals were more than twice as likely as teachers to see this challenge as an issue (57% and 49% v. 27% and 23%, respectively).

No other differences between respondent groups were statistically significant.
Figure 3: Challenges to Implementing Standards as Reported by Teachers, Principals, and District Officials

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Teachers</th>
<th></th>
<th>Principals</th>
<th></th>
<th>District Officials</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide range of student abilities</td>
<td>33/38</td>
<td></td>
<td></td>
<td></td>
<td>49/32</td>
<td></td>
</tr>
<tr>
<td>Inadequate student preparation in prior grades</td>
<td>37/26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of support from parents</td>
<td>31/24</td>
<td></td>
<td></td>
<td></td>
<td>35/9</td>
<td></td>
</tr>
<tr>
<td>Insufficient class time</td>
<td>29/23</td>
<td></td>
<td></td>
<td></td>
<td>27/15</td>
<td></td>
</tr>
<tr>
<td>Student absenteeism &amp; tardiness</td>
<td>26/18</td>
<td></td>
<td></td>
<td></td>
<td>40/5</td>
<td></td>
</tr>
<tr>
<td>Lack of teacher planning time built into the school day</td>
<td>19/20</td>
<td></td>
<td>41/16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large class size</td>
<td>22/14</td>
<td></td>
<td></td>
<td></td>
<td>5/4</td>
<td></td>
</tr>
<tr>
<td>Lack of guidance for teaching grade-level standards to students with disabilities</td>
<td>15/12</td>
<td></td>
<td>30/27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of school resources to provide extra help for students</td>
<td>14/13</td>
<td></td>
<td></td>
<td></td>
<td>23/9</td>
<td></td>
</tr>
<tr>
<td>Inadequate instructional resources</td>
<td>15/10</td>
<td></td>
<td>25/9</td>
<td></td>
<td>18/6</td>
<td></td>
</tr>
<tr>
<td>Lack of guidance for teaching grade-level standards for English Language Learners</td>
<td>14/9</td>
<td></td>
<td>28/21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal turnover</td>
<td>10/9</td>
<td></td>
<td></td>
<td></td>
<td>11/7</td>
<td></td>
</tr>
<tr>
<td>Teacher turnover</td>
<td></td>
<td></td>
<td>19/15</td>
<td></td>
<td>17/17</td>
<td></td>
</tr>
</tbody>
</table>

Note: Overall teacher response varied from 581 to 588. A total of 129 SWD and ELL teachers responded. 153 to 154 principals responded and 41 to 42 district officials.
Figure 4: Challenges to Implementing Standards as Reported by Principals and District Officials

<table>
<thead>
<tr>
<th>Challenge</th>
<th>PRINCIPALS</th>
<th>DISTRICT OFFICIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate lead time to prepare before implementing reform</td>
<td>43 / 16</td>
<td></td>
</tr>
<tr>
<td>Lack of high quality professional development opportunities for principals</td>
<td>33 / 14</td>
<td></td>
</tr>
<tr>
<td>Lack of high quality professional development opportunities for teachers</td>
<td>29 / 12</td>
<td></td>
</tr>
<tr>
<td>Frequent changes in district policy and priorities</td>
<td>20 / 7</td>
<td></td>
</tr>
<tr>
<td>Frequent changes in district leadership (e.g. the superintendent)</td>
<td>13 / 10</td>
<td></td>
</tr>
<tr>
<td>Level of difficulty of the current standards</td>
<td></td>
<td>47 / 8</td>
</tr>
<tr>
<td>Low student achievement</td>
<td></td>
<td>47 / 8</td>
</tr>
<tr>
<td>Lack of high quality teaching</td>
<td></td>
<td>34 / 7</td>
</tr>
<tr>
<td>Insufficient understanding by teachers</td>
<td></td>
<td>24 / 6</td>
</tr>
<tr>
<td>Insufficient understanding by principals</td>
<td></td>
<td>18 / 9</td>
</tr>
<tr>
<td>Conflicting state initiatives</td>
<td></td>
<td>13 / 14</td>
</tr>
<tr>
<td>Amount of time used for additional district-administered tests</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Conflicting district initiatives</td>
<td></td>
<td>8 / 4</td>
</tr>
</tbody>
</table>

Note: Overall teacher response varied from 581 to 588. A total of 129 SWD and ELL teachers responded. 153 to 154 principals responded and 41 to 42 district officials.
In Figure 4, the top moderate or major challenge of 59% of principals was inadequate lead time to prepare before implementing a reform. Our district respondents reported several challenges related to the nature of standards and assessment policy. Fifty-five percent (55%) of district respondents felt the “level of difficulty of the current standards” was a moderate or major challenge to implementing them, and 55% of district respondents chose “low student achievement” as a moderate or major barrier. But only 27% indicated that conflicting state initiatives were a challenge, and only 16% indicated that the amount of time used for additional district tests was a challenge to implementing standards, perhaps suggesting a high level of satisfaction with state-level policy around assessments and clarity of communication.

**Useful Resources**

We provided a list of common resources used to guide and support standards implementation, and asked respondents to indicate whether they had access to the support, and whether they found it useful. Here we highlight the top five resources that our respondents indicated were provided to them and that they found useful for implementing standards. As Figure 5 shows, all three sets of respondents reported that curriculum aligned to CCR standards and formative or diagnostic assessments aligned to CCR standards were among the top five most useful resources. Teachers and districts both named aligned textbooks in their top five useful resources. Teachers and districts included professional development (PD) related to CCR standards. Both teachers and districts indicated that digital tools—such as online textbooks, webinars, videos, online communities, and applications—were helpful resources that they used.

**Resources Desired by District Officials, Principals, and Teachers for Implementing the New CCR Standards**

The C-SAIL survey asked respondents to indicate which resources they wanted more of to improve their implementation of standards. Respondents indicated whether they wanted “less,” “the same,” or “more” of each resource. Figure 6 shows that most respondents want more of almost every resource listed on the survey. The exception is that only 18% of districts indicated they would like more textbooks aligned to CCR standards, while 42% of principals and teachers reported wanting more of this resource. This difference was statistically significant. These results suggest that district officials, principals, and teachers alike desire more resources that offer them guidance on implementing the new standards—resources in the form of aligned curriculum, diagnostic assessments, digital tools, and PD for principals and teachers.

While the percentages of respondents who want more of these resources are generally high, it stands out that 85% of district officials say they want more information about how to implement strategies to address instructional needs of students with individualized education programs (IEPs). And 70% indicate they would like more information about how CCR standards change what is expected of teachers’ instructional practice, while 82% also want information about how to better implement curricula or instructional strategies.
Most differences between teachers and principals were statistically significant, whereas we found only one statistically significant difference between districts and teachers, and between districts and principals. Between districts and teachers, the only statistically significant difference was that 53% of teachers desired more professional development compared to 78% of district respondents. District officials differed from principals in that 42% of principals reported wanting more textbooks aligned to CCR, compared to only 18% of district officials. By contrast, every item in Figure 6 that shows a difference between teachers and principals is statistically significant. Compared to teachers, principals reported wanting significantly more digital tools (64% of teachers compared to 79% of principals), curriculum resources aligned to CCR (63% compared to 78%), information about how CCR changes what is expected of teachers’ instructional practice (54% compared to 74%), and what students are expected to learn (53% compared to 69%), as well as formative or diagnostic assessments aligned to CCR (50% compared to 71%).

Note: On the survey we asked math teachers about math textbooks and curriculum, and ELA teachers about ELA-specific resources. On the principal survey we asked about math and ELA separately. In the chart, we combine responses across subjects (e.g., the top five resources named by principals was aligned math textbooks, aligned ELA textbooks, aligned math curriculum, aligned ELA curriculum, and aligned assessments).
Figure 6. Desired Resources as Reported by District Officials, Principals, and Teachers

<table>
<thead>
<tr>
<th>Resource Description</th>
<th>Teachers</th>
<th>PRINCIPALS</th>
<th>DISTRICT OFFICIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital tools (e.g., online textbooks, webinars, videos, online communities, applications)</td>
<td>64%</td>
<td>79%</td>
<td>64%</td>
</tr>
<tr>
<td>Curriculum resources aligned to CCR</td>
<td>63%</td>
<td>78%</td>
<td>59%</td>
</tr>
<tr>
<td>Information about how CCR change what is expected of teachers’ instructional practice</td>
<td>54%</td>
<td>74%</td>
<td>70%</td>
</tr>
<tr>
<td>Information about how CCR change what students are expected to learn</td>
<td>53%</td>
<td>69%</td>
<td>69%</td>
</tr>
<tr>
<td>PD for teachers on CCR</td>
<td>53%</td>
<td></td>
<td>78%</td>
</tr>
<tr>
<td>Formative or diagnostic assessments aligned to CCR</td>
<td>50%</td>
<td>71%</td>
<td>56%</td>
</tr>
<tr>
<td>Textbooks aligned to CCR</td>
<td>42%</td>
<td>42%</td>
<td>18%</td>
</tr>
<tr>
<td>PD for principals on CCR</td>
<td></td>
<td></td>
<td>76%</td>
</tr>
<tr>
<td>Clarification on how instruction is expected to shift in order to align to CCR</td>
<td></td>
<td></td>
<td>84%</td>
</tr>
<tr>
<td>Information about how to identify and implement effective curricula or instructional strategies</td>
<td></td>
<td></td>
<td>82%</td>
</tr>
<tr>
<td>Information about how to implement strategies to address the instructional needs of English language learners</td>
<td></td>
<td></td>
<td>74%</td>
</tr>
<tr>
<td>Information about how to implement strategies to address the instructional needs of students with individualized education programs (IEPs)</td>
<td></td>
<td></td>
<td>85%</td>
</tr>
</tbody>
</table>

Note: Resources are listed in order of magnitude as reported by teachers. Forty-one district officials responded to the survey questions. 571 to 576 teachers responded, and 150 to 153 principals responded.
How Are Teachers Changing the Content They Cover, and How Does This Differ for ELA and Math, as well as for Teachers of English Language Learners (ELLs), Teachers of Students with Disabilities (SWDs), and Elementary and High School Teachers?

Our survey items on self-reported instruction ask a series of questions about the teacher’s amount of coverage of different English and math content, with content defined as the intersection of topic and cognitive demand (e.g., perform measurement conversions where “perform” is the cognitive demand and “measurement conversions” is the topic). As a baseline measure, we asked teachers to report the extent to which they covered particular content in their ELA and math classes.

C-SAIL content experts created the list of content items based on an analysis of each state’s standards, to identify a sample of content areas that the new standards emphasized, and those that were de-emphasized (see Appendix for the exact questions). We will be able to use these data to compare results from our planned 2019 survey administration, to analyze the extent to which teachers have changed the content they emphasize in the classroom.

Figure 7 shows the results of the content of instruction questions across elementary and high school math and ELA. Our analysis of ELA teacher survey responses at the elementary school level indicates that general education, SWD, and ELL teachers all covered significantly more de-emphasized than emphasized content. At the high school level, the opposite was true—all subgroups of teachers reported covering significantly more emphasized than de-emphasized content.

For elementary math, the trends are different. Our analysis indicates that only general education math teachers report covering significantly more emphasized than de-emphasized content; the instructional difference for SWD teachers is not significant, and the sample size for ELL teachers is too small. And there are no significant differences in math at the high school level between emphasized and de-emphasized content between any subgroups.

Between subgroups of ELA teachers at the elementary level, SWD teachers cover significantly less emphasized content than math, ELA, and ELL teachers. For de-emphasized content, none of the differences between groups are statistically significant.

Between subgroups of ELA teachers at the high school level, for emphasized content, the mean for general education teachers is significantly higher than the mean for SWD teachers. For de-emphasized content, the mean for general education teachers is also significantly higher than the mean for SWD teachers. No other differences are significant.

Between subgroups of math teachers at the elementary level, no significant differences existed between any groups in either emphasized or de-emphasized content. Between subgroups of math teachers at the high school level, for emphasized content, the mean for general education teachers is significantly higher than the mean for SWD teachers. For de-emphasized content, the mean for regular education teachers is also significantly higher than the mean for SWD teachers. No other differences are significant.
Across **subjects at the elementary level**, for emphasized content, there are no significant differences between ELA and math between any subgroups. For de-emphasized content, the mean for general education ELA teachers is significantly higher than the mean for general education math teachers. The mean for SWD ELA teachers is also significantly higher than the mean for SWD math teachers.

Across **subjects at the high school level**, for emphasized content, the mean for general education ELA teachers is significantly higher than the mean for general education math teachers. The mean for SWD ELA teachers is also significantly higher than the mean for SWD math teachers. For de-emphasized content, there are no significant differences between any groups.

**Figure 7. Teachers’ Self-Reported Content Coverage**

<table>
<thead>
<tr>
<th></th>
<th>ELA TEACHERS</th>
<th>MATH TEACHERS</th>
<th>SWD TEACHERS</th>
<th>ELL TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EMPHASIS SCALE:</strong> 1-None, 2-Minor, 3-Moderate, 4-Major</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ELA, elementary school</strong></td>
<td>3.38</td>
<td>3.68</td>
<td>3.44</td>
<td>3.89</td>
</tr>
<tr>
<td><strong>ELA, high school</strong></td>
<td>3.59</td>
<td>3.19</td>
<td>3.54</td>
<td>3.12</td>
</tr>
<tr>
<td><strong>Math, elementary school</strong></td>
<td>3.41</td>
<td>3.06</td>
<td>3.57</td>
<td>2.97</td>
</tr>
<tr>
<td><strong>Math, high school</strong></td>
<td>3.34</td>
<td>2.80</td>
<td>3.39</td>
<td>2.53</td>
</tr>
</tbody>
</table>

Note: The survey question did not indicate which items were emphasized or de-emphasized in the standards. Further, to reduce social desirability responses, items on the survey were chosen by C-SAIL content experts to include only appropriate content that appeared in the standards. In ELA at the elementary level, 116 general education teachers, 24 SWD teachers, and 18 ELL teachers responded to the survey. In ELA at the high school level, 92 general education teachers, 16 SWD teachers, and 23 ELL teachers responded. In math at the elementary level, 138 general education teachers, 26 SWD teachers, and 8 ELL teachers responded to the survey. In math at the high school level, 90 general education teachers and 25 SWD teachers responded. No respondents who were exclusively math ELL teachers answered the survey.

**Summary**

**RQ1: To what extent is the policy system specific, consistent, authoritative, powerful, and stable, at the state, district, and school levels?**

There is room for increasing the overall levels of authority, consistency, power, and stability in the Texas policy system. This opportunity for growth should not be interpreted to mean that the
state does not have strength in its policy system, however. States have to decide how to balance the attributes based on constituent needs and local contexts.

Although teachers, principals, and district officials agreed on the level of consistency in the Texas policy system, we found differences across groups in how they viewed other attributes. These differences in how district officials, principals, and teachers view the policy system provide leverage points to discover where attributes are truly different by design (e.g., guidance to teachers may be more specific than guidance to principals), and where communication about policies could be improved (e.g., district rewards for teachers and principals should be known and reported similarly).

**RQ2: What is the nature and quality of support and guidance at the state, district, and school levels (e.g., challenges and resources)?**

The three respondent groups identified key challenges to implementing standards. These data can be used to target support and guidance. For example, “students with a wide range of abilities” was cited frequently as a challenge. Districts might focus principal and teacher PD on strategies for instruction in classrooms with diverse students, and additionally explore alternative classroom organization. Similarly, some of the challenges identify potential leverage points for intervention, such as teacher collaboration across grades and schools to increase student preparation for grade-level work, and parent support and outreach on the standards.

Notable is that all three respondent groups found aligned curricula and assessments as the most useful resources for implementing the standards. Further, while respondents clearly indicated that they found several key resources helpful and were using them, these were the same resources they reported wanting more of in order to improve their implementation. These findings indicate that the resources currently provided are of considerable value to educators, so much so that educators believe they would benefit from even more of these types of supports.

**How are teachers changing the content they cover, and how does this differ for ELA and math, as well as for teachers of English Language Learners (ELLs), for teachers of students with disabilities (SWDs), and for elementary and high school teachers?**

The main themes of our instructional findings are that (1) SWD teachers tend to cover significantly less emphasized content than most other teacher groups; (2) ELL teachers report covering the same level of content as ELA and math teachers; and (3) high school ELA teachers cover more emphasized content, but the inverse is true at the elementary level, where ELA teachers cover more de-emphasized content. The first theme suggests an area of potential growth around SWD instruction, while the second is encouraging about the strength of instruction that ELL students already receive.

Comparing across subjects, it is clear that at the elementary level ELA teachers report covering significantly more de-emphasized content than math teachers, while at the high school level ELA teachers cover significantly more emphasized content than math teachers. Thus the third theme suggests that while there are growth opportunities for lower grade teachers to incorporate more CCR-emphasized instructional practices, there are important subject differences. Some
significant differences average .5 points on a 1 to 4 scale, and other differences reflect a range from “minor” coverage to approaching “major” coverage, both of which suggest the differences are educationally meaningful.

**NEXT STEPS**

This report of selected items from the C-SAIL survey offers insights into how respondents view their policy environment, the challenges they face, and the resources that help them address these challenges. They also set a baseline for investigating progress toward using the standards in the classroom. Later survey analyses will analyze how the policy attributes, resources, challenges, and instruction relate to student learning.
Appendix

The following appendix details the survey questions applying to each scale in this report.

CONSISTENCY

District Survey Question 26

(1—not at all aligned, 2—somewhat aligned, 3—aligned, 4—strongly aligned)

Please indicate your opinion on the degree to which the following are aligned to the CCR standards:

a. The state test
b. District-mandated summative assessments
c. Formative or diagnostic assessments selected or created by schools
d. Formative or diagnostic assessments used district-wide
e. Mathematics textbooks used in your school or district
f. ELA textbooks used in your school or district
g. Mathematics curriculum selected or developed by your district
h. ELA curriculum selected or developed by your district

Principal Survey Questions 20 and 21

(1—not at all aligned, 2—somewhat aligned, 3—aligned, 4—strongly aligned)

Question 20

Please indicate your opinion on the degree to which the following are aligned to CCR standards for ELA:

a. The ELA section of the state test
b. District-mandated summative assessments
c. Formative or diagnostic assessments selected or created by your school
d. Formative or diagnostic assessments used district-wide
e. English/language arts textbooks used in your school
f. English/language arts curriculum selected or developed by your district
g. Professional development activities that you have participated in this year
h. The feedback I provide to teachers from their classroom observations

Question 21

Please indicate your opinion on the degree to which the following are aligned to CCR standards for mathematics:

a. The math section of the state test
b. District-mandated summative assessments
c. Formative or diagnostic assessments selected or created by your school
Teacher Survey Question 106

(1–not at all aligned, 2–somewhat aligned, 3–aligned, 4–strongly aligned)

Please indicate your opinion on the degree to which the following were aligned to the CCR standards for (ELA or math):

a. The (ELA or math) sections of the test
b. District-mandated summative assessments
c. Formative or diagnostic assessments selected or created by schools
d. Formative or diagnostic assessments used district-wide
e. Textbooks used in your school
f. Curriculum selected or developed by your district
g. State-developed or organized professional development activities that you’ve participated in this year
h. District-developed or organized professional development activities that you’ve participated in this year
i. Administrator feedback provided to you from classroom observations (i.e., walkthroughs, formal observations, etc.)

AUTHORITY

District scales for authority were developed using survey questions 20, 21, 23 and 24.

(1–not at all aligned, 2–somewhat aligned, 3–aligned, 4–strongly aligned)

District Survey Questions 20, 21, 23 and 24

Please indicate your agreement with the following statements:

Question 20

a. CCR standards for ELA set appropriate expectations for student learning at each grade level.
b. CCR standards for ELA positively affect the degree to which students are prepared for college and career.
c. CCR standards for ELA make learning relevant to students’ everyday lives.
d. Since [state] started implementing CCR standards for ELA, teachers in my district have made significant instructional shifts to tailor instruction to those standards.
e. The ELA sections of the CCR standards test provide valuable information about how well students in my district are mastering the state standards.
f. CCR standards for ELA are appropriate for ELLs.
g. CCR standards for ELA are appropriate for students with disabilities’ learning (including those with mild learning disabilities but excluding those with severe or profound disabilities).
Question 21

a Results from the ELA portion of the state test accurately represent students’ mastery of the ELA concepts emphasized in CCR standards for ELA.
b Results from the ELA portion of the state test are a good measure of how well students learned what ELA teachers in my district taught last year.
c CCR standards for ELA exclude important content that students should learn.
d CCR standards for ELA provide a manageable number of topics to teach in a school year.
e CCR standards for ELA give educators the flexibility they need to help students who are below grade level.
f CCR standards for ELA are more rigorous than the previous state standards.
g Teaching to CCR standards for ELA will increase student learning.
h Teaching to CCR standards for ELA is a major priority in my district.

Question 23

a CCR standards for mathematics set appropriate expectations for student learning at each grade level.
b CCR standards for mathematics positively affect the degree to which students are prepared for college and career.
c CCR standards for mathematics positively affect how well students are prepared to compete in the workforce.
d CCR standards for mathematics make learning relevant to students’ everyday lives.
e Since [state] started implementing CCR standards for mathematics, teachers in my district have made significant instructional shifts to tailor instruction to those standards.
f The mathematics sections of the CCR standards test provide valuable information about how well students in my district are mastering the state standards.
g CCR standards for mathematics are appropriate for ELLs.
h CCR standards for mathematics are appropriate for students with disabilities’ learning (including those with mild learning disabilities but excluding those with severe or profound disabilities).
i Results from the mathematics portion of the state test accurately represent students’ mastery of the mathematics concepts emphasized in CCR standards for mathematics.
j Results from the mathematics portion of the state test are a good measure of how well students learned what mathematics teachers in my district taught last year.

Question 24

a CCR standards for mathematics exclude important content that students should learn.
b CCR standards for mathematics provide a manageable number of topics to teach in a school year.
c CCR standards for mathematics give educators the flexibility they need to help students who are below grade level.
d CCR standards for mathematics are more rigorous than the previous state standards.
e Teaching to CCR standards for mathematics will increase student learning.
f Teaching to CCR standards for mathematics is a major priority in my district.
Principal scales for authority were developed using survey questions 6, 7, 8, and 9.

(1–disagree strongly, 2–disagree somewhat, 3–agree somewhat, 4–agree strongly)

Principal Survey Question 6

Please indicate your agreement with the following statements:

a College- and career-readiness (CCR standards) for ELA set appropriate expectations for student learning at each grade level.

b CCR standards for ELA make learning relevant to students’ everyday lives.

c Since [state] started implementing CCR standards for ELA, teachers in my district have made significant instructional shifts to tailor instruction to those standards.

d Results from the ELA portion of the state test provide valuable information about how well students in my school are mastering the state standards.

e I use results from the ELA portion of the state test to inform my school’s improvement planning.

f I use results from the ELA portion of the state test to inform teacher evaluations in my school.

g I use results from the ELA portion of the state test to inform professional learning decisions in my school.

h CCR standards for ELA are appropriate for English language learners.

i CCR standards for ELA set appropriate expectations for students with disabilities’ learning (including those with mild learning disabilities but excluding those with severe or profound disabilities).

Principal Survey Question 7

a CCR standards for Mathematics set appropriate expectations for student learning at each grade level.

b CCR standards for Mathematics positively affect how well students are prepared to compete in the workforce.

c CCR standards for Mathematics make learning relevant to students’ everyday lives.

d Since [state] started implementing CCR standards for Mathematics, teachers in my school have made significant instructional shifts to tailor instruction to those standards.

e Results from the mathematics portion of the state test provide valuable information about how well students in my school are mastering CCR standards for Mathematics.

f I use results from the mathematics portion of the state test to inform my school’s improvement planning.

g I use results from the mathematics portion of the state test to inform teacher evaluations in my school.

h I use results from the mathematics portion of the state test to inform professional learning decisions in my school.

i CCR standards for Mathematics are appropriate for English language learners.

j CCR standards for Mathematics set appropriate expectations for students with disabilities’ learning (including those with mild learning disabilities but excluding those with severe or profound disabilities).
Principal Survey Question 8

a. CCR standards for ELA exclude important content that students should learn.
b. CCR standards for ELA provide a manageable number of topics to teach in a school year.
c. CCR standards for ELA give educators the flexibility they need to help students who are below grade level.
d. CCR standards for ELA are more rigorous than the previous state standards.

Principal Survey Question 9

a. CCR standards for Mathematics exclude important content that students should learn.
b. CCR standards for Mathematics provide a manageable number of topics to teach in a school year.
c. CCR standards for Mathematics give educators the flexibility they need to help students who are below grade level.
d. CCR standards for Mathematics are more rigorous than the previous state standards.

Principal Survey Question 16

a. I have made teaching to CCR standards for ELA a major priority in my school.
b. My district has made teaching to CCR standards for ELA a major priority.
c. My state has made teaching to CCR standards for ELA a major priority.

Principal Survey Question 17

a. I have made teaching to CCR standards for Mathematics a major priority in my school.
b. My district has made teaching to CCR standards for Mathematics a major priority.
c. My state has made teaching to CCR standards for Mathematics a major priority.

Teacher scales for authority were developed using a composite of certain items in Questions 98, 99 and 100, depending on which statements applied to their positions. All items are included below.

Teacher Survey Questions 98, 99 and 100

Please indicate your agreement with the following statements:

a. CCR standards for (ELA or math) positively affect the degree to which students are prepared for middle school.
b. CCR standards for (ELA or math) make learning relevant to everyday lives.
c. Since starting to implement for CCR standards for (ELA or math), I have made instructional shifts to ensure students meet those standards.
d. Students’ results from the (ELA or math) section provide valuable information about how well my students are mastering CCR standards for (ELA or math).
e. CCR standards for (ELA or math) exclude important content that students should learn.
f. CCR standards for (ELA or math) provide a manageable number of topics to teach in a school year, for my grade level.
g. CCR standards for (ELA or math) give educators the flexibility they need to help students who are below grade level.
h. CCR standards for (ELA or math) are more rigorous than previous state standards.
Students’ results from the (ELA or math) sections of the state test are useful for improving my practice.

CCR standards for (ELA or math) set appropriate expectations for ELL.

CCR standards for (ELA or math) set appropriate expectations for SWD.

CCR standards for (ELA or math) set appropriate expectation for students learning at each grade level.

I plan lessons with CCR standards for (ELA or math) in mind.

**POWER**

**District Survey Question 16**

(1–not at all, 2–small extent, 3–moderate extent, 4–large extent)

Please indicate your level of agreement with the following statements:

a. The district rewards or recognizes principals based on their schools’ implementation of CCR standards.

b. The district rewards or recognizes teachers based on their schools’ implementation of CCR standards.

c. There are negative repercussions for principals in my district if their schools poorly implement.

d. There are negative repercussions for teachers in my district if their schools poorly implement.

e. The district rewards or recognizes principals based on their schools scores.

f. The district rewards or recognizes teachers based on their students scores.

**Principal Survey Question 19**

(1–disagree strongly, 2–disagree somewhat, 3–agree somewhat, 4–agree strongly)

Please indicate your level of agreement with the following statements:

a. District leaders publicly reward or recognize principals in this district for exemplary leadership practices aimed at implementing CCR standards.

b. District leaders publicly reward or recognize principals in this district for exemplary student achievement gains.

c. There are negative repercussions for me if students in my school do not perform well on the state test.

**Teacher Question 102**

(1–disagree strongly, 2–disagree somewhat, 3–agree somewhat, 4–agree strongly)

Please indicate your level of agreement with the following statements:

a. Teachers who poorly implement CCR standards for (math or ELA) will have a lower summative evaluation rating.

b. There are negative repercussions for teachers at this school whose students performed poorly on the state test.

c. Teachers at this school are recognized for using exemplary classroom practices that support the implementation of CCR standards for (math or ELA).
d Teachers at this school are recognized for their students’ achievement gains on the state test.

**STABILITY**

One question from each group was used to establish the stability scale.

\(1=1-2\text{ years, } 2=3\text{ years, } 3=4\text{ years, } 4=5+\text{ years}\)

**District Survey Question 19**

Including this current school year, how long do you believe each of the following will remain in effect?

- a CCR standards for ELA
- b CCR standards for Math
- c The state test

**Principal Survey Question 22**

Including this current school year, how long do you believe each of the following will remain in effect?

- a CCR standards for ELA
- b CCR standards for Math
- c The state test

**Teacher Survey Question 107**

Including this current school year, how long do you believe each of the following will remain in effect?

- a CCR standards for (ELA or math)
- b The (ELA or math) section of state test
- c The current proficiency standards (i.e. cut scores) for the state test.

**SPECIFICITY**

The district scale for specificity was created using the average of questions 22 and 25. Only one question was used for the principal and teacher scales.

\(1=\text{disagree strongly, } 2=\text{disagree somewhat, } 3=\text{agree somewhat, } 4=\text{agree strongly}\)

**District Survey Question 22**

Please indicate your level of agreement with the following statements:

- a CCR standards for ELA clearly indicate the content teachers should teach.
- b Teachers have received guidance from my district that clearly indicates the order in which they should teach each content area in CCR standards for ELA.
- c Teachers have received guidance from my district that clearly indicates how much time they should spend on each content area in CCR standards for ELA.
**District Survey Question 25**

Please indicate your level of agreement with the following statements:

a  CCR standards for math clearly indicate the content teachers should teach.

b  Teachers have received guidance from my district that clearly indicates the order in which they should teach each content area in CCR standards for math.

c  Teachers have received guidance from my district that clearly indicates how much time they should spend on each content area in CCR standards for math.

**Principal Survey Question 18**

Please indicate your level of agreement with the following statements:

a  My teachers have received specific guidance from my district on the order in which they should teach content area in CCR standards for ELA.

b  My teachers have received specific guidance from my district on how much time they should spend on each content area in CCR standards for ELA.

c  My district has provided teachers in my school with lesson plans aligned with CCR standards for ELA.

d  My teachers have received specific guidance from my district on the order in which they should teach content area in CCR standards for Mathematics.

e  My teachers have received specific guidance from my district on how much time they should spend on each content area in CCR standards for Mathematics.

f  My district has provided teachers in my school with lesson plans aligned with CCR standards for Mathematics.

**Teacher Survey Question 101**

Please indicate your level of agreement with the following statements:

a  CCR standards for (ELA or math) clearly indicate the content I should teach.

b  I have received guidance from my district that clearly indicates the order in which I should teach each content area for CCR standards in (math or ELA).

c  Teachers have received guidance from my district that clearly indicates how much time I should spend on each content area for CCR standards in (math or ELA).

**CHALLENGES**

(1—not a challenge, 2—minor challenge, 3—moderate challenge, 4—major challenge)

**Districts**

To what extent is each of the following a challenge to your district’s efforts to implement CCR standards in your district?

a  Lack of support from parents

b  Student absent and tardy

c  Insufficient class time

d  Wide range of student abilities

e  Large class size

f  Inadequate instructional resource
Principal turnover
h Teacher turnover
i Lack of school resources to provide extra help for students
j Level of difficulty of the current standards
k Conflicting state initiatives
l Conflicting district initiatives
m Insufficient understanding by teachers
n Insufficient understanding by principals
o Lack of high-quality teaching
p Low student achievement
q Amount of time used for additional district-administered tests

**Principals**

To what extent is each of the following a challenge to your district’s efforts to implement CCR standards for ELA and mathematics?

- Teacher turnover
- Inadequate school resources
- Inadequate lead time to prepare before implementing reform
- Lack of teacher planning time built into the school day
- Frequent changes in district policy and priorities
- Frequent changes in district leadership (e.g., the superintendent)
- Lack of high-quality professional development opportunities for teachers
- Lack of high-quality professional development opportunities for principals
- Lack of guidance for teaching grade-level standards to students with disabilities
- Lack of guidance for teaching grade-level standards for English Language Learners

**Teachers**

Thinking of your target class, to what extent is each of the following a challenge to your district’s efforts to implement CCR standards for (ELA or math)?

- Inadequate student preparation in prior grades
- Lack of support from parents
- Student absenteeism and tardiness
- Insufficient class time to cover all the content
- Wide range of student abilities to address
- Large class size
- Inadequate instructional resources (e.g., textbooks)
- Frequent changes in school priorities or leadership (e.g. principal turnover)
- Lack of school resources to provide extra help for students
- Lack of planning time built into the school day
- Lack of guidance for teaching grade-level standards to students with disabilities
- Lack of guidance for teaching grade-level standards for ELLs
RESOURCES

(1—less, 2—same amount, 3—more)

Districts

How much of each of the following resources would you like in the future, compared to what you use now?

a. Textbooks aligned to CCR standards
b. Curriculum resources aligned to CCR standards
c. Formative or diagnostic assessments aligned to CCR standards
d. Digital tools
e. Information about how CCR standards changes what students are expected to learn
f. Information about how CCR standards changes what is expected of teachers’ instructional practice
g. PD for principals on CCR standards
h. PD for teachers on CCR standards
i. Clarification on how instruction is expected to shift in order to align to CCR standards
j. Information about how to identify and implement effective curricula or instructional strategies
k. Information about how to implement strategies to address the instructional needs of English language learners
l. Information about how to implement strategies to address the instructional needs of students with individualized education programs (IEPs)

Principals

How much of each of the following resources would you like in the future, compared to what you use now?

a. Textbooks aligned to CCR standards for ELA
b. Curriculum resources aligned to CCR standards or ELA
c. Formative or diagnostic assessments aligned to CCR standards for ELA
d. Digital tools (e.g., online textbooks, webinars, videos, online communities, applications)
e. Information about how CCR standards for ELA change what students are expected to learn
f. Information about how CCR standards for ELA change what is expected of our teachers’ instructional practice

Professional development on CCR standards for ELA
h. Other (specify)
i. Textbooks aligned to CCR standards for Mathematics

j. Curriculum resources aligned to CCR standards for Mathematics

k. Formative or diagnostic assessments aligned to CCR standards for Mathematics

l. Digital tools (e.g., online textbooks, webinars, videos, online communities, applications)
m. Information about how CCR standards for Mathematics change what students are expected to learn

n. Information about how CCR standards for Mathematics change what is expected of our teachers’ instructional practice

o. Professional development on CCR standards for Mathematics
p. Other (specify)
Teachers

How much of each of the following resources would you like in the future, compared to what you use now?

a Textbooks aligned to CCR standards
b Curriculum resources aligned to CCR standards
c Formative or diagnostic assessments aligned to CCR standards
d Digital tools
e Information about how CCR standards changes what students are expected to learn
f Information about how CCR standards changes what is expected of teachers’ instructional practice
g Professional development on CCR standards
h Other (specify)

Instructional Practices

Below are the groupings of instructional practices that are either CCR emphasized or CCR de-emphasized. Teachers responded based on their subgroup.

Thinking about your target class, please indicate the level of emphasis you currently give to each of the following in your instruction in your target class.

(1—none, 2—minor emphasis, 3—moderate emphasis, 4—major emphasis)

In the survey, the following practices were grouped together as CCR-emphasized for elementary school ELA:

1 Apply grammatical rules
2 Compare multiple texts on the same theme
3 Demonstrate ability to write different forms of text
4 Engage in effective conversation and discussion with peers
5 Identify correct meaning within context for words with multiple meanings

The following practices were grouped together as CCR de-emphasized for elementary school ELA:

1 Apply cognitive strategies when reading
2 Demonstrate correct spelling rules
3 Identify main, key and supporting ideas, and details
4 Interpret words and phrases with multiple meanings
5 Locate and use textual evidence to support comprehension

CCR-emphasized practices for high school ELA:

1 Analyze vocabulary choices in different forms of text (e.g., use of technical or figurative language as appropriate)
2 Apply rules for capitalization and punctuation
3 Identify similar themes in multiple texts
4 Demonstrate ability to write for different purposes
5 Demonstrate speaking and listening skills in different engagements with peers (e.g., conversations, discussions, debates)
CCR de-emphasized practices for high school ELA:
1. Identify rhyme scheme in a poem
2. Demonstrate correct grammar rules
3. Discuss the characteristics of different genres of text
4. Locate and use textual evidence to support comprehension
5. Vary sentence construction in writing

CCR-emphasized practices for elementary math:
1. Demonstrate understanding of angle measurement
2. Demonstrate understanding of fraction multiplication
3. Perform the procedures of adding and subtracting fractions
4. Represent fractions
5. Solve one-step equations

CCR de-emphasized practices for elementary math:
1. Calculate simple probabilities
2. Demonstrate understanding of data in tables or graphs
3. Demonstrate understanding of geometric or arithmetic patterns
4. Demonstrate understanding of rate of change/slope
5. Perform measurement conversions

CCR-emphasized practices for algebra:
1. Apply linear and non-linear functions to real-world settings
2. Convert expressions involving radicals to expressions with rational exponents
3. Demonstrate understanding of exponential functions
4. Demonstrate understanding of sequences
5. Interpret the slope in real-world settings

CCR de-emphasized practices for algebra:
1. Compute with exponents and radicals (e.g., square roots)
2. Demonstrate understanding of estimation
3. Find the factors of an algebraic expression
4. Perform operations on polynomials
5. Perform procedures involving rate of change/slope

CCR-emphasized practices for algebra 2:
1. Perform procedures with complex numbers
2. Demonstrate understanding of linear functions
3. Apply functions to real world settings
4. Demonstrate understanding of polynomials
5. Demonstrate understanding of inequalities
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CCR de-emphasized practices for algebra 2:
1. Solve systems of equations
2. Memorize the symbolic representation for a linear function
3. Perform procedures on polynomials
4. Perform operations on exponential expressions
5. Memorize attributes of exponential functions

CCR-emphasized practices for geometry:
1. Demonstrate understanding of rigid transformations (e.g., slides/translations, flips/ reflections, turns/rotations)
2. Use geometry to model situations (e.g., use circles, three-dimensional objects to model real-world situations)
3. Demonstrate understanding of similarity
4. Justify properties of circles
5. Generalize transformations to other concepts (e.g., congruence)

CCR de-emphasized practices for geometry:
1. Perform procedures associated with triangles
2. Memorize definitions and formulas associated with triangles
3. Perform procedures to determine angle measures
4. Memorize definitions and formulas associated with quadrilaterals
5. Perform procedures associated with circles