

STANDARDS IMPLEMENTATION IN KENTUCKY:

Local Perspectives on Policy, Challenges, Resources, and Instruction

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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.

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he 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, Ohio, Massachusetts, and Texas to explore their experiences with CCR standards-based reform.

Data

This analysis examines select data from a survey administered to principals and teachers in the state of Kentucky during the spring of 2016. We employed a stratified random sampling technique designed to ensure the sample was representative of districts in Kentucky. Eightynine Kentucky districts were included in the sample. In each of the 89 districts, we identified 285 elementary schools. In each of these elementary schools, we sampled two 4th-grade math teachers, two 5th-grade ELA teachers, one SWD teacher, and one ELL teacher. In the 125 high schools in the study, we sampled two ELA teachers and one teacher in each of the following specialties or subjects: SWD, ELL, algebra I, algebra 2, and geometry. We chose these 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. The 89 districts all participated in a state-wide Kentucky Department of Education (KDE) survey effort, so C-SAIL did not individually recruit the districts. In total, 353 principals (or designated staff) out of the 841 eligible principals completed the principal survey in Kentucky, for a response rate of 42%; and 554 out of 1731 sampled teachers responded, for a response rate of 32%. Counts are for overall participation, as every district was included in the sample. During analyses, we applied weights to ensure that respondents were representative of the entire state. The design of the study also included a district survey, but due to an error on the part of a contractor, C-SAIL questions were not included on the district survey. We anticipate being able to include district survey questions in a 2019-20 administration.

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 suggests that five attributes are related to successful policy implementation, and that the stronger each attribute is, the better implementation will be:

- **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 are the implementation challenges and resources at the state, district, and school levels? 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? Principals report on the district and their school, and teachers report on their school.

To What Extent Is the Policy System Specific, Consistent, Authoritative, Powerful, and Stable, According to **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 principals and teachers fall between 1.96 and 3.18 where four is the highest possible response, and one is the lowest. These responses reflect a moderate view of the strength of each of the attributes.

Figure 1. Policy Attributes as Reported by 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

*Not asked of principals in Kentucky

Consistency Specificity Stability

Principal

----Teacher

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 statistically significant gaps between principals and teachers.

In Kentucky, teachers reported higher consistency and power for standards-related policies than did principals (2.91 and 2.56 versus 2.52 and 1.96, respectively). However, principals perceived more authority for the standards than did teachers (3.18 versus 2.78, respectively).

In Figure 2, we compare math, ELA, and SWD teacher responses about the policy attributes. The number of different types of teachers who completed the survey are as follows: n=92elementary ELA; n=31 elementary math; n=37 elementary SWD; n=102 high school ELA, n=105 high school math; n=43 high school SWD. ELL teachers were not included because of low sample sizes (the number of respondents varied from 1 to 6 depending on the question). For math, ELA and SWD teachers, means in the 2.15 to 2.33 range for stability suggest the policy system could be strengthened in this area, as these numbers indicate many respondents believe that the standards will not last longer than three years. Power scores across the three types of teachers average 2.56, indicating there is room for increasing rewards and/or sanctions associated with standards implementation and outcomes. Higher mean scores for specificity (mean=2.72), authority (mean=2.78) and especially consistency (mean=2.92) suggest strength in these areas. Since no means reach a 3 on the 4-point scale, this indicates there is room to strengthen each of the policy attributes.

Figure 2: Policy Attributes as Reported by Kentucky Math, ELA, and SWD Teachers

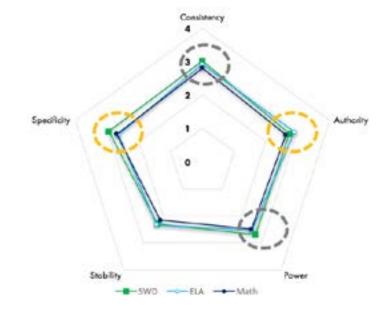
Consistency: 1=not at all aligned; 2=somewhat aligned; 3=aligned; 4=strongly aligned

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.

Yellow circles indicate that mean differences are statistically significant between the group with the most extreme mean, and the other two groups. That is, SWD teachers report significantly higher specificity than both math and ELL teachers; and ELA teachers report significantly higher authority than math and SWD teachers. The gray circles indicate significance between only two groups, those with the highest and lowest mean. SWD teachers report significantly higher power than math teachers; and SWD teachers report significantly more consistency than math teachers.



Figure 2 also shows that ELA teachers rated the policy system as significantly more authoritative than math teachers did. Math teachers perceived the policy system as more powerful than SWD teachers. SWD teachers rated the system as significantly more consistent than did math teachers, but less authoritative than did ELA teachers. SWD teachers also saw the policy system as significantly more specific and consistent than math teachers, and significantly more specific than ELA teachers (2.95 and 3.02 for specificity and consistency, respectively, versus 2.65 and 2.81).

What Are Challenges and Resources at the School Level?

In this section, we show the challenges to standards implementation that our respondents reported. We then provide data on the five most useful resources that they reported as helping them to implement the standards. Finally, we indicate which resources respondents reported they would like to have more of in their efforts to implement Kentucky's new college- and careerreadiness standards.

CHALLENGES TO IMPLEMENTING THE NEW CCR STANDARDS

The teacher survey presented a list of common challenges to implementing standards-based reform, related to students and parents, school organization, and policy. Teachers were asked to indicate whether each was "not a challenge," "a minor challenge," or "a moderate challenge" or "a major challenge." Here we report the percent of respondents who indicated each to be a moderate or major challenge. Every challenge was reported by at least some teachers as a minor or moderate challenge, which Figure 3 lists in order of frequency.

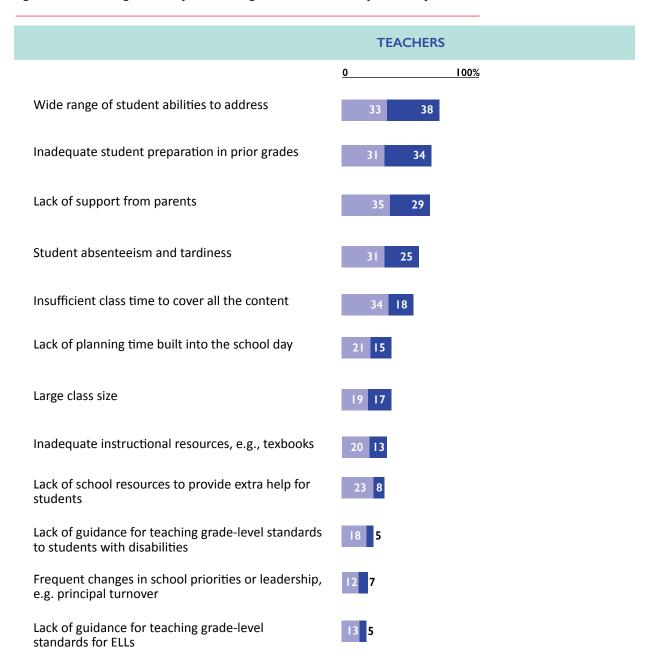
In Figure 3, related to *students and parents*, teachers most often indicated that moderate or major challenges are a wide range of student abilities (71%); inadequate student preparation in prior grades (65%); a lack of support from parents (64%); and student absenteeism and tardiness (56%).

The *organizational factors* were related to the lack of ample time for reform-related activities. Also in Figure 3, teachers indicated most frequently that insufficient class time was a challenge (52%). Thirty-six percent of teachers indicated that a "lack of teacher planning time built into the school day" was a major or moderate challenge.

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 Kentucky teachers and principals indicated were both provided to them and that they found useful for implementing standards. Interestingly, the least useful resource for both groups was how the standards change what is expected of teachers' instructional practice, suggesting that Kentucky may have invested significant resources already in this area. As Figure 4 shows, curriculum, textbooks, professional development, and assessments aligned to the CCR standards were in the top five most useful resources for both principals and teachers. There was only one key distinction. Digital tools were the most useful resource for teachers, but they were least useful to principals (likely reflecting that

Figure 3: Challenges to Implementing Standards as Reported by Teachers

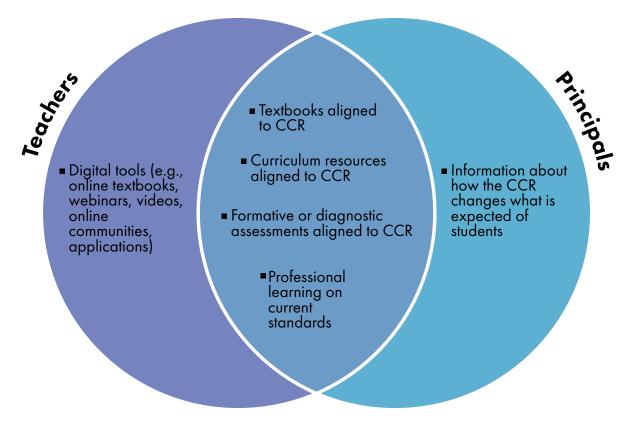


Note: From 426-438 teachers responded, depending on the item (12 challenges).

teachers use the tools in classroom instruction). Also, principals cited as useful more information about how the CCR changes what is expected of students, while teachers considered this information as the least useful resource. Teachers may be more focused on the tools that they need inside of the classroom; they may already feel confident in how the CCR changes what is expected of students.



Figure 4: Top 5 Useful Resources for Implementing Standards, as Reported by Teachers and **Principals**



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.

Resources Desired by 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 5 shows that teachers and principals differ in the resources they desire to improve their standards implementation. Teachers (46%) identified digital tools as the resource they most wanted more of, and 69% of principals wanted more digital tools. However, the two groups differ on the desirability of the remaining resources. Teachers tend to want more supports related to instruction; a substantial number of principals desire not only more supports related to instruction but also more resources related to assessment and understanding how instruction should change. This gap between the two groups makes sense, as the principal is responsible for all of these areas and providing guidance to all teachers, whereas teachers may be more focused on their own instruction. Low teacher percentages for "desired resources" may indicate that teachers don't want more of these resources, which require time;

rather they want time, as indicated in the previous section.

While the percentages of principals who want more of these resources is generally high, it stands out that 78% of principals say they want more aligned assessments, though only 25% of teachers do. (The question did not specify the source of the aligned assessments—e.g., state, district, or school.) All differences between principals and teachers are statistically significant.

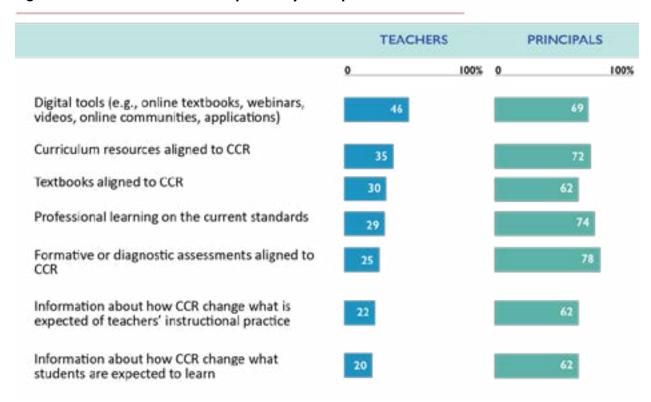


Figure 5. Desired Resources as Reported by Principals and Teachers

Note: Resources are listed in order of the percent of teachers who indicated they were desirable. From 173-276 teachers responded depending on the question and from 101-155 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 SWDs and Elementary and High School Teachers?

Our survey items on self-reported instruction asked a series of questions about the teacher's amount of coverage of different ELA 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 the 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). The survey questions did not indicate which items were emphasized or de-emphasized in the standards. Further, to reduce social desirability responses, all items on the survey were chosen by C-SAIL content experts to include only appropriate content that appeared in the standards.

Responses range from 2.62 to 3.60, where 1= no coverage, 2=minor coverage, 3=moderate coverage, and 4=major coverage. In terms of emphasized versus de-emphasized content, elementary ELA teachers were significantly more likely to cover de-emphasized content than emphasized content. There were no differences at the high school level for ELA. Elementary math teachers were significantly more likely to cover emphasized content than de-emphasized content, but the opposite was true at the high school level.

There are no significant differences in content coverage between ELA, math, or SWD teachers.

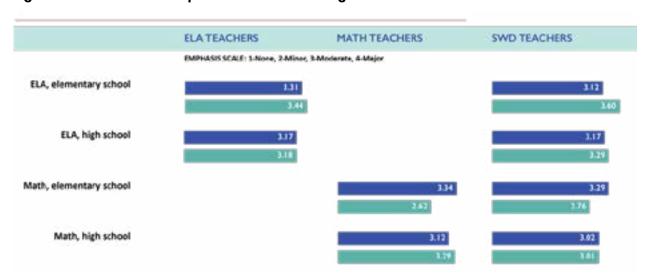


Figure 6. Teachers' Self-Reported Content Coverage in ELA and Math

In ELA at the elementary level, 92 general education teachers, 11 SWD teachers, and only 1 ELL teacher (excluded from the analysis) responded to the survey. In ELA at the high school level, 102 general education teachers, 11 SWD teachers, and 0 ELL teachers responded. In math at the elementary level, 31 general education teachers, 26 SWD teachers and 5 ELL teachers responded. In math at the high school level, 105 general education teachers and 32 SWD teachers responded.

Summary

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

Power scores at 2.0 for principals and 2.56 for teachers likely reflects Kentucky's effort to shift emphasis from rewards and sanctions to other elements of the policy system, such as building buyin and providing resources (authority). Stability is relatively low among teachers at 2.29, suggesting lower levels of confidence that the current policy system will remain constant over time. Principals perceive relatively high levels of authority, which is promising, though teachers show a bit more room for improvement in this area. Teachers do perceive a consistent system with alignment among policies, standards and assessments, and both groups have relatively high and similar specificity scores.

Statistically significant differences in how principals and teachers view the policy system provide leverage points to discover where attributes are truly different by design, and where communication about policies could be improved.

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

Teacher data can be used to target support and guidance. For example, "students with a wide range of abilities" was cited frequently as a challenge. PD might focus 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 developing new parental involvement programs and targeting districts with chronic attendance issues, though these findings are only based on teacher perceptions.

Notable is that both teachers and principals found textbooks as the second most useful resource for implementing the standards. Further, while respondents clearly indicated they found helpful and were using several key resources—aligned curricula, diagnostic assessments, textbook, on-line tools, PD on the standards and information about how to change instruction—these were not the same resources they indicated that they wanted to have more of to improve their implementation. This indicates that the resources currently provided are either of sufficient value to educators or might be changed, so that educators believe they would benefit from more of these types of supports.

How are teachers changing the content they cover, and how does this differ for ELA and math, for teachers of ELLs, teachers of SWDs, and for elementary and high school teachers?

Some significant differences between emphasized and de-emphasized content average 0.5 points on a 1 to 4 scale, and other differences reflect a range from "moderate" coverage to approaching "major" coverage, both of which suggest the instructional content differences are educationally meaningful. If teachers' instruction was well aligned to the new standards, we would expect teachers to be covering more of the emphasized content. But we found that for elementary school ELA, both regular and SWD teachers cover significantly more of the content de-emphasized in



the new standards, compared to the content emphasized in the new standards. For elementary math, the opposite was true – teachers were significantly more likely to cover the standardsemphasized content. At the high school level, there was no difference in the type of content covered for ELA, and the trend for math was also to cover significantly more de-emphasized content. Further clarification is needed. An additional notable findings is that SWDs received the same content coverage as their general education counterparts across subject areas.

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.

References

Porter, A. C., Floden, R., Freeman, D., Schmidt, W., & Schwille, J. (1988). Content determinants in elementary school mathematics. In D. A. Grouws & T. J. Cooney (Eds.), Perspectives on research on effective mathematical teaching (pp. 96–113). Hillsdale, NJ: Lawrence Erlbaum Associates.



Appendix

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

CONSISTENCY

Principal Survey Questions

(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 CCR standards for ELA.

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

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

- The math section of the state test
- b District-mandated summative assessments
- Formative or diagnostic assessments selected or created by your school
- d Formative or diagnostic assessments used district-wide
- Mathematics textbooks used in your school
- Mathematics curriculum selected or developed by your district
- Professional development activities that you have participated in this year
- The feedback you provide to teachers from their classroom observations

Teacher Survey Questions

(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).

- The (ELA or math) sections of the test
- b District-mandated summative assessments
- Formative or diagnostic assessments selected or created by schools
- d Formative or diagnostic assessments used district-wide
- textbooks used in your school
- curriculum selected or developed by your district

- 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
- Administrator feedback provided to you from classroom observations (i.e., walkthroughs, formal observations, etc.)

AUTHORITY

Principal scales for authority were developed using 6 survey questions.

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

Please indicate your agreement with the following statements.

Principal Authority Question 1

- a College and career readiness (CCR standards) for ELA set appropriate expectations for student learning at each grade level.
- CCR standards for ELA make learning relevant to students' everyday lives.
- Since [state] started implementing CCR standards for ELA, teachers in my district have made significant instructional shifts to tailor instruction to those standards.
- 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.
- I use results from the ELA portion of the state test to inform teacher evaluations in my school.
- I use results from the ELA portion of the state test to inform professional learning decisions in my school.
- CCR standards for ELA are appropriate for English language learners.
- 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 Authority Questions 2

- 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.
- 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.
- 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.
- I use results from the mathematics portion of the state test to inform my school's improvement planning.
- 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.
- CCR standards for Mathematics are appropriate for English language learners.
- 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 Authority Question 3

- 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
- 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 Authority Question 4
- CCR standards for Mathematics exclude important content that students should learn. f
- CCR standards for Mathematics provide a manageable number of topics to teach in a school year.
- h CCR standards for Mathematics give educators the flexibility they need to help students who are below grade level.
- CCR standards for Mathematics are more rigorous than the previous state standards.

Principal Authority Question 5

- 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.
- d Principal Authority Question 6
- I have made teaching to CCR standards for Mathematics a major priority in my school.
- My district has made teaching to CCR standards for Mathematics a major priority.
- My state has made teaching to CCR standards for Mathematics a major priority.

Teacher Authority Question

Teacher scales for authority were developed using a composite of certain items in the following questions, depending on which statements applied to their positions. All items are included below.

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

POWER

Principal Survey Question

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

Teacher Question

(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.
- 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 years, 2=3 years, 3=4 years, 4=5+ years)

Teacher Survey Question

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

SPECIFICITY

Only one question was used for the principal and teacher scales.

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

Principal Survey Question

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

Teacher Survey Question

Please indicate your level of agreement with the following statements:

- 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)
- 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)

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)?

- a Inadequate student preparation in prior grades
- b Lack of support from parents
- c Student absenteeism and tardiness
- d Insufficient class time to cover all the content
- Wide range of student abilities to address
- Large class size f
- Inadequate instructional resources, e.g., textbooks
- h 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
- k Lack of guidance for teaching grade-level standards to students with disabilities
- Lack of guidance for teaching grade-level standards for ELLs

RESOURCES

 $(1-less, 2-same\ amount, 3-more)$

Principals

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

- Textbooks aligned to CCR standards for ELA a
- b Curriculum resources aligned to CCR standards or ELA
- 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
- 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)
- Textbooks aligned to CCR standards for Mathematics
- Curriculum resources aligned to CCR standards for Mathematics
- k Formative or diagnostic assessments aligned to CCR standards for Mathematics
- 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
- 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?



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

INSTRUCTIONAL PRACTICES

Below are the groupings of instructional practices that are either CCR emphasized or CCR deemphasized. 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
- Demonstrate ability to write different forms of text
- 4 Engage in effective conversation and discussion with peers
- Identify correct meaning within context for words with multiple meanings 5

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
- Locate and use textual evidence to support comprehension

CCR-emphasized practices for high school ELA:

- Analyze vocabulary choices in different forms of text (e.g., use of technical or figurative language as appropriate)
- Apply rules for capitalization and punctuation
- Identify similar themes in multiple texts
- Demonstrate ability to write for different purposes
- Demonstrate speaking and listening skills in different engagements with peers (e.g., conversations, discussions, debates)

CCR de-emphasized practices for high school ELA:

Survey Analysis of Standards Implementation in KENTUCKY

- Identify rhyme scheme in a poem
- 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:

- Demonstrate understanding of angle measurement
- 2 Demonstrate understanding of fraction multiplication
- Perform the procedures of adding and subtracting fractions
- 4 Represent fractions
- 5 Solve one-step equations

CCR de-emphasized practices for elementary math:

- Calculate simple probabilities
- 2 Demonstrate understanding of data in tables or graphs
- Demonstrate understanding of geometric or arithmetic patterns
- 4 Demonstrate understanding of rate of change/slope
- Perform measurement conversions

CCR-emphasized practices for algebra:

- 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:

- Compute with exponents and radicals (e.g., square roots)
- 2 Demonstrate understanding of estimation
- Find the factors of an algebraic expression
- 4 Perform operations on polynomials
- Perform procedures involving rate of change/slope

CCR-emphasized practices for algebra 2:

- 1 Perform procedures with complex numbers
- Demonstrate understanding of linear functions
- 3 Apply functions to real world settings
- 4 Demonstrate understanding of polynomials
- 5 Demonstrate understanding of inequalities

CCR de-emphasized practices for algebra 2:

- Solve systems of equations
- 2 Memorize the symbolic representation for a linear function
- 3 Perform procedures on polynomials
- 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:

- Perform procedures associated with triangles
- 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