USING COMMON ASSIGNMENTS TO STRENGTHEN TEACHING AND LEARNING:

Research on the Ist Year of Implementation

Prepared for the Bill and Melinda Gates Foundation September 2014



Rebecca Reumann-Moore Brittan Hallar Christine Leow Stephanie Levin

About Research for Action

Research for Action (RFA) is a Philadelphia-based nonprofit organization. We seek to use research as the basis for the improvement of educational opportunities and outcomes for traditionally underserved students. Our work is designed to: strengthen public schools and postsecondary institutions; provide research-based recommendations to policymakers, practitioners, and the public at the local, state, and national levels; and enrich the civic and community dialogue about public education. For more information, please visit our website at www.researchforaction.org.

Acknowledgements

This research would not have been possible without the generous support of the Bill and Melinda Gates Foundation. We would like to thank the Common Assignment Study partners, administrators and teachers who so generously gave their time and shared their successes and challenges in the first year of this work. Thanks especially to the district administrators in each site who so efficiently managed the scheduling and logistics of our visits to their schools.

In addition to the authors of this report, a team of RFA staff were instrumental in completing the research and this report. Kim Edmunds and Elizabeth Park played vital roles in both data collection and analysis; their insights helped shape this report. Marvin Barnes worked to facilitate both survey administration and analysis. Kate Shaw, RFA's Executive Director, and Liza Rodriguez, Director of Research Operations and Qualitative Research, provided guidance and feedback, especially about the development of this report. Within her first weeks at RFA, our Communications Assistant, Rachel Greene, jumped in and worked hard to translate our data into many figures to communicate the findings more clearly. Alison Murawski, Communications Director, ably coordinated all aspects of report production. Maddie Silber served as an intern throughout most of the project's first year. We appreciate her support and valuable contributions to the qualitative research (e.g., transcribing interviews, conducting internet research, and assisting with analysis of interview data).

Table of Contents

The C	Common Assignment Initiative	1
Intro	oduction	1
Ov	verview of Research	2
In	this Memo	4
Pai	rticipant Demographics	4
Findi	ings	5
1.	Influence on Teacher Practice and Student Learning	5
2.	Teacher Collaboration	8
3.	Unit Implementation	16
4.	Alignment: Present in Key Areas	21
5.	Leadership and Support: Strong Administrator Support for CAS, Especially at the Level	
6.	CAS Sustainability	27
Areas	s for Improvement and Further Research	30
Col	ollaboration	30
Un	nit Implementation	30
Ali	ignment	31
Lea	adership	31
Sus	ıstainability	31
	endix 1: Overview of CAS Research	

Using Common Assignments to Strengthen Teaching and Learning: Research on the 1st Year of Implementation

Prepared by Research for Action for the Bill and Melinda Gates Foundation

Authors

Rebecca Reumann-Moore
Brittan Hallar
Christine Leow
Stephanie Levin

September 2014

Copyright © Research for Action 2014

The Common Assignment Initiative

The Common Assignment Study (CAS) has been designed to address the gap between educators' current instructional practice and the level of practice necessary to dramatically increase the number of students who master the knowledge and skills called for in the Common Core State Standards (CCSS). Conceptually, CAS builds on previous efforts to improve instruction through the Literacy Design Collaborative (LDC).¹ LDC's template-task approach to supporting key instructional shifts has demonstrated utility for teachers working to enhance literacy instruction across multiple content areas.

The CAS builds on the work of LDC by building literacy instruction into larger "content" units and by incorporating LDC modules into the units. In the CAS, teachers work across districts and states to collaboratively develop instructional units with embedded "common assignments" for use across multiple classrooms. To create units, teachers work in six subject-grade teams: middle school and high school English/Language Arts (ELA), science and history. In subsequent years, teachers will spend time revising existing units as well as developing new ones.

The CAS has two mutually reinforcing components:

- 1. Teachers in separate locations collaborate on unit development and implementation.
- 2. Teachers use common pieces of student work to have instructional conversations and calibrate their expectations for students.

These two components reinforce each other. Further, the Common Assignment Initiative gives schools and districts a means of strengthening teachers in three ways:

- 1. By providing professional learning opportunities, largely through teacher collaboration;
- 2. By using student work to provide teachers with information on their students' academic needs and evidence of their academic performance; and,
- 3. By providing evidence of teachers' impact on their students' academic outcomes.

Introduction

Initiated in the 2013-14 school year, the CAS is a three-year effort being led by the Colorado Education Initiative (CEI) and The Fund for Transforming Education in Kentucky (The Fund) with support from the Bill & Melinda Gates Foundation. Technical and implementation support for the project is being provided by multiple organizations including Stanford Center for Assessment, Learning & Equity (SCALE), Westat, the Center for Assessment, and Research for Action (RFA). This memo reports on RFA's research findings on the first year of CAS implementation.

¹ See ldc.org for more information about the Literacy Design Collaborative.

Overview of Research

The CAS is a research project designed to shed light on the progress and outcomes of the initiative. RFA's research focuses on providing formative feedback on unit design, unit implementation, and supports from partners. RFA is also investigating participant perceptions of enhanced teacher practice and improved student learning. Research by the Center for Assessment will examine the value of CAS student work as an indicator for measuring teacher impact and how participation in CAS affects student performance on Common Core-aligned measures. The goals, intermediate outcomes, and implementation supports of the major research strands are summarized in Appendix 1. Data was collected through teacher, administrator, and partner interviews, teacher surveys, student focus groups, observations of unit development, and review of student work, and analyzed to assess the status of implementation in Year 1.

Over the course of the study, RFA is addressing three major research questions.

RFA'S GUIDING RESEARCH QUESTIONS

- 1. How do teachers use Common Assignments to:
 - · better understand and respond to the academic needs of their students;
 - foster peer collaboration and support both within schools and districts and across districts and states;
 - · strengthen curriculum design;
 - · strengthen classroom practices; and
 - improve student work products?
- 2. How do school and district leaders use Common Assignments to:
 - · support professional learning among teachers; and
 - · collect evidence of students' academic growth over time?
- 3. What are the contexts and conditions at the classroom, school, district, and state levels that influence successful implementation of the CAS?

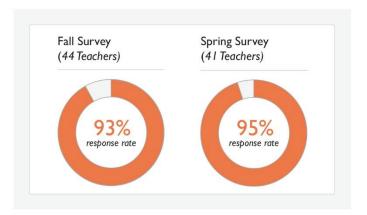
This memo provides feedback on the first year of the initiative, focusing primarily on research questions 1 and 3.2 Research on change in teacher practice and student academic growth will be a greater focus in Year 2.

Major data sources for the memo include fall and spring surveys sent to all CAS teachers and interviews with CAS partners, administrators, teachers (n=58), and eight student focus groups. Response rates for both surveys were high, with a 93% response rate in the fall (n=44) and a 95% response rate in the spring (n=41). Interview data were gathered in all four participating districts – two in Colorado and two in Kentucky. Results were triangulated with survey data (closed and open response questions), with fieldwork conducted at the January 2014 cross-state meeting, and with informal discussions at partner meetings.

² This Year I memo addresses research question 2 through the presentation of findings on leaders' perceptions of teacher learning and student growth.

Table I & Figure I. Data Sources

RESPONDENTS	INTERVIEWS
Overall	113
Respondents	
Teachers	37
District	4
Administrators	
Principals	8
Students	8 focus groups
	51 students
CAS Partners	9
	most interviewed fall & spring



This memo includes data collected from all four of the participating Year 1 districts. However, one of the original four districts will not be participating in CAS in Year 2, due to changes in district-level priorities.

The table below highlights key findings about Year 1 implementation of CAS. The sections below will explore these findings in more detail.

Table 2. Key Year I Implementation Findings

KEY FINDINGS				
Perceived Impacts				
	Teachers reported that CAS helped them incorporate new instructional strategies and			
	increase instructional rigor.			
2	Teachers and students say CAS is enhancing student learning.			
Implementation				
	Teachers experimented with multiple approaches to collaboration (e.g., in-person, email,			
(3)	conference call, the CAS website), but found sustaining in-depth virtual collaboration across			
	districts and states challenging.			
4	Teachers, administrators and partners generally called spring unit implementation successful.			
5	Teachers reported success using the units with diverse student populations.			
6	Scoring and uploading students' work was less burdensome in the spring than in the fall,			
0	but challenges remained.			
(7)	Participants reported positively about CAS's alignment with state standards, school curricula			
0	and district instructional goals.			
8	Both school and district administrators offered support for teachers' CAS participation.			
9	The majority of administrators and teachers believed CAS would expand and grow.			

In this Memo

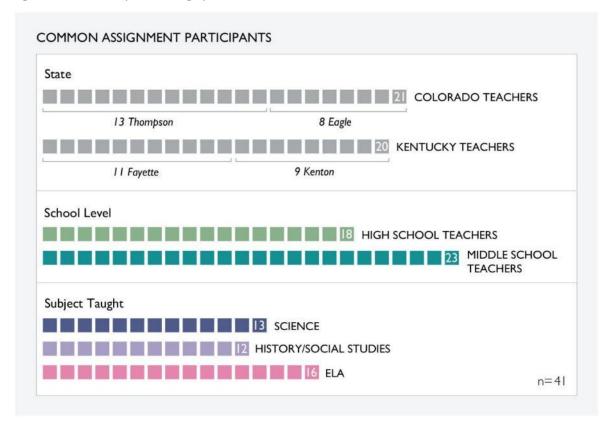
After providing a brief overview of participant demographics, this study's first year findings are organized around the following topic areas:

- 1. Influence on Teacher Practice and Student Learning
- 2. Teacher Collaboration
- 3. Unit Implementation
- 4. Alignment
- 5. Leadership and Support
- 6. CAS Sustainability

The memo concludes with recommendations on areas for improvement and further research.

Participant Demographics

Figure 2. CAS Participant Demographics



Of the 45 teachers who began the CAS in summer 2013, 41 were still active in May 2014. See Figure 2 above for overview of year-end participant numbers by state, district, school levels, and content area.³ Teacher participation was relatively equally distributed across these different groups.

³ The small number of teachers who left CAS did so for a range of reasons and were distributed across both states and school levels and all three content areas.

Findings

1. Influence on Teacher Practice and Student Learning

This section examines early reports about how CAS is influencing: (a) teacher instructional practice; and, (b) student engagement and learning. Though work to refine and develop the project is still very much in progress, the end of Year 1 provides an opportunity to take an initial look at perceptions of these important intermediate outcomes.

A. Teacher Practice: New Strategies and Increased Rigor

Teachers reported that CAS helped them learn and use new instructional

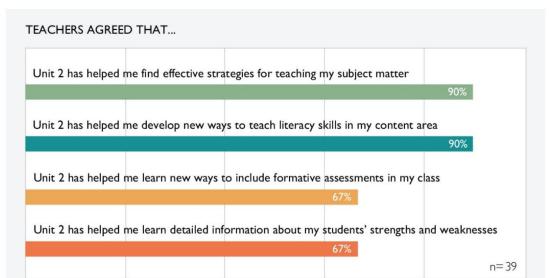
strategies. Almost all CAS teachers surveyed indicated that designing and teaching the second unit provided them with effective teaching strategies for both subject matter and literacy skills. Two-thirds of teachers reported that unit 2 helped them incorporate more formative assessment in their class and helped them become more knowledgeable about students' strengths and weaknesses (see Figure 20). In interviews, teachers expanded on some of the ways CAS affected their teaching, including new pedagogical approaches, incorporating more writing, and improving assessments:

I liked the unit. A lot [of the activities] were things I didn't have in my toolbox. I learned how to structure some quick one-on-one debates as well as how to better structure a Paideia discussion seminar.

I do writing assignments [otherwise], but it is lesser in scale....with [CAS] I'm spending more time with the writing assignment.

I think that my tests, my assessments have improved.

[CAS] has allowed me to become a better teacher...I've been much more organized...and we've gone more in depth with those two units than I have with any of my other units."



40

Figure 20. Teachers Reporting on the Second Unit

20

0

60

80

100

CAS invigorated many participants' teaching practice. In interviews, teachers said CAS helped them see their work in new ways, in part due to the opportunities to exchange ideas with new people from other districts and states. As one teacher said, "I think it's extremely beneficial to bring people together from different areas and it kind of gets you out of a rut, so to speak." Another teacher noted that CAS helped her try new activities and approaches that she never would have done on her own. A third teacher explained, "The first [unit] that we did, that's totally different. That's why it scared me at first. Because it was I like I was going away from the method or materials that I was used to. And it scared me, but it turned out to be good."

Many teachers reported that CAS helped to make their instruction more rigorous. Almost three-quarters of teachers surveyed agreed that the spring unit raised their expectations for student work and 62% of teachers agreed that it helped them increase the rigor of their teaching (see Figure 21). In interviews, some teachers explained that opportunities to exchange ideas with colleagues from other districts and states encouraged them to try new activities and approaches and helped to make lessons more challenging. Below, two teachers explain how CAS affected some of their own frameworks for thinking about teaching, by increasing the focus on critical thinking and analyzing texts and by pushing all students to achieve at high levels.

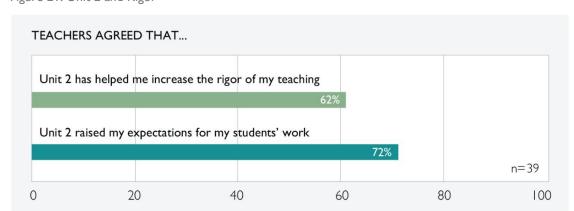


Figure 21. Unit 2 and Rigor

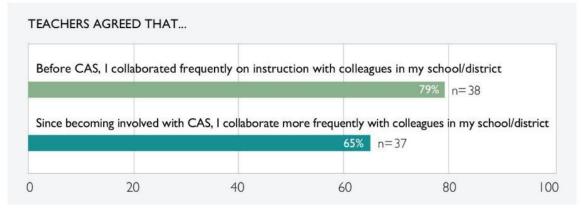
I think it causes me to be very conscious about making sure that the kids are critically thinking. That they're critically thinking about a text, and that they're looking at multiple texts....It keeps that rigor in the forefront of my mind when I'm instructing and planning, so I think that's always good.

Doing the Common Assignment has caused me to want to get kids to complete everything more. Not that I normally don't, but where I would have docked points because they would have left something blank, I'm more insistent on they get everything filled out, even if it takes a little bit longer.

Teachers and administrators reported that participating in CAS was strengthening teachers' leadership and collaborative skills. As the second year of CAS began in summer 2014, some CAS teachers moved into leadership roles, helping to facilitate their subject-grade team's review of student work and unit revision. While over three-quarters of teachers reported that they collaborated on instruction frequently with school and district colleagues before CAS, almost two-thirds reported that, they were collaborating more frequently with colleagues since becoming involved in CAS (see Figure 22). Principals and district administrators also reported seeing teacher growth and thought that teachers' CAS learning would benefit their schools as a whole. As one principal said, "I think what the participating teachers have learned from it will strengthen them [as teachers] and as leaders." Another principal said:

I think they would all tell you that they all grew as a result of participating in this study. To strengthen their ability to collaborate, that's a meaningful experience that they bring back here, and that supports our culture here and makes it stronger. So even if the units that they brought back still required a lot of revision, their ability to be more effective collaborators is a huge benefit from this experience.

Figure 22. Collaboration Before and After CAS



B. Student Learning: Teachers and Students Cite CAS Learning Benefits

The majority of teachers believed students were engaged in their CAS unit. Ninety-two percent (n=38) of teachers that responded to the survey agreed that the spring unit was engaging for their students. During an interview, a principal described seeing student engagement during an observation of Unit 2 implementation.

The high level of student engagement [is the success from the unit]. Most recently it was with science. Kids absolutely loved it. I would go into the classroom and they're like, look at my biome. The level of knowledge they developed really sticks with them. ELA unit on children's rights; kids were so into it. It increased their depth of their knowledge.

Students enjoyed the interactive, hands-on components of the unit. During focus groups, students voiced that they enjoyed the interactive, hands-on components of the unit and that this method of teaching helped them better understand the content. One student explained the connections between activities and learning, "By doing hands-on activities, I think for the majority of kids, they're going to get a lot more out of it. You are interacting with other people [and] remember those things better because it involves interaction [and] not just staring at the screen."

Teachers believe CAS has positively influenced student learning. All teachers agreed that they were satisfied with what their students learned from the spring unit. Specifically, large majorities of teachers reported that the second unit helped students improve both their understanding of content (92%) and their writing (84%). Further, three-quarters (74%) of teachers agreed that their students produced high quality work for the spring unit (see Figure 23). During interviews, teachers and students discussed student learning in the second CAS unit. One teacher said:

They can write a thesis statement. Know what literary elements are and connection to theme. They're learning how to use transitions to introduce their textual evidence. The LDC helps with their development of ideas. No Guitar Blues...they made connection that guitar was symbolic of poverty. You could see student learning through ideas they put down on paper.

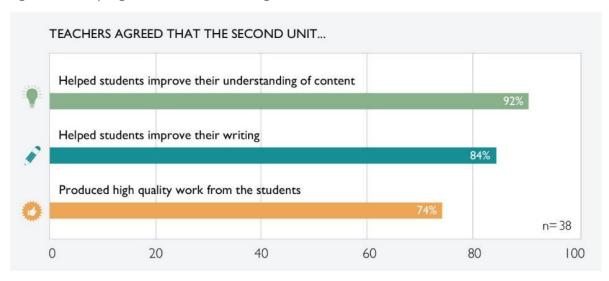


Figure 23. The Spring Unit and Student Learning

One teacher described seeing her students gain content knowledge from the pre-assessment to the post-assessment. "What was cool was when students did the genetics unit. They had never taken any genetics classes, so when they first answered those questions, they had no idea how to answer them. By the end [of the unit] they had nailed it and figured it out." A student also described changes from the beginning to the end of the unit:

There was a little essay at the end [of the unit]....I could only write three sentences during the pre-test. People were writing like one sentence. And now, we could all do a paragraph or more."

2. Teacher Collaboration

"The Common Assignment Study is an opportunity to build new knowledge about how teacher collaboration and peer-feedback can support the development and use of high-quality curricula and improve the expectations for and quality of student work in key subject areas." (Common Assignment website)

As illustrated in this quotation and throughout the CAS work, teacher collaboration is central to facilitating the development and sharing of best practices leading to improved student outcomes. In the first year, cross-district and cross-state collaboration focused on designing common units and assessments, problem-solving during unit implementation, review of student work, and revising units.

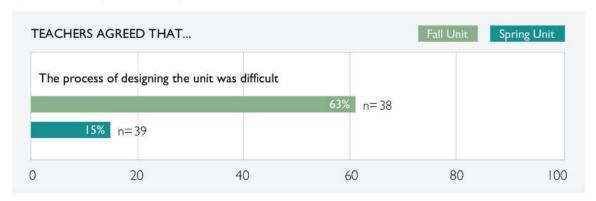
This section examines three different aspects of collaboration:

- a. Collaboration and unit planning;
- b. Methods of collaborating; and,
- c. Collaboration during implementation.

A. Collaboration and Unit Planning: Strong Process for Spring Units

Stakeholders reported positively about the spring unit design process. The majority of teachers reported that both spring unit design and their team's design collaboration went more smoothly than in the fall. While a majority of teachers (63%) reported that designing the fall units was difficult, a small minority reported this in the spring (15%). Also, four-fifths of teachers agreed that spring unit design went more smoothly than fall unit design (see Figures 3 & 4).

Figure 3. Difficulty of Unit Design Process



In interviews, teachers, along with partners and school and district administrators, shared a positive perception of the spring unit design process. Across all six teams, teachers indicated the following reasons for a more satisfying design process for the spring unit:

- Groups arrived at the mid-year convening with a focus for their unit and having completed preliminary work, including identifying possible resources, standards, activities and/or writing prompts. This enabled a jump start on unit development.
- Teams had developed positive relationships, making collaboration easier. As one teacher said, "When we got there, a lot of the barriers we had before were gone, I think because there was trust."
- Team members better understood the goal of their work together (i.e., what a unit entailed and the process for creating it).

Figure 4. Comparing Fall and Spring Unit Design

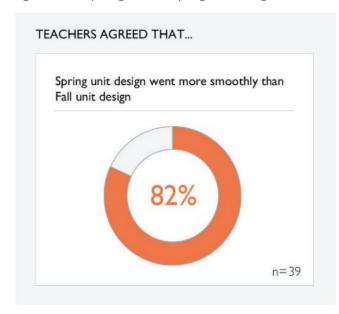


Figure 5. Perspectives on Unit Design Collaboration

Their team collaborated well on planning the fall unit

0

Teams chose to scale down their units to make them more manageable to design and implement. For example, teams reduced the number of common assignments and the number of activities overall.

In the fall, both interviews and surveys indicated that middle school teachers as a group were more satisfied with the unit design process and their team's collaboration, whereas high school teachers reported more challenges. At that time, about half (55%) of high school teachers and 83% of middle school teachers agreed that their team collaborated well on planning the fall unit. By spring, high school teachers' perceptions of unit design

had become similar to the more positive perceptions middle school teachers voiced about the first unit. Given greater room for improvement, high school teachers were especially likely to agree that collaboration on unit design had improved in the spring. The vast majority of high school teachers (88%) reported that their team's collaboration on unit design improved from the first to the second unit, compared with 36% of middle school teachers (see Figure 5).



Middle School Teachers 80 83% 60 n = 2040 n = 2236% 20

Their team's collaboration on unit design improved from the first to the second unit Unit design was challenged by differences in district and state standards, as well as differing curricula maps and timelines. State standards differed in terms of the degree to which they focused on content versus skills, often resulting in different emphases in state assessments and in what teachers need to include in classroom curricula and assessments. In addition, curricula scope and sequence varied across states and districts. This variation made it challenging to create common units. One teacher described a challenge faced by the middle school science group, which spanned both states:

The decision to split into groups was made before we went to Colorado. We faced a challenge...because you're talking about two different states with different curriculums. One of the schools only taught physical science with one little life science blurb about genetics, and another group only did life science. Kentucky 7th grade does both life and physical, so we were able to split up with the Colorado people.

Several science teachers noted that the split into two groups was a practical decision that enabled all participating teachers to end up with a unit that would fit into their curricula, but several teachers noted the disadvantages of having much smaller collaborative groups. As one teacher said, "We definitely missed that brain power and bouncing ideas off each other and having more input."

A teacher from a different content area called their team's merging of two state standards a success, noting that this "expanded the way we looked at our unit and approached the content." But it was also "a high-wire act of trying to manage both [sets of standards]."

Teacher collaborators faced the challenge of compromising changes to their customary pedagogical and curricular approaches. In order to truly create common units, teachers needed to be open to doing things differently (e.g., giving up favorite activities, agreeing to a new way of approaching a topic or lesson). One principal explained the challenges of these compromises: "When they had to agree on supporting activities, it seems like that was the most contentious of the issues....There were activities that some teachers held sacred and just weren't ready to let go. So they had to work through that." A teacher echoed this point, saying, "Sometimes it's difficult to let some things go when you feel passionately about something." A different teacher explained that this was addressed by teachers "willing to make sacrifices." A principal from a different district said, "Teachers had to give up things they'd loved and had done. Teachers have to get together and collaborate and decide on what's important for students to learn." A principal characterized this practice working through differences as a positive benefit of CAS for his/her teachers.

B. Methods of Collaborating: In-person and Email Most Popular

In the first year, CAS collaboration occurred in multiple ways including in-person gatherings of all teachers, school and district informal meetings, conference calls, email, document-sharing sites such as google docs, the CAS website, text messages, and Twitter. RFA investigated how teachers perceived the utility and challenges of different modes of communication.

Teachers perceived face-to-face collaboration as the most productive way to work together. Across content areas and grade levels, teachers voiced this perception in interviews and in response to an open-ended survey question. As one teacher said, "It's much easier to really dig in that way." In both spring and fall interviews, teachers said that the opportunity to collaborate with their subject-grade team across districts and states was a highlight of their CAS experience. However, because in-person meetings of CAS subject-grade teams occurred just twice in Year 1, teams needed to develop methods of collaborating across physical distance.

Teachers reported that email was their most frequent mode of long-distance collaboration and almost all (97%) found it helpful.⁴ Email was a primary form of communication for five of the six subject-grade teams. Participants used email to talk about how the unit was going, to ask questions, and to share resources (see Figure 6). ⁵

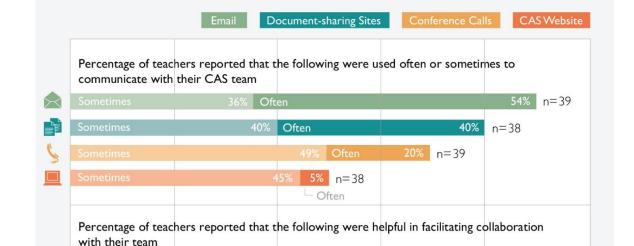


Figure 6. Tools for Teacher Collaboration

0

20

Of the four main modes of long-distance communication, teachers used the CAS website least and just over half found it helpful. While one of the subject-grade teams used the CAS website as its primary vehicle for collaboration, most of the groups chose other vehicles. Teams cited a variety of challenges with the site:

40

n = 35

60

86% n=35

100

n = 39

80

- It could be difficult to navigate, to find a specific post to respond to, or to identify the most current version of a document.
- The separate log in is cumbersome; it is easier just to communicate with email, which
 most teachers already are using during the school day, rather than adding another
 platform.
- In one school, technical problems made it difficult to access the website in their building.

More than three-quarters of teachers used document-sharing sites often or sometimes, and the vast majority found them helpful. Many participants noted that the document-sharing sites had advantages over the CAS website for sharing, working on, and keeping track of versions of documents. One teacher explained:

⁴ Percentages calling communications method helpful include both "very helpful" and "somewhat helpful" responses.

⁵ There were only slight variations in mode of long distance collaboration among content and grade-level groups.

Whenever you add something, people can see who last touched it and what they did. We had a meeting online a couple times, where we'd say, 'Okay, go to this document,' and all of us could work on the same one at once....And we can see it kind of in real time. And then once it's done, it's done. You don't have to upload it anywhere else...If I'm going for the most recent document, I never go to the CAS website, always Google Docs.

Most subject-grade teams had a small number of conference calls (1-2) about spring unit planning and/or implementation. Four-fifths of those who participated found the calls helpful. Common challenges for conference calls revolved around timing, both finding a time when six to eight busy people could talk and negotiating time zone differences. After-school times that worked for Colorado folks were late in the day for Kentucky teachers.

Virtual and in-person collaboration reinforced each other. Teachers found that online collaboration was more productive once people had met in person and established trust. Also, online collaboration could support in-person collaboration, as when subject-grade teams collaborated online before the January convening, helping them to have greater focus upon arrival with some initial work already completed.

C. Collaboration during Implementation: Mixed Experiences

During interviews, teachers described the focus of their collaboration during implementation. See Table 3 for an overview of the four most frequent types of collaboration.

Table 3. Types of Collaboration during Implementation

TEACHERS REPORTED

- 1. Asking questions of the team
- 2. Sharing resources and additional materials
- 3. **Reflecting on teaching the unit and sharing what worked.** At least one team agreed to email reflections about the unit as they taught. One group had a conference call after a few people had implemented to help others prepare for the unit
- 4. Revising activities or prompts, after one or two people had implemented.

Some teams used the Colorado winter convening to develop plans to improve team communication and collaboration. Teams had already experienced the challenges of staying in touch after they returned home and became immersed in their classrooms in the fall, so some teams intentionally formulated strategies to stay in touch in the spring. For example, one team agreed to post weekly to the CAS website when they were teaching. A teacher explained the approach of a different team:

We left Colorado with a plan in January for how we were going to communicate. We decided that email would be the primary method because people found that checking the website was a little cumbersome, but email they had to check anyway for work. That seemed to work more effectively. Because in the fall some people were posting to the website, some people were emailing, some people weren't engaging in conversation, so it did help unify that discussion that we would have as a group.

Despite these strategies, many teachers found it challenging to sustain in-depth virtual collaboration in the midst of all the immediate demands of their schools and classrooms. Lack of time and busy schedules were the biggest barriers to collaboration during implementation. One teacher described how the press of other demands made it challenging to

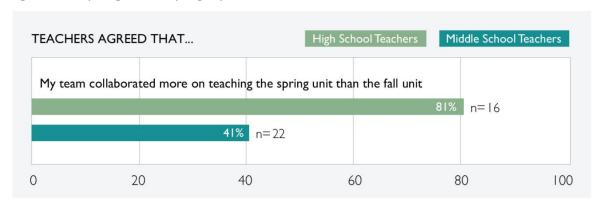
communicate with team members outside of their building, "When you're in the unit, you're not really thinking about everyone else doing it....It's hard to make the time when you're teaching the unit."

Because of these challenges and the nature of virtual communication, engaging the full team in collaboration around implementation was difficult. As one teacher said, "It's really hard if some people don't participate online - maybe they're reading it, but you don't know where they're at in the conversation. So that can be a challenge just as far as a check in. Like, where are you at, what are you up to?" Individual facilitators or teacher team members sometimes made efforts to reach out and bring less active members into the conversation.

Teachers gave mixed reports about collaboration during unit implementation. As noted above, different teams approached collaborating during implementation in varied ways. Some aspects of collaboration were shaped by team experience and others by individual factors, including individual preferences and the timing of implementation.

• High school teachers were more likely to report better implementation collaboration in spring than fall. Responses among high school and middle school teachers about collaboration and implementation follow a similar pattern to their perspectives on collaboration and unit design. A higher percentage of high school than middle school respondents said that their team collaborated more on teaching the spring unit than they had in the fall. Eighty-one percent of high school teachers agreed with this statement, compared with 41% of middle school teachers (see Figure 7). As with collaboration on unit design, middle school teachers had already responded fairly positively about collaboration during implementation in the fall. The differences in responses to this question may indicate that high school teams faced more challenges to collaboration initially and by the second unit had figured out how to work together, while middle school teams may not have experienced as much of a change between the first and second unit.⁶





• Some teachers were disappointed by a drop off in the intensity of collaboration during implementation. A teacher who would have liked more collaboration said, "I felt like the design part of it was so collaborative and then when we all went back home it was like, "See you in June!"

⁶ There were no obvious differences in responses by content area.

• **Timing of unit implementation affected collaboration.** In many teams, teachers' individual experience of collaboration while teaching the unit depended on how early or late in the semester they implemented and whether others were implementing at the same time. Teachers who implemented first sometimes had fewer opportunities for collaboration and had to figure out more on their own, which they then shared with their group.

Despite the challenges of long distance collaboration, a majority of teachers indicated that collaboration with their team had helped them with several aspects of unit implementation. Figure 8 indicates the range of implementation areas which collaboration supported. One teacher explained, "Working with CAS has helped me design and implement units by really challenging my students. It was great to hear a variety of ways to teach the same material."

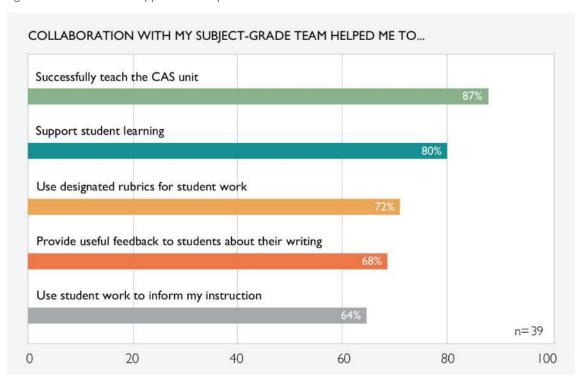


Figure 8. Collaborative Supports for Implementation

School level CAS partners generally collaborated more closely than did district CAS partners and were more likely to call the partnership helpful. About half of CAS teachers responding to the survey had a school level CAS partner and about two-thirds had a CAS district level partner (see Figure 9). Middle school teachers (68%) were more likely than high school teachers (24%) to have a CAS school-based teaching partner. School partners responded more positively than district partners about the helpfulness of their collaboration, with almost all (95%) of those who had a partner agreeing that it was helpful to collaborate with them (see Figure 9). Four-fifths of those surveyed who did not have a school partner would have liked to have a CAS teaching partner at their school. Interview data supported these survey findings. One teacher explained, "When I get excited about it, there's not really anybody else to get excited about it. So it's been a little less exciting for me and that may be why I'm missing the group interaction....my other folks here [at my school], they don't understand what I'm doing."

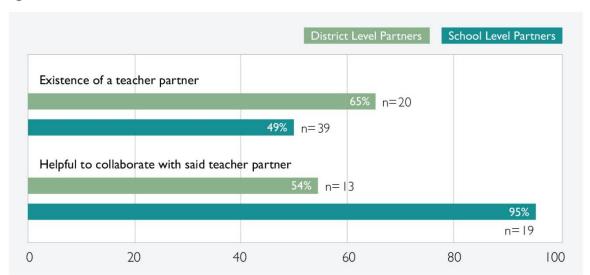


Figure 9. Presence of School and District Level Teacher Partners

Some district level partners developed strong collaborative relationships during unit implementation. Some principals facilitated district level partnerships by providing release time for their CAS teacher to work with a partner at a different district school. Other teachers had neither a school nor district partner or had little contact with their district partner.

Across content areas, grade levels and districts, teachers reported that the collaborative unit design process improved and ran more smoothly in the spring, compared with the initial fall process. Key challenges remaining included the need to reconcile different standards, curricula and pedagogical approaches so that units could work in all settings. Sustaining team collaboration from home was a challenge for most participants. Teachers did not find any of the available communication platforms as satisfying as in-person collaboration. Team approaches to virtual collaboration varied, but, overall, teachers used email most frequently for collaboration and the CAS website least. Despite the challenges, teachers reported that collaboration with their team helped them with a number of aspects of unit implementation, including teaching and assessment. Teachers who had school-level CAS partners found that collaboration helpful and most of those without a partner would have liked to have one.

3. Unit Implementation

All participating CAS teachers taught one unit in the fall semester and one in the spring. The biggest challenge of fall unit implementation was that units took longer to teach than expected. At the same time, almost all teachers wanted to teach the fall unit again, though many had ideas for modifications. Building on mid-year findings about the fall unit, this section focuses on the spring unit and reports on implementation overall and the on two key areas: (a) differentiating CAS units to serve the needs of individual students; and, (b) demands of using CAS student work for teaching and research.

Spring unit implementation was generally successful. In interviews, teachers, administrators, and partners reported that, similar to the spring unit design process, implementation got stronger between fall and spring. Teachers had some experience and knew

what to expect when teaching the spring units. Eighty-seven percent of respondents indicated that they felt adequately prepared to teach the spring unit.

Subject-grade teams also narrowed the scope of spring units and, in most cases, reduced the number of common assignments. Given these changes and teachers' prior CAS experience, most teachers found that they were better able to teach the units within the projected time frame in the spring.

A. Differentiating CAS Units: Success Using Units with Different Populations

Having experienced a round of unit development and implementation, teachers adjusted their focus in the spring to work on differentiating the units for students of different abilities in both the design and teaching of the unit.

Figure 10. Flexibility of the Second Unit



Teachers reported success using the units with diverse students. Ninetytwo percent of teachers responding to the survey indicated that the second unit was flexible enough to fit the needs of all of their students. CAS teachers used units with advanced, regular, special education, and English language learner populations. One teacher interviewed said, "We felt like we had enough liberties with the unit where we could modify as needed. I did [teach] it with all four of my classes. I have one general class, one advanced class, and two double advanced classes." A teacher noted that collaboration with the group helped with differentiating instruction: "Sharing ideas was the most helpful, especially in regards to my students with special needs."

Teachers continued to make adjustments for differentiation during

implementation. Teachers reported that they were able to effectively scaffold instruction based on the teaching and learning activities built into the units. Many units included a variety of learning activities, which provided multiple opportunities to address students' learning needs. Teams differentiated by:

- Including different kinds of "texts" in the unit to allow for different learning styles (e.g., video, cartoon, infographic, articles, blogs);
- Incorporating multiple types of assessments in the unit to allow for different learning styles (e.g., writing, discussion, analysis of cartoons or graphics);
- Providing documents on the CAS website to support scaffolding instruction, such as thesis-builders, outlines, and information about citations;
- Creating different versions of activities for different levels (e.g., both science groups created different versions of their labs to address different student needs); and,

Modifying primary source documents for middle school readers.

During implementation, some teachers further differentiated either individually or with a school partner by:

- Modifying tests (e.g., by narrowing them or using Grade-Cam to re-direct students to certain items);
- Providing additional support for Individual Education Plan students in classes with a second special education teacher;
- Giving students additional opportunities for practice; and,
- Adjusting the schedule to provide additional time for some students or classes.

Several teachers and administrators spoke enthusiastically about using the same units with different levels of classes. One teacher explained:

There are four advanced level classes and one general level class. However, I am running the unit exactly the same. There are a few more supports I put in for the general level students, so we do a lot more discussions....But as far as the texts, they're reading the same texts.

Looking at student work from both advanced and general classes, an administrator noted, "One of our observations was that there was very little discrepancy between the two, which was an indication that your general level classes were doing some really high-level, rigorous work."

B. Using CAS Student Work for Teaching and Research: Less Taxing in Spring, but Challenges Remain

Examining student work is a major component of the CAS initiative, both for teacher groups and as part of the research. The overall data collection process included assigning and collecting completed assessments, scoring the work, uploading all scores to a designated website, and submitting student work samples to one of the partner organizations. Data collection emerged as a difficult task during the first unit because scoring and uploading student work required more time than many teachers had expected and also because of confusion around the expectations for grading and sharing scores and student work with partner organizations. This section examines the extent to which the demands teachers faced became more manageable for the spring unit and what challenges remained.

Adjustments to the spring unit processes reduced some of the demands related to student work. For the fall unit, many teachers provided work and scores for four classes and some units had multiple common assignments. Adjustments in the spring unit design and guidelines for student work, such as asking teachers to collect data for only two classes and reducing the number of common assessments in the units, reduced the teachers' burden. Areas of improvement included:

• **Scoring**: A majority of teachers (64%) reported that the overall process of scoring student work was smoother during implementation of the spring unit. Science (81%) and social studies (83%) teachers were much more likely to report that the process of scoring student work was smoother in spring than ELA teachers (38%) (see Figure 11). This is likely because ELA teachers found the scoring less challenging in the fall, perhaps because they have more experience at scoring writing assignments similar to those associated with the CAS.

Figure 11. Scoring Student Work from Unit 2

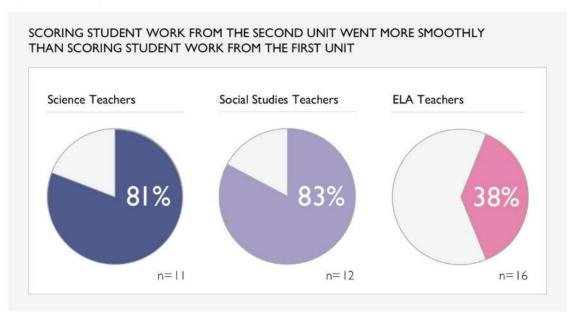
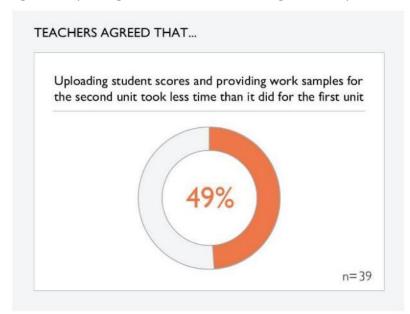


Figure 12. Uploading Student Scores and Providing Work Samples



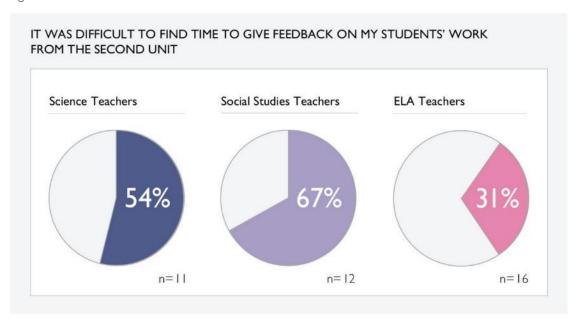
• Uploading student work and providing student work samples: About half (49%) of teachers agreed that uploading student scores and providing work samples for the second unit took less time than it did for the first unit (see Figure 12).

More research is needed to understand teachers' experiences sharing scores and student work. Only half of respondents surveyed agreed the process took less time for the 2nd unit. Approximately one-quarter responded neutrally and

the same fraction disagreed. We do not know if those who disagreed had negative or positive assessments of the process.

The time demands of responding to student work were a challenge for many teachers. Overall, about half of the teachers responding to the spring survey indicated that it was difficult to find time to give feedback on their students' work from the second unit. A higher percentage of science (54%) and social studies teachers (67%) reported difficulty in finding time than ELA teachers (31%) (see Figure 13).

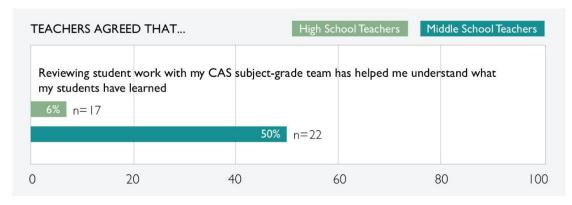
Figure 13: Time for Feedback on Student Work



Concerns about interpreting and using rubrics complicated scoring student work. In interviews, teachers and administrators raised multiple concerns about scoring student work. Concerns included:

- Too many rubrics. Especially in the first unit, multiple common assignments meant
 juggling the use of multiple rubrics, some of which seemed long and complicated to
 teachers.
- The quality of the rubrics as tools for judging quality. This was primarily a partner concern. One partner commented, "It's not always clear what the rubric is aligned to or what it's trying to measure."
- **Scoring student work twice**. In at least one district, teachers had to use the Common Assignment rubric, as well as their local rubric, adding to teachers' burdens.
- Using assessment data formatively. In some cases, teachers applied what they learned from the fall unit about gaps in students' skills or content knowledge to inform skill focus areas for the spring unit, but this practice was uneven across teams. At the time of the survey, few teams had had time to collaboratively examine student work; most of that work happened in the summer. Middle school teachers appeared to have had more opportunities to review student work, with half of middle school teachers reporting that reviewing student work with their subject-grade team helped them understand what their students had learned compared with 6% of high school teachers (see Figure 14). In addition to the lack of time, teachers may need support in translating patterns in student work into understanding about student learning.





• Lack of dedicated time to collaboratively calibrate scoring of student work. Some CAS school partners worked together to ensure that they were grading student work in a consistent manner. At the same time, some teachers indicated that they did not engage in conversations with their Common Assignment colleagues to determine a benchmark, or standard of proficiency, for the unit assignments. This resulted in disparate scoring approaches, which some teachers and principals attributed to varied interpretations of the rubrics and different local standards of quality. Multiple stakeholders thought that it would have been useful to identify exemplars of student work through a calibration process. Two teachers commented:

Teacher 1: It would be a good suggestion to do during the summer meeting, to bring student work, to see which one is proficient from your class, talk it out, [and ask] 'Why do you think this one is proficient?'

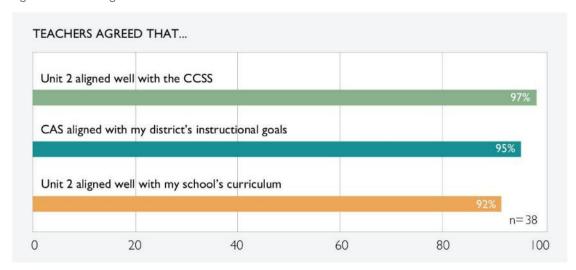
Teacher 2: Although we have a common rubric, we want to see [how] the paper or work of the students from Colorado versus the ones from Kentucky [differs].

4. Alignment: Present in Key Areas

As CAS heads into Year 2, it is important to understand how teachers and administrators see the units fitting with their existing instructional practices and tools as well as with other initiatives in place within their respective districts. In this section, we explore participants' perceptions of CAS alignment with CCSS, curricula, other instructional goals, and standards.

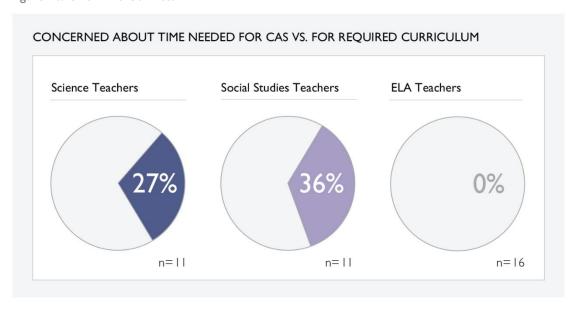
Alignment exists between the unit, CCSS, school curricula and district instructional goals. Almost all teachers surveyed agreed that Unit 2 aligned well with the CCSS, their school's curricula, and with their district's instructional goals (see Figure 15). During interviews, teachers also noted that the units fit well with their school curricula. Teachers' conviction that CAS fits well with their curricula seems to have grown since the fall unit, when 64% (n= 39) of teachers indicated that Unit 1 was a good addition to their curricula.

Figure 15. Unit Alignment



Some science and social studies teachers were concerned that the units took time away from required curriculum topics. Approximately one-fifth of survey respondents (19%, n= 38) noted that the units took time away from covering required curriculum topics. This sentiment was echoed by a few teachers in interviews as well. Concerns about conflicts between time for CAS and content coverage were most pronounced for science and social studies teachers, with 27% (n=11) and 36% (n=11) respectively indicating that teaching the second unit took too much time away from required curriculum topics. No ELA teachers (n=16) agreed this was the case. But, most of those with this conflict still affirmed that, despite the time pressure, the 2nd unit fit well and was a good addition to their curricula.

Figure 16. CAS Time Conflicts



Most principals interviewed highlighted how CAS could help them achieve school or district goals, including specific instructional goals, such as writing to demonstrate content mastery, and closing the achievement gap. One principal noted that,

I could see CAS playing a big role; because [...] our number one goal in this county is to close the achievement gaps. And I think that these units and the lessons that we're doing, I think it can help us do that. The quality of the stuff that we're getting is able to be presented to the different levels of learners that we have. So, overall I think that it could help us close the achievement gap.

During interviews, principals and district administrators noted a link to teacher effectiveness, but no teachers mentioned this area. The administrators were enthusiastic about how CAS could help teachers meet new teacher effectiveness demands. One administrator explained that,

The new professional growth and effectiveness system that's going to be fully implemented this fall includes a new way for teachers and principals to be evaluated. That system does require so much that LDC can show, and CAS can show for teachers, in the various components and under the various domains.

Although there was excitement from administrators about alignment to teacher effectiveness initiatives, one administrator pointed out that it was hard for teachers to see the big picture with the stress of the new evaluation system.

But with all of the stress of the new evaluation system, it's becoming hard for people to [juggle] so many things [at one time]. Teachers have to focus on the new effectiveness system. Though I believe it's all connected, they need to see that that's indeed the case.

5. Leadership and Support: Strong Administrator Support for CAS, Especially at the District Level

This section examines the roles that school and district level administrators are playing in CAS including: (a) Teacher Perceptions of Administrator Support; (b) School Administrators' CAS Roles; and, (c) District Administrators' CAS Roles.

A. Teacher Perceptions of Administrator Support

Overall, most teachers were positive about school and district administrator support for CAS participation (see Figure 17). Three quarters of teachers agreed that district and school administrators are supporting their CAS work and that administrators encouraged their participation in CAS. Most others chose a neutral response rather than disagreeing that their administrators encouraged them (see Figure 18).

Figure 17. Teacher Perceptions of District/School Administrators' Support for CAS Work

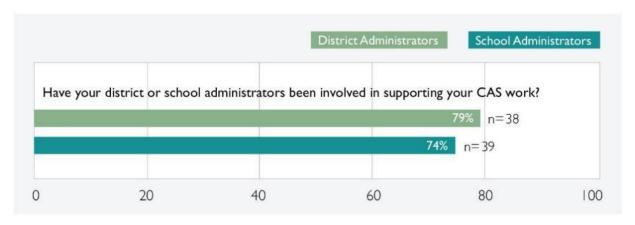
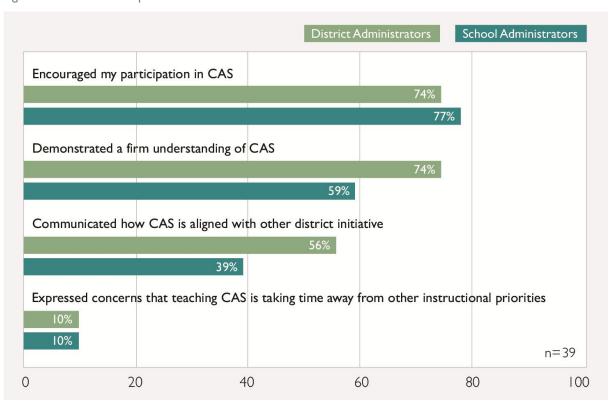


Figure 18. Teacher Perception of School/District Administrators' Involvement in CAS Work



Teachers indicated district administrators were more involved than principals in some aspects of CAS:

District administrators were more likely than school administrators to demonstrate a
firm understanding of the CAS and to communicate how CAS is aligned to other
initiatives (see Figure 18). Some teachers whose principals had attended the Seattle
convening reported that this experience deepened principal knowledge of CAS "so they
understand what we're doing in the classroom."

• District administrators communicated more with teachers about CAS and alignment than school administrators. At the same time, teachers reported that few district or school administrators expressed concerns about CAS conflicting with other instructional priorities (see Figure 18). There was clearly room, however, for school and district administrators to communicate more about alignment.

Teachers were especially likely to perceive district administrators' support as helpful (see Figure 19). Ninety percent of teachers who said district administrators supported the CAS work reported that they were helpful. In contrast, 70% of teachers reporting that school administrators supported their work said that they were helpful. This may be because district administrators were the point people for CAS and, in many cases, were more directly involved than principals.

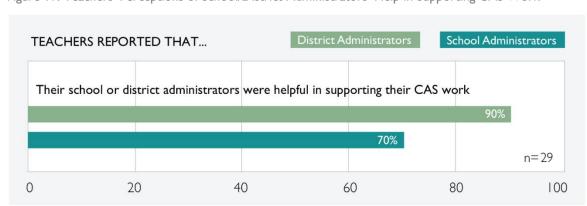


Figure 19. Teachers' Perceptions of School/District Administrators' Help in Supporting CAS Work

B. School Administrators' CAS Roles: General Support

Teachers and administrators mainly described principals' CAS roles as providing general support, rather than being deeply involved in the initiative. In interviews, teachers described the following principal involvement with CAS.

- Providing release time for trainings and, sometimes, for collaboration. Many teachers noted that principals were supportive when they needed to leave the building for CAS training and that principals helped facilitate bringing in substitute teachers. In some cases, principals gave teachers additional release time for related activities (i.e., to meet with their content, grade level partner in the district).
- Communicating strong support for CAS and promoting it as a priority. Some teachers described how their principal promoted strong teacher and school uptake of CAS. Teachers said:

[Principal] shared students' excitement [about a CAS project]...and believes in the goals and mission.

⁷ Only teachers who answered yes to the questions in Figure 19 about district or school administrators providing support were asked these questions about the helpfulness of the support.

[For Year 2, principal] encouraged all of us to do the design lead, because we're all leaders.

A principal described telling teachers, "Just know that we want you to go do this, because we think it's going to be good for our school. A district leader described further evidence of principals' strong support for their school's involvement. When principals heard about the possibility of involving additional teachers in Year 2, all immediately emailed the next day nominating teachers from their school. The district administrator had to ask them to reduce the numbers, due to their inability to accommodate all of the suggested participants.

- Checking in about CAS. Teachers reported that their principals asked then about unit implementation. One teacher said that the principal "knows what's been going on; [principals] always asking us how it went."
- Linking teachers to district administrators or state coordinators for further support. Principals sometimes contacted district or state leaders about specific questions or to request a visit.
- **Observing CAS instruction.** A few teachers reported that a small number of principals had observed during CAS units and, in a few cases, the principal provided feedback after the observation.

A few teachers said that their principal had not been involved in CAS at all.

C. District Administrators' CAS Roles: Facilitation and Some Instructional Support

District administrators' CAS roles varied according to a number of factors, including district context and their overall job description. While all facilitated CAS logistics and communicated with teachers about CAS events and issues, level of involvement with CAS instruction varied. Teachers and administrators described the following major aspects of district administrators' CAS involvement:

- **Organizing logistics.** District administrators coordinated CAS logistics such as travel arrangements and stipends.
- **Providing information and answering questions.** In addition, they provided ongoing information about CAS developments and events and answered questions.
- Checking in about CAS. Like many principals, district administrators wanted to know how things were going. One teacher said, "They're always asking us what support you need, let us know."
- **Problem-solving.** Some teachers noted that their district administrator served as a sounding board for thinking through issues and questions about CAS or helped them address challenges. A principal noted that teachers have been able to make CAS fit with their existing curriculum. She credited district administrators for "working closely and helping them problem-solve" to tackle challenges and questions that arose.
- **Supporting instruction.** Some district administrators worked directly with teachers on instructional issues. This included observing instruction and providing feedback, examining student work with teachers, and looking at the units with teachers before they taught them. One teacher said that a district administrator "has helped us do some

research [related to unit activities], has been very supportive by helping us get the materials we need, and has also come into the classroom and helped out on some occasions."

While we found many examples of district level support, challenges exist. One teacher noted impediments to strong district support in a large district. "They [district administrators] have so many other roles. If you're trying to replicate this model, that district person, they've got so much going on that I think it's hard to be onsite."

6. CAS Sustainability

This section highlights key Year 1 findings about the sustainability of CAS. Areas related to the sustainability of CAS and included in this section are: a) goals; b) teacher role in Year 2; c) time and effort; d) CAS spread; and, e) partner roles and dynamics.

A. Goals: Collaboration and Incorporating the Common Core Are Key Goals for Stakeholders

RFA's mid-year memo described some partner and participant concerns about the lack of a common vision for CAS and illustrated how some teachers perceived mixed messages about CAS goals. It is promising that teachers and partners are gaining a clearer understanding of goals as the project enters into its second year.

The majority of teachers, principals, and district leaders indicated that the main goals of CAS are framed around collaboration and implementation of the Common Core. In interviews, we asked teachers, principals, and district leaders to explain what they believed to be the main goals of CAS. Although responses were varied, most respondents expressed that the main goals were focused on collaboration and finding ways to best incorporate the Common Core into existing classroom practices. As one principal explained,

The Gates grant was looking to see what can happen with teachers collaborating multiple miles away from each other. Not just within their state, but also across the country. [...] I think also this is an initiative to support CCSS and to show that it is taught across the country and you can see similarities in classrooms whether you're in Colorado or Kentucky.

A teacher offered that, "I think it's all about incorporating the CCSS into what we do every day and seeing how different states incorporate it into their instruction as well." And, another teacher said, "I felt that collaboration was one of the ultimate goals and to come up with a better product than [what] we could come up with on our own, and just kind of see what other people are doing. And I was glad to get the opportunity to do that." Linking CAS to teacher effectiveness is a longer term goal of the project but, as mentioned above, at the time of these interviews, only a few administrators and no teachers mentioned this aspect of the work.

B. Teachers in Year 2: Plans to Continue Participation

Overall, all but three teachers interviewed in spring (n=19) indicated that they definitely planned to participate in CAS next year.⁸ When asked about continuing for another year, one teacher simply replied, "absolutely, because I love it and would like to continue to be part of it." The three teachers unsure about continuing to participate named competing priorities as the reason. One teacher explained that,

A lot depends on my role here [in my district]. Obviously there are budget cuts and positions changing and things like that. [...] I have other things going on as well so it's been tough. I probably missed 30 days of school already. Not just missed for sickness, but missed for professional development. I've got something this Friday that I am going to be out for, so I'm getting to where I may be need to pull back from a couple of projects. I enjoy this work; it's not that I dislike it. Like I said, if I had an infinite amount of time, I'd love to.

C. Time and Effort: It is Worth It

Teachers reported that CAS has been worth the time and effort.

Ninety percent (n=39) of teachers responding to the teacher survey agreed that their participation in CAS has been worth their time and effort. Three out of the four remaining teachers chose a neutral response rather than *disagreeing* that CAS was worth their time and effort.

During interviews, teachers and partners indicated that CAS has been worth their time and effort. They explained that being part of CAS has allowed them to:

- Grow professionally by collaborating with other teachers outside their building/district/state. Teachers welcomed the opportunity to rethink teaching strategies, access new resources, collaborate in new ways, learn how others are using the CCSS, and be exposed to new perspectives in their cross-district, cross-state group.
- Create a strong unit. One teacher said through the CAS, she created an engaging, common-core standards based unit with strong formative assessments.

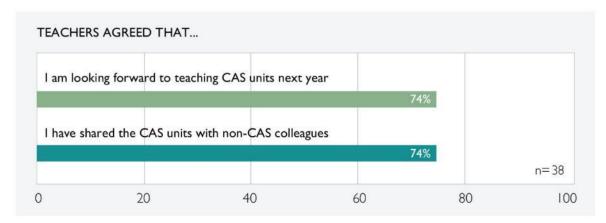
D. CAS Spread: Most Participants Believe CAS Will Expand and Grow

The majority of teachers, principals, district administrators, and other partners believe that CAS will expand and grow (see Figure 24).

Almost three-quarters (74%) of teachers indicated that they had shared the CAS units with non-CAS colleagues and that they look forward to teaching CAS units in the coming year. Most of the remaining respondents chose a neutral response rather than disagreeing.

⁸ All spring interviews took place in Kentucky, so did not include Eagle teachers, whose district chose leave CAS.

Figure 24. Teacher Response on CAS Program



Two-thirds of teachers (67%) agreed that their district was committed to sustaining the implementation of CAS. However, all who disagreed (18%) were from the district that will no longer participate in CAS moving forward. The remaining 15%, all from remaining districts, chose "neither agree nor disagree."

In interviews, many school and district administrators were enthusiastic about CAS and its role in improving teacher practice and student learning. Further, they wanted to expand it within their schools. With that said, they indicated a few concerns that could inhibit expansion:

- **Inadequate funding.** Administrators wondered whether their districts would be able to sustain the work after the grant ended.
- The need for more common planning time. School and district administrators indicated that teachers would benefit from more common planning time within their schools and had questions about the best way to provide these opportunities.
- Lack of time for in-person collaboration. School and district leaders understood that their teachers had benefited from the in-person collaboration offered thru CAS. They wondered how this aspect of the work could be continued or sustained as it takes considerable resources and coordination.
- E. Partner Roles/Dynamics: Some Roles are Changing and Partner Relationships Still Need Work

Partner Relations and Coordination are Still Evolving. In interviews, CAS partners discussed challenges and sometimes tensions when multiple organizations and individuals play leadership roles. Challenges include:

- Confusion about roles and responsibilities. At times, partners believed that roles and responsibilities were overlapping and created unintentional tensions. A partner stated, "We have all of these partners with all this expertise, and I think that a clear division of roles would be very helpful."
- Partners' differing priorities sometimes cause conflict. Partners all brought strong ownership of, and commitment to, the project as a whole, as well as individual aspects of the project. In interviews, partners expressed the need for continued work on communicating and collaborating across different visions for the project. One partner stated, "There are times in this project where I don't know if we're having

conversations about what we think will work best, or whether we think our idea is better than someone else's."

All of the partners note progress in partner coordination in Year 1. For example, partner leaders now have regular calls to better coordinate the work amongst the different organizations. They say that ongoing role clarification and communication is needed for this work to move forward as productively as possible.

Areas for Improvement and Further Research

Year 1 research revealed areas in need of improvement within CAS, and leaders have already taken steps to address some of them. In Year 2, partners can continue to monitor these areas and researchers will continue to investigate them.

Collaboration

Ensure time to unpack differences in state and district standards. The focus and implementation of CCSS-aligned standards can vary across states and districts. Moving forward, teams should be given time to explore and understand these differences. As the initiative grows, it will be important to engage teachers in sharing how cross-state teams have managed these differences and for partners and teachers leaders to think about how to connect units to standards as operationalized by multiple states.

Make CAS website more user-friendly. Revise the CAS website to address some of the Year 1 concerns, including making it easier to navigate, find documents, and turn off email notifications. If CAS leadership wants to make the website more central to the collaboration process, it will be important to engage Year 1 and Year 2 teachers as advisors and testers.

Increase opportunities for implementation collaboration. Many teachers want more opportunities and time to collaborate during unit implementation. When teams meet in person, encourage them to develop plans for this collaboration and then to refine them as needed during the year. Encourage school and district-level collaboration as well, including time for teachers to engage in professional learning communities or grade content groups that focus on CAS implementation.

Unit Implementation

Encourage and document strategies for unit differentiation. Share the strategies teams have developed and employed to make units work for learners at different levels. It is important to develop a common mechanism to collect additional strategies teachers are developing and using at home to adapt units. In addition, there should be clear communication with teachers and administrators about how units can serve different learners and any limits that exist on differentiation during the study.

Improve supports to assist teachers in meeting the demands of the research related tstudent work. To ensure that teachers deliver high quality information to researchers about student work, they need clear and consistent direction as to what is expected and how it needs to be delivered.

- Clarify rubrics to maximize their utility during the scoring process.
- Dedicate time for calibrating the scoring of student work so that stakeholders develop shared perceptions of quality work.
- Continue to provide teachers options for uploading and submitting work that will reduce their time and effort on this task.

Alignment

Communicate more clearly about links between CAS and teacher effectiveness.

Partners have a goal that CAS provide authentic, meaningful data about teacher effectiveness, but this idea has not been clearly communicated, especially to teachers. To that end, more attention to exploring these links and engaging teachers and administrators in reflecting on how CAS units and related student work could become a valuable component of their teacher effectiveness systems could help build this aspect of the work.

Leadership

Continue engaging administrators in CAS. Administrators play a crucial role in the implementation and spread of CAS. Year 1 administrators could benefit from ongoing professional development about CAS and can also serve as resources for educating Year 2 administrators about the work. Administrator provision of instructional support for CAS is less robust than other areas of support. Assisting administrators in developing deeper understanding of instruction within the units could position them to serve as effective advocates for and supporters of CAS. Such support could assist administrators in offering more robust instructional support for CAS. In addition, Year 1 administrators would be well positioned to provide guidance to Year 2 administrators.

Support site-based leaders in planning for sustainability. In Year 1, CAS partners were the lead facilitators and coordinators of the initiative. In Year 2, leadership roles are beginning to migrate from partners to teachers, and districts will need to become involved in planning for the CAS work beyond the grant period. District and school administrators, as well as teacher leaders, could play important roles in broadening and deepening CAS implementation. In addition, sites' length of involvement in the initiative will shape the kind of support they need.

Sustainability

Continue to develop teacher leadership. CAS partners have taken initial steps to position teachers as leaders in Year 2 of CAS, with teachers serving as leaders at the summer convenings. For CAS to grow and take root in participating districts, it will be important to create pathways for teacher leadership in CAS and to support districts in engaging teachers as leaders at the district level.

Clarify what needs to be common in CAS. It is important for partners to address ongoing questions about the common elements of CAS. For example, to what extent do teachers need to implement the unit in the same way? What parts of the unit are essential versus what can be adapted to fit individual classroom conditions? A shared understanding about the core elements of units is essential to this dialogue about student work.

Solidify and communicate the plan for CAS in Years Two and Three. As CAS moves into its second year, there continue to be many questions about what shape it will take beyond

Year 2. There is the danger that the ongoing evolution of CAS and resulting changes in structure could lead to participant frustration and undermine buy-in. Partners should formulate a clear strategic plan and articulate it in a timely way to teachers and administrators. Further, partners should engage stakeholders in planning and/or providing feedback on the plans. When key components of the project change (e.g., a move from cross-state to within state convenings), it will be important to explain the rationale and purpose of the change.

Appendix I: Overview of CAS Research

GOALS	SHORT-TERM AND INTERMEDIATE OUTCOMES	IMPLEMENTATION			
Strand: Unit Design & Use					
Explore how to design high quality units and how to ensure their successful implementation in the classroom	Teacher capacity buildingFidelity of unit useOpportunities for students to learnAssessment accuracy	 Facilitate design of Common Assignment units Provide examples of units Incorporate teacher feedback in training 			
Strand: Resources & Support					
Identify the resources and professional learning opportunities educators need to collaborate and effectively design and implement the units	 Teacher buy-in Facilitation of collaboration and peer review process through technology use Improved implementation through collaboration 	 Create technology platform Facilitate collaboration during professional learning opportunities Identify tools and strategies to support the work Ensure administrator participation 			
Strand: Teacher Practice and Student Lea	rning				
Determine if and how Common Assignment units improve student learning and contribute to more robust teacher evaluation systems	 Teacher and administrator perceptions of improved student learning and enhanced teacher practice Collection of meaningful student information Value of student work as an evaluation indicator Increases in student achievement on common core-aligned measures 	 Collect student work Examine student work Evaluate effectiveness of Common Assignment unit assessments to measure teacher impact 			