



**Evaluation of the Implementation of the
Ready Common Core and i-Ready Pilot Program in
Montgomery County Public Schools**

Office of Shared Accountability

December 2017

Julie Wade, M.S. and Natalie Wolanin, M.Ed.



OFFICE OF SHARED ACCOUNTABILITY

**850 Hungerford Drive
Rockville, Maryland 20850**

Dr. Jack R. Smith
Superintendent of Schools

Dr. Janet S. Wilson
Associate Superintendent

Highlights: Evaluation of the Implementation of the Ready Common Core and i-Ready Pilot Program in Montgomery County Public Schools

Julie Wade, M.S. and Natalie Wolanin, M.Ed.

Purpose of Study

The primary goal of the Ready Common Core (RCC) and i-Ready programs is to increase and accelerate achievement gains in mathematics, reading and writing for all students. These programs are aligned with the Common Core State Standards (CCSS), and are designed to offer the rigor required for students to meet the higher demands of the CCSS (Curriculum Associates, 2016). RCC is a comprehensive classroom instructional program in reading, writing, and math, and i-Ready is a technology-based diagnostic and intervention program. RCC and i-Ready were implemented in 11 MCPS elementary schools beginning in the 2016-2017 school year. This study addressed the following questions: 1) How were RCC and i-Ready implemented in MCPS and were they implemented as designed? 2) What were the experiences and perceptions of stakeholders regarding the implementation and operation of the program? This implementation evaluation used a non-experimental design to examine implementation and staff and student experiences. The survey sample included 275 staff (i.e. principals, classroom teachers, specialists, staff development teachers (SDTs), math content coaches (MCCs), reading specialists (RSs)) and 1,463 Grade 4 and 5 students from the 11 participating elementary schools.

Recommendations

- Identify and address the training and support needs of the SDTs/MCCs/RSs.
- Include teaching specialists (ELL, special education, focus teachers) in all relevant training for RCC and i-Ready.
- Ensure that teaching specialists have access to all RCC/i-Ready resources and data needed to most effectively work with the students they teach and support.
- Provide additional training and support to help teachers and specialists understand the role and structure of small group instruction in RCC.
- Request that Curriculum Associates lead a collaboration with special education and ESOL staff to ensure that the needs of all students are being met with RCC and i-Ready.
- Ensure that teachers' skill set includes needed content knowledge and scaffolding strategies to deliver instruction with fidelity.

Highlights of Study Findings

Evidence drawn from stakeholder surveys indicated that most aspects of RCC and i-Ready were implemented as designed in a majority of classrooms, while a few areas were identified as needing additional support.

- 1) Most teachers—two thirds to three quarters of those responding—felt prepared to use RCC and i-Ready in reading and math. SDTs/MCCs/RSs reported on their own preparation to support the implementation of RCC and i-Ready, and only 5 of 10 indicated they were adequately prepared to support the programs in reading, 2 of 10 in writing, and 6 of 10 in math.
- 2) Most teachers were satisfied with whole group lesson materials and reported that whole class instruction fit well within their daily schedule, but smaller percentages were satisfied with small group materials and fitting small group instruction into their schedule.
- 3) More teachers and leadership staff were satisfied with RCC pacing in reading than with pacing in math.
- 4) Consistently, teachers and leadership staff were most likely to indicate that RCC met the needs of accelerated students, but least likely to report that RCC met the needs of students receiving special education and students needing intervention.
- 5) Most students agreed that the reading passages were interesting, that they enjoyed most of the math lessons, and that i-Ready was a good way to practice skills.

Teachers' Satisfaction with Selected RCC/i-Ready Program Resources

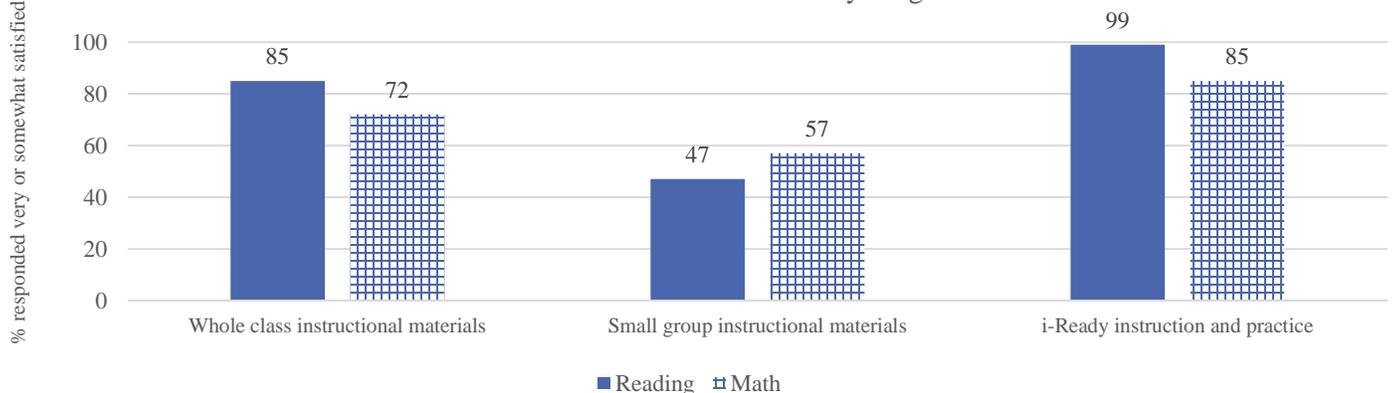


Table of Contents

Executive Summary	vii
1. How were RCC and i-Ready implemented in MCPS and were they implemented as designed?.....	vii
2. What were the experiences and perceptions of stakeholders regarding the implementation and operation of the program?	vii
Background.....	1
Program Description	2
Implementation Planning Guide.	3
Participating Schools, Students, and Staff	3
Review of Selected Literature.....	3
Evaluation Scope and Questions.....	5
Methodology	6
Evaluation Design.....	6
Data Sources	6
Survey instrument development.	7
Study sample.....	7
Analytical Procedures	8
Strengths and Weaknesses of the Methodology	8
Results.....	9
<i>Evaluation Question 1. How were RCC and i-Ready implemented in MCPS and were they implemented as designed?</i>	<i>9</i>
Planning and professional development	9
Staff participation in professional learning sessions.....	9
Implementing components of RCC and i-Ready	10
The use of RCC and i-Ready in collaborative planning meetings.....	13
The use of i-Ready reports by leadership staff.	14
<i>Evaluation Question 2. What were the experiences and perceptions of stakeholders regarding the implementation and operation of the program?</i>	<i>16</i>
Professional learning opportunities.....	16
Staff perceptions of the implementation of RCC and i-Ready	18

Meeting the needs of students with RCC and i-Ready	21
Staff overall satisfaction and comments about their experience with RCC and i-Ready	24
Student comments about their experience with RCC and i-Ready	30
Student perceptions of RCC and i-Ready	30
Summary and Conclusions	35
Recommendations	38
Acknowledgments	39
References	39
Appendix A	42
Appendix B	44
Appendix C	48
Appendix D	74

List of Tables

Table 1 Numbers and Percentages of Stakeholders Completing RCC/i-Ready Survey	8
Table 2 Professional Learning Opportunities Provided in RCC Pilot Schools and Self-Reported Participation by Staff Survey Respondents	10
Table 3 Teachers’ Reports of RCC and i-Ready Daily Scheduling in Reading, Writing, and Math	11
Table 4 Teachers’ Reports of RCC and i-Ready Practices in Reading, Writing, and Math.....	12
Table 5 Principals, Staff Development Teachers, Math Content Coaches, and Reading Specialists’ Agreement with Survey Items Describing Implementation of RCC and i-Ready in Reading, Writing, and Math	13
Table 6 SDTs/MCCs/RSS’ Reports on the use of RCC and i-Ready in Collaborative Planning Meetings	14
Table 7 Principals, Staff Development Teachers, Math Content Coaches, and Reading Specialists’ Reports of Frequency of Use of i-Ready Reports	15
Table 8 Teachers’ and Specialists’ (ELL, Special Education, Focus, Intervention Teachers) Perceptions of RCC Professional Learning Opportunities in Reading, Writing, and Math ..	17
Table 9 Principals, Staff Development Teachers, Math Content Coaches, and Reading Specialists’ Perceptions of RCC Professional Learning Opportunities in Reading, Writing, and Math	18
Table 10 Teachers’ and Specialists’ Satisfaction with RCC and i-Ready Program and Resources in Reading, Writing, and Math	19
Table 11 Experiences with Implementation of RCC and i-Ready in Reading, Writing, and Math: Teachers and Specialists	20
Table 12 Experiences with Implementation of RCC and i-Ready in Reading, Writing, and Math: Principals, Staff Development Teachers, Math Content Coaches, and Reading Specialists.	21
Table 13 Teachers’ Reports of Difficulty Level of RCC in Reading, Writing, and Math.....	22
Table 14 Teachers’ and Specialists’ Satisfaction with RCC for Meeting the Needs of Subgroups of Students	23
Table 15 Leadership Satisfaction with RCC for Meeting the Needs of Subgroups of Students .	24
Table 16 Overall Satisfaction with RCC and i-Ready by Stakeholders	24
Table 17 Likelihood to Recommend RCC and i-Ready Reported by Stakeholders.....	25
Table 18 Aspects of RCC and i-Ready Liked Best by Teachers Responding to Open-End Survey Question	26
Table 19 Aspects of RCC and i-Ready Liked Least by Teachers Responding to Open-End Survey Question.....	27
Table 20 Successful Aspects of RCC and i-Ready Reported by Specialists Responding to Open-End Survey Question	28
Table 21 Challenges of RCC and i-Ready Reported by Specialists Responding to Open-End Survey Question.....	29
Table 22 Student Experiences with RCC and i-Ready	31

Table 23 RCC and i-Ready Difficulty Levels Indicated by Students	32
Table 24 Aspects of RCC and i-Ready Liked Best by Students Responding to Open-Ended Survey Question.....	33
Table 25 Aspects of RCC and i-Ready Reported by Students to Need Change in Response to Open-Ended Survey Question	34
Table A-1 2016–2017 Ready Common Core/i-Ready Program Sites	42
Table A-2 Characteristics of Teachers, Specialists, and Principals Completing RCC/i-Ready Survey	43
Table A-3 Years of Teaching Experience Reported by Teachers Completing RCC/i-Ready Survey	43
Table B-1 ... Teachers’ Reports of Resources used in Addition to RCC in Reading, Writing, and Math.....	44
Table B-2 Teachers’ Satisfaction with RCC and i-Ready Program and Resources in Reading, Writing, and Math by Grade	46
Table B-3 Teachers’ Reports of Difficulty Level of RCC in Reading by Grade	47
Table B-4 Teachers’ Reports of Difficulty Level of RCC in Writing by Grade	47
Table B-5 Teachers’ Reports of Difficulty Level of RCC in Math by Grade	47
Table C-1 Teachers’ Responses to Open-Ended Question About What They Like Best	48
Table C-2 Teachers’ Responses to Open-Ended Question About What They Like Least	51
Table C-3 Specialists’ Responses to Open-Ended Question About Successes of RCC	55
Table C-4 Specialists’ Responses to Open-Ended Question About Challenges of RCC	57
Table C-5 Students’ Responses to Open-Ended Question Asking What They Like about Reading RCC and i-Ready	60
Table C-6 Students’ Responses to Open-Ended Question Asking What They Like about Math RCC and i-Ready	63
Table C-7 Students’ Responses to Open-Ended Question Asking What They Would Like to Change about Reading RCC and i-ready?	66
Table C-8 Students’ Responses to Open-Ended Question Asking What They Would Like to Change about Math RCC and i-ready?	70
Table D-1 Summary of Survey Responses Regarding RCC Lessons.....	74
Table D-2 Summary of Survey Responses Regarding i-Ready Diagnostic Assessments and Intervention and Enrichment	75
Table D-3 Summary of Survey Responses Regarding Collaborative Planning Meetings.....	76
Table D-4 Summary of Survey Responses Regarding Preparation for RCC and i-Ready by Professional Learning Opportunities	76

Executive Summary

The Office of Shared Accountability (OSA) is conducting an evaluation of Ready Common Core (RCC) and i-Ready in Montgomery County Public Schools (MCPS), piloted in 11 elementary schools in fall 2016. RCC is a comprehensive classroom instructional program in reading/language arts, writing, and mathematics, and i-Ready is a technology-based diagnostic and intervention program. In MCPS, RCC and i-Ready are being used together to blend the lesson content of RCC with the online assessment and differentiated follow-up instruction provided by i-Ready. RCC and i-Ready are published by Curriculum Associates (CA) (2016).

A two-part evaluation of the RCC and i-Ready programs is under way. This report examines the implementation of the programs in 11 MCPS elementary schools. A second report will focus on the reading and mathematics achievement of students in schools implementing the programs.

The implementation evaluation was guided by the following questions.

1. How were RCC and i-Ready implemented in MCPS and were they implemented as designed?
2. What were the experiences and perceptions of stakeholders regarding the implementation and operation of the program?

Summary of Methodology

The implementation evaluation used a non-experimental design to describe program implementation and staff and student experiences with RCC and i-Ready. Multiple measures were used, including data from program documents and records, informational meetings, and staff and student surveys designed by OSA in collaboration with an advisory group. The school staff surveys were administered to teachers, principals, specialists (English for Speakers of Other Languages [ESOL] teachers, special education teachers, academic intervention teachers, and focus teachers), staff development teachers, math content coaches, and reading specialists in each of the 11 RCC schools. Student surveys were administered to students in Grades 4 and 5 online and anonymously. Survey response rates were 71% ($n = 275$) for staff and 74% ($n = 1,463$) for students.

Summary of Findings

Evaluation Question 1. How were RCC and i-Ready implemented in MCPS and were they implemented as designed? Evidence drawn from stakeholder surveys indicated that most aspects of RCC and i-Ready were implemented as designed in a majority of classrooms, while a few areas were identified as needing additional support. Notable findings are described below.

RCC lessons and i-Ready. More than three-quarters of responding teachers reported that RCC whole group instruction and i-Ready fit well into their daily schedule, and that students were using i-Ready between 30 and 60 minutes per week on each of the subjects, reading and math. Leadership reported that most teachers in their schools were teaching the RCC lessons as presented in the Teacher Resource Book. Less than two thirds of the teachers however, indicated that small

group instruction fit well in their daily schedule. Survey responses from leadership reinforced the findings from teachers that implementing RCC small group instruction is challenging for some.

Collaborative planning meetings and reviewing i-Ready data. Very high percentages (83%–94%) of teachers and specialists, and all of responding leadership staff (100%), indicated that collaboration for instructional planning was working well. However, somewhat smaller percentages of teachers (69%–74%), specialists (55%–70%), and leadership (71%–85%) indicated that reviewing i-Ready data in collaborative planning meetings was working well.

Professional learning opportunities. Training sessions were planned and scheduled by program administrators in collaboration with Curriculum Associates representatives. Initial training sessions were held during the first two weeks of school and additional opportunities continued throughout the school year. Teachers who responded to surveys attended an average (mean) of five training sessions for RCC and i-Ready. In general, a smaller percentage of specialists reported attendance at most of the sessions. Among leadership, greater than 75% reported attending most of the professional learning opportunities.

Taken together, the evidence indicated that most aspects of RCC and i-Ready were implemented as designed in the large majority of classrooms, but that some areas need additional work. For example, implementation appeared strong in whole class instruction, student use of i-Ready, and teachers' use of RCC and i-Ready tools. Survey data indicated that further support is needed to improve the implementation of small group instruction.

Evaluation Question 2. What were the experiences of stakeholders regarding the implementation of the program? Survey findings from teachers, specialists, leadership staff, and students indicated that most respondents in all stakeholder groups had positive feedback regarding the implementation of RCC and i-Ready, while a few aspects need improvement.

RCC lessons and i-Ready. High percentages of teachers and specialists were satisfied with the materials and resources provided with RCC and i-Ready. The Teacher Toolbox and i-Ready Tools for Instruction, as well as the Diagnostic assessments and i-Ready reports were among the resources with the highest rates of satisfaction by teachers. Nearly all teachers (99%) were satisfied with i-Ready for student instruction and practice in reading, and 85% were satisfied with the use of i-Ready in math. Reinforcing the teachers' reports, more than three quarters of the responding leadership staff reported that the use of i-Ready data for instruction was working well.

The percentage of teachers satisfied with the overall pacing of RCC and i-Ready was 83% in reading but only 42% in math. Consistent with teachers' reports, leadership staff agreed in larger numbers that teachers in their schools were able to keep on track with lesson pacing in reading (87%) compared with math (62%).

Reporting their level of satisfaction with how the RCC program in reading, writing, and math meets the needs of various subgroups of students—English Language Learners, accelerated, special education, and students needing intervention—the largest percentage of teachers were satisfied that RCC was meeting the needs of accelerated students (76% for reading; 76% for writing; 68% for math). The smallest percentage of responding teachers indicated satisfaction that

RCC was meeting the needs of special education students (42%–51% across subjects) and students needing intervention (49%–55%). Leadership responses were similar, with highest levels of satisfaction indicating that RCC was meeting the needs of accelerated students. Further, relatively small percentages of teachers (49%–69%) and specialists (39%–45%) indicated that differentiation opportunities were working well in RCC.

Preparation of school staff for RCC and i-Ready. Two thirds or more of responding teachers felt adequately prepared by the professional learning opportunities to use RCC and i-Ready in reading and math, but fewer specialists indicated they felt prepared to use i-Ready, especially in reading (59%–63%). Most leadership staff reported that their instructional staff were prepared to use RCC and i-Ready (71%–88%). Of note, staff development teachers, math content coaches and resource teachers were asked to report on their own preparation to support the implementation of RCC and i-Ready. Of those responding, only 5 of 10 indicated they were adequately prepared to support the programs in reading, 2 of 10 in writing, and 6 of 10 in math.

Overall satisfaction with RCC and i-Ready was high across all groups. More than 80% of responding staff in all stakeholder groups expressed overall satisfaction with RCC and i-Ready, and between two thirds and three quarters of students responded positively to survey questions about RCC and i-Ready.

Recommendations

Professional learning and support

1. Identify and address the training and support needs of the Staff Development Teachers/Math Content Coaches/Reading Specialists. Their role is key in implementing and supporting the use of RCC and i-Ready in the schools but a substantial number of them reported that their own preparation for leading RCC and i-Ready was not adequate. Consider alternative formats for additional professional learning, such as webinars and job-alike Professional Learning Communities.
2. Include teaching specialists (ESOL, special education, focus teachers) in all relevant training for RCC and i-Ready; additional specialized training may be appropriate for this group as their use of RCC and i-Ready may vary with the needs of their students.
3. Provide additional training and support to help teachers and specialists understand the role and structure of small group instruction, including the use of scaffolding, in RCC. Substantial numbers of both groups reported that small group instruction did not fit well in the daily schedule, and that they were not satisfied with lesson materials for small group instruction.
4. Maintain records of attendance at professional learning opportunities to ensure that staff from each school are receiving the necessary training and information. Follow up with schools where training gaps may be developing so school leadership can help staff get back on track in their RCC/i-Ready professional learning.

Reinforcing RCC instructional delivery

5. Ensure that teachers' skill set includes needed content knowledge and scaffolding strategies to deliver instruction with fidelity. Developing teachers' capacities in these areas may help address issues that were identified as needing improvement, such as pacing (especially in math), differentiating, and implementing RCC in writing.
6. Emphasize with leadership and teaching staff the need to use i-Ready data in collaborative planning meetings. Reinforce the connection between i-Ready data and developing scaffolding so all students can access the content.
7. Determine with each school whether scheduling or procedural adjustments are needed in order to implement RCC as expected, and work with school leadership to ensure that school structures support implementation with fidelity.

RCC/i-Ready resources

8. Ensure that teaching specialists have access to all RCC/i-Ready resources and data needed to most effectively work with the students they teach and support.
9. Provide or recommend additional/improved lesson materials for small group instruction, through Curriculum Associates or other sources.

Meeting the needs of all students

10. Request that CA lead a collaboration with special education and ESOL staff to support the use of RCC and i-Ready with all students in the class and to ensure that the needs of all students are being met. Compared with other aspects of the programs, teachers were less satisfied with differentiation opportunities in RCC, and fewer agreed that RCC was meeting the needs of special education students and students needing intervention, compared to accelerated students.

Evaluation of the Implementation of the Ready Common Core and i-Ready Pilot Program in Montgomery County Public Schools

Julie Wade and Natalie Wolanin

At the request of the Office of Curriculum and Instructional Programs (OCIP) and the Office of School Support and Improvement (OSSI), the Office of Shared Accountability (OSA) in Montgomery County Public Schools (MCPS) is conducting an evaluation of the Ready Common Core (RCC) and i-Ready pilot program in MCPS. RCC is a comprehensive classroom instructional program in reading/language arts, writing, and mathematics, and i-Ready is a technology-based online diagnostic and intervention program. In MCPS, RCC and i-Ready are being used together to blend the lesson content of RCC with the online assessment and differentiated follow-up instruction provided by i-Ready. RCC and i-Ready are published by Curriculum Associates (2016).

A two-part evaluation of the RCC and i-Ready programs is under way. This report examines the implementation of the programs in 11 MCPS elementary schools. A second report will focus on the reading and mathematics achievement of students in schools implementing the programs.

Background

In summer 2016, Montgomery County Council provided funds to MCPS with the specific goal of closing the achievement gap. OSSI and OCIP collaborated to explore instructional options designed to facilitate the teaching and learning of Common Core State Standards and the acceleration of student learning. Principals from 24 elementary schools, along with members of their leadership teams, were invited to attend a presentation of several instructional options, including RCC and i-Ready. The 24 schools were identified by the OSSI because their students were not making expected progress in reading and mathematics achievement.

Two alternative instructional options for mathematics and reading were presented to the school leaders. Schools could opt for alternative instructional programs in both mathematics and reading/writing, in mathematics only, or in reading and writing only. Schools were asked to rank their top two options, with the understanding that their preferred rankings did not guarantee that their school would be assigned to an alternative program of instructional materials.

After previewing the options, the invited schools made their selections: 11 schools chose to implement the RCC and i-Ready programs (Appendix A, Table A-1). Nine schools signed on for both mathematics and reading/writing; one school chose to implement RCC and i-Ready reading/writing and continue with Curriculum 2.0 in math; and one school chose RCC and i-Ready for mathematics, while continuing with Curriculum 2.0 in reading. The remainder of the schools (13) chose to continue using MCPS Curriculum 2.0 for both reading/writing and math.

An RCC and i-Ready product overview meeting was held in August 2016 for leadership and staff from the 11 schools that would be implementing the programs during the 2016–2017 school year. During that meeting, the goals and objectives of the programs were outlined. A presentation of the experience of one MCPS school where RCC was implemented during the previous year also was shared.

Leadership teams at each of the eleven schools opting for RCC and i-Ready were asked at the product review meeting to identify from a list of possible factors those that contributed to their decision to sign on to the programs. The factors reported by staff from the largest number of schools were:

- Program resources (teacher guides, consumables, online assessment) (11 of 11 school team respondents)
- Trend data for student performance (10 of 11 school team respondents)
- Reflections on the current state of school instructional program (10 of 11 school team respondents)
- Feedback from school stakeholders (core team, leadership team, teacher leaders) (9 of 11 school team respondents)

Program Description

The goals of the Ready Common Core and i-Ready programs in MCPS include:

- Increase and accelerate achievement gains in mathematics, reading, and writing for all students
- Close achievement gaps among subgroups of students, specifically addressing disparities by race/ethnicity, receipt of Special Education services, Limited English Proficiency, and receipt of Free or Reduced-price Meals System services
- Streamline the lesson planning process for teachers
- Provide underperforming students with access to targeted intervention

The RCC and i-Ready programs (Curriculum Associates, 2016) are aligned with the Common Core State Standards (CCSS), and are designed to offer the rigor required for students to meet the higher demands of the CCSS. The RCC and i-Ready programs offer an array of materials and strategies, including:

1. **RCC lessons** incorporate whole group and small group instruction. Teacher resources (Teacher Resource book and online toolbox) and student workbooks provide a cohesive structure for reading, writing, and mathematics instruction.
2. **i-Ready online diagnostic assessments**, administered three times during the school year, provide drilled-down data for each student, identifying areas for growth, regardless of individual baseline.
3. **i-Ready online intervention and enrichment program** provides students with individualized lessons matching their instructional needs. The i-Ready program provides ongoing monitoring allowing teachers to track student progress. The program recommendation for student time on i-Ready online lessons is 45 minutes for reading and writing, and 45 minutes for mathematics per week.

4. **Collaborative planning meetings** provide an opportunity for teachers to work with staff development teachers and reading specialists to unpack RCC lessons, use RCC to establish daily learning goals, and use i-Ready data to develop instructional strategies and plan lessons.
5. **Professional development**, districtwide and school-based, is offered by Curriculum Associates and MCPS to provide school staff with training and guidance on the RCC and i-Ready programs. Additional supports include: a network for sharing resources; online teacher toolbox; and central office staff, including instructional specialists and directors, to support implementation and assist school leaders by providing direction and help in overcoming obstacles.

Implementation Planning Guide. Schedules and plans for the components of RCC and i-Ready are detailed in the Implementation Planning Guide. Curriculum Associates training staff worked with MCPS administrators during summer 2016 to develop the planning guide for MCPS. The guide included professional development schedules and plans, expectations for implementing RCC and i-Ready in the classroom, expected use and monitoring of diagnostic assessments, assessment windows, and tracking standards mastery. The Implementation Planning Guide also contained recommendations for the use of i-Ready data and communication among stakeholders.

Participating Schools, Students, and Staff

Eleven elementary schools implemented RCC and i-Ready during the 2016–2017 school year. One of the 11 schools began pilot implementation during 2015–2016. The RCC and i-Ready programs are being used in Grades 1 through 5 in MCPS.¹ A list of the 11 schools and the components they are implementing is included in Appendix A.

In each of the RCC schools, the principal, reading specialist, math content coach (where applicable), and staff development teacher lead the implementation of the program and monitor student progress at the school and grade level. The principal works with the school’s central services director for school support and improvement to ensure that implementation is on track and that problems are resolved. School staff typically meet weekly in grade level teams to review i-Ready data, unpack standards, plan lessons, and generate ideas for differentiated instruction.

Review of Selected Literature

Supporting Common Core State Standards

The introduction of RCC and i-Ready is one of the ways MCPS is supporting the teaching and learning of CCSS. Two recent reports from the RAND Corporation examined the implementation of CCSS for mathematics and English Language Arts using findings from nationally representative surveys of U.S. teachers (Kaufman, Stecher, & Hamilton, 2016; Opfer, Kaufman, & Thompson, 2017). The reports aimed to describe teachers’ perceptions and knowledge of the standards, their use of instructional resources to address standards, their understanding of content and approaches aligned with the standards, and their instructional practices. In the national surveys, most teachers

¹ Ready CC and i-Ready does not include writing for Grade 1.

were positive about the impact of standards on student learning and instruction. More than 90% of teachers indicated the standards support the alignment of the curriculum from grade to grade, and more than three-quarters agreed that the standards increase student learning and college and career readiness (Kaufman, Stecher, & Hamilton, 2016).

Based on previous research, Opfer, Kaufman, and Thompson (2017) identified three requirements for teachers' successful implementation of the standards. First, teachers must have access to high-quality instructional materials aligned with the standards; second, teachers must understand the content standards deeply; and third, teachers must be willing and able to change their instructional practice. Analysis of surveys completed by elementary teachers led the researchers to identify key areas that will support teachers to engage in instruction that will be most helpful for students' learning. In language arts, the areas of support included:

- selection and development of high-quality instructional materials aligned with standards across grade levels, with particular guidance on the use of leveled readers for instruction;
- additional guidance on practices that consider repertoires of close reading and skills-based reading instruction for different texts, purposes, and contexts.

For mathematics, the areas supporting elementary teachers included:

- further clarity on key content at each grade level;
- guidance about how to address aspects of rigor with equal time and intensity (Opfer, Kaufman, & Thompson, 2017).

RCC and i-Ready incorporate elements that are based in education research, including: formative assessment; modeling and gradual release; and close reading. Some of the studies that have examined these strategies are described below.

Formative assessment, when used to inform instruction, has the potential to improve learning outcomes (Black & Wiliam, 1998; Hattie, 2008; NCTE, 2013; Seethaler et al., 2012). Indeed, Hattie's (2008) extensive meta-analysis of effects on teaching and learning identified feedback—about what students know, where they make errors, when they have misconceptions—and formative evaluation—seeking evidence about students' progress, and paying attention to the formative effects of their teaching—as two very powerful influences on student achievement.

Modeling and gradual release have been shown to be effective instructional strategies in multiple subject areas; most research has focused on their use in reading and mathematics (Adler, 2001; Fisher & Frey, 2008; Rupley, Blair, & Nichols, 2016; Van de Pol, Volman, & Beishuizen, 2010). Modeling and gradual release of responsibility, as well as the broader term, scaffolding, may be viewed as strategies within a direct or explicit instruction model. Van de Pol, Volman, and Beishuizen (2010) examined three characteristics of scaffolding—contingency, fading, and transfer of responsibility—in a review of literature published between 1998 and 2009. Many of the studies were descriptive, and illustrated the challenges of definition and measurement, but provided rich narratives of scaffolding in the classroom. Of the studies that addressed effectiveness of scaffolding, results consistently indicated positive effects on students' metacognitive and cognitive activities and their affect.

Close reading is a concept frequently associated with CCSS (Ellis, 2013). The CCSS requires that all students “have the chance to productively struggle with complex texts” (Brown & Kappes,

2012). Close reading is a strategy that helps students achieve a deeper understanding of the text, including the author’s purpose, how the ideas connect to other texts, experience, and knowledge, and the way the reader can use the information to support an opinion. Characteristics of close reading include: short, rich complex text; repeated readings; and text-dependent questions (Fisher & Frey, 2012). According to Partnership for Assessment of Readiness for College and Careers (PARCC, 2012), “Close, analytic reading stresses engaging with a text of sufficient complexity directly and examining its meaning thoroughly and methodically, encouraging students to read and reread deliberately.” (p. 7). Indeed, repeated reading has shown positive effects on reading comprehension as well as fluency (Hattie, 2008).

Research on Ready Common Core and i-Ready

A search of independent rigorous research on the effectiveness of i-Ready and Ready Common Core revealed a shortage in this area of the literature. However, one study by the Educational Research Institute of America (ERIA), commissioned by Curriculum Associates, analyzed Ready Common Core in Grades 3-8 within schools in the state of New York (ERIA, 2016). Findings from 2014 showed that the average New York State English Language Arts standard scores and percentage of reading proficient students were significantly higher among the group of schools that used Ready Common Core compared to the schools that did not use the program. Similarly, the average New York State Mathematics standard scores and percentage of math-proficient students were significantly higher among the Ready Common Core user group than the non-user group. Additionally, a research paper by students at the Northwest Missouri State University found that Grade 3-5 students at a suburban school in Missouri had significantly higher Missouri Assessment Program Communication Arts Composite scores (administered by the Missouri Department of Elementary and Secondary Education) during 2013 when they implemented i-Ready, compared to the prior two years before i-Ready was implemented at the school (Todtfield & Weakley, 2013).

Evaluation Scope and Questions

The evaluation of Ready Common Core and i-Ready is being conducted in two stages. The first stage, reported here, examined the implementation of the programs, including the professional learning opportunities that were provided during the implementation. The goal of this stage of the evaluation was to assess whether RCC and i-Ready were implemented as designed and to provide detailed descriptions of teachers’, specialists’, and principals’ experiences with the programs, and their perceptions of the professional development and support received for RCC and i-Ready implementation. In addition, the implementation evaluation included the perceptions of students in grades 4 and 5. The second stage of the evaluation will examine the impact of RCC and i-Ready on student reading and mathematics achievement, and will be reported in a separate document at a later date.

The implementation evaluation was guided by the following questions.

1. How were RCC and i-Ready implemented in MCPS and were they implemented as designed?
2. What were the experiences and perceptions of stakeholders regarding implementation and operation of the program?

Methodology

Evaluation Design

The implementation evaluation used a non-experimental design to describe program implementation and staff and student experiences with RCC and i-Ready. Multiple measures were used, including data from program documents and records, informational meetings, and staff and student surveys.

Data Sources

Program documents, provided to evaluators by program administrators, were reviewed, including RCC and i-Ready published program materials, teacher guidebook, student workbook, online teacher tools, and professional learning agendas and training session notes. Documents were used to describe the RCC and i-Ready program resources and implementation as well as guide the development of staff and student surveys.

Planning Guide and RCC/i-Ready materials. The RCC/i-Ready Implementation Planning Guide established expected processes, structures, and schedules for the introduction, implementation, and operation of the programs. The recommendations presented in the guide as well as the procedures detailed in the published RCC materials provided clear direction and well-defined expectations for district administrators and school staff.

Informational meetings were held with MCPS administrators who were overseeing the RCC program and with a trainer from Curriculum Associates who is working with MCPS school personnel. Data from the MCPS administrators and from Curriculum Associates trainers were used to describe the planning and implementation of the RCC and i-Ready program in MCPS, including professional learning opportunities, materials provided, and ongoing monitoring and support.

MCPS staff data. The MCPS website and websites for the 11 participating schools were used to identify classroom teachers and specialists in grades 1 through 5 in the schools using RCC and i-Ready. A memorandum was sent to principals in each of the RCC/i-Ready schools to explain the evaluation study and describe the surveys that would be sent to their staff; principals also were asked to identify a contact person at the school who could assist the evaluators when questions arose.

Survey instrument development

Survey development. Staff and student surveys were developed by OSA in collaboration with an evaluation advisory group, made up of four central office program administrators and two principals from RCC/i-Ready schools. Staff surveys were constructed around the expected program structures and processes, so that survey findings would allow an examination of whether the experiences reported by school staff aligned with the design and intent of RCC and i-Ready. Questions were designed to elicit staff feedback about professional development, RCC lessons, using i-Ready, collaborative planning, and how well RCC and i-Ready meet the needs of all students. Staff were asked about RCC and i-Ready only in the subject(s) that were implemented in their school. Staff surveys were pilot-tested with a few teacher volunteers to ensure the questions were clear and relevant to their experiences with the programs. Student surveys were constructed to ascertain Grade 4 and 5 student perceptions of the programs, particularly with regard to RCC lessons, i-Ready intervention and enrichment, assessments, program materials and workbook.

School staff surveys were administered to teachers, principals, specialists (ESOL teachers, special education teachers, academic intervention teachers, and focus teachers), staff development teachers, math content coaches, and reading specialists in each of the 11 RCC schools. E-mail messages were sent to staff during a two-week period in March and April 2017 explaining the evaluation study and requesting their participation in the survey. A link to the online survey was included in the email message, with an explanation that responses were anonymous and that staff survey findings would be reported only in the aggregate.

Student surveys were administered to students in Grades 4 and 5 online and anonymously. Student survey links were sent directly to Grade 4 and 5 teachers in RCC schools with a request to have students take the survey during a two-week window during May and June 2017.

Study sample

The sample for the implementation evaluation was made up of staff and students in all 11 schools piloting the programs. All principals, classroom teachers, specialists (English for Speakers of Other Languages [ESOL] teachers, special education teachers, academic intervention teachers, and focus teachers), staff development teachers, math content coaches, and reading specialists were asked to complete surveys, as well as students in Grades 4 and 5 of the pilot schools.

The number of staff members who completed surveys, along with the number of students who completed surveys, are shown in Table 1. Surveys were completed by teachers, specialists, and students from all 11 RCC schools. At least one leadership staff member from 9 of the 11 schools completed a survey: surveys were completed by 8 of the 11 principals and by Staff Development Teachers (SDTs)/Math Content Coaches (MCCs)/and Reading Specialists (RSs) in 8 of the 11 RCC schools. Survey response rates were 81% ($n = 193$) for teachers, 56% ($n = 62$) for specialists, 50% ($n = 12$) for staff development teachers/math content coaches/reading specialists, and 73% ($n = 8$) for principals. Of 1,982 students² enrolled in Grades 4 and 5 in the 11 pilot schools, 1,463

² Ninety-eight students in a French immersion program did not use RCC and were not counted in the total enrollment of the 11 schools.

completed surveys, yielding a response rate of 74%. Descriptive information about the respondents (grade taught, staff position, student grade) is shown in Appendix A, Tables A-2 and A-3.

Because the numbers of responding principals and SDTs/MCCs/RSs were small, the responses from these two groups have been combined for reporting survey findings, and the combined group is labeled “Leadership.”

Table 1
Numbers and Percentages of Stakeholders Completing RCC/i-Ready Survey

Stakeholder	<i>N</i>	<i>n</i>	Response rate (%)
Classroom Teachers	239	193	80.8
Specialists (Focus, academic intervention, special education, ESOL, other)	111	62	55.9
Staff development teachers, math content coaches, reading specialists	24	12	50.0
Principals	11	8	72.7
Students, Grades 4 and 5	1,982	1,463	73.8

Analytical Procedures

Descriptive summary statistics were computed for the quantitative survey items. Summary statistics of survey responses were presented separately for each study sample.

For open-ended survey items, a systematic review of responses was conducted, and emerging categories of similar responses were created utilizing open coding and constant comparison approaches³. Descriptive summary statistics were computed for each the categories and reported under larger themes of categories. Several verbatim examples from the surveys were also provided for each category.

Strengths and Weaknesses of the Methodology

Strengths. To ensure that the evaluation addressed the issues of most importance and interest to the administrators and stakeholders of the project, the evaluation plan was developed in collaboration with the RCC/i-Ready Steering Committee, comprising administrators in OSSI and OCIP. In addition, the principal, teacher, specialist, and student surveys were developed with input from the Steering Committee, strengthening the construct validity of the instruments. Surveys also were pilot tested with a few teachers and a few students to elicit their feedback before administering the surveys.

³ Open coding inductively creates substantive categories which are descriptive of the participants’ concepts and beliefs (Maxwell, 2005). In constant comparison, passages that are being coded are compared with other passages to verify consistency in the coding process. Constant comparison helps the researcher show that they have conducted a comprehensive review (Gibbs, 2010).

A mixed-method approach was used to provide both complementarity and triangulation of the data, which improve the validity of the findings. Response rates from all groups were greater than 50%: teachers, 82%, principals, 73%, specialists 50%–56%, and students, 74%. The high response rates in most instances improved the external validity of the findings.

The survey included open-ended items in order to determine the full extent of stakeholders' experiences and provide respondents with the opportunity to elaborate. These qualitative data provided details describing a range of experiences and contexts in the implementation of RCC and i-Ready.

Limitations. Much of the data for this stage of the evaluation was collected with surveys from teachers, principals, and specialists; in many cases the respondent reported on her/his own work, so the possibility of self-report bias must be considered, i.e., respondents may have been influenced by the desire to report more favorable responses. Further, although survey response rates were 50% or higher, the number of leadership staff responding to some of the open-ended questions was small, so their comments must be considered with caution.

Results

Evaluation Question 1. How were RCC and i-Ready implemented in MCPS and were they implemented as designed?

Planning and professional development

Schedule of training opportunities for school leaders and instructional staff. Implementation of RCC and i-Ready included professional learning opportunities for school leadership and teaching personnel. CA worked with administrators from OSSI and OCIP to develop the schedule of learning opportunities that would provide initial training as well as ongoing learning and support for staff at the 11 pilot schools. Table 2 presents the schedule of training opportunities provided for staff in RCC schools during 2016–2017 school year.

During the first two weeks of school, training sessions were held to prepare teachers for implementing RCC lessons and launching i-Ready in reading/writing and math. Following the initial training sessions, learning opportunities were provided to staff throughout the implementation of RCC and i-Ready, beginning in September, 2016 and continuing throughout the school year. Each school had at least three site-based training sessions during the school year (see Table 2).

Staff participation in professional learning sessions. Table 2 also presents the attendance at each session reported by respondents in the staff surveys. Among survey respondents, large percentages of staff members in each group reported attending professional learning opportunities. The sessions with the largest percentages of teachers reporting attendance were CA-led training on looking at your data (84%), CA-led training on Math Talk Review (75%), and the initial training on RCC (75%). In general, a smaller percentage of specialists (ELL, special education, focus, and intervention teachers), reported attendance at most of the meetings, but the sessions reported by

the largest percentages of specialists were school-based training (63%), looking at your data (60%), and support at collaborative planning meetings (61%). Among leadership, greater than 75% reported attending most of the professional learning opportunities, including the product overview, initial training, math talk review, looking at your data, and RCC training at the Professional Learning Community (PLC).

Table 2
Professional Learning Opportunities Provided in RCC Pilot Schools and
Self-Reported Participation by Staff Survey Respondents

	Date	Number and percent attended					
		Teachers (N = 193)		Specialists ¹ (N = 62)		Leadership ² (N = 20)	
		n	%	n	%	n	%
Product Overview (CA)	Aug. 24	122	63.2	36	58.1	17	85.0
Initial Training on RCC (CA)	Aug. 29 – Sept. 9	145	75.1	13	21.0	16	80.0
Training on RCC Reading (CA)	Sept. 12	132	68.4	25	40.3	13	65.0
Math Talk Training (CA)	Oct. 25	36	18.7	6	9.7	10	50.0
RCC-led training on Math Talk review (CA)	various dates in Nov.	145	75.1	23	37.1	17	85.0
RCC-led training on looking at your data (CA)	various dates in Feb.	162	83.9	37	59.7	18	90.0
School-based training (school)	ongoing through the school year	106	54.9	39	62.9	14	70.0
Support at collaborative planning meetings (school)	ongoing through the school year	119	61.7	38	61.3	--	
RCC at PLCs	4 during the school year	--	--	--	--	18	90.0

¹ Specialist group included ELL, special education, intervention, and focus teachers

² Leadership group included principals, staff development teachers, math content coaches, and reading specialists

Note. Schedule of sessions was provided by program staff. Number (N) and percent are based on staff members responding to survey, so may not reflect total number of attendees at session. CA = Curriculum Associates led the training; school = school staff led training; MCPS= MCPS central office staff led training.

Implementing components of RCC and i-Ready

The following section describes the survey responses of teachers and leadership staff on the implementation of the intended structures and processes of RCC and i-Ready.

Teachers. Tables 3 and 4 summarize information reported by the responding teachers about implementation of the RCC and i-Ready in their classroom. Note that teachers responded separately to the use of RCC in reading, writing, and math.

The recommended structure of RCC includes daily whole class instruction and daily small group instruction in reading and math, as well as 45 minutes per week of i-Ready practice in each subject. Teachers were asked how well these components fit into their daily schedule.

In reading, 92% of responding teachers reported that RCC *whole class instruction* fit somewhat or very well in their daily schedule and 83% reported that i-Ready time fit somewhat or very well in their daily schedules (Table 3), indicating that most teachers are implementing these components daily as expected. A smaller percentage (64%) reported that *small group instruction* fit somewhat or very well in their daily schedule.

Similarly, in math, 88% of responding teachers reported that RCC *whole class instruction* fit somewhat or very well in their daily schedule and 81% reported that i-Ready fit somewhat or very well, but a smaller percentage (61%) reported that small group instruction fit somewhat or very well (see Table 3).

Table 3
Teachers' Reports of RCC and i-Ready Daily Scheduling in Reading, Writing, and Math

	Very Well or Somewhat Well					
	Reading		Writing		Math	
	<i>N</i> = 138		<i>N</i> = 100		<i>N</i> = 121	
How well do parts of the program fit within daily schedule?	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Whole class instruction in Reading/Writing/Math	127	92.0	87	87.0	106	87.6
Small group instruction in Reading/Writing/Math	88	63.8	na		74	61.1
i-Ready time in Reading/Math	114	82.6	na		98	81.0

Note. *N* = number responding to survey item. Response options were “Very well,” “Somewhat well,” “Not so well,” “Not well at all.” na = survey item not asked.

RCC lesson materials are expected to be the primary resource for teachers implementing the program. Teachers were asked whether they used RCC materials exclusively or in combination with other resources.

In reading, 38% of the responding teachers reported that they used RCC exclusively, while almost half (48%) reported that they mostly used RCC for instruction, but sometimes used other resources (Table 4). In contrast, in math and writing, nearly two thirds of responding teachers reported that they used RCC exclusively (math, 62%; writing, 65%). An additional survey question asked teachers who indicated that they used some non-RCC materials, to describe those resources. Table B-1 in Appendix B summarizes their comments. Among teachers who named additional reading resources, about one half reported using guided reading/leveled texts; other resources named were short videos, picture dictionaries, and materials to build background knowledge. Additional writing resources included graphic organizers, reading books for context, and modified materials. Teachers who reported using additional math resources named self-created materials, including additional problems for practice (see Table B-1).

In both reading and math, most teachers reported that their students were spending between 31 and 45 or between 46 and 60 minutes per week on i-Ready instruction and practice (85% in reading;

82% in math). Further, large majorities of teachers responded that most i-Ready instruction and practice is done in class (86% in reading; 90% in math) versus home (see Table 4).

Table 4
Teachers' Reports of RCC and i-Ready Practices in Reading, Writing, and Math

	Reading		Writing		Math	
Which statement best describes your reading/writing/math instruction?	<i>N</i> = 139		<i>N</i> = 102		<i>N</i> = 122	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
I use RCC exclusively for my instruction	53	38.1	66	64.1	76	62.3
I mostly use RCC for instruction but sometimes I use other resources/curriculum	66	47.5	24	23.5	35	28.7
I use a combination of RCC and other resources/curriculum for instruction	20	14.4	9	8.8	10	8.2
I mostly use other resources/curriculum for instruction but sometimes I use RCC	0	.0	3	2.9	1	0.8
On average, how many minutes per week do your students spend on i-Ready instruction and practice in Reading/Math	<i>N</i> = 138		na		<i>N</i> = 123	
	<i>n</i>	%			<i>n</i>	%
30 minutes or less	11	8.0	--	--	15	12.2
31 – 45 minutes	54	39.1	--	--	52	42.3
46 – 60 minutes	64	46.4	--	--	49	39.8
More than 60 minutes	9	6.5	--	--	7	5.7
Which statement best describes your students' use of i-Ready instruction in class or at home in Reading/ Math	<i>N</i> = 139		na		<i>N</i> = 122	
	<i>n</i>	%			<i>n</i>	%
Most i-Ready instruction and practice is done in class during the school day	123	88.5	--	--	110	90.2
About half of i-Ready instruction and practice is done in class and about half is done at home	15	10.8	--	--	10	8.2
Most i-Ready instruction and practice is completed at home	1	0.7	--	--	2	1.6

Notes. *N* = number responding to survey item. na = survey item not asked.

School leadership. School leaders reported on implementation of intended aspects of the program in their school by indicating agreement or disagreement with statements about the practices of “most or all teachers in their school.” Table 5 shows the number of principals, staff development teachers, math content coaches, and reading specialists who responded “Strongly Agree” or “Agree.”

In reading, most or all respondents agreed that teachers are teaching RCC lessons as presented in the teacher resource book, are keeping on track with RCC (i.e., are covering the material in the recommended timeframes), are using RCC for small group instruction and to deliver standards-based content, and are using 45 minutes per week of i-Ready practice.

In math, all responding leadership staff agreed that teachers are teaching RCC lessons as presented in the resource book, and more than three quarters of the respondents agreed that teachers are using RCC to deliver standards-based content and are using 45 minutes of i-Ready practice. Lower

levels of agreement were shown for using RCC for data-driven small group instruction (61%), and for keeping on track with RCC pacing (61%).

Table 5
Principals, Staff Development Teachers, Math Content Coaches, and Reading Specialists' Agreement with Survey Items Describing Implementation of RCC and i-Ready in Reading, Writing, and Math

	Strongly Agree or Agree								
	N	Reading			Writing			Math	
		n	%	N	n	%	N	n	%
Most or all teachers in my school...									
...are teaching the RCC lessons in Reading/Writing/Math as presented in the Teacher Resource Book.	15	15	100.0	14	14	100.0	13	13	100.0
...are able to keep on track with RCC Reading/Writing/Math lesson pacing.	15	13	86.7	14	10	71.4	13	8	61.5
...are using RCC for data-driven, needs-specific small group instruction in Reading/ Math.	15	13	86.7	--	--	--	13	8	61.5
...are using RCC grade-level materials in Reading/ Math to deliver standards-based content.	15	15	100.0	--	--	--	13	12	92.3
...are using 45 minutes per week of i-Ready intervention or practice in Reading/Math.	15	14	93.3	--	--	--	12	10	83.3

Note. N = number responding to survey item minus "Not applicable"; n = number of "Strongly agree" or "Agree." Response options were "Strongly agree," "Agree," "Disagree," "Strongly disagree," and "Not applicable."

The use of RCC and i-Ready in collaborative planning meetings. Collaborative planning meetings are key among the established processes of RCC; staff are expected to use the meetings to unpack RCC lessons, establish daily learning goals, and use i-Ready data to develop strategies and plan instruction.

Eight SDTs/MCCs/RSs responded to a set of survey questions about how frequently RCC and i-Ready are used in various collaborative planning meeting tasks, not specified by subject. Table 6 summarizes their responses.

The most frequently reported use of RCC and i-Ready in collaborative planning meetings was: breaking down RCC lessons (seven of eight reported using frequently or always) and establishing daily learning goals (six of seven reported using frequently or always). Fewer respondents reported frequent use of RCC and i-Ready for: planning for small group instruction (four of eight);

analyzing growth (three of eight); differentiating instruction (three of eight); or planning for Standards Mastery assessment (two of eight).

Table 6
SDTs/MCCs/RSs' Reports on the use of RCC and i-Ready in Collaborative Planning Meetings

In what ways and how frequently are RCC and i-Ready used in collaborative planning meetings?	N	Frequently or always		Rarely or never
		n	n	n
Breaking down RCC lesson	8	7	1	0
Establishing daily learning goals using RCC	7	6	1	0
Using i-Ready data to plan for small group instruction	8	4	4	0
Analyzing growth using i-Ready data	8	3	5	0
Using i-Ready data to differentiate instruction to meet the needs of particular student groups	8	3	5	0
Planning for Standards Mastery assessment	8	2	2	4

¹SDT = staff development teacher; MCC = math content coach; RS = reading specialist

Note. N = number responding to survey item

The use of i-Ready reports by leadership staff. School leaders indicated their use of the reports provided by i-Ready and described ways the reports supported their work, as well as challenges of using the reports. Table 7 shows the usage indicated by principals, staff development teachers, math content coaches, and reading specialists. The reports used most frequently by the two groups of survey respondents were the Diagnostic completion report, the instructional usage report, the student growth by grade report, and the performance by grade and class report. Fewer respondents reported frequent use of predicted proficiency, Standards Mastery assessment, needs analysis, intervention screener, and data requests. All respondents were aware of almost all the reports, except several respondents indicated they were not aware of the data request reports (Table 7).

Table 7
Principals, Staff Development Teachers, Math
Content Coaches, and Reading Specialists' Reports of Frequency of Use of i-Ready Reports

	% of respondents					
	<i>N</i>	Frequently	Sometimes	Rarely	Have not used	Not aware of report
i-Ready Diagnostic completion report	16	12	2	1	1	0
i-Ready instructional usage report	16	12	3	0	1	0
Student growth by grade report	16	13	2	0	1	0
Performance report by grade and class	16	13	1	0	2	0
Predicted proficiency report	15	5	4	3	3	0
Standards mastery assessment report	16	3	7	2	4	0
Needs analysis by grade	16	5	4	3	3	1
Intervention screener	16	7	5	2	2	0
Data requests	16	2	3	1	3	7

Note. *N* = number responding to survey item.

Principals responded to an open-ended survey question and SDTs/MCCs/RSs responded to a survey checklist asking how the reports are supporting their work. Fourteen leadership staff (of 20 total) provided responses describing how they use the reports. The findings indicated that among school leadership, the reports are being used to:

- examine and monitor student growth
- provide feedback for teachers
- help motivate teachers by showing student growth
- inform data meetings, staff training, and collaborative planning sessions
- help develop interventions, Student Learning Objectives and [Individualized Education Program] IEP goals and objectives
- help place students in flexible needs groups

Principals, staff development teachers, math content coaches, and reading specialists were asked whether they felt adequately prepared to use the i-Ready reports. Thirteen of the 16 responding leadership staff indicated they felt able to use the reports effectively, while 3 respondents indicated the need for additional training or support to make the best use of the reports.

Leadership staff also were asked to comment on any challenges they had experienced with the reports. Seven respondents (of 20 total) provided comments about challenges, with 1 to 3 noting each of the following:

- need more time and experience with the reports to use all of them well and understand which reports will give them the best information to monitor students' growth

- difficult to narrow the number of reading groups
- the Standards Mastery reports haven't provided data that was not already known from other sources
- technical limitations made using the reports difficult:
 - the need for listing all students' performance on a particular lesson, so it would be possible to see which kids in the class failed that lesson, rather than going to each student's record to view performance on the lesson
 - it would be helpful if the instructional usage report allowed going back to previous week's usage
 - constant scrolling is needed because a limited amount of data can be seen on one screen, making analysis difficult

Evaluation Question 2. What were the experiences and perceptions of stakeholders regarding the implementation and operation of the program?

Professional learning opportunities

Teachers, specialists, and leadership staff reported their experiences with the professional learning opportunities and supports offered in conjunction with RCC and i-Ready through their responses to the surveys administered in spring 2017.

Teachers and specialists. Table 8 summarizes the reports of teachers and specialists with regard to their preparation for the use of RCC and i-Ready. In reading, 75% or more of the teachers agreed that the professional learning opportunities had adequately prepared them, except for using Standards Mastery Assessments (58% agreed). For each survey item, a smaller percentage of specialists than teachers agreed that the professional learning opportunities had adequately prepared them (see Table 8).

In writing, only 46% (compared to 67%–75% in reading and math) of teachers and specialists agreed that the professional learning opportunities had adequately prepared them to use, or support the use of, RCC. Lower percentages of teachers and specialists (67%–68%) also agreed that they knew where to go for help with writing compared to math and reading (69%–85%).

In math, the percentage of teachers agreeing that they were adequately prepared ranged from 61% for using Standards Mastery Assessments to 84% for knowing where to go with questions. Specialists also had the lowest percentage agreement on preparation for using Standards Mastery Assessments (39%); the highest percentage of specialists (75%) agreed that they were adequately prepared for using RCC in math.

Table 8
Teachers' and Specialists' (ELL, Special Education, Focus, Intervention Teachers) Perceptions of
RCC Professional Learning Opportunities in Reading, Writing, and Math

Survey item	Percent Responding Strongly Agree or Agree							
	Role	Reading		Writing		Math		
		N	%	N	%	N	%	
The PLO adequately prepared me to use (or support the use of) RCC for Reading/Writing/Math.	Teachers	163	74.8	117	46.2	147	67.4	
	Specialists	40	72.5	28	46.4	24	75.0	
The PLO adequately prepared me to use (or support the use of) i-Ready to monitor student progress in Reading/Math.	Teachers	164	76.2	na		148	77.1	
	Specialists	41	58.5	na		24	66.7	
The PLO adequately prepared me to use (or support the use of) i-Ready generated data reports for Reading/Math.	Teachers	161	75.2	na		147	74.1	
	Specialists	40	62.5	na		23	73.9	
The PLO adequately prepared me to use Standards Mastery Assessments to monitor student progress through grade-level standards in Reading/Math.	Teachers	139	57.5	na		124	61.3	
	Specialists	38	36.8	na		21	38.0	
If I need help with RCC for Reading/Writing/Math, I know where to go or who to ask.	Teachers	164	84.8	117	68.4	145	84.1	
	Specialists	44	79.5	30	66.7	26	69.2	

Note. N = number responding to survey item minus “Not applicable”; % computed with number of “Strongly agree” or “Agree.” Response options were “Strongly agree,” “Agree,” “Disagree,” “Strongly disagree,” and “Not applicable.” PLO = Professional Learning Opportunity.

Leadership staff. Reporting on their staff’s preparation for RCC, 70% or more of principals, staff development teachers, math content coaches, and reading specialists indicated that school staff were adequately prepared to use RCC and i-Ready in reading and math. Less than one half of the leadership staff agreed that preparation for using RCC in writing was adequate, however (see Table 9).

Reporting on the adequacy of their own preparation, 5 of the 10 responding SDTs/MCCs/RSs indicated they were adequately prepared to support RCC and i-Ready in reading, 2 of 10 indicated they were prepared to support writing, and 6 of 10 reported they were prepared to support RCC and i-Ready in math (see Table 9).

Table 9
Principals, Staff Development Teachers, Math Content Coaches, and Reading Specialists’ Perceptions of
RCC Professional Learning Opportunities in Reading, Writing, and Math

Survey item		Strongly Agree or Agree								
		Reading			Writing			Math		
		<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%
The RCC Professional Learning Opportunities adequately prepared our school staff to use RCC for Reading/Writing/Math.	Principals, SDTs, MCCs, RSs ¹	17	12	70.6	17	8	47.1	17	13	76.5
The RCC Professional Learning Opportunities adequately prepared our school staff to use i-Ready to monitor student progress in Reading/ Math.	Principals, SDTs, MCCs, RSs	17	15	88.2	--	--	--	17	14	82.4
I have been adequately prepared to support the implementation of RCC and i-Ready in Reading/Writing/ Math at the classroom level.	SDTs, MCCs, RSs	10	5	50.0	10	2	20.0	10	6	60.0

¹SDT = staff development teacher; MCC = math content coach; RS = reading specialist

Note. *N* = number responding to survey item minus “Not applicable”, *n* = number of “Strongly agree” or “Agree.” Response options were “Strongly agree,” “Agree,” “Disagree” “Strongly disagree,” and “Not applicable.”

SDTs/MCs/RSs were asked where they go with questions about RCC and i-Ready or for support with the programs. Of the 12 SDTs/MCs/RSs who completed surveys, 11 provided a response, identifying the following resources:

- 10 respondents said they contact Curriculum Associates;
- 6 respondents said they contact another person with the same position as theirs in another school;
- 5 respondents said they contact someone in OCIP;
- 1 respondent said they contact administrators or other teachers in the building.

Staff perceptions of the implementation of RCC and i-Ready

School staff reported their satisfaction and perceptions of how well various facets of RCC and i-Ready are working in the schools.

Teachers and specialists. Table 10 shows the number and percentage of teachers and specialists who indicated they were very or somewhat satisfied with aspects of the program in reading, writing, and math.

On most aspects of RCC and i-Ready in reading, high percentages of the responding teachers (more than 80%) indicated they were very or somewhat satisfied, including responses to overall pacing, RCC lesson materials for whole class instruction, i-Ready student instruction, RCC Teacher Toolbox and i-Ready resources (Tools for Instruction, Adaptive Growth Measure, and reports). Two survey items yielded lower levels of satisfaction from teachers in reading—RCC

lesson materials for small group instruction (47% very or somewhat satisfied) and Standards Mastery assessments (66% very or somewhat satisfied). Among specialists, a majority of those responding indicated that they were satisfied with most aspects of RCC for reading; the items that yielded the lowest levels of satisfaction among specialists were Standards Mastery assessments (62%) and i-Ready Adaptive Growth Measure and Diagnostics (77%).

Only two survey items in this section addressed writing—overall pacing and materials for whole group instruction. On both items about three quarters of the responding teachers indicated they were satisfied.

On survey items addressing RCC in math, less than one half (42%) of the responding teachers indicated they were very or somewhat satisfied with the overall pacing, 72% were very or somewhat satisfied with the RCC lesson materials for whole group instruction, and 57% were very or somewhat satisfied with the RCC lesson materials for small group instruction. Large majorities of the responding teachers (94%) indicated they were satisfied with the RCC Teacher Toolbox and i-Ready resources (Tools for Instruction, Adaptive Growth Measure, and reports) in math. A smaller percentage (71%) indicated satisfaction with the Standards Mastery assessments. Similar to their responses in RCC reading, a majority of responding specialists indicated they were satisfied with most aspects; only on the item addressing Standards Mastery did less than one half of the specialists indicate they were satisfied (40%) (Table 10).

Table 10
Teachers’ and Specialists’ Satisfaction with RCC and i-Ready Program and Resources
in Reading, Writing, and Math

Survey item	Role	Percent Responding Very Satisfied or Somewhat Satisfied					
		Reading		Writing		Math	
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Overall pacing	Teachers	154	82.5	111	73.9	137	41.6
RCC lesson materials for whole class instruction in Reading/Writing/Math	Teachers	153	85.0	110	77.3	137	72.2
RCC lesson materials for small group instruction in Reading/ Math	Teachers	144	47.2	na		136	57.4
i-Ready student instruction and practice in Reading/Math	Teachers	144	98.6	na		137	85.4
RCC Teacher Toolbox for Reading/ Math	Teachers	154	95.5	na		137	94.2
	Specialists	41	92.7	na		26	92.3
i-Ready Tools for Instruction in Reading/ Math	Teachers	152	92.1	na		137	93.5
	Specialists	33	84.8	na		20	85.0
i-Ready Adaptive Growth Measure and Diagnostics in Reading/ Math	Teachers	147	90.5	na		133	85.7
	Specialists	30	76.7	na		18	77.8
i-Ready reports for Reading/ Math	Teachers	155	91.0	na		138	91.3
	Specialists	35	82.8	na		22	86.4
Standards Mastery assessments in Reading/Math	Teachers	117	65.8	na		108	71.3
	Specialists	29	62.0	na		15	40.0

Note. *N* = number responding to survey item minus “Not applicable”; % computed with number of “Very satisfied” or “Somewhat satisfied.” Response options were “Very satisfied,” “Somewhat satisfied,” “Somewhat dissatisfied,” “Very dissatisfied,” and “Not applicable.”

Teachers’ responses to several questions about the program and resources were examined by grade taught: overall pacing, materials for whole class instruction, materials for small group instruction, and i-Ready instruction and practice (see Table B-2 in Appendix B). Consistent with the findings for all teachers, higher percentages of responding teachers in each grade were satisfied with overall pacing and with whole group instruction in reading than in math. Responses by teachers in different grades were not statistically significantly different.

Table 11 summarizes the responses of teachers and specialists to survey items addressing the implementation of several aspects of RCC: collaboration, differentiation, using i-Ready for instruction, and using i-Ready data in planning meetings. In RCC reading, almost all teachers (90%) and specialists (90%) reported that collaboration for RCC instructional planning was working somewhat or very well. About three quarters (76%) of the teachers and 72% of the specialists reported that using i-Ready for instruction was going well. In reading, the aspect with the lowest percentage of teachers and of specialists indicating that implementation was going well was differentiation opportunities (66% of teachers and 45% of specialists).

Only two survey items pertained to RCC writing: collaboration and differentiation. Teachers’ and specialists’ ratings for both collaboration and differentiation were lower than their ratings for those items in reading and math.

Ratings for implementation of RCC in math were similar to those for reading; the aspect with the largest percentage of teachers and specialists indicating that implementation is working well was collaboration (94% of teachers; 83% of specialists). Differentiation opportunities had the lowest ratings (69% of teachers; 50% of specialists).

Table 11
Experiences with Implementation of RCC and i-Ready in Reading, Writing, and Math:
Teachers and Specialists

How well do the following aspects work?		Percent Responding Working Very Well or Somewhat Well					
		Reading		Writing		Math	
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Collaboration for RCC instructional planning in Reading/Writing/Math.	Teachers	140	90.0	97	73.2	120	94.2
	Specialists	38	89.5	30	63.3	24	83.4
Differentiation opportunities in RCC Reading/Writing/Math.	Teachers	139	66.2	100	49.0	120	69.2
	Specialists	42	45.3	31	38.7	26	50.0
Using i-Ready data for instruction in Reading/ Math.	Teachers	139	75.5	--	--	120	79.1
	Specialists	36	72.2	--	--	23	78.3
Reviewing i-Ready Reading/ Math data in collaborative planning meetings.	Teachers	134	68.7	--	--	117	73.5
	Specialists	33	69.7	--	--	22	54.6

Note. *N* = number responding to survey item minus “Not applicable”; % computed with number of “Very well” or “Somewhat well.” Response options were “Very well,” “Somewhat well,” “Not so well,” “Not well at all,” and “Not applicable.”

Leadership Staff. Principals and SDTs/MCCs/RSs also reported how well aspects of RCC and i-Ready were working, rating them based on most classrooms in their school. Table 12 shows their responses.

The numbers of principals and SDTs/MCCs/RSs responding to these survey items were small, but overall, they were more likely than the teachers and specialists to indicate that aspects of the program were working well. Most principals and SDTs/MCCs/RSs indicated that collaboration, differentiation, and i-Ready were working very well or somewhat well in reading and in math; ratings were slightly lower on the two writing items—collaboration for instructional planning, and differentiation opportunities.

Table 12
Experiences with Implementation of RCC and i-Ready in Reading, Writing, and Math:
Principals, Staff Development Teachers, Math Content Coaches, and Reading Specialists

In MOST of the classrooms in your school, how well do the following aspects work?	Working Very Well or Somewhat Well								
	Reading			Writing			Math		
	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%
Collaboration for RCC Reading/Writing/Math instructional planning	15	15	100.0	14	10	71.4	13	13	100.0
Differentiation opportunities in RCC Reading/Writing/Math	15	14	93.3	13	9	69.2	12	10	83.3
Using i-Ready data for instruction in RCC Reading/ Math	15	14	93.3		na		12	8	66.7
Reviewing i-Ready Reading/Math in collaborative planning meetings ¹	7	5	71.4		na		13	11	84.6

¹ Survey item only appeared on principal survey due to input error.

Notes. *N* = number responding to survey item; *n* = number responding “Very well” or “Somewhat well.” Response options were “Not well at all,” “Not so well,” “Somewhat well,” “Very well,” or “Not applicable.” na = not asked.

Meeting the needs of students with RCC and i-Ready

Teachers were asked to rate the overall difficulty level of RCC in reading, math, and writing for the students in their class. In addition, teachers, specialists, principals, and SDTs/MCCs/RSs responded to questions about meeting the needs of specific subgroups of students in their school, including ELL students, accelerated students, special education students, and students needing intervention.

Teacher perceptions of RCC difficulty level. In each subject, the largest percentage of teachers indicated that RCC was usually the right amount of difficulty for their class (48% in reading; 58% in writing; 40% in math; see Table 13). Nearly one third of the teachers responded that RCC reading (30%) was often too difficult for their class, one third indicated that RCC math (33%) was often too difficult, and one quarter (26%) of the teachers indicated that RCC writing was too difficult for their class.

Table 13
Teachers' Reports of Difficulty Level of RCC in Reading, Writing, and Math

How would you rate the overall difficulty level of RCC in Reading/Writing/Math?	Reading (<i>N</i> = 139)		Writing (<i>N</i> = 101)		Math (<i>N</i> = 122)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Often too difficult for my class	42	30.2	26	25.7	40	32.8
Often too easy for my class	0	0.0	1	1.0	1	0.8
Often too easy for some students and too difficult for other students	30	21.6	15	14.9	32	26.2
Usually just about the right amount of difficulty for my class	67	48.2	59	58.4	49	40.2

Note. *N* = number responding to survey item; *n* = number selecting response option.

Teachers' ratings for the overall difficulty level of subjects by grade level can be seen in Tables B-3, B-4 and B-5 in Appendix B. When responses indicating RCC was "often too difficult for my class" were compared across grade levels, differences were statistically significant in reading and writing ($p < .05$). In reading, higher percentages of teachers judged RCC as too difficult in Grades 2, 3, and 4 compared with Grade 1. In writing, a higher percentage of Grade 4 teachers indicated RCC was too difficult compared with grades 2 teachers. The percentages of teachers indicating RCC was "often too difficult for my class" in math were not statistically different by grade.

Teacher and specialist perceptions of how well RCC meets the needs of specific groups of students. Teachers reported their level of satisfaction with how the RCC program in reading, writing, and math meets the needs of various subgroups of students—ELL students, accelerated students, special education students, and students needing intervention. Table 14 shows that across all subjects, the largest percentage of teachers were satisfied with RCC meeting the needs of accelerated students (76% for reading; 76% for writing; 68% for math). Smaller percentages of teachers indicated satisfaction that RCC were meeting the needs of special education students (42%–51% across subjects) and students needing intervention (49%–55%) (see Table 14).

Specialists reported how well RCC worked with the students they taught, and the relevance of the instructional materials for working with their students. The bottom two rows of Table 14 show the specialists' responses to these survey questions. More than two thirds of the responding specialists were satisfied with the way RCC works and with the materials in reading and in math. Specialists responded with lower levels of satisfaction for writing (58% for how RCC works with their students and 55% for relevance of the materials).

Table 14
Teachers' and Specialists' Satisfaction with RCC for Meeting the Needs of
Subgroups of Students

...please rate your satisfaction with the following aspects of the program	Percent Responding Very Satisfied or Somewhat Satisfied					
	Reading		Writing		Math	
Teachers	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
How the RCC program meets the needs of ELL students in Reading/Writing/Math.	152	59.9	109	53.2	135	60.0
How the RCC program meets the needs of accelerated students in Reading/Writing/Math	151	76.1	109	76.1	136	68.4
How the RCC program meets the needs of special education students in Reading/Writing/Math	133	42.1	102	51.0	121	45.4
How the RCC program meets the needs of students needing intervention in Reading/Writing/Math	152	50.7	111	54.9	136	49.3
Specialists						
How the RCC program in Reading/Writing/Math works for the students I teach.	42	69.1	31	58.0	25	72.0
The relevance of the instructional materials in the RCC Reading/Writing/Math program for the students I teach.	41	70.7	31	54.8	25	72.0

Note. *N* = number responding to survey item minus “Not applicable”; % computed with number of “Very satisfied” or “Somewhat satisfied.” Response options were “Very well,” “Somewhat well,” “Not so well,” “Not well at all,” and “Not applicable.”

Leadership perspectives on how well RCC meets the needs of specific groups of students. Principals and SDTs/MCCs/RSs indicated whether they agreed that the RCC program in reading, writing, and math is meeting the needs of ELL students, accelerated students, special education students, and students needing intervention (Table 15). Numbers of respondents were small, so the findings must be interpreted with caution. Consistent with the responses of teachers, highest levels of agreement were reported for RCC reading meeting the needs of accelerated students; the lowest levels of agreement were reported for RCC math meeting the needs of special education students and students needing intervention.

Table 15
Leadership¹ Satisfaction with RCC for Meeting the Needs of Subgroups of Students

Please indicate your level of agreement...	Strongly Agree or Agree								
	Reading			Writing			Math		
	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%
The RCC Reading/Writing/Math program is meeting the needs of ELL students in our school.	15	10	66.7	5 ²	3	60.0	11	7	63.6
The RCC Reading/Writing/Math program is meeting the needs of accelerated students in our school.	15	14	93.3	14	13	92.9	12	9	75.0
The RCC Reading/Writing/Math program is meeting the needs of special education students in our school.	14	9	64.3	14	13	92.9	12	7	58.3
The RCC Reading/Writing/Math program is meeting the needs of students needing intervention in our school.	15	12	80.0	14	12	85.7	12	7	58.3

¹ Leadership staff comprised principals, staff development teachers, math content coaches, and reading specialists.

² Survey item only appeared on principal survey due to input error.

Note. *N* = number responding to survey item minus “Not applicable”; *n* = number responding “Strongly agree” or “Agree.” Response options were “Strongly agree,” “Agree,” “Disagree,” “Strongly disagree,” and “Not applicable.”

Staff overall satisfaction and comments about their experience with RCC and i-Ready

Respondents from each of the stakeholder groups rated their overall satisfaction with RCC and i-Ready, and indicated the likelihood that they would recommend the programs to another elementary school. Tables 16 and 17 summarize their responses.

Satisfaction with RCC and i-Ready—at the level of “somewhat satisfied” or “very satisfied”—was high among all stakeholder groups. More than 80% of respondents in each of the groups indicated that they were somewhat or very satisfied with the programs (Table 16).

Table 16
Overall Satisfaction with RCC and i-Ready by Stakeholders

Overall, how satisfied are you with RCC and i-Ready?	Teachers (<i>N</i> =147)		Specialists (<i>N</i> =45)		Principals, SDTs/ MCCs/RSs (<i>N</i> =15)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
	Very satisfied	51	34.7	10	22.2	11
Somewhat satisfied	76	51.7	28	62.2	4	26.7
Somewhat dissatisfied	12	8.2	6	13.3	0	0.0
Very dissatisfied	8	5.4	1	2.2	0	0.0

Note. *N* = number responding to survey item

More than two thirds of respondents from each of the groups indicated that they were somewhat or very likely to recommend RCC and i-Ready to another elementary school (Table 17). Eighteen percent of teachers and nearly one quarter (24%) of specialists responded that they might or might not recommend the programs to other elementary schools.

Table 17
Likelihood to Recommend RCC and i-Ready Reported by Stakeholders

If you could, how likely would you recommend RCC and i-Ready to another elementary school?	Teachers (N=147)		Specialists (N=45)		Principals, SDTs/ MCCs/RSs (N=15)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
	Very likely to recommend	58	39.5	9	20.0	11
Somewhat likely to recommend	44	29.9	18	40.0	2	13.3
Might or might not recommend	26	17.7	11	24.4	2	13.3
Would probably not recommend	9	6.1	6	13.3	0	0.0
Would definitely not recommend	10	6.8	1	2.2	0	0.0

Note. N = number responding to survey item

Staff responses to open-ended survey questions. In addition, teachers, specialists, principals, and SDTs/MDDs/RSs provided comments in response to open-ended survey questions about aspects of RCC and i-Ready that they liked most and least. The tables and text that follow show the major topics (i.e., 10% or more of respondents provided a comment in the topic) that emerged from the responses. More detailed summaries of teacher and specialist responses to the open-ended questions, including representative examples of comments, are shown in Appendix C, Tables C-1, C-2, C-3, and C-4.

Teachers. A total of 121 teachers provided a response to the survey question asking what they liked best about RCC and i-Ready. Table 18 presents the aspects that were named by 10% or more of the responding teachers. Teachers most frequently noted that they liked the RCC and i-Ready resources and materials. They liked that materials were organized and all in one place, and that the reading materials were interesting and varied (see Table 18).

The format of RCC and i-Ready was noted by about one fourth of the responding teachers as an aspect they liked. Teachers liked the structure and sequence of the programs as well as the individualized, differentiated format of i-Ready (see Table 18).

Other aspects of the RCC and i-Ready programs mentioned by about 10%–15% of those who responded were the content—teachers reported that the programs are engaging and rigorous, and they connected with other learning. They also liked i-Ready and the i-Ready reports (17%); teachers found them helpful for monitoring progress and identifying needs for intervention (Table 18).

Table 18
Aspects of RCC and i-Ready Liked Best by Teachers Responding to Open-End Survey Question ($N = 121$)

Liked Aspects ¹	Description	<i>n</i>	%
Resources			
Organized Materials	Premade; all in one place; helps planning; easy to use	37	30.6
Reading Material	Interesting; variety; relevant topics	23	19.0
Format			
i-Ready Differentiation	Starts at their level; self- paced; individualized	34	28.1
Structure and Pace	Well-paced; structured layout; like format; scaffolding; gradual release; focuses on one skill at a time (some specify Reading or Math)	29	24.0
Sequencing	Like sequencing (some specify Reading or Math)	18	14.9
Content			
Connections	Between i-Ready and RCC; connected with specific objectives being taught; addresses standards; prepares for PARCC	18	14.9
Engaging	Students interested; motivated; engaged; enjoy	14	11.6
Rigorous instruction	High level; challenging; Close reading	14	11.6
Data Monitoring			
Reports	Helpful i-Ready reports; can monitor progress; diagnostics; suggest intervention; accessible data	20	16.5
General			
Like i-Ready		21	17.4
Like overall writing/reading		13	10.8

¹ Aspects named by 10% or more of those who provided comments are included in table. A complete list of aspects named by respondents is shown in Appendix C, Table C-1.

Note. N = number responding to survey item; respondents may respond with more than one aspect

Comments about aspects they liked least were provided by 122 teachers; aspects named by 10% or more of the teachers are shown in Table 19. The aspects noted by the largest number of teacher respondents were lack of engaging materials, pacing, scheduling, and instructional content (Table 19). Pacing was most often identified as an issue for math; teachers noted that they did not have enough time for teaching, re-teaching, and practicing the lessons. Teachers also reported dissatisfaction with scheduling; instructional blocks were not long enough to cover the RCC whole group lesson (Table 19).

Instructional content also was named a least liked aspect of RCC and i-Ready among those who provided comments. Teachers were concerned that the reading lessons were too difficult for many of their students and that there were not enough opportunities for differentiation and enrichment. Further, a substantial number of the responding teachers reported that the materials were not engaging (Table 19).

Table 19
Aspects of RCC and i-Ready Liked Least by Teachers Responding to Open-End Survey Question (*N* = 122)

Least Liked Aspects ¹	Description	<i>n</i>	%
Materials			
Not engaging	Boring; not engaging	26	21.3
Instructional Content			
Differentiation	Lack of differentiation; enrichment opportunities	23	18.9
Reading difficulty	Too difficult for most; books are higher level; passages too difficult	19	15.6
Not Authentic Learning	Too structured; not enough flexibility with materials; lessons confining; teaches to PARCC; too much time; emphasis on computer	19	15.6
Assessments	Doesn't match what learned; quizzes too hard (some reading, some math); too many assessments	16	13.1
Pacing			
Math too fast	Not enough time to reteach; need time for practice	21	17.2
Pacing too fast	Subject unspecified	17	13.9
Other pacing comments	Inaccurate; some fast; some slow; too structured; reading too fast; lack of time for creative; thoughtful writing	14	11.5
Reports			
Accuracy and user friendliness	Not accurate; students get same lesson again even if got 100%; reports are too much; need to streamline	12	9.8
Scheduling/Lesson Length			
Scheduling	Time blocks not enough; not time to implement as intended	17	13.9
Lesson Length	Too long; whole group too long	13	10.7

¹ Aspects named by 10% or more of those who provided comments are included in table. A complete list of aspects named by respondents is shown in Appendix C, Table C-2.

Note. *N* = number responding to survey item; respondents may respond with more than one aspect

Specialists. Specialists (ESOL teachers, special education teachers, academic intervention and focus teachers) were asked in open-ended questions to name the major successes and challenges of implementing RCC at their school. Tables 20 and 21 show their responses.

A total of 38 specialists provided a response to the survey question about successful aspects of RCC; the aspects named by 10% or more of those who provided a comment are shown in Table 20. Detailed summaries of the specialists' comments are shown in Appendix C, Tables C-3 and C-4.

Similar to the responding teachers, the specialists most frequently noted that they liked the RCC and i-Ready resources and format of the program. Specifically, specialists liked that materials were accessible and ready to use, and they liked the consistent structure of RCC and the

opportunity to differentiate and customize interventions using i-Ready data. Specialists also reported that they could see student progress and gains with the programs (Table 20).

Table 20
Successful Aspects of RCC and i-Ready Reported by Specialists Responding to
Open-End Survey Question (*N* = 38)

Successful Aspects ¹	Description	n	%
Format			
Differentiation	i-Ready shows needs and gives suggestions; can customize/student profile; fills in gaps	14	36.8
Structure	Consistent; writing format good for special education students; assures same-grade teachers teaching same content	7	18.4
Resources			
Materials	Accessible; ready to use; many resources; helps planning	11	28.9
Data Monitoring			
Positive Results	See growth; students making gains	9	23.7
Data availability	Access to lots of data; helpful for intervention	4	10.5
Content			
Engaging	Students interested; engaged; enjoy i-Ready	6	15.8
Rigorous	High level; all students have access to on-level or challenge	6	15.8
Vocabulary	Students using academic vocabulary	4	10.5
Other	Discourse; think-pair-share; prepares for PARCC	4	10.5
General			
Collaboration	More collaboration at planning meetings; supporting teacher's work with ELL students	4	10.5

¹ Aspects named by 10% or more of the respondents are included in table. A complete list of aspects named by respondents is shown in Appendix C, Table C-3.

Note. *N* = number responding to survey item; respondents may respond with more than one aspect

A total of 41 specialists provided comments reporting challenging aspects of RCC; aspects named by 10% or more of those responding to the question are shown in Table 21. The issue noted by the largest number of specialists was pacing of reading; the specialists reported that it was difficult to have enough time for students to practice and to be sure they understood what they read. Specialists were also unhappy with the lack of RCC training for specialists, and the lack of clarity about specialists' work with RCC (Table 21).

Table 21
Challenges of RCC and i-Ready Reported by Specialists Responding to Open-End Survey Question
(*N* = 41)

Challenging Aspects ¹	Description	<i>n</i>	%
Format			
Reading pace	Not enough time for practice; texts move fast	11	26.8
No differentiation	Not differentiated for beginning ESOL students	4	9.8
Whole group too long	Whole group lessons long; not enough time for small groups	4	9.8
Support			
Training	Specialists needed training before program started; specialist training seemed to be an afterthought	9	22.0
Lack of clarity	Not enough information for ESOL, IEP, interventions, other specialists; not sure of expectations for guided reading	8	19.5
Instructional Content			
Reading difficulty	Difficult for students to access; texts are above grade level; no differentiated text levels	9	22.0
Not engaging	Texts not engaging; workbooks not engaging; too repetitive	7	17.1
Other content	Need a spiral component to RCC; MCPS grading and reporting for reading not aligned with RCC	8	19.5
Resources			
Materials needed	Supplementary books not available; suggested technology needs	5	12.2
Access	Accessing data and reports needs to be easier	5	12.2

¹Aspects named by 10% or more of the respondents are included in table. A complete list of aspects named by respondents is shown in Appendix C, Table C-4.

Note. *N* = number responding; respondents may respond with more than one aspect

Leadership. Principals and SDTs/MCCs/RSs were asked to comment on the aspects of RCC and i-Ready that were most successful and those that were most challenging in their schools. The small number of respondents in these two groups precluded a more detailed accounting of comments, but the topics mentioned most frequently are summarized here.

Fourteen of 20 leadership staff responded to the open-ended question about what has worked well with RCC and i-Ready at their school. Six respondents reported student growth as a success of RCC; one specifically pointed out growth within subgroups of students. Five reported that RCC is meeting needs of students through data driven instruction. Five respondents pointed to the wealth of resources provided, and three mentioned the rigorous texts provided. Several respondents reported that their students were writing more and that there's more consistency across grade levels.

When asked what the major challenges were with implementing RCC and i-Ready, two of the respondents reported that the late start into the school year and lack of training before implementation presented problems. Specifically, it was difficult to fit into the already established

departmentalized blocks and adjust whole and small group time allotments. One respondent also noted that books were not received for a month due to the late start.

Six respondents reported that the allotted time was a challenge. Specifically, respondents noted challenges to: effectively implement math in the math time block because additional time may be needed to understand the concept; complete all the math lessons in a year; complete the weekly 45 minutes of i-Ready; and implement the small group lessons. Several leadership staff reported that staff are receiving mixed messages about what small groups should look like, suggesting that additional work around small groups and differentiation is required. A respondent reported that there was little room to modify lessons with no differentiation, and another reported that guided reading had not been addressed.

Student comments about their experience with RCC and i-Ready

Student perceptions of RCC and i-Ready. Survey responses from Grade 4 and 5 students were generally positive toward RCC and i-Ready. On most survey items, the percentage of students indicating positive agreement ranged from about two thirds to more than three quarters (Table 22). The highest level of agreement was in response to the statement that i-Ready is a good way to practice skills: agreement was 83% in reading and 88% in math. The lowest levels of agreement were shown in items tapping interest: 62% agreed that the reading passages were interesting, and 71% agreed that they enjoyed most of the math lessons.

Grade 4 students had higher levels of agreement than Grade 5 students on all items (differences were statistically significant on all but one item (Table 22). The largest difference was observed on the items stating they enjoy using i-Ready: in reading, 76% of Grade 4 students agreed compared with 59% of Grade 5 students; in math 84% of Grade 4 students agreed compared with 69% of Grade 5 students.

Table 22
Student Experiences with RCC and i-Ready

Please indicate your level of agreement...	Strongly Agree or Agree									
	All Respondents ¹			Grade 4			Grade 5			Sig ²
	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%	
Reading										
Overall, the RCC reading instruction book helps me understand the lesson	1,263	1,042	82.5	716	603	84.2	543	436	80.3	*
Most of the reading passages in the RCC reading instruction book are interesting to me.	1,263	782	61.9	716	477	66.7	543	302	55.6	***
I like the selections (stories, articles, poems) and activities in the reading instruction book.	1,263	860	68.1	716	517	72.3	543	340	62.6	***
I-Ready is a good way to practice my reading skills.	1,239	1,028	82.9	701	606	86.5	534	420	78.7	***
The i-Ready lessons in reading connect with what we learn in class.	1,217	842	69.2	688	492	71.5	525	349	66.5	*
I enjoy using the i-Ready program for reading.	1,240	848	68.4	702	532	75.8	534	315	59.0	***
Math										
Overall, the RCC math instruction book helps me understand the lesson.	1,132	948	83.7	610	537	88.0	514	403	78.4	***
I enjoy most of the math lessons in the RCC math instruction book.	1,116	791	70.9	598	451	75.4	511	334	65.4	***
I-Ready is a good way to practice my math skills.	1,241	1,097	88.4	716	660	92.2	518	431	83.2	***
The i-Ready lessons in math connect with what we learn in class.	1,223	907	74.2	709	540	76.2	507	362	71.4	
I enjoy using the i-Ready program for math.	1,246	970	77.9	720	605	84.0	519	360	69.4	***

¹ *N* for All Respondents includes students who did not indicate grade level.

² Sig = statistically significant difference between Grade 4 and 5 responses, tested by chi square. * *p* < .05, ** *p* < .01, *** *p* < .001.

Notes. *N* = number responding to survey item minus “Not applicable”; % computed with number of “Strongly agree” or “Agree.” Response options were “Strongly agree,” “Agree,” “Disagree,” “Strongly disagree,” and “Not applicable.”

Most students (between 60% and 70% of grades combined) reported that class lessons in reading and math, and the i-Reading practice lessons, were about the right difficulty level for them (see Table 23). Between 10% and 17% of the students indicated that the lessons were usually hard for them. Grade 4 students were significantly more likely to report that class lessons were hard for them in reading and math, and that the i-Ready practice lessons in reading were hard for them (Table 23).

Table 23
RCC and i-Ready Difficulty Levels Indicated by Students

	All Respondents ¹		Grade 4		Grade 5		
Reading							
<i>How would you describe the difficulty level of the reading lessons?</i>	<i>N = 1,188</i>		<i>N = 664</i>		<i>N = 520</i>		Sig.²
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
The reading lessons we do in class are usually hard for me	143	12.0	91	13.7	50	9.6	
The reading lessons we do in class are usually easy for me.	222	18.7	110	16.6	112	21.5	
The reading lessons we do in class are usually about right for me—not too hard, not too easy.	823	69.3	463	69.7	358	68.8	
<i>How would you describe the difficulty level of the i-Ready practice reading lessons?</i>	<i>N = 1,193</i>		<i>N = 678</i>		<i>N = 513</i>		
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
The i-Ready practice reading lessons are usually hard for me.	124	10.4	89	13.1	35	6.8	
The i-Ready practice reading lessons are usually easy for me.	357	29.9	203	29.9	153	29.8	
The i-Ready practice reading lessons are usually about right for me—not too hard, not too easy.	712	59.7	386	56.9	325	63.4	
Mathematics							
<i>How would you describe the difficulty level of the math lessons?</i>	<i>N = 1,045</i>		<i>N = 559</i>		<i>N = 480</i>		
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
The math lessons we do in class are usually hard for me	172	16.5	102	18.2	70	14.6	
The math lessons we do in class are usually easy for me.	231	22.1	109	19.5	121	25.2	
The math lessons we do in class are usually about right for me—not too hard, not too easy.	642	61.4	348	62.3	289	60.2	
<i>How would you describe the difficulty level of the i-Ready practice math lessons?</i>	<i>N = 1,202</i>		<i>N = 687</i>		<i>N = 508</i>		
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
The i-Ready practice math lessons are usually hard for me.	158	13.1	94	13.7	63	12.4	
The i-Ready practice math lessons are usually easy for me.	286	23.8	159	23.1	127	25.0	
The i-Ready practice math lessons are usually about right for me—not too hard, not too easy.	758	63.1	434	63.2	318	62.6	

¹ N for All Respondents column includes students who did not indicate grade level.

² Sig = statistically significant difference between Grade 4 and 5 responses, tested by chi square. * p < .05, ** p < .01.

Note. N = number responding to survey item; n = number choosing response option for survey item.

Student comments about RCC and i-Ready. In response to open-ended survey questions about aspects of RCC and i-Ready that they liked most and what they would change, students provided comments in a number of areas. Table 23 presents the main topics that emerged from comments about what they liked best about RCC and i-Ready in reading and math. Given the large number

of respondents, and the wide range of topics that students commented upon, the criterion for inclusion in the table was set at 5%, so that aspects named by 5% or more of the responding students were included, instead of 10%, as used for staff. A more detailed account of these responses, including all aspects named and representative comments, is shown in Appendix C, Tables C-5, C-6, C-7, and C-8.

The largest number of comments from students about what they liked best about RCC and i-Ready pertained to how the programs helped them. About one quarter of the students who responded noted that the programs helped them learn new things and improve their skills ($n = 277$ for reading, $n = 202$ for math). Students also reported that RCC and i-Ready were engaging; one fifth of those commenting ($n = 240$) noted that the reading text was interesting; more than ten percent ($n = 136$ for reading, $n = 156$ for math) commented that RCC/i-Ready was fun (Table 24).

Table 24
Aspects of RCC and i-Ready Liked Best by Students Responding to Open-Ended Survey Question

Liked Aspects ¹	Description	Reading ($N = 1,180$)		Math ($N = 1,111$)	
		<i>n</i>	%	<i>n</i>	%
Helps					
Learning	Learn new things; get better; it's good for me	277	23.5	202	18.2
Improve skills	(Math) Helps with specific skills: fractions, multiplication, angles, problems, etc.	na		70	6.3
Connects	Understand more about the lesson; connects with class	56	4.7	53	4.8
Engagement					
Interesting	(Reading) text is interesting; real-life scenarios; new information	240	20.3	na	
Games	Like the games; get coins; motivating; helps to take a break with games	140	11.9	82	7.4
Fun	Fun; interactive; funny sayings; cool backgrounds	136	11.5	156	14.0
Characters	Characters are funny; different characters for each lesson	54	4.6		< 5.0
Difficulty level					
Good fit	Just right; not too hard/not too easy; some parts hard/some easy	95	8.1	99	8.9

¹ Aspects named by 5% or more of the respondents are included in table. A complete list of aspects named by respondents is shown in Appendix C, Tables C-5 and C-6.

Note. *N* = number responding; respondents may respond with more than one aspect. na = survey item not asked

Students' comments about aspects they would change in RCC and i-Ready most often focused on interest and difficulty level. Table 25 shows the aspects that were named by 5% or more of the responding students. About one fifth ($n = 204$) of the responding students commented that RCC reading was not interesting, not relatable, or boring. Another aspect named by a large percentage of students was the difficulty level in reading. Eighteen percent of the responding students ($n = 188$) commented that RCC reading was not the right difficulty level. Likewise in math, nineteen

percent ($n = 213$) of the responding students reported dissatisfaction with the difficulty level—some thought it should be easier and some thought it should be harder.

Table 25
Aspects of RCC and i-Ready Reported by Students to Need Change
in Response to Open-Ended Survey Question

Aspects to change ¹		Reading ($N = 1,074$)		Math ($N = 1,074$)	
		n	%	n	%
Engagement					
Not interesting	Make more fun; change stories; boring; not interesting; make more relatable	204	19.0	na	
Games	Add more games; make games more fun; brain break; add mini-games in middle of lesson	113	10.5	76	6.7
Characters	Change characters; change animation	50	4.7		
Fun	Make more fun; make less boring; make less childish; put some funny jokes in		<5.0	58	5.1
Difficulty level					
Not the right difficulty level	Too easy; too hard; make it right (varying or unspecified aspects)	188	17.5	213	18.9
Coins	Make it easier to get coins; less lessons for next level	55	5.1		< 5.0
Content					
Length	Lessons too long; stories too long; responses too long	72	6.7		< 5.0
Clarity	Questions confusing; make more understandable; explain better; be more specific	63	5.9	80	7.4

¹ Aspects named by 5% or more of the respondents are included in table. A complete list of aspects named by respondents is shown in Appendix C, Table C-7 and C-8.

Note. N = number responding; respondents may respond with more than one aspect

Summary and Conclusions

Evidence drawn from program documents and stakeholder surveys indicated that most aspects of RCC and i-Ready were implemented as designed in a majority of classrooms, while a few areas were identified as needing additional support. Survey data were collected for the following components of the programs:

- RCC lessons
- i-Ready online diagnostic assessments
- i-Ready online intervention and enrichment
- Collaborative planning meetings
- Professional development

A description of the main survey results addressing the implementation of the components of RCC and i-Ready is presented here for each of the program components. Responses from the various stakeholder groups—teachers, specialists (focus, academic intervention, special education, and ESOL teachers) leadership (principals, staff development teachers, math content coaches, and reading specialists), and Grade 4 and Grade 5 students—are considered together. In this way, the program components can be examined through the experiences of respondents with different roles in the implementation of the programs. Tables summarizing these consolidated findings in reading and math⁴ are included in Appendix D: Tables D-1 to D-4.

RCC lessons (Appendix D, Table D-1)

Use of RCC. A smaller percentage of teachers reported that they used RCC materials exclusively in reading (38%) than in math (62%). All responding principals and SDTs/MCCs/RSSs, however, reported that most teachers in their schools were teaching the RCC lessons as presented in the Teacher Resource Book.

Whole group and small group instruction. Implementation appeared strong in whole group instruction, but findings indicated that further support is needed to improve the implementation of small group instruction in reading and math. Most teachers (88%–92%) reported that RCC whole group instruction fit well into their daily schedule, but smaller percentages of teachers reported a good fit for small group instruction (61%–64%). Further, while about three quarters of responding teachers were satisfied with lesson materials for whole group instruction, less than one half were satisfied with the RCC lesson materials for small group instruction in reading, and slightly more than half were satisfied with small group materials in math. In response to an open-ended question about RCC challenges, four leadership staff mentioned small groups, reporting that teachers are receiving mixed messages about what small groups should look like, and that additional work around small groups is required.

⁴ Survey responses for RCC writing are not included in the summary tables because not all questions were included in the writing section of the survey. Responses to writing questions are reported in the full tables in the body of the report.

Differentiation. About two thirds of teachers (66%–69%) and half of specialists (45%–50%) indicated that differentiation opportunities were working well in RCC in reading and math; smaller percentages (teachers, 49%; specialists 39%) indicated that differentiation worked well in writing. Lack of differentiation was one of the most frequently mentioned concerns noted by teachers in response to an open-ended survey question about least-liked aspects of RCC. Leadership staff, however, indicated that differentiation opportunities in RCC were working well (93% in reading; 83% in math).

Pacing. The percentage of teachers satisfied with the overall pacing of RCC and i-Ready was 83% in reading but only 42% in math. Consistent with teachers' reports, leadership staff agreed in larger numbers that teachers in their schools were able to keep on track with lesson pacing in reading (87%) compared with math (62%). In response to open-ended survey questions, one of the least-liked aspects of RCC and i-Ready noted most frequently was pacing. Teachers and specialists commented that the pace of RCC was too fast, especially in math; some noted that there was not enough time to teach and practice, and to give students enough time to learn the material.

Meeting the needs of all students. Consistently, teachers (68%-76%) and leadership staff (75%-93%) were most likely to indicate that RCC met the needs of accelerated students, but least likely to report that RCC met the needs of students receiving special education (42%-45% of teachers and 58%-64% of leadership). Most specialists (69% – 72%) indicated that RCC and i-Ready were meeting the needs of the students they teach in reading and math.

Student engagement with RCC. More than one half of the responding Grade 4 and 5 students agreed that the reading passages were interesting (62%) and that they like the selections and activities in the reading instruction book (68%). Slightly larger percentages of students agreed that they enjoy most of the math lessons in the RCC math instruction book (71%).

Student engagement with RCC and i-Ready. More than one half of the responding students agreed that the reading passages were interesting (62%) and that they like the selection and activities in the reading instruction book (68%). Slightly larger percentages of students agreed that they enjoy most of the math lessons in the RCC math instruction book (71%). In their responses to questions about i-Ready, two thirds to three fourths agreed that they enjoyed the i-Ready program: 68% in reading, and 78% in math.

In response to open-ended survey items, students provided examples and descriptions of the aspects of RCC and i-Ready that they found engaging. One of the most frequently mentioned topics was that the reading text in RCC and i-Ready is interesting; the students enjoyed the real-life scenarios, and reported gaining new information through the reading selections. Students also liked the games—some noted that they were motivating, and also helped to give a break during lessons or assessments.

Students also provided comments in response to an open-ended survey question asking what they would like to change about RCC and i-Ready. The aspects named most frequently pertained to 1) interest level—students suggested that the stories should be more interesting, more relatable, less boring—and 2) difficulty level—in both reading and math, students indicated that the difficulty level was not right for them, either too easy or too hard.

i-Ready (Appendix D, Table D-2)

i-Ready online diagnostic assessments and student use for instruction and practice. Most aspects of i-Ready were rated positively by all groups of stakeholders. More than three quarters of teachers and specialists were satisfied with i-Ready diagnostic assessments, and similar percentages reported that using i-Ready data for instruction was working well. Reinforcing the teachers' and specialists' reports, most leadership staff reported that the use of i-Ready data for instruction was working well (93% in reading; 77% in math). Nearly all teachers (99%) were satisfied with i-Ready for student instruction and practice in reading, and 85% were satisfied with students' use of i-Ready in math. Most teachers (82%–86%) and leadership staff (83%–93%) indicated that students were using i-Ready for 31 to 60 minutes per week in each subject. In students' responses to survey questions about i-Ready, two thirds to three fourths agreed that they enjoyed the i-Ready program: 68% for reading, and 78% for math.

Collaborative planning (Appendix D, Table D-3)

Collaborative planning meetings and reviewing i-Ready data. Very high percentages (83%–94%) of teachers and specialists, and all of responding leadership staff (100%), indicated that collaboration for instructional planning was working well. However, somewhat smaller percentages of teachers (69%–74%), specialists (55%–70%), and leadership (71%–85%) indicated that reviewing i-Ready data in collaborative planning meetings was working well.

Professional learning opportunities (Appendix D, Table D-4)

Preparation of school staff for RCC and i-Ready. Most teachers (67%–77%) felt adequately prepared to use RCC and i-Ready in reading and math; specialists were less likely to report that they were prepared to use i-Ready for instruction (59%–67%). Teachers and specialists alike reported in lower numbers (46%) that they were adequately prepared to use RCC in writing. Reports from leadership staff on the preparation of their school staff were similar to those of the teachers and specialists: 71% agreed that their staff were prepared to use RCC in reading, 47% in writing, and 77% in math. Higher percentages of leadership (82%–88%) agreed that their staff were prepared to use i-Ready in reading and math. Further, SDTs/MCCs/RSs were asked to report on their own preparation to support the implementation of RCC and i-Ready. Of notable concern, only 5 of 10 indicated they were adequately prepared to support the programs in reading, 2 of 10 in writing, and 6 of 10 in math.

In response to open-ended survey questions, a number of specialists expressed concern that they were included in the RCC and i-Ready training late, and a few reported their training seemed like an “afterthought.” More generally, two of six responding principals indicated in response to an open-ended survey question that the late start into the school year and lack of training before implementation of RCC and i-Ready presented problems. For example, it was difficult to fit RCC and i-Ready into the already established departmentalized blocks and adjust whole and small group time allotments.

Recommendations

Professional learning and support

1. Identify and address the training and support needs of the SDTs/MCCs/RSs. Their role is key in implementing and supporting the use of RCC and i-Ready in the schools but a substantial number of them reported that their own preparation for leading RCC and i-Ready was not adequate. Consider alternative formats for additional professional learning, such as webinars and job-alike PLCs.
2. Include teaching specialists (ESOL, special education, focus teachers) in all relevant training for RCC and i-Ready; additional specialized training may be appropriate for this group as their use of RCC and i-Ready may vary with the needs of their students.
3. Provide additional training and support to help teachers and specialists understand the role and structure of small group instruction, including the use of scaffolding, in RCC. Substantial numbers of both groups reported that small group instruction did not fit well in the daily schedule, and that they were not satisfied with lesson materials for small group instruction.
4. Maintain records of attendance at professional learning opportunities to ensure that staff from each school are receiving the necessary training and information. Follow up with schools where training gaps may be developing so school leadership can help staff get back on track in their RCC/i-Ready professional learning.

Reinforcing RCC instructional delivery

5. Ensure that teachers' skill set includes needed content knowledge and scaffolding strategies to deliver instruction with fidelity. Developing teachers' capacities in these areas may help address issues that were identified as needing improvement, such as pacing (especially in math), differentiating, and implementing RCC in writing.
6. Emphasize with leadership and teaching staff the need to use i-Ready data in collaborative planning meetings. Reinforce the connection between i-Ready data and developing scaffolding so all students can access the content.
7. Determine with each school whether scheduling or procedural adjustments are needed in order to implement RCC as expected, and work with school leadership to ensure that school structures support implementation with fidelity.

RCC/i-Ready resources

8. Ensure that teaching specialists have access to all RCC/i-Ready resources and data needed to most effectively work with the students they teach and support.
9. Provide or recommend additional/improved lesson materials for small group instruction, through CA or other sources.

Meeting the needs of all students

10. Request that CA lead a collaboration with special education and ESOL staff to support the use of RCC and i-Ready with all students in the class and to ensure that the needs of all students are being met. Compared with other aspects of the programs, teachers were less satisfied with differentiation opportunities in RCC, and fewer agreed that RCC was meeting the needs of special education students and students needing intervention, compared to accelerated students.

Acknowledgments

The authors thank Dr. Shahpar Modarresi, supervisor, Program Evaluation Unit (PEU), OSA, for her contributions and guidance in producing and refining this evaluation report and Dr. Elizabeth Cooper-Martin, evaluation specialist, PEU, for her thoughtful review and comments. Much appreciation is extended to our evaluation advisory group for sharing their expertise in the development of the study plan and survey instruments: Dr. Sarah E. Sirgo, director of school support and improvement of elementary schools, OSSI; Ms. Loretta M. Favret, director of school support and improvement of elementary schools, OSSI; Ms. Siobhan M. Alexander, director, Elementary Integrated Curriculum Team, OCIP; Ms. Niki T. Hazel, director, Department of Elementary Curriculum and Districtwide Programs, OCIP; Dr. Kara B. Trenkamp, director, Department of Technology Integration and Support, Office of the Chief Technology Officer; Dr. Barbara A. Jasper, principal, Sequoyah Elementary School; and Mr. Cabell W. Lloyd, principal, Meadow Hall elementary school. Finally, we are grateful to the students, teachers, specialists, and principals who completed the surveys that provided the information for this report.

References

- Adler, C.R. (Ed). 2001. Put Reading First: The Research Building Blocks for Teaching Children to Read, pp. 49-54. National Institute for Literacy.
<https://lincs.ed.gov/publications/pdf/PRFbooklet.pdf>
- Black, P., & Wiliam, D. (1998). Inside the Black Box: Raising Standards Through Classroom Assessment © *Phi Delta Kappan*, 80 (2), pp.139-148 October 1998.
- Brown, S., & Kappes, L. 2012. Implementing the Common Core State Standards: A primer on “Close reading of text.” Washington, DC: The Aspen Institute, Education & Society Program
<http://www.aspendri.org/portal/browse/DocumentDetail?documentId=1396&download>.
- Curriculum Associates. (2016). *Ready Common Core Overview*. North Bellerica, MA: Curriculum Associates. Retrieved from:
<http://www.curriculumassociates.com/products/ready-common-core-overview.aspxNNor>

- Educational Research Institute of America (ERIA). (2015). *Ready Program New York State Efficacy Study*. Study commissioned by Curriculum Associates, LLC, Report Number 512. Retrieved from:
<http://www.casamples.com/downloads/ReadyNYEfficacyStudy512.pdf>
- Ellis, A. (2013). Critical Literacy, Common Core, and “Close Reading.” *Colorado Reading Journal*, Winter 2013, 46-50.
- Fisher, D., & Frey, N. (2008). *Better learning through structured teaching: A framework for the gradual release of responsibility*. Alexandria, VA: ASCD.
- Fisher, D., & Frey, N. (2012). Close reading in elementary schools. *The Reading Teacher*, 66(3), p. 179-188.
- Frye, D., Baroody, A. J., Burchinal, M., Carver, S. M., Jordan, N. C., & McDowell, J. (2013). *Teaching math to young children: A practice guide (NCEE 2014-4005)*. Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education.
- Gibbs, G., (2010). Grounded Theory: Open Coding Part 2. Lecture video retrieved from:
https://www.youtube.com/watch?v=vi5B7Zo0_OE
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York: Routledge.
- Kaufman, Julia H., Laura S. Hamilton, Brian M. Stecher, Scott Naftel, Michael Robbins, Lindsey E. Thompson, Chandra Garber, Susannah Faxon-Mills and V. Darleen Opfer. (2016). *What Supports Do Teachers Need to Help Students Meet Common Core State Standards for English Language Arts and Literacy? Findings from the American Teacher and American School Leader Panels*. Santa Monica, CA: RAND Corporation, 2016.
- Maxwell, J.A. (2005) *Qualitative research design: An interactive approach* (2nd Edition). Thousand Oaks, CA: Sage Publications.
- National Council of Teachers of English. (2013). *Position statement: Formative Assessment That Truly Informs Instruction*. Approved by the NCTE Executive Committee, October 21, 2013.
- Opfer, V. Darleen, Julia H. Kaufman and Lindsey E. Thompson. (2016). *Implementation of K–12 State Standards for Mathematics and English Language Arts and Literacy: Findings from the American Teacher Panel*. Santa Monica, CA: RAND Corporation, 2016.
- Partnership for Assessment of Readiness for College and Careers (PARCC). (2012). *Model Content Frameworks for English Language Arts/Literacy Grades 3-11, Version 2.0*.
- Rupley, W. H., Blair, T. R., & Nichols, W. D. (2009). Effective reading instruction for struggling readers: The role of direct/explicit teaching. *Reading & Writing Quarterly*, 25, 125-138.

Todtfeld D. & Weakley W. (2013). *The Impact of Instructional Reading Technology Programs on Student Reading Achievement*. (Unpublished research paper). College of Education and Human Services, Northwest Missouri State University, Maryvale, Missouri.

Van de Pol, Janneke & Volman, Monique & Oort, Frans & Beishuizen, Jos. (2015). The effects of scaffolding in the classroom: support contingency and student independent working time in relation to student achievement, task effort and appreciation of support. *Instructional Science*. 43(10).

Appendix A

Table A-1
2016–2017 Ready Common Core/i-Ready Program Sites

School	Year first implemented	Mathematics	Reading and Writing
Judith A. Resnik Elementary School	2016–2017	Curriculum 2.0	Ready Common Core Reading
Sargent Shriver Elementary School	2016–2017	Ready Common Core Math	Ready Common Core Reading
Maryvale Elementary School	2016–2017	Ready Common Core Math	Ready Common Core Reading
Sequoyah Elementary School	2015–2016	Ready Common Core Math	Ready Common Core Reading
Twinbrook Elementary School	2016–2017	Ready Common Core Math	Ready Common Core Reading
Lake Seneca Elementary School	2016–2017	Ready Common Core Math	Ready Common Core Reading
Watkins Mill Elementary School	2016–2017	Ready Common Core Math	Ready Common Core Reading
Burtonsville Elementary School	2016–2017	Ready Common Core Math	Ready Common Core Reading
Meadow Hall Elementary School	2016–2017	Ready Common Core Math	Ready Common Core Reading
Summit Hall Elementary School	2016–2017	Ready Common Core Math	Ready Common Core Reading
Greencastle Elementary School	2016–2017	Ready Common Core Math	Curriculum 2.0

Table A-2
 Characteristics of Teachers, Specialists, and Principals Completing RCC/i-Ready Survey

Teachers	<i>n</i>	% of respondent group
Total responding	193	100.0
Grade 1	44	22.8
Grade 2	52	26.9
Grade 3	33	17.1
Grade 4	29	15.0
Grade 5	25	13.0
More than 1 grade	4	2.1
No answer	6	3.1
Specialists		
Total responding	62	100.0
Focus teacher	11	17.7
Academic Intervention	4	6.5
Special education teacher	17	27.4
ESOL teacher	24	38.7
Other, or not specified	6	9.7
SDTs/MCCs/RSs¹		
Total responding	12	100.0
Staff Development Teacher	6	50.0
Math Content Coach, Reading Specialist	6	50.0
Principals		
Total responding	8	100.0
Students		
Total responding	1,463	100.0
Grade 4	829	56.7
Grade 5	626	42.8
Grade not indicated	8	0.5

¹ SDT = staff development teacher; MCC = math content coach; RS = reading specialist

Table A-3
 Years of Teaching Experience Reported by Teachers Completing RCC/i-Ready Survey

Teachers— Years of teaching experience	<i>n</i>	% of respondent group
First year teaching	19	9.8
2 – 5 years	52	26.9
6 – 10 years	42	21.8
11 – 15 years	34	17.6
More than 15 years	45	23.3
No answer	1	0.5

Appendix B

Table B-1
Teachers' Reports of Resources used in Addition to RCC in
Reading, Writing, and Math

	Number of times named	Examples of resources reported
Other materials used with RCC in Reading (N = 75)		
Leveled texts, guided readers	38	<ul style="list-style-type: none"> • In small group, I have used guided readers to support my below level reading students. • We use leveled texts from the book room for small group reading but continue to use the graphic organizers from RCC. • I pull guided reading groups and leveled texts and provide my students what they need.
Curriculum 2.0 materials	7	<ul style="list-style-type: none"> • I sometimes go back into the MCPS 2.0 curriculum as well as use Junior Great Books. • novels from the previous curriculum.
Teacher-created resources	2	<ul style="list-style-type: none"> • Our team has created interactive flipcharts with sentence frames and thought bubbles
Other resources	35	<ul style="list-style-type: none"> • Sometimes we incorporate short videos or pictures to build background knowledge • language frames, pictures for vocabulary • interactive journal prompts, graphic organizers, visuals, picture dictionaries, word banks, and graphic organizers. • read-alouds, graphic organizers, language/ grammar worksheets, materials to build background knowledge • I use other poetry / plays for the students to read and analyze. Also ReadWorks.com for supplemental reading comprehension.
Other materials used with RCC in Writing		
Graphic organizer	6	<ul style="list-style-type: none"> • As a support teacher, I collaborate with teachers to develop graphic organizers and other scaffolds to help make the writing lessons more comprehensible and meaningful. • particular graphic organizers that we've used in the past • I use the RCC Reading for most of my writing instruction. I also use ReadWorks and other Writing books by other publishers. • I use writing materials I have created over the last few years that cover the same topics as RCC but are less overwhelming and confusing. We write based on curriculum 2.0 standards and projects that students take ownership in and enjoy the writing process
Other reading books, resources to add context, Curr. 2.0	9	

		<ul style="list-style-type: none"> • The RCC lessons are very long and sometimes we do our own shorter writing pieces to get the kids excited about writing. • I have modified assignments to have more student choice. For example, instead of the whole class writing about sharks I let my students pick an animal to research on factcite.com.
Modify resources, differentiate	8	
Other	2	
Other materials used with RCC in Math		
		<ul style="list-style-type: none"> • I create math centers and activities based on the skills taught in whole group • My team puts together flipcharts to break down the lesson a little bit more. We use exactly what is in the book but simplify it visually. We also pull old resources for independent work and practice.
Self-created resources	9	
		<ul style="list-style-type: none"> • I sometimes supplement with additional resources to provide additional practice with various concepts. • I create other problems to practice skills and concepts, create center games for practice
Additional practice	6	
		<ul style="list-style-type: none"> • resources as enrichment and more sources to use for re-teach • Curriculum 2.0, especially for my students who are above grade level and need enrichment. I also use it to re-teach because sometimes the RCC practice isn't enough.
Curriculum 2.0	5	
Other	8	<ul style="list-style-type: none"> • Manipulatives, CC workbook, videos, websites

Table B-2
Teachers' Satisfaction with RCC and i-Ready Program and Resources
in Reading, Writing, and Math by Grade

Survey item	Very Satisfied or Somewhat Satisfied								
	Reading			Writing			Math		
	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%
Overall pacing in Reading/Writing/Math									
Grade 1	37	30	81.0	--	--	--	36	12	33.3
Grade 2	45	34	75.6	42	37	88.1	41	15	36.6
Grade 3	26	23	88.4	26	17	65.4	26	14	53.8
Grade 4	21	21	100.0	21	18	85.7	18	6	33.4
Grade 5	18	14	77.7	17	9	53.0	11	7	63.6
RCC lesson materials for whole class instruction in Reading/Writing/Math									
Grade 1	37	31	83.7	--	--	--	36	24	66.7
Grade 2	45	36	80.0	42	34	81.0	41	27	65.9
Grade 3	26	24	92.3	25	19	76.0	26	24	92.3
Grade 4	21	19	90.5	21	17	81.0	18	12	56.7
Grade 5	18	16	88.9	17	13	76.5	11	7	63.6
RCC lesson materials for small group instruction in Reading/ Math									
Grade 1	32	14	43.7				35	19	54.3
Grade 2	43	21	48.9				41	24	58.5
Grade 3	25	13	52.0				26	17	65.4
Grade 4	19	6	31.6				18	9	50.0
Grade 5	18	11	61.1				11	5	45.5
i-Ready student instruction and practice in Reading/ Math									
Grade 1	31	31	100.0				35	26	74.3
Grade 2	44	44	100.0				41	36	87.8
Grade 3	25	24	96.0				26	25	96.2
Grade 4	21	21	100.0				19	16	84.2
Grade 5	16	16	100.0				11	9	81.8

Note. *N* = total responding to survey item minus "Not applicable"; *n* = number "Very satisfied" or "Somewhat satisfied;" response options were "Very satisfied," "Somewhat satisfied," "Somewhat dissatisfied," "Very dissatisfied," and "Not applicable." Responses by teachers across grades were not statistically significant different (chi-square).

Table B-3
Teachers' Reports of Difficulty Level of RCC in Reading by Grade

How would you rate the overall difficulty level of RCC in Reading?	Total (N=139)		Grade 1 (N=31)		Grade 2 (N=42)		Grade 3 (N=26)		Grade 4 (N=19)		Grade 5 (N=14)	
	n	%	n	%	n	%	n	%	n	%	n	%
Often too difficult for my class	42	30.2	2	6.5	15	35.7 ^a	11	42.3 ^a	6	31.6 ^a	2	14.3
Often too easy for my class	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Often too easy for some students and too difficult for other students	30	21.6	10	32.3	6	14.3	5	19.2	4	21.1	5	35.7
Usually just about the right amount of difficulty for my class	67	48.2	19	61.3	21	50.0	10	38.5	9	47.4	7	50.0

Note. Total includes 7 respondents who did not indicate grade taught or who taught more than one grade.

^a Significantly (chi square, $p < .05$) higher percentage of teachers rated "Often too difficult for my class" compared with Grade 1 teachers.

Table B-4
Teachers' Reports of Difficulty Level of RCC in Writing by Grade

How would you rate the overall difficulty level of RCC in Writing?	Total (N=101)		Grade 1		Grade 2 (N=38)		Grade 3 (N=26)		Grade 4 (N=18)		Grade 5 (N=14)	
	n	%	n	%	n	%	n	%	n	%	n	%
Often too difficult for my class	26	25.7	na		4	10.5 ^a	7	26.9	8	44.4 ^a	4	28.6
Often too easy for my class	1	1.0	na		1	2.6	0	0.0	0	0.0	0	0.0
Often too easy for some students and too difficult for other students	15	14.9	na		5	13.2	8	30.8	1	5.6	1	7.1
Usually just about the right amount of difficulty for my class	59	58.4	na		28	73.7	11	42.3	9	50.0	9	64.3

Note. Total includes 5 respondents who did not indicate grade taught or who taught more than one grade.

^a Significantly (chi square, $p < .05$) higher percentage of Grade 4 teachers rated "Often too difficult for my class" compared with Grade 2 teachers.

Table B-5
Teachers' Reports of Difficulty Level of RCC in Math by Grade

How would you rate the overall difficulty level of RCC in Math?	Total (N=122)		Grade 1 (N=29)		Grade 2 (N=37)		Grade 3 (N=25)		Grade 4 (N=17)		Grade 5 (N=9)	
	n	%	n	%	n	%	n	%	n	%	n	%
Often too difficult for my class	40	32.8	8	27.6	16	43.2	7	28.0	6	35.3	2	22.2
Often too easy for my class	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	1	11.1
Often too easy for some students and too difficult for other students	32	26.2	10	34.5	5	13.5	9	36.0	5	29.4	2	22.2
Usually just about the right amount of difficulty for my class	49	40.2	11	37.9	16	43.2	9	36.0	6	35.3	4	44.4

Note. Total includes 5 respondents who did not indicate grade taught or who taught more than one grade.

Appendix C

Table C-1
Teachers' Responses to Open-Ended Question About What They Like Best ($N = 121$)^a

Liked Aspects	<i>n</i>	%	Representative examples (paraphrased)
Resources			
Organized Materials: Premade/organized all in one place/helps with planning/easy to use	37	30.6	<ul style="list-style-type: none"> • I like having the books across our grade level for consistency - the guided script for teachers is wonderful to use a resource. • The resources. I no longer have to spend time searching for the perfect resources for each concept I am teaching. I can instead spend my time making sure I understand the best way to teach. • I LOVE that we have so many resources and that they are already prepared, levelled, and organized
Reading Material: interesting/variety/ relevant topics	23	19.0	<ul style="list-style-type: none"> • Most of the articles are about relevant topics that the students are interested in. I like that the articles are short and the writing is very specific to the topic. • I like the texts that are chosen (high interest with rich vocabulary and various supports to help students engage and comprehend) • The stories/ passages are interesting. Contents are grade-level appropriate and how the contents build upon each other within a lesson.
Workbooks: can take home/good practice/like parent letter	8	6.6	<ul style="list-style-type: none"> • I enjoy the math activity work books. I use one for homework weekly. I also like that the Practice and Problem Solving book includes family letters, especially Spanish! This way, I know a paper is going home explaining to parents how the work is being taught in the classroom • Like the Consumable workbooks.
i-Ready Mobility: Can be used at home/after school/accessible outside of school	3	2.5	<ul style="list-style-type: none"> • That the i-ready program can continue instruction after school • i-Ready can be done at school and home which is helpful
Format			
i-Ready Differentiation: Starts at their level/self- paced/individualized	34	28.1	<ul style="list-style-type: none"> • I love i-Ready! I feel like it truly meets our kids where they are and will accelerate them as they are ready. • I like how i-Ready lessons are able to provide individual lessons that based on each needs • I really like how the lessons on the program support each students' individual needs. It ensures that each students is being supported in the areas they need the most support in.

Liked Aspects	<i>n</i>	%	Representative examples (paraphrased)
Structure and Pace: Well-paced/structured layout/easy to follow pace/students know/like format/scaffolding (some specify Reading or Math)	29	24.0	<ul style="list-style-type: none"> • The structured pace of activities...the same structure every week. • The scaffolds (especially in writing!) are clear and effective. • The structured pace of activities...the same structure every week. • RCC lessons focus on one data point for long periods of time so students really learn it. • The slow release system is fantastic!
Sequencing: Like sequencing (some specify Reading or Math)	18	14.9	<ul style="list-style-type: none"> • The sequence of the math RCC is very logical and an upgrade from what we've taught before. It allows students to learn skills in the beginning of the year that they'll continue to need and can build upon throughout the year. • I find the sequence of the i-Ready lessons beneficial. • The sequence of skills makes much more sense than C2.0.
Content			
Engaging: Students interested/motivated/engaged/enjoy	14	11.6	<ul style="list-style-type: none"> • Students have become much more invested in their learning and how well they do, based on seeing when they pass or fail lessons, • i-Ready student lessons are engaging and helpful
Connections: between iReady and RCC/what did before with specific objectives being taught/address standards/prepares for PARCC	18	14.9	<ul style="list-style-type: none"> • They also make a ton of connections between what we are doing in class and what they have seen before on i-Ready. RCC and i-Ready are completely correlated so for the kids it is very fluid for them to be doing both • I like how well connected the articles are. As we get further into the lessons there are concepts from articles that tie back to earlier lessons, as well as tying to the writing projects. • It addresses the standards in a very clear way in both reading and math.
Rigorous instruction: high level /challenging	14	11.6	<ul style="list-style-type: none"> • I like the in depth thinking that RCC pushes and having the students dig deeper. • RCC reading exposes kids to difficult texts that help them become better readers.
Skill Building: Helps with needed skills/fills in the gaps/helps students with skills they need	7	5.8	<ul style="list-style-type: none"> • I have noticed this year that i-Ready is helping to fill in the gaps that I might not necessarily be able to fill in completely through small group instruction • It ensures that each student is being supported in the areas they need the most support in
Media Components: Academic Talk Vocals/tutorials/videos	6	5.0	<ul style="list-style-type: none"> • Interactive tutorials are helpful. • The videos are amazing! • I like the focus on the Academic Talk Vocabulary, the students are using the vocabulary with success.
Discourse/pair share	6	5.0	<ul style="list-style-type: none"> • I like the think-share-compare routine from RCC, it is excellent for student discourse. • I have also found that the level of discourse amongst my students has improved as well.

Liked Aspects	<i>n</i>	%	Representative examples (paraphrased)
Data Monitoring			
Reports: Helpful i-Ready reports/can monitor progress/diagnostics suggest intervention/accessible data	20	16.5	<ul style="list-style-type: none"> I love the data that is available and that I can print reports to show students their progress throughout the year on online assessments. The data collection from i-Ready is VERY helpful in planning my small groups. I like the math diagnostic and subsequent resources that come along with that because I get very detailed information about my students that I can use to help them where they need help. This is something that the county has lacked in general as long as I've been teaching here
Positive Results: See growth/seen great results	7	5.8	<ul style="list-style-type: none"> I like all the growth I have seen in my students which must be attributed to RCC At the beginning of the year 10/18 of my students read below grade level. That is now down to 1/18 that is below grade level.
General			
Like i-Ready/	21	17.4	<ul style="list-style-type: none"> I like the i-Ready component. That is the only thing I would use over and over again. I really enjoy I-Ready and all it has to offer the students and teachers i-Ready is great....If I could, I would keep i-READY and get rid of Ready Common Core.
Like overall curriculum/reading/writing	13	10.8	<ul style="list-style-type: none"> Overall, I have been incredibly pleased with the curriculum! Overall, I really do like the reading program and look forward to using it again. The requirement of writing in each lesson, has shown great progress in my students' writing skills. The amount they write now is incredible (and on topic)!
Other	18	14.9	<ul style="list-style-type: none"> Common language among teammates and grade levels It is easy to leave sub plans. I like that first grade uses fewer text and goes into greater depth in those texts.

^a Upper-case N (*N*) represents the number of teachers responding to the open-ended question. Lower-case ns (*n*) represent the number of comments coded to that category. A single comment may have been coded in more than one category, and teachers may have responded with more than one comment, so percentages add to more than 100%.

Table C-2
Teachers' Responses to Open-Ended Question About What They Like Least ($N = 122$)^a

Least Liked Aspects	<i>n</i>	%	Representative comments (paraphrased)
Pacing			
Math too fast: Not enough time to reteach/practice/not enough days/need more time to teach	21	17.2	<ul style="list-style-type: none"> • The Ready Common Core only provides 10 days of instruction in multiplication and division of multi-digit numbers. My students needed at least 2 weeks for multiplication and two weeks for division before continuing to progress through the lessons. • The pace is too fast - 2.0 gives us 2-3 weeks for multiplication and 2-3 weeks for division in 4th grade, RCC is a week for both and that was definitely not enough time for my students. • I think that the math curriculum goes entirely too fast, especially the fraction unit. The fraction unit spent 3 days on each new concept and it wasn't enough time. In math it feels like there is no time to reteach concepts. • The lessons assume students can make the cognitive jump from a basic understanding to something more complex within the same lesson. In that sense, the pace is too quick. There isn't enough time allotted for students to really grasp a new concept before moving on. Basic arithmetic skills are left behind as the units progress. For example, by the time students get to geometry or measurement units, addition and subtraction skills are left out.
Pacing too fast (subject unspecified)	17	13.9	<ul style="list-style-type: none"> • RCC - not always enough time built into the pacing to practice with new concepts. • The pacing of starting a new lesson every week is awful. This is stressful to students and teachers. If students did not understand the concept of the week they are often left behind over and over.
Pacing not right: Inaccurate/some fast, some slow/too structured	8	6.6	<ul style="list-style-type: none"> • RCC-I do not like Ready Common Core due to the planned whole group-small group pacing and it's poor sequencing/pacing • Writing instruction is not well-paced out for students' abilities. Some students are faster at organizing ideas and are ready to draft the moment they are ready and the pages in the writing book to practice and check delays them. Those who are on pace or slower at organizing ideas, tend to get bored with the number of pages they need to practice on and review.
Reading/Writing too fast: Every week starts a new reading lesson/need background knowledge/lack of time for creative/thoughtful writing	6	4.9	<ul style="list-style-type: none"> • In reading, lack of time to work on foundational skills that the students need additional practice with (fluency, phonics, etc.) • Students are not able to independently read the passages and follow up assignments. This greatly impacts the pacing of the lessons.

Least Liked Aspects	<i>n</i>	%	Representative comments (paraphrased)
Scheduling/Lesson Length			
Scheduling: Time blocks not enough/not enough time to implement as intended	17	13.9	<ul style="list-style-type: none"> • Sometimes have a hard time getting certain students to meet their 45 minutes, due to the other interventions (SpEd, OT, PT, Speech, etc.) they also need to receive. • Due to the lack of time in our Math block and the various needs of my students, there is not enough time to consistently provide intervention using these wonderful resources. Based on the needs of my students, about two thirds of them require an in-class intervention, which can become fairly unrealistic to accomplish on a weekly basis.
Lesson Length: Too long /whole group too long	13	10.7	<ul style="list-style-type: none"> • The lessons, both in math and reading, require too much whole group "sitting." Students become very agitated for this length of time and it is difficult to regain attention once lost. • With i-Ready, some of the lessons are quite lengthy.
Instructional Content			
Differentiation: Lack of differentiation/enrichment opportunities	23	18.9	<ul style="list-style-type: none"> • Lack of differentiation, especially challenges (for reading and math) and supports (for math in particular) • The math curriculum seems very deep, which is frustrating to my above-level (they're bored) and below-level (they're overwhelmed) students; and I have very few students in between and actually on grade level • The long whole group components. It is not as differentiated as it sounds especially when you have limited time for whole group and are expected to do small groups. It does not address multiple learning styles. I'm very frustrated having to use this after we've been taught all about how kids have different learning styles and needs. • It is difficult to meet the needs of my highest and lowest students. • We have had to make other accommodations for students who are well above the grade level. • Doesn't challenge accelerated students
Reading Difficulty: Too difficult for most/books are higher level/passages too difficult/passages in writing too difficult	19	15.6	<ul style="list-style-type: none"> • The "independent" texts provided at the end of each week's lesson is often written at a Lexile level outside of our grade level strand. This makes the independent texts extremely difficult for my students who, for the most part, are all reading a year or two BELOW grade level. • The text levels are too difficult for my below level readers to complete independently. I have to facilitate more and have less gradual release. • Questions are often too wordy for ELL students. Students are unable to read the lessons without help.
Assessments: Doesn't match what learned/quizzes too hard (some reading, some math)/too many assessments	16	13.1	<ul style="list-style-type: none"> • The weekly test is usually far more challenging than any of the practice problems and examples from the lesson. • I do not think that the interim assessments are true assessments based on the units they represent. • In math and reading, sometimes the quizzes/assessments cover areas that weren't necessarily touched on during instruction.

Least Liked Aspects	<i>n</i>	%	Representative comments (paraphrased)
Not Authentic Learning: Too structured/not enough flexibility with materials/ /lessons/confining/ teaches to PARCC/emphasis on computer	19	15.6	<ul style="list-style-type: none"> • While the RCC program has much to recommend it, it is my opinion that it is too scripted, too whole group focused, and does not meet the needs of the typical wide range of abilities in our classrooms. I use RCC as a guide for scope, sequence, and some materials, to use in my instruction. The emphasis of teachers teaching the same way on the same day, often to the entire class (even if the lesson is not appropriate for all of them), is disheartening for an experienced teacher. • There is very little flexibility in materials and meeting student interest • It is teaching to the PARCC test not teaching kids to learn reading strategies and apply to a variety of texts. • Spoon-feeding kids doesn't make for the best learning! • i-Ready: Requiring students to have 45 minutes of reading and math is too much; specifically for math • TOO much dependence on using a computer. • I also do not like the emphasis we are putting on students to sit in front of a computer for extended periods of time, expecting that a program can teach them.
Math Lessons: Too hard/too much scaffolding/too many strategies to understand	11	9.0	<ul style="list-style-type: none"> • I feel there is too much scaffolding in the math books, so adding pages with less scaffolding into the practice and problem solving pages would be helpful. • Math expects students to learn strategies all covered instead of having students be able to choose which strategies best work for them. One strategies does not always work for everyone • Math curriculum is too difficult for most students even with teacher scaffolding • Some of the strategies presented for multiplication and division were not connecting with my students.
Materials			
Engagement: Boring/not engaging (some reading, some math, some writing)	26	21.3	<ul style="list-style-type: none"> • No variety with literature and informational books (children are not listening to enough read a-louds...reading for fun) • My 5th graders think i-ready is boring. • Not much room for creativity. Not very engaging. • i-Ready "extra lessons" are just the same lessons over again.
Amount of Materials: need more books/lessons	7	5.7	<ul style="list-style-type: none"> • More trade books should be used so students can be exposed to more literature. In the digital text features lesson a real website should be used rather than a pretend one so students can actively engage in it. The i-Ready math program needs to include more lessons on grade level
Amount of Computers: need more	4	3.3	<ul style="list-style-type: none"> • For reading, that there is only 8 read alouds for the whole year • Insufficient computer units & obsolete technology. • Without enough technology it's hard to have all students meet the 45 min goal a week for i-Ready. We need chrome books in first grade!!!!!!!!!!!! • Multiple steps involved with identifying and making changes to students on-line instruction.
Miscellaneous: Materials	6	4.9	<ul style="list-style-type: none"> • When students need to write the short responses, it is difficult to go back and forth to look for details because the page to write is not after the assigned text. • Reading book is too flimsy, falls apart •

Least Liked Aspects	<i>n</i>	%	Representative comments (paraphrased)
Reports			
Accuracy: Not accurate diagnostic/students get same lesson again even if got 100	12	9.8	<ul style="list-style-type: none"> • Where they are on the diagnostic often does not match where they are in the lessons. • There should also be more than one lesson and tutorial for each skill. For example, when a student fails a lesson they should have a different presentation of the material instead of the same exact lesson. • I also wish there was a way to look at i-Ready data in a quicker/more efficient way (instead of 1 student at a time). • With all of the data it holds, why can't it simply print me a report of which students need specific help in areas (a list of names) rather than the lengthy, wordy reports I have to read through one at a time. If I want to know in an instant which students need to work on phonics, I would like to click a button and have a list generated of who needs short vowels, who needs long vowels, who needs blends and digraphs, etc. The data is all in the data base, we just can't easily access it.
Other			
Programming: Technical difficulties/improvements to be made to i-Ready/error messages	8	6.6	<ul style="list-style-type: none"> • When an i-Ready error appears for students I would appreciate a teacher button that would tell me what the problem is. • Too many error messages coming up that require teacher time during instruction.
Other	8	6.6	<ul style="list-style-type: none"> • Stories were inappropriate for 3rd grade featuring a lot of death, decapitation, and deception. • Would like a better system of notification when students are doing poorly. • I do not always feel that students are actually coming in with what RCC thinks they are, or even though we are not skimming topics, sometimes topics don't go deep enough

^a Upper-case N (*N*) represents the number of teachers responding to the open-ended question. Lower-case ns (*n*) represent the number of comments coded to that category. A single comment may have been coded in more than one category, and teachers may have responded with more than one comment, so percentages add to more than 100%.

Table C-3
Specialists' Responses to Open-Ended Question About Successes of RCC (*N* =38)^a

Successful Aspects	<i>n</i>	%	Representative comments (paraphrased)
Resources			
Materials: accessible /ready/planning is easier/lots of resources/easy to use	11	28.9	<ul style="list-style-type: none"> The RCC gives me the tools I need to teach my students. I don't have to go digging for complex texts or higher order math problems. I am able to spend my time and energy differentiating my instruction and not searching for materials. Planning lessons is somewhat easier. Written response in the teacher guides, student books, teacher toolbox website, and the language handbook is very helpful.
Format			
Differentiation: i-ready shows needs and gives suggestions/can customize/student profile/fills in gaps	14	36.8	<ul style="list-style-type: none"> The i-Ready component is very valuable and helps to fill many gaps. The i-ready lessons/quizzes/data provide great differentiation opportunities for students. The i-Ready profile data has been the most helpful in allowing us to target our students and create a plan that everyone is on board with.
Format: Structure/ consistency	7	18.4	<ul style="list-style-type: none"> The format of the writing program has been great for the special education students. The consistency of how math lessons are set up Structured curriculum assures all teachers per grade are teaching the same content
Content			
Engaging: Students interested/engaged	6	15.8	<ul style="list-style-type: none"> Students really enjoy using I-ready. Noticed that students are more engaged with RCC over curriculum 2.0 i-Ready is fun for the kids. They look forward to this time and can play independently.
Rigorous instruction: more rigor/all students have access to on level or challenge	6	15.8	<ul style="list-style-type: none"> All students get to access on-grade level text Rigor. The RCC allows access to rigorous text for all. I like that. Provides more rigor in reading and math
Vocabulary: Students learn vocabulary	4	10.5	<ul style="list-style-type: none"> The students are learning the common vocabulary We have seen an increase in students' use of academic vocabulary.
Other Content: Discourse/think-share, Prepares for PARCC	4	10.5	<ul style="list-style-type: none"> The Think-Share-Routine has been very helpful in promoting the level of problem solving, I think students are better prepared to take the PARCC
Data Monitoring			
Positive Results: See progress/growth	9	23.7	<ul style="list-style-type: none"> Many of my students have made tremendous growth My students with IEPs are making significant progress. Teachers have seen gains from students using i-Ready

Successful Aspects	<i>n</i>	%	Representative comments (paraphrased)
Data Availability: lots of available data	4	10.5	<ul style="list-style-type: none"> The reports and data generated by iReady is amazing. If all of the specialists had school-wide access to that data (or at least access to all of the teachers we support) we would be better able to utilize that data when making choices about small group instruction, flexible needs groups, interventions and information for EMT and IEP meetings. lots of data (maybe too many assessments)
General			
Collaboration with/between teachers	4	10.5	<ul style="list-style-type: none"> Leads to better collaboration at our weekly planning meetings. Collaborating with teachers on supporting and using the ELL suggestion
Other	4	10.5	

Table C-4
Specialists' Responses to Open-Ended Question About Challenges of RCC (N =41)^a

Challenges	<i>n</i>	%	Representative comments (paraphrased)
Format			
Reading Pace: not enough time for practice/understanding/intervention/too fast paced	11	26.8	<ul style="list-style-type: none"> • The RCC texts move very quickly...so much time on the RCC program that have less time reading at their instructional level and almost no time for independent reading practice...students who struggled don't have extra time to work through it. Then have to rush writing • Not enough time spent to ensure students understand • The length of time given to some of the units is very short given the gaps we are trying to fill • Not enough time to implement the reading and writing programs with fidelity
No differentiation for ESOL student: Not for lower ESOL students	4	9.8	<ul style="list-style-type: none"> • Next to no differentiation built in; suggestions for what to do with ELL students generally not helpful or differentiated at all by proficiency level: • I am a Specialist and Teach English as a Second Language. The material in reading, math and writing are not tailored for Students with very limited English Language Proficiency. It tends to be much too advanced for beginning ESOL students and does not accurately assess their level of English acquisition for level they begin with.
Too much time on whole group/not enough time for small groups/whole group too long to sit	4	9.8	<ul style="list-style-type: none"> • The whole group lessons are long for first graders to sit for. • The whole group [math] lessons also take away from the amount of time teachers can have students in small groups, which are the most effective use of their time. • Hard to see small groups regularly
Support			
Training: non-classroom teachers should have been trained/Need training/started after school year	9	22.0	<ul style="list-style-type: none"> • Admin (you folks) were learning this curriculum, even as we were & we had to teach it. I felt like I'm flying the plane while it's being built and I'm trying to avoid a crash landing • The program was implemented once the school year had already begun. • Certainly having no training over the summer to prepare for the upcoming year was startling to say the least. I think that almost all of the staff felt like we were thrown into a whirlwind. Many of us had used part of our summer to prepare materials in alignment with 2.0 which in essence, was time wasted. I felt like all of the professional staff that were working with students should have been invited to the trainings on Reading and writing. • It's frustrating that specialist did not receive adequate training on using the RCC and on how to interpret the i-Ready data. Training specialist and our role seemed to be an afterthought.

Challenges	<i>n</i>	<i>%</i>	Representative comments (paraphrased)
Lack of Clarity for implementation: with small groups/with IEP goals/with interventions/ESOL	8	19.5	<ul style="list-style-type: none"> The information has been very slow to come to ESOL other supporting teachers. I feel like I have been left to figure a lot out on my own...[school staff has] zero knowledge on how I should implement this program in my small groups. There have been so many mixed messages about what we can use and how. Small groups or guided reading? Nearly a year later I'm still unsure of expectations. When do we get to guided reading? How do we do interventions for these kids? When during that block would you pull a child out? What would they miss? How could they possibly make it up when they struggle doing it with the whole class? Are we really doing it with fidelity if kids miss instruction in order to go to an intervention? Implementing support of student IEP goals and the RCC curriculum with fidelity.
Specialists don't have access/no log in	2	4.9	<ul style="list-style-type: none"> We have asked over and over again, but specialists do not have access to the iReady data. I either need to get passwords and login information from teachers or get an administrator to log in just so I can check data on my own caseload! Working with teachers to access i-Ready profile resources since non-classroom teachers are not given a login.
Resources			
Accessing Data/Reports: needs to be easier/too much data	5	12.2	<ul style="list-style-type: none"> You need to make a one-page needs analysis for a student that has the indicators so we don't have to print 15 pages. There should be a batch to run for the class or have your programmers tag the child & indicator needed so teacher can choose indicator and the report will spit out a list of kids for that indicator. One page report by 4 indicators with lists of kids under each indicator would help with the small group planning. Another huge challenge is the amount of time it takes to sift through the data in the i-Ready reports. We have all been voicing this issue during planning sessions. There has to be a way for RCC to create a tab that would allow us to sort by skill and group students with deficits accordingly. Right now it is very time consuming to do that.
Materials Needed	5	12.2	<ul style="list-style-type: none"> I would like to see ACTIVITIES for profile teaching Supplementary books are not available/suggested Technology needs (chrome books/headphones) have been a constant challenge.
Instructional Content			
Reading difficulty/too high level	9	22.0	<ul style="list-style-type: none"> My students have difficulties accessing instruction. A 4th grade text does not appear to be on a 4th grade reading level, but higher. texts are above grade level, no differentiated text levels

Challenges	<i>n</i>	%	Representative comments (paraphrased)
Not engaging/texts not engaging/workbooks not engaging/too repetitive	7	17.1	<ul style="list-style-type: none"> The students are not very engaged because they have the same type of activities every week Based on observation in the classroom, I find that many students are quite bored with the Practice and Problem Solving workbook - especially as the year progresses. Students do not always understand in a deep level what they are reading. Keeping the students engaged b/c the texts are boring, according to the students.
Writing too difficult/too cumbersome/doesn't match outcomes	3	7.3	<ul style="list-style-type: none"> The use of RCC writing does not match the outcomes. That has been hard to rectify Writing is too complicated
Too high language in math	3	7.3	<ul style="list-style-type: none"> Some of the quizzes have very difficult language that is a challenge for students even when they have strong command of the content. We are learning how to prepare students to be successful and are finding TSC helpful. The math program is very heavy in language and many of our students are learning English. There's not a spiral component to RCC and our kids really NEED this
Other Content	8	19.5	<ul style="list-style-type: none"> Grading and reporting for MCPS (reading levels) does not align with RCC. Independent activities are challenging due to the format and vocabulary Aligning tier 3 intervention to curriculum
Too much time for Standards Mastery tests and other tests	3	7.3	<ul style="list-style-type: none"> Students with disabilities must be given their accommodations, so all instruction had to stop for the day to give the Standards Mastery test Too much time with the cumulative amount of testing time (MAP, I-Ready assessments, RCC quizzes, assessments, etc.)

Table C-5
Students' Responses to Open-Ended Question Asking What They Like about Reading RCC and i-Ready
(*N* = 1180)^a

Likes	<i>n</i>	%	Representative comments
Helps			
Helps improve: learn new things; get better; helps with reading skills; it's good for me	277	23.5	<ul style="list-style-type: none"> • I like i-Ready reading because it helps me learn new things about reading • I like that both of these things can help me improve in reading • I-Ready reading allows me to grow in vocabulary and grammar so that I can improve. • What I like best about i-Ready is it helps me get ready for fifth grade and also help me with things I don't know. • What I like is that I learn how to read books
Connects with class: helps with what I'm learning in class	56	4.7	<ul style="list-style-type: none"> • In I-Ready you can learn what you are learning in class which is great because you can do better at the lessons you're working on now. • The lessons help understand more about the lesson we are learning about. • I like that i-Ready reading helps me to connect to what I am learning in class.
Gives hints: corrects me if I'm wrong	46	3.9	<ul style="list-style-type: none"> • Something else that a like about i-Ready is that it helps me learn from my wrong answers. That it help me when I am wrong and shows me what to do. • It helps me get the answer. • It helps me with thing Im stuck on.
Helps understanding: like how it teaches, examples, like how it explains, step by step	44	3.7	<ul style="list-style-type: none"> • What I like about i-Ready reading is that it helps me understand • What I like best in i-Ready reading is the examples they give you so you could understand better. • Finally I like how they make charts and diagrams to help us understand more about the stories. • Really helps break apart the hard stuff.
Practice: gives you another chance; allows you to practice	38	3.2	<ul style="list-style-type: none"> • It has you practice and get it stuck in your head. • The thing I like best about i-Ready is the way it helps me practice my reading and comprehension skills. • I like how in the practice if you get an answer wrong it will give you another chance to get the answer correct. • I like how there are levels to get to because it gives you a goal.
Shows progress: get rewards, shows what need to work on	25	2.1	<ul style="list-style-type: none"> • I like that it shows me my progress and that you have rewards • I like that i-Ready gives you the lessons that you need to really help you.
Difficulty Levels			
Fits: Just right, not too hard/not too easy, sometimes hard/sometimes easy, some parts hard/some easy	95	8.1	

Likes	<i>n</i>	%	Representative comments
Challenge: like that it challenges me	22	1.9	
Other: hard, easy	49	4.2	
Engagement			
Text: interesting, relatable	240	20.3	<ul style="list-style-type: none"> I like the stories and the poems that they put in the lessons. What I like best about ready common core or i-Ready is that they give me stories I like I like how it adds real life scenarios to reading. In most of the lessons, there is a theme and around that theme come the real life problems. I get to read info that I never knew about.
Games: get coins	140	11.9	<ul style="list-style-type: none"> I like that with i-Ready when you finished the lesson you get \$20 when you get to play games The thing that I like most about I-Ready is how they have Games after the lessons their really fun to play I like is that we can play that really fun fish game during our long tests. I also like the games on i-Ready because if you are having some trouble learning or you are tired you can take a break and do something really fun and then get back to learning.
Fun: funny/interactive/fun to do	136	11.5	<ul style="list-style-type: none"> I like how i-Ready gives you a picture. My I ready has lots of fun things and says really weird sayings I only like i-Ready because it is fun and I am learning at the same time There jokes and stuff...Last thing is that they give us cool backgrounds.
Characters	54	4.6	<ul style="list-style-type: none"> I like the characters and I liked the lessons that were Bake Stars, Rise Over Run, Infinite Dimensions How there is actually characters that do whatever lesson with you. The characters, they're funny The thing that I like most about i-Ready is that they have characters that teach you instead of a person.
Content			
Questions and Quizzes: like how it tests understanding	43	3.6	<ul style="list-style-type: none"> I personally like how I can read a whole passage and answer questions that help me with reading quizzes In RCC I like that it gives us questions after the passages. I also like how the tests help me improve. I like how when they give you a lesson and when you're done with the lesson they give you a quiz to so what you have learned
Lessons: like lessons, variety, short lessons, Close lesson, iReady lessons	40	3.4	<ul style="list-style-type: none"> I really like that there are close reading lessons What I like about i-Ready and Ready Common Core is the variety of lessons I like the lessons of i-Ready.

Likes	<i>n</i>	%	Representative comments
Writing: get to write, show what we learned, write opinion	18	1.5	<ul style="list-style-type: none"> • What I like about in ready common core is that we get to do quick writes that simulate our mind. • I like the fact that you can type your own response in the longer lessons • I like how we can give our opinions by typing stuff in the textbox and how its as if your talking to them.
Materials: workbooks, chromebooks, get to work at home, activities	18	1.5	<ul style="list-style-type: none"> • I like the convenience of the work books • That we don't have to skip something because it didn't get printed. • It gives me the chance to use a chrome book. • You can get on i-Ready at home.
Other	45	3.8	
Everything: love it/like it	19	1.6	
Like nothing: hate it	104	8.8	

^a Upper-case N (*N*) represents the number of students responding to the open-ended question. Lower-case ns (*n*) represent the number of comments coded to that category. A single comment may have been coded in more than one category, and students may have responded with more than one comment, so percentages add to more than 100%.

Table C-6
Students' Responses to Open-Ended Question Asking What They Like about Math RCC and i-Ready
(N=1111)^a

Likes	n	%	Representative comments
Helps			
Helps improve: learn new things; get better; helps with math skills; it's good for me	202	18.2	<ul style="list-style-type: none"> • I like how it teaches me different things that i don't know. • It really helps us get better at math and gets us ready for 6th grade. • it helps you get better with your math skills • I like because it helps me with my math work and I am getting better. • that it helps me be a stronger learner
Helps understanding: like how it teaches, tutorials, examples, like how it explains	115	10.4	<ul style="list-style-type: none"> • I like how they show me how to do math problems. • I liked how it explains everything so smoothly • It teaches you things step by step • I like the tutorials. • I really like how they explain and show the strategies • I like how it how if I don't understand the question, it helps explains it in a way that makes me comfortable.
Helps with specific skills: fractions, multiplication, angles, problems, etc.	70	6.3	<ul style="list-style-type: none"> • The thing that I like best about the RCC Math books is...Measuring, Weight and...line segment... • What I like about the i ready math is that it really des helps me with multiplication and dividing • That i-Ready common core helps me understand problems... like thanks to iReady I learned how to do fractions and geometry
Practice: gives you another chance; allows you to practice	60	5.4	<ul style="list-style-type: none"> • If you make a mistake they will give you another try. • How it helps you practice before you go to the quiz. • What I like about the i-Ready MATH is that it helps me practice my MATH skills • What I like in I-Ready is when you put a wrong answer I-Ready gives you another chance
Connects with class: helps with what I'm learning in class	53	4.8	<ul style="list-style-type: none"> • I like the math because its what we learn in class • One thing that I like about i-Ready math is that it helps me on math in my class • I like that the lessons I do connect with the same thing I do in class.

Likes	n	%	Representative comments
Gives hints: corrects me if I'm wrong	32	2.9	<ul style="list-style-type: none"> I like everything about Ready Common Core because in math it gives hints I like the way when you get an answer wrong, they give you like a chart to help you visually solve the problem That it give you hints if you need them and that they show a model to us.
Helps with upcoming lessons: I learn ahead of teacher	18	1.6	<ul style="list-style-type: none"> It gives me a head start about what we're going to do in the next unit. They help me with the lesson my teacher teaches me so I can learn it before my teacher teaches it to me so I can answer all the questions and be proactive What I like about i-Ready math is that, it gives us a head start about what we are going to learn in math. For example, the coordinate plane lesson, gave me a head start on coordinates.
Learn different ways of doing something	13	1.2	<ul style="list-style-type: none"> I like i-Ready because i-ready helps me with understanding different ways to solve my math problems Helped me learn how to work out the problem the easy way What I like is that they help you find more ways to get the same answer.
Difficulty Levels			
Fits: Just right, not too hard/not too easy, sometimes hard/sometimes easy	99	8.9	
Challenge: like that it challenges me	52	4.7	
Other: hard, easy, it adjusts levels	53	4.7	
Engagement			
Fun: funny/interactive/fun to do	156	14.0	<ul style="list-style-type: none"> I like how in i-Ready we can work with some of the tools (like the blocks) to help us solve the problems. It is fun and funny. But I also love how they make what I'm learning actually interesting. In math they make it funny and give bizarre story settings, like my one lesson with FLYING RHINOS! I like it when we use the protractor for math – it's very fun

Likes	n	%	Representative comments
Games: get coins	82	7.4	<ul style="list-style-type: none"> We can play games in the math i-Ready after I finish a lesson. I like the coins and games because it motivates you to get through lessons and if you rush and do it wrong and they make you do the entire lesson again. I really like how i-Ready math, has lessons that have games inside the lesson. Like after you finish a practice or a quiz, you could play a game
Characters	42	3.8	<ul style="list-style-type: none"> I like that they have different characters for each lesson. The characters can be funny and it helps me learn props for the animation...the animation for the animals is great! I like the different characters and shows like pj and sweet-t are my two favorite people.
Quizzes: Like the quizzes/like how it tests understanding with quizzes	30	2.7	<ul style="list-style-type: none"> I like the quizzes and when you see your percentage of accuracy I also like that it gives you a quiz because that shows am ready for the next lesson It will just give me a quiz and test me if i remember stuff that the i-ready or my teacher has told me.
Other	90	8.1	
Everything: love it/like it	30	2.7	
Like nothing: hate it	89	8.0	

^a Upper-case N (*N*) represents the number of students responding to the open-ended question. Lower-case ns (*n*) represent the number of comments coded to that category. A single comment may have been coded in more than one category, and students may have responded with more than one comment, so percentages add to more than 100%.

Table C-7
Students' Responses to Open-Ended Question Asking What They Would Like to Change about Reading
RCC and i-Ready? (N =1074)^a

Changes	<i>n</i>	%	Representative comments
Content			
Length: lessons too long/stories too long/responses too long	77	7.2	<ul style="list-style-type: none"> • I would make the lessons shorter • I would change the EXTENDED RESPONSE its so long and takes a lot of time. I don't get how they expect us to do all of that. • The thing that I would change is the time limit because some lessons are so long that a person wouldn't finish in one day.
Clarity: confusing/make more understandable/explain better/be more specific	63	5.9	<ul style="list-style-type: none"> • The lessons don't explain it right so we get stuff wrong...I think I would do better if my teacher instead of a robot could teach me. • I would try to make some of the questions more understandable in ready common core. Some of them just have so many words that you get confused and you have to read it over and over again. • Sometimes doesn't make sense.
Redo lesson/quiz: not have to redo lesson/make it a different lesson if redo/not have to redo quiz	30	2.8	<ul style="list-style-type: none"> • I wish that when you failed the quiz you would not have to do the lesson over and instead it would take you to parts of that lesson that you need to work on. • I would change if fail the lesson you do not have to do it again • What I would change about i-Ready reading would be how you have to repeat the lessons if you get it wrong. For example if someone is rushing that means that they don't care if they get a bad grade so why give them another opportunity if they are going to not take their time. • The way that if you fail a test you have to start ALLLLLLL OVERRRRR AGAIN
Book Features: more space to write/add pictures/book not so big/type on computer	26	2.4	<ul style="list-style-type: none"> • Have more space to write in the graphic organizer. • The book is too big for my desk • I noticed in the RCC book that when you write on the paper, it's kind of faded and blurry, so to fix that I might print it on stronger, harder paper so that the writing won't get smudged and faded. • to add more picture in the book • What I will change about the reading book is that to do the pages in a chrome book. • I will change ready common core that need more space for writing
Increase: more stories/more activities/more reading	18	1.7	<ul style="list-style-type: none"> • More reading and poems • I would put more activities • Give us more books to read
Decrease: eliminate short responses/learning target/less writing	22	2.0	<ul style="list-style-type: none"> • I would remove the learning target. • I would change the learning target because it doesn't really help me or anyone in my class. My teacher doesn't use it half the time when we do the lessons. • The short response you DONT have to do it and if you do you get extra credit • Put less writing.

Changes	<i>n</i>	%	Representative comments
Change: lessons, repetitive lessons, questions, short responses,	34	3.2	<ul style="list-style-type: none"> I would change the questions and put them at the end...sometime get in your way when you are trying to the focus...If I could change something about Ready Common Core it would be how the questions are asked in the short and extended responses. Change the lessons In i-Ready I get the same lessons over and over again even when I pass them so I would change I would change i-Ready lessons by, making it so you don't encounter the same lesson. In reading, it's most likely that you have did the same lesson.
Choices: offer various choices (stories, levels, lessons, etc.)	19	1.8	<ul style="list-style-type: none"> You do what lessons you want to do. Maybe when it's time for us to read they could give us a selection of articles that are all about the basic topic. Then we could choose. I would add a difficulty to i-ready so the person who is doing i-Ready can choose easy, medium, or hard. If on i-Ready you could pick what lesson you want to learn about.
Need more lessons/more questions	16	1.5	<ul style="list-style-type: none"> Need to put more lessons on i-Ready I would change the amount of lesson there are because, there's only 3 lessons for i-Ready reading and there is a lot to learn. I would like to be able to get some more information about a subject other than just 1 tutorial and then a quiz.
Connect with what learning in class	15	1.4	<ul style="list-style-type: none"> Sometimes we don't know the lessons on i-Ready so I would change it to the things that were working on in class so it wouldn't be so hard or so we don't get stuck doing what were doing. I would change how they don't even have any similar questions on the quiz then on the tutorial. So what I what to change is that are lessons are based on what we're doing in class. In the RCC I would change it so that you could also do some stories with a partner.
Other Content	74	6.9	<ul style="list-style-type: none"> What I would change about i-Ready is if it would give you two chances for when if you get it wrong you could get one more chance. I would improve more of the writing because there's not a lot of witting
Difficulty Levels			
Variety of Difficulty: too easy/too hard/ make it right (varying or unspecified aspects)	188	17.5	<ul style="list-style-type: none"> I would make it a little easier. I would change the quiz to make them just right for people learning Make i-Ready Reading a bit harder because it's very easy for me. Sometimes the questions in the Ready Common Core are hard and unfair. I would make it challenging.

Changes	<i>n</i>	%	Representative comments
Coins: make it easier to get coins/less lessons for next level	55	5.1	<ul style="list-style-type: none"> • HOW MANY COINS YOU GET!! make it like, 100 • I would change the fact that i-Ready games cost 50 coins and you only get 20 coins per quiz. The price of the games should be 20 coins. • I think when we get coins we should be able to buy things and decorate an animal then people would be determined to do lessons. And I think for i-ready reading there would be prizes at the end of the lessons.
Other score keeping and levels	23	2.1	<ul style="list-style-type: none"> • That when you fail, the second one would be a little easier • I would change that if you get higher than 50, you pass and if you get lower than 50, you don't pass. • GO TO MY LEVEL INSTANTLY!!!! • If in i-Ready they could give you hints to guide you to the answer
Help: more help/more hints/tell answers/point out mistakes	12	1.1	<ul style="list-style-type: none"> • Another thing that I would change is that if you keep failing lessons there would be a special person that would give you hints and help you with the lessons
Other Difficulty Levels	11	1.0	
Engagement			
Interesting/Fun: make more fun/change stories (suggestions)/boring/not interesting/make more relatable	204	19.0	<ul style="list-style-type: none"> • I would make the lessons more fun instead of boring. • The cringy jokes and make it at least more realistic. • Have the stories and articles more interesting to our age. • Make ready common core more fun for kids so they want to learn. • I am not a fan of science in the books. Can you replace it with dog breeds? • The lessons are so so boring the books are not interesting • After a lesson have more games to do.
Games: add more games/make games more fun/brain break	113	10.5	<ul style="list-style-type: none"> • I would change it by adding a brain break button for every 3 lessons we take to take a little break from learning. • I feel like the games need a variety of them. • More games • put games in the middle of the lesson
Characters: change characters/change animation	50	4.7	<ul style="list-style-type: none"> • What I would change about i-Ready is that your i-Ready avatar could be more customizable • Add more characters, and make it more realistic. • I would change the characters in the i-Ready they look weird. • The animation is not that high quality. • I would make the animations better because they look weird when they move
Characters Voices: Talk too much/change voices	32	3.0	<ul style="list-style-type: none"> • The people on i-Ready talk like robots not like someone who wants to teach us. Make sure they sound like humans. • I would change the voices. They are annoying. • I would change how the characters talk too much in i-Ready...you want to learn! Not hear the characters talk the whole time! • I would change it so they don't talk about stuff too much so it would be short and simple.

Changes	<i>n</i>	%	Representative comments
Other engagement comments	18	1.7	<ul style="list-style-type: none"> • In the i-Ready I would change the background and the questions to make it colorful • They don't really catch the eye I feel • For i-Ready make it so there is a battle mode and you can battle other friends and see who is better whoever wins gets points
Nothing: love it/like it	157	14.6	
Other	7	6.9	

^a Upper-case N (*N*) represents the number of students responding to the open-ended question. Lower-case ns (*n*) represent the number of comments coded to that category. A single comment may have been coded in more than one category, and students may have responded with more than one comment, so percentages add to more than 100%.

Table C-8
Students' Responses to Open-Ended Question Asking What They Would Like to Change about Math
RCC and i-Ready? (N=1128)^a

Changes	<i>n</i>	%	Representative comments
Content			
Clarity: questions confusing/explain better/how lessons taught/show different ways to solve	80	7.1	<ul style="list-style-type: none"> • I usually fail a lot of my quizzes because I don't understand it at all. How am I supposed to answer the question on the quiz when I don't understand it • I would change how they write it or they try to explain the problem. • For the common core it's hard to understand the questions sometimes! • I will change the way they teach it and make it so kids can understand what i-Ready math and teachers are trying to say to the 4th graders. • One thing I would change is being able to have a button that says "I don't understand can you explain to me in a different way?"
Change: lessons, repetitive lessons, questions, problems	30	2.7	<ul style="list-style-type: none"> • When the lessons with the whole class come sometimes I already did it and passed it. So it's just a review of what I already did. So I suggest to not do whole class i-Ready. • Change by not repeating. • I would change some of the problems they give us. • Change the i-Ready math to have more strategies in math. • Stop repeating i-Ready lessons because it is just so annoying every time that happens because I just want new, not the same lesson I already did.
Redo lesson/quiz: not have to redo lesson/make it a different lesson/not drop a level/not have to redo quiz	27	2.4	<ul style="list-style-type: none"> • If someone did not pass a level, I would not just make them restart the level because for some people, restarting does not make a difference. I would just make the level a little bit easier • I would probably change i-Ready so that you would not have to do the same lesson all over again. • I wish that when you failed the quiz you would not have to do the lesson over and instead it would take you to parts of that lesson that you need to work on. • I would change how they repeat the lesson that you just did if you got that lesson wrong because sometimes people will fail that lesson again and again i think they should just give them another lesson with the same topic just that it explains it differently.
Length of lessons/tutorials: too long/too short	26	2.3	<ul style="list-style-type: none"> • Shorter lessons • i-Ready has short tutorials and then it's hard to know everything and move on to the practice • Should make the lessons a little bit more faster because sometimes it takes me about two day to finish a whole lesson • I would make some lessons longer to do because I feel some are too short

Changes	<i>n</i>	%	Representative comments
More lessons/problems	24	2.1	<ul style="list-style-type: none"> • In i-Ready math give more equations problems so we would know what to do in the quiz. • I would put more lessons • I would put a third lesson if the person is having difficulties with both lessons. • In i-Ready math, have a lot of lessons so I could have more problems to solve
Choices: lessons, levels, background, characters	18	1.6	<ul style="list-style-type: none"> • Add math lessons that let you choose if you want to do angles, division, subtraction, multiplication, or addition. • I would add a difficulty so the person who is doing i-Ready can choose either easy, medium, or hard. • If we could change our buddies and make our own wallpaper • I would look at what I am not good at and pick a lesson to help me as if there were a variety of lessons to choose from.
Book: don't use/need more space to do work	12	1.1	<ul style="list-style-type: none"> • My teacher didn't use the book with us • I would change to use it more often • You should take out the ready common core because sometime we skip the page in the common core book • The writing space is too small in the books. So I would add more lines to write on.
Assessments: less quizzes, tests, less mastery checks, quiz content	12	1.1	<ul style="list-style-type: none"> • I would change how we have to do a quiz every week which is not fun at all. • Give us less mastery checks • Not as many quizzes
Relevance: connect with what learning in class	9	0.8	<ul style="list-style-type: none"> • It sometimes doesn't relate to the thing we are learning in i-Ready. • I would change how different the questions are from the tutorial • The i-Ready lesson should be about what we are learning.
Difficulty Levels			
Variety of Difficulty: too easy/too hard/ make it right (varying or unspecified aspects)	213	18.9	<ul style="list-style-type: none"> • If i-Ready could give me easy and not hard challenges • What I would change about i-ready math is to make it a harder because it is really easy for me. • Make a little bit more difficult. • I would make the lesson just right for the person who is doing it and not to easy or not too hard
Coins: make it easier to get coins/less lessons for next level/offer rewards	29	2.6	<ul style="list-style-type: none"> • I would like to change how much coins you earn and the prices for the games. • I would change the numbers of coins you get when you complete a lesson to 60 not 20 because I work hard to achieve my points • More coins each lesson. • Every time we do good in a quiz they should give us a reward

Changes	<i>n</i>	%	Representative comments
Help: hints/explanations of wrong answers/reminders	24	2.1	<ul style="list-style-type: none"> • How it responds to the answer, because I want an exact explanation of how the answer is wrong or right • Give us more hits. • They should have more characters to give hints throughout the book. • I would change about i-Ready math that there would be a box that says help or no help and you click on one of those so if you need help it would help you on the thing you are on. • I would change that if we fail two of the same lesson we have more chances to pass the lesson.
Chances: more chances with quiz, lessons/more time to respond	22	2.0	<ul style="list-style-type: none"> • Let you retry the questions on the quiz. • I would change that you can go back and change your answer in i-Ready. • Something I would change is that they would give you a third time to practice again. • What I would change about i-Ready is that they give you more time to answer.
Other Levels/Scoring Comments	22	2.0	<ul style="list-style-type: none"> • Instead of 75% to pass a test it should be 60% • Make questions a one-time opportunity and not a two time question redeem.
Engagement			
Games: add more games/make games more fun/brain break	76	6.7	<ul style="list-style-type: none"> • I would make more games • I would get better games • I would make little mini games once you get all of the questions right in the middle of the lessons. • I would give a 10 minute break and have a game in it. • Take out the other math games and put in all the cool math games and that would make everyone happy.
Fun: Make more interesting/make more fun/make less boring/make less childish	58	5.1	<ul style="list-style-type: none"> • Make it more interesting and not just boring things like only math put some funny jokes or something like that. • Make it fun • Everything is too babyish
Characters: change characters/change Animation/add more characters	41	3.6	<ul style="list-style-type: none"> • I would change all the jokes that the characters do because it is cringy. • I would make the people less creepy and more real looking • I would change the characters because I don't want the same characters every lesson. • I would add more characters then just Yoop and Plory.
Characters Voices: talk too much/change voices	27	2.4	<ul style="list-style-type: none"> • THEY TALK WAY TOO MUCH!!!! • Less talky more worky. • I would change the speed of it because they talk so slow. • If I could on i-Ready math I would change when the characters talk, like a pause or skip button because it can sometimes be annoying.

Changes	<i>n</i>	%	Representative comments
Tools: change tools/visuals	28	2.5	<ul style="list-style-type: none"> • Also, I would try to add more tools for certain lessons such as a protractor or a calculator along with the current tools on the bottom right. • I think the notepad should save the notes you have all the way until the quiz. I put some good notes to help me pass on one and it erased them when I went to the quiz. I was very sad • I think you could have a more vast variety of backgrounds.
Technical Difficulties	11	1.0	<ul style="list-style-type: none"> • I would change that it would say correct things because it is wrong sometimes. • They could patch all the glitches. • Sometimes when type in the correct answer, it says it's wrong! That makes it so confusing. • It keeps exiting me out of the lesson and I would have to do it over again
Everything: don't like anything	36	3.2	
Nothing: love it/like it	318	28.2	
Other	76	6.7	

^a Upper-case N (*N*) represents the number of students responding to the open-ended question. Lower-case ns (*n*) represent the number of comments coded to that category. A single comment may have been coded in more than one category, and students may have responded with more than one comment, so percentages add to more than 100%.

Appendix D

Table D-1
Summary of Survey Responses Regarding RCC Lessons

Aspect	Stakeholder	Reading, positive response	Math, positive response	
RCC lessons	Use of RCC	Teachers	38% exclusively; 48% mostly	62% exclusively; 29% mostly
	Leadership	100% lessons as presented	100% lessons as presented	
Whole group fits in daily schedule	Teachers	92% well or very well	88% well or very well	
Small group fits in daily schedule	Teachers	64% well or very well	61% well or very well	
Lesson materials – whole group	Teachers	85% satisfied	72% satisfied	
Lesson materials – small group	Teachers	47% satisfied	57% satisfied	
Differentiation opportunities	Teachers	66% working well	69% working well	
	Specialists	45% working well	50% working well	
	Leadership	93% working well	83% working well	
Pacing	Teachers	83% satisfied	42% satisfied	
	Leadership	87 % ‘able to keep on track’	62 % ‘able to keep on track’	
Meets needs of student subgroups	Teachers	42% (special ed) – 76% (accelerated)	45% (special ed) – 68% (accelerated)	
	Leadership	64% (special ed.)– 93% (accelerated)	58% (special ed.) – 75% (accelerated)	
	Specialists	69% works for students I teach	72% works for students I teach	
Student engagement in RCC	Students	62% say reading passages are interesting	71% enjoy the math lessons	

Notes. Leadership group includes principals, staff development teachers, math content coaches, and reading specialists. Specialists group includes focus, academic intervention, special education, and ESOL teachers.

Table D-2
Summary of Survey Responses Regarding i-Ready Diagnostic Assessments
and Intervention and Enrichment

Aspect	Stakeholder	Reading, positive response	Math, positive response	
i-Ready online diagnostic assessments	i-Ready Adaptive Growth Measure and Diagnostics	Teachers	91% satisfied	86% satisfied
		Specialists	77% satisfied	78% satisfied
	Using i-Ready data for instruction	Teachers	76% working well	79% working well
		Specialists	72% working well	78% working well
		Leadership	93% working well	77% working well
	i-Ready online intervention and enrichment	Students' use 31-60 mins/week	Teachers	86% indicated
Leadership			93% agree	83% agree
Student instruction and practice		Teachers	99% satisfied	85% satisfied
Student engagement		Students	68% enjoy for reading	78% enjoy for math

Notes. Leadership group includes principals, staff development teachers, math content coaches, and reading specialists. Specialists group includes focus, academic intervention, special education, and ESOL teachers.

Table D-3
Summary of Survey Responses Regarding Collaborative Planning Meetings

	Aspect	Stakeholder	Reading, positive response	Math, positive response
Collaborative planning meetings	Collaboration for RCC instructional planning	Teachers	90% working well	94% working well
		Specialists	90% working well	83% working well
		Leadership	100% working well	100% working well
	Reviewing i-Ready data in collaborative planning meetings	Teachers	69% working well	74% working well
		Specialists	70% working well	55% working well
		Leadership	71% working well	85% working well

Notes. Leadership group includes principals, staff development teachers, math content coaches, and reading specialists. Specialists group includes focus, academic intervention, special education, and ESOL teachers.

Table D-4
Summary of Survey Responses Regarding Preparation for RCC and i-Ready by
Professional Learning Opportunities

	Aspect	Stakeholder	Reading, positive response	Math, positive response
Professional learning	Adequately prepared to use RCC	Teachers	75% agree	67% agree
		Specialists	73% agree	75% agree
		Leadership (prepared staff)	71% agree	77% agree
	Adequately prepared to use i-Ready to monitor student progress	Teachers	76% agree	77% agree
		Specialists	59% agree	67% agree
		Leadership (prepared staff)	88% agree	82% agree
	Adequately prepared to use Standards Mastery Assessments	Teachers	58% agree	61% agree
		Specialists	37% agree	38% agree
	Adequately prepared to support the implementation of RCC and i-Ready	SDTs, MCCs, RSs	50% agree	60% agree

Notes. Leadership group includes principals, staff development teachers, math content coaches, and reading specialists. Specialists group includes focus, academic intervention, special education, and ESOL teachers.