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Striving Readers Cohort II Evaluation Report: Kentucky

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Executive Summary of Findings: Implementation and Impact

This Striving Readers evaluation examined the impact of a targeted intervention for struggling adolescent readers in participating schools. This study was conducted in nine high schools in nine school districts serving large percentages of at-risk students in Kentucky. The targeted intervention for struggling readers was the Kentucky Cognitive Literacy Model (KCLM) developed by the Kentucky Department of Education.

The effectiveness of the KCLM intervention was determined through a randomized control field trial utilizing a treatment and control group design. The KCLM was a supplement to the regular curriculum wherein students in the targeted intervention participated in a reading class in place of an elective as part of their regular school day. The control-group condition was "business as usual," wherein students in the control group take a regular elective such as band, theater arts, civics, or physical education. This study examined the implementation of KCLM and its impact on struggling ninth-grade students' reading and writing achievement, self-efficacy with reading strategies, and motivation for reading.

In this Striving Readers project, each school employed an intervention teacher who was responsible for teaching the targeted intervention to struggling readers.

The impact research questions that motivated the study design and analysis plan are:

- What is the impact of Kentucky's Cognitive Literacy Model (KCLM) on the reading achievement of low-achieving readers?
- What is the impact of KCLM on the writing achievement of low achieving readers?
- What is the impact of KCLM on the perceived reading strategy use of low achieving readers?
- What is the impact of KCLM on the motivation and engagement of low achieving readers?

In addition, the following implementation questions will be answered:

- What is the state-level implementation of the professional development training and support for intervention teachers in the project?
- Which components of KCLM were implemented most frequently by teachers in classrooms?
- What was the quality of KCLM implementation in classrooms?

KCLM Targeted Intervention

This study examined both the implementation and impact of the KCLM over the course of the first year of the Striving Readers project.

Implementation. During the year of the project, KCLM teachers participated in training and on-site support, and training was provided for school administrators. During the year, KCLM teachers were provided 11 days professional development training and up to 66 hours support from visits by KDE literacy staff. School administrators were provided one day of training and at least two support meetings regarding the intervention for the year. Overall, participation in the professional development the KCLM teachers and administrators was high, with 100% of teachers and administrators participating fully in the training either through the formal training dates or through makeup training. Classroom implementation fidelity was measured through classroom observations. Observations indicated that teachers implemented some components of the KCLM model more readily than other components. The intervention was implemented with adequate quality in 3 of 9 classrooms.

Impacts. This study used hierarchical linear modeling (HLM) analyses to measure the impacts of the KCLM on ninth-grade (high school) students' reading achievement, writing achievement, perceived strategy use, and motivation. In this Striving Readers study, there were no impacts on students' reading achievement as measured by the *Group Reading Assessment and Diagnostic Evaluation* and no impacts on writing achievement as measured by the *Kentucky State Writing Assessment.* Student survey results indicated significant effects of the intervention on participating students' self-efficacy for strategy use and on students' reading motivation.

Introduction and Study Background

Description of the Intervention Model

The targeted intervention for the Kentucky project was the KCLM, developed by the Kentucky Department of Education (KDE). The purpose of the KCLM was to assist students who were significantly behind grade level in reading by providing them with the supports to be successful in learning across the curriculum. Table 1.1 illustrates the strands of the intervention.

Table 1.1

Framework of the Supplemental Literacy Intervention Class

Motivation and Engagement	• Thematic instruction with project/inquiry-based learning produces students who are more fully **engaged and motivated** to learn. • Literacy is a social accomplishment (Bloome, 1986; Dyson, 1992).
Strategic Processing	• Strategy—a deliberate cognitive process of selecting, enacting, monitoring and regulating behavior. Includes **comprehension strategy instruction** and **foundational reading skills**. • Skill—a mental activity that can be applied to specific learning situations. • Metacognition—key to strategic processing because it enables students to monitor progress toward achieving their goals (Flavell, 1979).
Instructional Strategies for Content Learning	• Robert Marzano's characteristics of **effective vocabulary instruction** • Marzano, et al. **strategies for learning** such as cues, questions, and advance organizers; non-linguistic representations; identifying similarities and differences; summarizing and notetaking
Communication Skills	• Includes **reading, writing and discussion** outcomes that address a variety of approaches to essential questions and texts. • **Writing** helps readers clarify meaning and provides opportunities for authentic **engagement** and communication. • Exchanging ideas, especially through **extended discussion of meaning and interpretation of text,** is essential to a learning community.

It is important to note that while these are categorized into specific strands, they also are embedded across strands to integrate a total literacy experience for students. The four components of the KCLM framework were tied together by content-related themes such as success, the environment, and problem solving.

Figure 1 shows the major course components and specific dimensions of each component.

Supplemental Intervention Model Components			
Motivation & Engagement	Strategic Processes	Instructional Strategies	Communication
Theme-based Instruction			
Connections between learning activities and real world issues Varied instructional format Student prior knowledge, interest and background used in determining content Technology is used to facilitate learning Goal setting and private feedback Focus on problem-solving processes Autonomy for learning and meaningful choices	Explicit comprehension strategy instruction (modeling, explanation, practice, and reflection) Explicit instruction in foundational reading skills	Instructional tools for comprehension and vocabulary learning. Vocabulary processing through visual, auditory, physical and/or emotional experiences; opportunities to use their own words or non-linguistic representations to define new words; teacher explanations and examples of new, key terms A focus on summarizing and identifying similarities and differences Higher level questioning	Pre-, during-, and post-text based discussion strategies Writing to learn activities Explicit instruction in writing strategies Explicit instruction in foundational writing skills

Figure 1: Components of KCLM.

In the Kentucky project, ninth-grade students who scored two grade levels or more below grade level in reading received a minimum of 225 minutes per week and a maximum of 375 minutes per week of supplemental reading instruction in a targeted intervention class taught by an intervention teacher. Students were placed in this course in addition to their regular reading/language arts classes for an entire school year.

Over the course of the project, the professional development model for the targeted intervention included summer and follow-up trainings and on-site support from KDE literacy staff. To learn how to implement the targeted intervention, teachers participated in a summer workshop, which was led by KDE literacy staff. During the school year, the trainers led the teachers in follow-up workshops. Across the project, KCLM teachers received 11 days of workshop training in the targeted intervention in total. To support their ongoing learning and development, teachers also participated in site visits and regular distance support by KDE literacy staff.

The professional development model included training and support for administrators, as well. School administrators attended a one day meeting in the summer to learn about the KCLM model and the ways in which the schools should support the intervention. Additionally, KDE literacy staff participated in on-site meetings with administrators up to six times during the school year. Topics at those meetings included grant requirements, evidence-based components of the targeted intervention, scheduling issues, observations of interventionists, literacy leadership, literacy planning, and meeting the needs of struggling adolescent learners. Administrators also received KCLM update newsletters from KDE four times during the course of the year.

Targeted Students

This project was designed to serve low achieving readers in the ninth grade. In the spring of their eighth-grade year, students in middle schools that feed into the nine participating high schools were given the middle school form of the spring Group Reading Assessment and Diagnostic Evaluation (GRADE). Students that scored an NCE of 40 or lower on the GRADE were defined as low achieving readers, and were placed in the eligibility pool.

Students in all day resource classes were not eligible; all other students were eligible. The evaluation team directed the faculty at all feeder middles schools to identify students in all day resource classes, and instructed the schools not to give the spring GRADE to these students. In addition, evaluators directed the faculty at the nine participating high schools to identify students that were placed in all day resource classes after they enrolled in ninth-grade this fall and asked them to provide evaluators with the names of these students for removal from the study. Finally, middle schools sent home passive consent forms with all eighth-grade students who would be tested for participation in the study. The study was described, and parents were directed to contact the evaluators if they chose to not allow their student to participate in the study. No parent declined permission for their child's participation in the study.

Two thousand two hundred four students were listed on the school register sheets as enrolled at the feeder middle schools. Evaluators received an additional twenty-five student

GRADE sheets that were not on the enrollment lists. There were 637 students that met the study's criterion on the spring GRADE for eligibility.

Selection Process for Interventionists

Intervention teachers were recruited and hired by individual schools. Advertisements for the intervention teacher position included the following criteria: experienced classroom teacher, respected by faculty and administration; familiarity with and/or interest in interdisciplinary and project-based learning; willingness to learn and apply new skills and knowledge; planning/reflecting skills; strong leadership ability; adaptability and problem solving skills; presentation skills; collaboration skills; ability to mediate between the school and community organizations; and personal communication skills.

Desired Characteristics of the Intervention Classroom

Classes were to be no larger than twenty ninth-grade students. The intervention class was to meet daily for at least 45 minutes for the entire year.

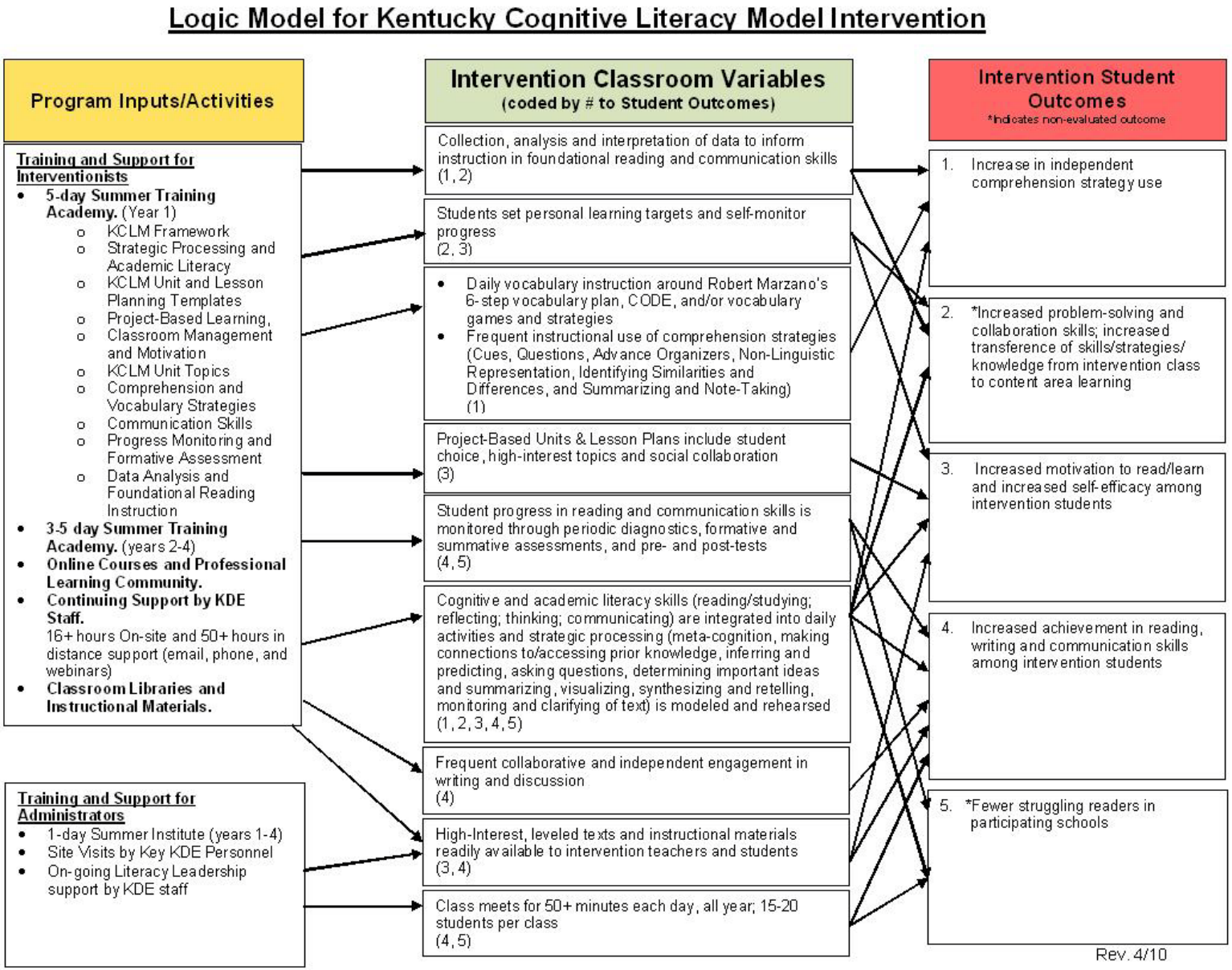


Figure 2: KCLM Intervention Logic Model

Cantrell, Carter & Rintamaa, 2012

Planned Training Model

During the summer of 2010, the intervention teachers from each school were to receive five days of initial training on the core strands. This training was to be developed and provided by the Kentucky Department of Education literacy staff. School administrators were required to attend one day of summer training to learn about the goals of the intervention and the expectations for support of the interventionist and students. By the end of the initial training, the interventionists were to create an instructional plan for direct strategy instruction, and integration of strategies into standards-based units of study. Each participant was to leave understanding how to teach, use, and assess within the KCLM framework, and with a plan to begin immediate implementation as the 2010-2011 school year began.

Throughout the year of implementation, the interventionists were to receive on-going training and support through face-to-face meetings and an online Kentucky Virtual Schools (KYVS) learning community, which was to include book studies, Webinars, a discussion forum, and repositories for sharing resources. KDE literacy staff planned site visits to the schools in the fall and again in the spring to provide on-site coaching and support for up to 50 additional hours.

Administrators were to engage in professional development focusing on the guide from the National Association of Secondary School Principals, *Creating a Culture of Literacy: A Guide for Middle and High School Principals* as well as a KDE DVD resource*, Literacy Leadership: Stories of Schoolwide Success.* This shared leadership network was intended to help administrators and coaches develop a close working relationship critical in supporting instructional improvement efforts.

Table 1.2

Planned PD Activities

PD hrs.	Activities	Date	Attendees *
40	Training on core strands of intervention; develop instructional plan and units of study	July 2010	I
8	Training on goals for intervention and on providing support to interventionists	July2010	A
50 +	Ongoing PD: Online learning community, including book studies, webinars, discussion forum, sharing network	2010	I
16	On site visits/coaching	2010	I

*I=Interventionist; A=Administrator

Planned Classroom Instructional Model

The Kentucky Department of Education created a Unit Planning Template (UPT) to assist intervention teachers in creating units of instruction for the intervention class. One component of the UPT listed the strategies and activities that comprise the KCLM. Teachers selected strategies to teach in each unit. Figure 3 shows the strategies and activities as listed on the UPT. Teachers were free to select the strategies they taught based on their assessment of students' needs. As part of the intervention class, students assigned to the intervention will take the SAT-10 online (reading) and TOWL-4 (writing) diagnostic assessments twice per year.

In addition, KCLM is designed to engage students in reading a variety of level-appropriate texts related to essential question(s) for each content-related unit, including nonfiction, informational and procedural documents, and narrative texts.

Planned Experiences for Control Students

Expectations for the control students were "business as usual," wherein students in the control group took a regular elective such as band, theater arts, civics, or physical education.

COMPREHENSION STRATEGIES

Cues, Questions and Advance Organizers
- ☐ Anticipation/Reaction Guide (PK, Q, M/C, M)
- ☐ Questions and Answers (PK, I/P, Q, S, M/C, M)
- ☐ Skimming (PK, I/P, V, S/R)

Non-linguistic Representations
- ☐ Pattern Organizers (S, V)
- ☐ Mind Mapping (Q, V, S/R, M/C)
- ☐ Pictograph (PK, V, M)

Identifying Similarities and differences
- ☐ Comparison Matrix Chart (PK, S, M)
- ☐ Comparison Guide Map (PK, S, V, S/R, M/C, M)
- ☐ Graphic Organizer for Analogies and Metaphors (I/P, S, V, M)
- ☐ Student or Teacher-Generated Classification Graphic Organizer (dependent on graphic organizer)

Summarizing and Note taking
- ☐ Cornell Notes (Q, S, MC)
- ☐ Note Taking Using Both Sides of the Brain (PK, S, V, M/C)
- ☐ Summary Frame (Dependent on frame)
- ☐ Rule-Based Strategy (Q, S, M/C)

*The letters in parentheses indicate the strategic processing skills that each strategy supports.

STRATEGIC CLASSROOM SKILLS

- ☑ Strategic Processing
  - ☐ PK Making connections to prior knowledge and developing schema
  - ☐ I/P Inferring and predicting
  - ☐ Q Asking questions
  - ☐ S Determining important ideas and summarizing
  - ☐ V Visualizing
  - ☐ S/R Synthesizing and retelling
  - ☐ M/C Monitoring/clarifying understanding of text
  - ☐ M Metacognition
- ☑ Collaboration
  - ☐ Paired
  - ☐ Group (Reciprocal Teaching) (I/P, Q, S, M/C)
- ☑ Fluency
  - ☐ Oral
  - ☐ Written

DAILY VOCABULARY STRATEGIES

6-Step Marzano Plan and CODE

- ☐ Word Storming (PK, I/P)
- ☐ Closed /Open Word Sort (PK, Q, S, V, S/R, M)
- ☐ Three-Way Tie (PK, I/P, Q, V, M/C, M)
- ☐ Connect the Words (PK, I/P, Q, V, S/R, M/C, M)
- ☐ LitFig (PK, I/P, Q, V, M/C, M)
- ☐ Four Square Vocabulary Map/Frayer Model (PK, V, M/C)
- ☐ Word Questioning (PK, I/P, Q, S, V, S/R, M/C, M)
- ☐ Text Impressions (PK, I/P, Q, M)
- ☐ Cinquain (PK, S, V, S/R. M/C, M)
- ☐ Rate Your Knowledge (P/K, I/P, Q/ M/C, M)
- ☐ Vocabulary Tree (PK, M/C, M)

Games
- ☐ Password (PK, I/P, V, S/R)
- ☐ Memory (PK, MC)
- ☐ Most Important Word (PK, I/P, Q, S, M)

*The letters in parentheses indicate the strategic processing skills that each strategy supports.

PROGRESS MONITORING AND REFLECTION

- ☐ Progress Work Report : Individual
- ☐ Progress Work Report: Group
- ☐ Student Goal-setting
- ☐ Journal/Learning Log

COMMUNICATION

Writing
- ☐ Writing to Learn
- ☐ Writing to Demonstrate Learning
- ☐ Writing for Authentic Purposes

Speaking
- ☐ Paired Discussion
- ☐ Group Discussion
- ☐ Presenting to an Audience

ASSESSMENTS

Formative

- ☐ Journal/Learning Log
- ☐ Graphic Organizers
- ☐ Rough Drafts
- ☐ Checklists (Introducing, Progressing, Mastering, etc.)
- ☐ Review Games/Activities
- ☐ Teacher Questioning
- ☐ Student Practice Activities/Exercises
- ☐ Exit Slips/Activities
- ☐ Student Partner Talk (Think-Pair-Share; Turn & Talk)
- ☐ Preliminary Plans/Outlines/Prototypes
- ☐ Practice Presentation
- ☐ Quizzes/Tests
- ☐ Teacher's Anecdotal Notes
- ☐ Role-Playing
- ☐ Other _____

Summative

- ☐ Written Project, with Rubric
- ☐ Oral Presentation, with Rubric
- ☐ On-Demand Writing
- ☐ Test
- ☐ Peer Evaluation
- ☐ Self-Evaluation
- ☐ Other _____

☑ Foundational Reading Skills: Differentiation, Graphic Organizers, Visualization, Text Structure Analysis, Decoding and Word Identification Strategies
Interim/Diagnostic Assessments: SAT-10; TOWL-4; Quizzes/Tests

KENTUCKY Cognitive Literacy Model

Adapted from *The Unit Organizer Routine* (Edge Enterprises, 1994); *PBL Starter Kit* (The Buck Institute for Education, 2009); "How to Develop a Standards-Based Unit of Study" (Kentucky Department of Education, 2007); and *High Schools That Work and Making Middle Grades Work* Summer Institute (Southern Regional Education Board, 2008.

Figure 3: Unit Planning Template

Cantrell, Carter & Rintamaa, 2012

Key Evaluation Design Features

The evaluation is designed to measure the impact of the targeted intervention on student outcomes teacher efficacy. The impact study was guided by the following research questions:

The impact research questions that motivated the study design and analysis plan are:

- What is the impact of Kentucky's Cognitive Literacy Model (KCLM) on the reading achievement of low achieving readers?
- What is the impact of KCLM on the writing achievement of low achieving readers?
- What is the impact of KCLM on the perceived reading strategy use of low achieving readers?
- What is the impact of KCLM on the motivation and engagement of low achieving readers?

Student outcome measures are as follows:

- Group Reading Assessment and Diagnostic Evaluation (GRADE)
- The Kentucky State Writing Assessment
- Metacognitive Awareness of Reading Strategies Inventory (MARSI)
- Student Motivation Survey

In addition, the following implementation questions were answered:

- What is the state-level implementation of the professional development training and support for intervention teachers in the project?
- Which components of KCLM were implemented most frequently by teachers in classrooms?
- What was the quality of KCLM implementation in classrooms?

Evaluation of Implementation

Summary of the Design of the Implementation Study

The research questions that guided the implementation study of the targeted intervention are:

- What is the state-level implementation of the professional development training and support for intervention teachers in the project?
- Which components of KCLM were implemented most frequently by teachers in classrooms?
- What was the quality of KCLM implementation in classrooms?

Implementation Data Collection and Analysis

Summer training. During the summer of 2010, the selected intervention teachers from each school received five days of initial training on the core strands. This training was developed and provided by the Kentucky Department of Education literacy consultants. Attendance records were kept at each training session, and individual teacher attendance was computed at the end of the training in terms of percentage of days attended. School administrators will be required to attend one day of summer training to learn about the goals of the intervention and the expectations for support of the interventionist and students. Participation will be assessed and scored for adequacy and fidelity through attendance records provided by the developers.

Research assistants attended each training session and took detailed field notes in five minute intervals. A code list was developed related to Content and Delivery. Content codes related to the key components of KCLM. Delivery codes related to various training formats such as whole group, small group, discussion, and lecture. To establish reliability, three research assistants independently coded one day of field notes. Agreement was 90% for content and 90% for delivery. After the coding the research assistants agreed that some of the codes should be further broken down for a more accurate description of what was going on during the time interval. Research assistants and investigators discussed adding additional codes for content and delivery. The following codes were added to content: Collaboration, Planning-working, and Planning-discussion. The following codes were added to delivery: Whole group-lecture and Whole group- discussion. The research assistants continued independently coding the next four days of the intervention teacher training. Research assistants met again to check agreement. Agreement achieved for content was 95% and 100% agreement for delivery.

Coaching and mentoring. Interventionists received on-going training and support through an online learning community that included book studies, Webinars, a discussion forum, and repositories for sharing resources. KDE consultants made site visits to the schools in the fall and again in the spring to provide on-site coaching and support. Participation was assessed and scored for adequacy and fidelity through attendance records provided by the developers.

Classroom instruction. Implementation fidelity for the treatment condition was established through classroom observations using a standardized observation protocol for intervention classes. Reading intervention teachers were observed twice during the year. The standardized observation protocol for intervention teachers included two components: a checklist of essential KCLM components and a quality rubric for assessing teachers' implementation quality. In the fall 2010, two research assistants met to create a list of model components based on the trainings from KDE. This list was sent to KDE for validation. KDE added a few components to make the list complete. To identify the model features that were most critical to program success, evaluators asked the developers to rank each set of features for each component in order of importance. To confirm these rankings, evaluators sought feedback from three expert scholars who confirmed and elaborated on the shortened list for each feature. The lead evaluator and KCLM trainer viewed two videos of KCLM instruction and independently completed the protocol. Then, they discussed their scores, reached consensus on scoring, and made minor revisions to

some wording on the protocol. For training in using the protocol, research assistants viewed one video, rated the instruction using the protocol, and discussed disagreements. To establish inter-observer agreement, the research assistants viewed the second video and independently completed a protocol. Agreement with the lead evaluator on the checklist of key aspects of KCLM components for this protocol was 74.4%. The largest area of disagreement was related to vocabulary instruction under the "Instructional Strategies" component. The lead evaluator provided additional training around vocabulary instruction to clarify misunderstandings. Agreement on the quality descriptors for the second video was 91.7%.

It was expected that teachers would implement some aspect of each for the four model components (motivation and engagement, strategic processes, instructional strategies, and communication) during each class period but it was not expected that teachers would implement every aspect of each component each class period. The protocol yielded information on which aspects of each component were implemented during observations and whether the quality of implementation was (a) developing, (b) adequate, or (c) exemplary. Percentages of observations that included each component were computed, and the proportion of observations rated at each quality level was provided.

KCLM Implementation Results

Characteristics of Interventionists

Nine interventionist positions were filled by 11 teachers during the year. Intervention teachers were selected and hired by individual school districts and met the planned characteristics, according to school personnel. A total of nine interventionists were hired in the summer of 2010. During the course of the school year, two interventionists left and were replaced, for a total of 11 interventionists. These interventionists implemented the KCLM targeted interventions within the nine schools. One interventionist was male and 10 were female. All interventionists were white. All of the interventionists had a masters degree or higher, and three (27%) were certified as reading specialists. Interventionists had an average of 12.9 years of experience.

Implementation of Professional Development Model

Interventionist training. Training was provided to interventionists for five days in the summer, and three days during the school year. Table 2.1 shows the content amount and delivery of the professional development model.

Table 2.1

Content and delivery of professional development training (KCLM)

		Number of Minutes total	Percent of training
Content	Housekeeping	70	2.77
	Overview of grant	220	8.71
	Collaboration	275	10.89
	Reading strategies & Strategic processing	640	25.30
	Communication	175	6.93
	Motivation and behavior management	225	8.91
	Foundational reading – basic skills	60	2.38
	Assessment	360	14.26
	Planning work	280	11.09
	Planning discussion	115	4.55
	Project based learning	110	4.36
Delivery Format	Whole group lecture	790	31.23
	Whole group discussion	1035	40.91
	Small group	340	13.44
	Individual	365	14.43

Professional development inputs. During the summer training, seven of the nine interventionists attended all five days. One interventionist attended four days and was absent one day due to illness. This material was covered with the absentee during the following day's training during lunch and breaks. Another interventionist did not attend the summer training. That interventionist was trained one-on-one during three days at the interventionist's school. During the school year there were three regular training dates. All interventionists attended two of these dates, and eight attended the third. The absent interventionist made up the missed training date via Skype with KDE staff. Interventionists also attended the Kentucky Reading Association conference. All nine interventionists attended all three days of the conference. Attendance and participation was adequate for all interventionists.

In addition to summer training, interventionists received site visit support from KDE staff throughout the year. The number of visits ranged from four days to 11 days per interventionist at six hours per day with an average of 5.56 days. When extra support was needed, additional visits were scheduled. Items discussed during the visits were strategy implementation, project-based learning, data collection, student engagement and motivation, assessment procedures and other various topics depending on type of support needed related to the KCLM model.

Interventionists received support through the use of a NING, Skype, email and phone calls. Phone calls, email and Skype were used for ongoing support and professional development. The

NING was used for book studies, discussion forums, blogging and sharing resources. KDE staff estimate that each interventionist was supported an estimated three times per week via phone calls and emails, an estimated once per week via NING, and once per month via Skype.

All participation in the professional development training and support was considered to be adequate for all interventionists.

Professional development for administrators. Administrators were provided with one training day in the summer of 2010 to discuss the requirements of the grant and ways they could support the intervention. Administrators from all nine schools attended.

During the school year, KDE staff met with school administrators to discuss grant requirements, evidence-based components of the targeted intervention, scheduling issues, observations of interventionists, literacy leadership, literacy planning, and meeting the needs of adolescent learners—especially low achieving students. The number of meetings ranged from two to six per school with an average of 3.11 meetings per school. KDE staff also shared a KCLM Update newsletter with all administrators four times throughout the year. All administrator participation was considered to be adequate.

Implementation of Classroom Model

Class size, intensity, and duration. Class sizes varied throughout the year due to student attrition (i.e., transferring schools, dropping out, etc.). Classes ranged from as few as 12 students to as many as 20. The intervention class met every day throughout the course of the year, and ranged from 45 minutes to 75 minutes daily.

Classroom Implementation Results. The observation protocol included ratings for both presence of indicators for each component for KCLM, and quality of each component of KCLM. The next four tables show the number of times interventionists were observed incorporating indicators of motivation and engagement, strategic processing, instructional strategies, and communication skills in their lessons. Table 2.2 indicates the model components most widely implemented by teachers and the numbers and percents of lessons that included those components. Other model components were observed in fewer than 50% of lessons.

Table 2.2

Most Widely Implemented Model Components

Model Component	Round 1 N=18	%	Round 2 N=18	%
Motivation & Engagement				
Teacher makes connections between learning activities and real world issues	13	72	9	50
Teacher varies instructional format, i.e. group work, lecture, and partner work	9	50	9	50
Student prior knowledge, interest and background used in determining content	11	61	12	67
Strategic Processing				
Teacher explains cognitive strategies for comprehension	14	78	9	50
Teacher models using cognitive strategies for comprehension	12	67	10	56
Teacher encourages and provides opportunities for students to practice using cognitive strategies for comprehension	15	83	13	72
Instructional Strategies				
Teacher explicitly incorporates higher level questions	7	39	10	56
Teacher uses instructional tools to support student comprehension or vocabulary	12	67	6	33
Teacher describes, explains, and provides an example of new key terms	8	44	11	61
Communication Skills				
Teacher uses during text-based discussion strategies	11	61	6	33
Teacher includes writing to learn activities	15	83	9	50

For each KCLM component, interventionists focused on some components more than others. For motivation and engagement, interventionists were more likely to make connections between the lesson and real world issues, to vary instructional format, and to tie the content into student experiences. Interventionists were not as likely to incorporate technology, provide student feedback, facilitate problem solving and provide students with choices. For strategic processing, interventionists were more likely to explain, model and encourage student practice of cognitive strategies. Interventionists were not as likely to ask student to reflect on cognitive processing and reading comprehension or provide explicit instruction in foundational reading skills. Overall, interventionists were not as likely to incorporate instructional strategies into their lessons. In the first round of observations, interventionists did use instructional tools to support student comprehension or vocabulary, and in the second round they were likely to describe,

explain and give examples of new vocabulary words. Communication skills were also under-utilized by interventionists. There was some evidence of teacher uses during text-based discussion strategies, and writing to learn activities.

Classroom observations also included a quality scoring for each KCLM component. Table 2.3 shows each teacher's quality score by KCLM component for each round of observation. Each round represents an average between scores for each class period observed. Table 2.3 shows the mean scores by teacher for quality of each KCLM component and the overall score for the model. In terms of overall quality of implementation, implementation of KCLM was adequate in 3 of the 9 classrooms.

Table 2.3

Mean Scores by Teacher for Quality of KCLM component

Classrooms	Motivation Engagement Mean	Strategic Processing Mean	Instructional Strategies Mean	Communication Skills Mean	Overall score Mean
1	1	1	1	1	1
2	1.5	1.5	1	1.5	1.38
3	2.25	2	2	2	2.06
4	1	1	1	1	1
5	2	2	2	1.5	1.88
6	2	2	2	1.5	1.88
7	1	1	1	1	1
8	1.5	1	1	1	1.13
9	1	1	1	1	1

Note. 1-1.4=Developing, 1.5-2=Adequate, 2.1-3=Exemplary

Experiences for control students during intervention period. Students who were selected for the control group received a regular elective as part of their freshman program. A wide range of electives were taken including band, chorus, civics, and physical education.

Additional reading programs. In two schools, additional reading assistance programs were provided to students who qualified. At one school students from both the intervention and control groups took an unstructured reading class where the teacher had access to materials from Study Island and Discovery Education as well as Read 180 and System 44. In the second school, students in both intervention and control groups took a one semester class called Reading Revisited, a highly structured class relying heavily on vocabulary workbook exercises.

Implications for impact analysis. Two factors related to implementation should be considered when interpreting the impact analysis to follow. First, teachers were learning to implement the intervention as they were implementing it, and this resulted in a variation in

implementation quality. Teachers were adhering to the major components of the intervention, but they did not necessarily implement those components as they were designed to be implemented. Therefore, impact findings should not be directly attributed to the intervention model as it is designed. Second, that some schools continued to implement reading programs targeted at low achieving readers presents a confounding factor that may have influenced outcomes for both treatment and control groups.

Evaluation of Impact

Study Design

Sampling selection process. Evaluators implemented a stratified random sampling procedure for students within each school using four demographic variables: special education status, free/reduced lunch status, ethnicity, and gender. Within each school students were sorted by demographic variables creating subgroups of students, and students within each subgroup were then sorted by assessment score. Using a random number generator to assign the first student to either the intervention or control group, the students were then alternately assigned sequentially to the intervention or control group.

Evaluators provided a list of students that qualified for the intervention group to the nine participating high schools during the summer of 2011. These students were scheduled to be in the intervention class, and students and parents were notified when the class schedules were given to all students at the beginning of the fall semester. Schools were not provided the names of the students in the control group.

A student was removed from the study post-random assignment if he/she dropped out of school or moved/transferred to a school not participating in the Striving Readers program. Also, if the student did not take the posttest in the spring of 9th grade, they were removed. Finally, a student was ineligible post-random assignment if, after the student enrolled in the ninth-grade, the high school places the student in all day resource classes. The schools were instructed to inform the evaluators at the end of the study if a control student was placed in all day resource classes. Thus the criterion the high school used to assign a student to all day resource would not be affected by the results of the random assignment, and was applied equally to intervention and control students. There were 13 intervention students that were assigned to all day resource classes post-random assignment, and are ineligible to be in the study. There were sixteen control students who were placed in all day resource classes after random assignment.

Sample size. Exhibit 1 shows the sample size results for reading achievement test, GRADE, divided by condition. Out of the population of 2,229 eighth grade students, 637 were identified as low achieving readers (NCE of 40 or lower). Three hundred nineteen students were assigned to the treatment group, and 318 students were assigned to the control group. After random assignment, 13 students in the treatment group and 16 students in the control group were assigned to all day resource classes after enrolling in high school so were ineligible for the study. Additionally, 22 students in the treatment group did not enroll in a participating

high school. The number of students in the control group that did not enroll in a participating high school is not available.

There were 306 targeted, eligible students at baseline in the intervention group and 302 students in the control group. Attrition in the intervention group at the end of the school year totaled 74 students (36 students moved and 38 students did not take the spring test), resulting in an analytic sample of 232 intervention students. Attrition in the control group totaled 49 students (34 students either did not enroll in the participating high school or moved during the year and 15 students did not take the spring test), resulting in an analytic sample of 253 control students.

Exhibit 1: Consort Chart for Kentucky: GRADE

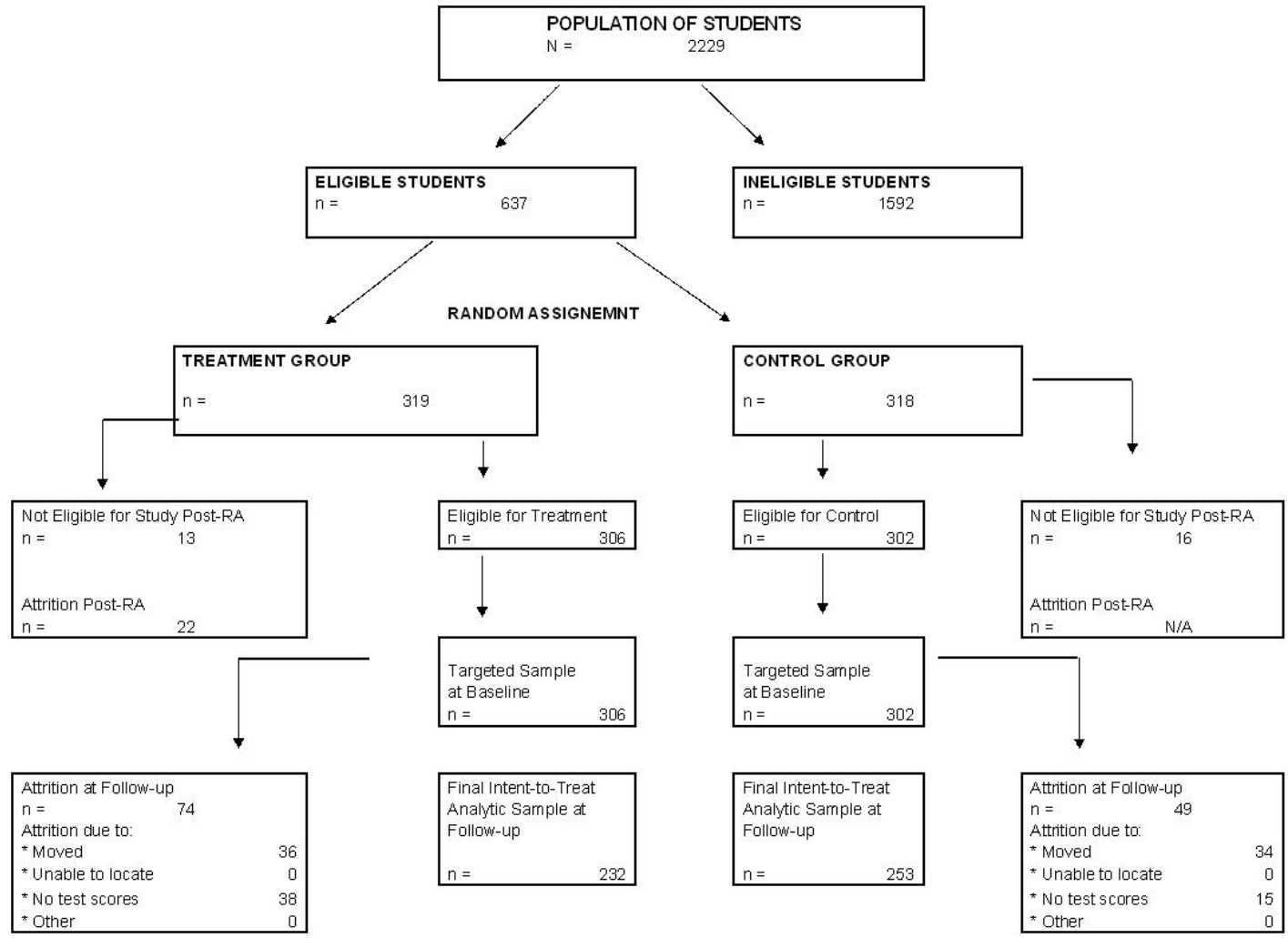


Exhibit 2 shows the sample size results for the writing achievement, by condition. The targeted number of eligible students at baseline in the intervention group was 306, with 302 students in the control group. Attrition in the intervention group during the school year totaled 134students (36 students moved and 98 students did not take the spring writing test), resulting in an analytic sample of 172 intervention students. Attrition in the control group totaled 109 students (34 students either did not enroll in the participating high school or moved during the year, and 75 students did not complete the spring survey), resulting in an analytic sample of 193 control student.

Exhibit 2: Consort Chart for Kentucky: Writing

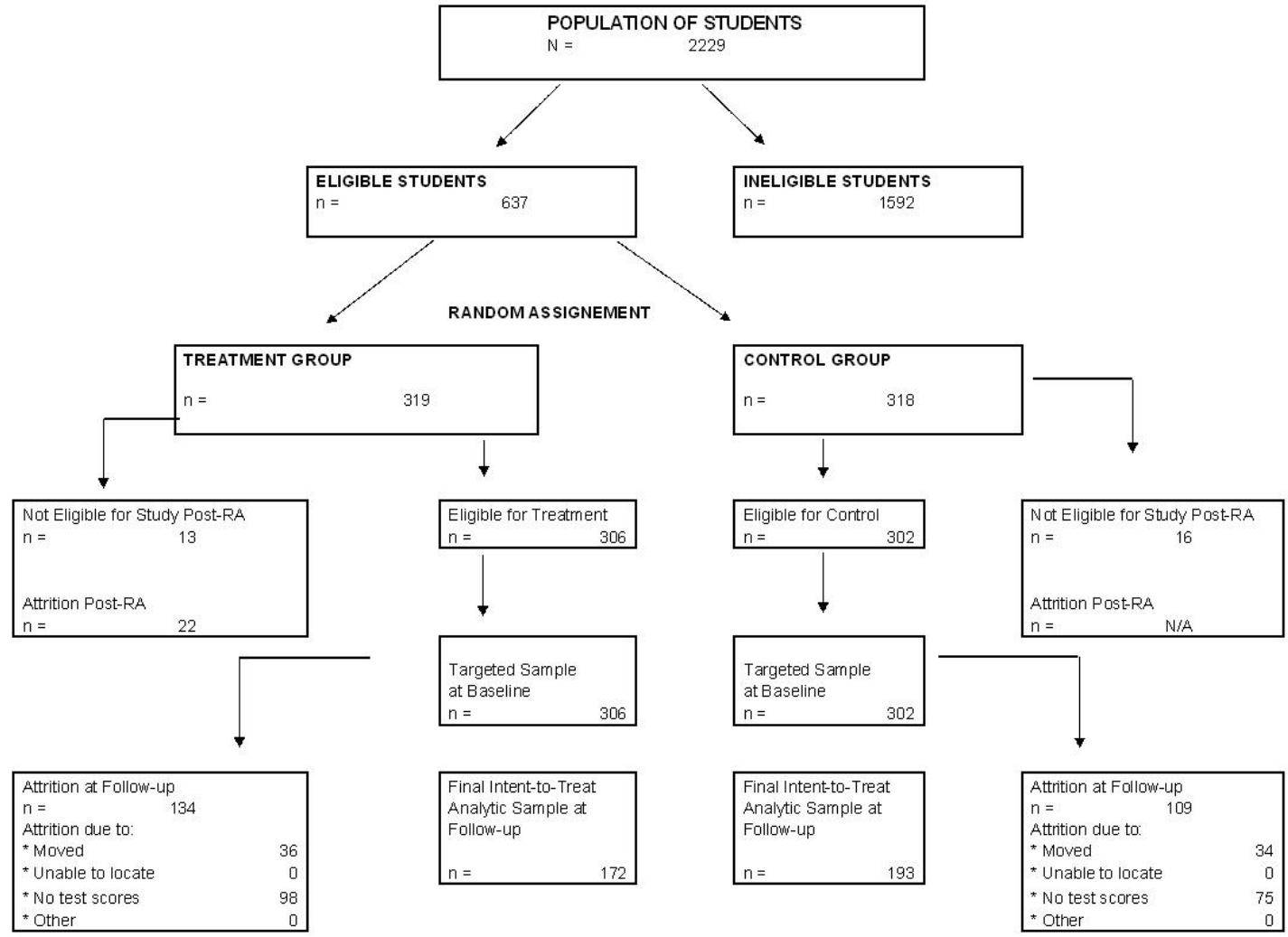
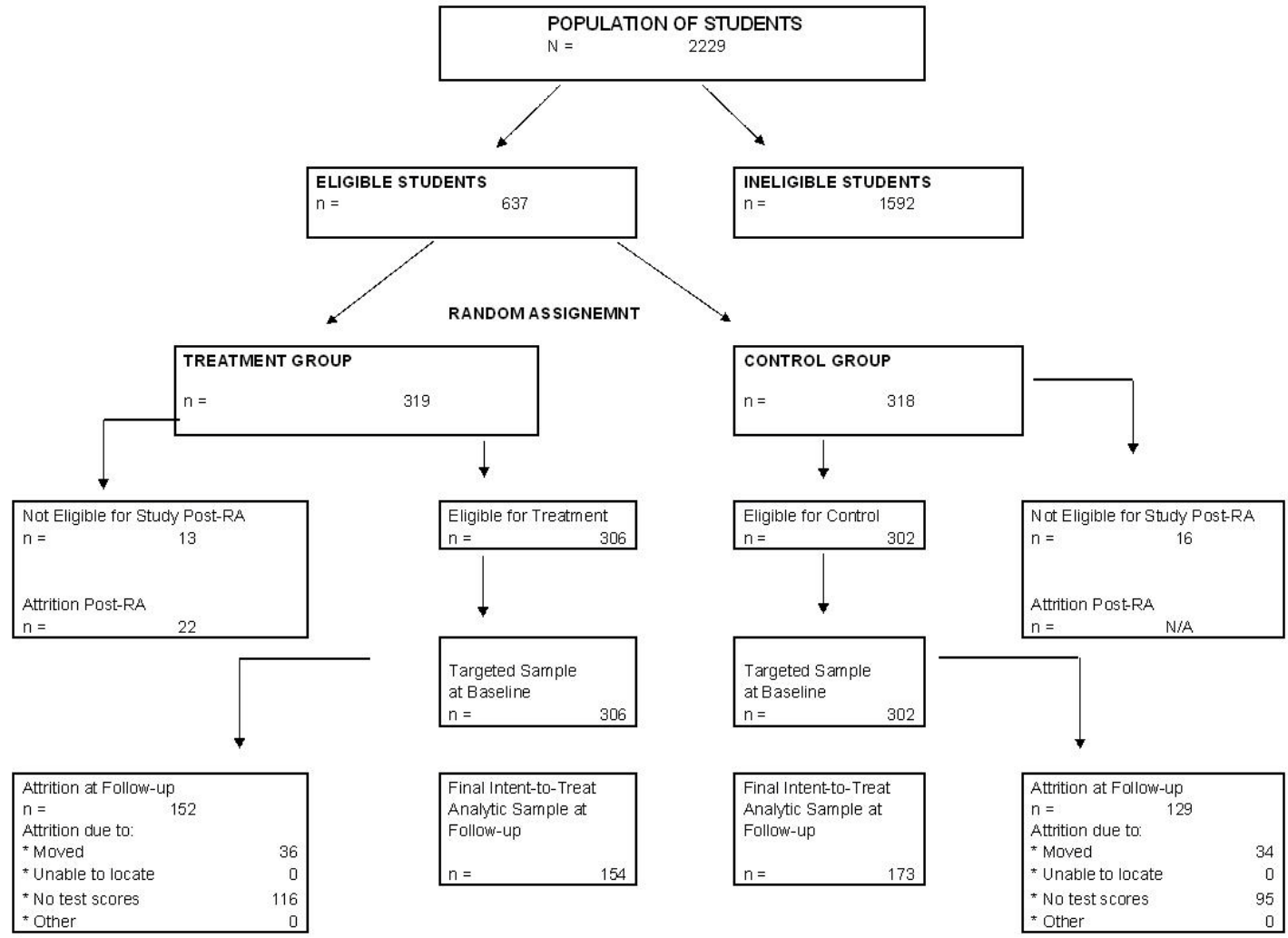


Exhibit 3 shows the sample size results for student survey, by condition. The targeted number of eligible students at baseline in the intervention group was 306, with 302 students in the control group. Attrition in the intervention group during the school year totaled 152 students (36 students moved and 116 students did not complete the spring survey), resulting in an analytic sample of 154 intervention students. Attrition in the control group totaled 129 students (34 students either did not enroll in the participating high school or moved during the year, and 95 students did not complete the spring survey), resulting in an analytic sample of 173 control student

Exhibit 3: Consort Chart for Kentucky: SE Motiv



Impact Measures and Data Collection

The following measures were used to ascertain the impact of the KCLM intervention on students' reading and writing achievement, reading strategy use, and reading motivation.

Group Reading and Diagnostic Evaluation (GRADE). The GRADE is a nationally normed reading assessment, and it includes normalized scores for overall reading achievement. Normal Curve Equivalent scores (NCEs) including vocabulary and comprehension items closely align student outcomes with the goals of the intervention. In the spring of the planning year, the GRADE (level M) was given to all eighth-grade students in participating feeder schools as a pretest. In the following spring, the GRADE (level H) was given to all ninth-grade students as a postest.

Kentucky State Writing Assessment. The Kentucky state writing assessment provides a holistic score based on analytic categories which closely align student outcomes with the goals of the intervention. The State Writing Assessment was given to all eighth-grade students in spring of the planning year, and all ninth-grade students in spring of the following year. The test is designed so that students get a choice between two writing tasks which include three possible modes of writing (inform, narrate for a purpose, or persuade) and four possible response formats (article, editorial, letter or speech). In addition to a writing task, each student is also presented with draft versions of three pieces of writing. Four multiple-choice questions dealing with editing/revising are provided with each of the three drafts so, each student also responds to 12 multiple-choice questions.

Metacognitive Awareness of Reading Strategies Inventory (MARSI). The MARSI (Mokhtari & Reichard, 2002) is a student self-report measure designed specifically to assess adolescents' perceived use of reading strategies during academic reading. For this study, the MARSI was adapted to measure self-efficacy with strategy use. "I can" was added to the beginning of each strategy statement in the survey. The survey was given to all students in fall and spring of ninth grade. The survey items are presented on a scale of 1 to 5, where 1 is equal to "not at all confident" and 5 is equal to "completely confident." Example items would be "I am able to have a purpose in mind while I read" or "I can take notes while reading to help me understand what I read."

Adolescent Motivation Survey. In the spring of eighth grade and in the spring of ninth grade, all students in participating schools (and eighth-grade feeder schools) completed a survey measuring several dimensions of intrinsic reading motivation (challenge, curiosity, intrinsic task value, attainment), extrinsic reading motivation (extrinsic task value, compliance), reading related self-beliefs (expectancy, difficulty) and leisure reading. The survey items are presented on a scale of 1 to 5 and the value varies depending on the dimension measured. A sample item for the challenge dimension is "I like hard, challenging books" where 1 equals "not at all true and 5 equals "very true." A sample item from the leisure dimension is "How much time have you spent reading a magazine this week?" with 1 equaling "none," and 5 equaling "more than five hours." Reliability for subscales were >.70 with the exception of leisure

(a=.585) and extrinsic task value (a=.60). These scales were taken from existing measures (Eccles & Wigfield, 1995; Hopper, 2005; Wigfield & Guthrie, 1997).

Summary of Analytic Approach

Hierarchical Linear Models (HLMs) were used to estimate the impact of the KCLM on student achievement, motivation, and reading strategies outcomes. The GRADE Normal Curve Equivalents (NCEs) were used to estimate the impact of the KCLM intervention on achievement. Holistic scores from the state writing assessment were used to estimate the impact of the KCLM on writing achievement. The average of the items on the MARSI was used to estimate the impact on reading strategy use, and the average of the items on the Adolescent Motivation Survey was used to estimate the impact on motivation.

A two-level HLM model (students assigned to intervention or control group within schools) will be used to determine the impact of KCLM. Four hypotheses will be tested:

H1: The KCLM intervention has no impact on student achievement.
H2: The KCLM intervention has no impact on student writing achievement.
H2: The KCLM intervention has no impact on self efficacy of student strategy use.
H3: The KCLM intervention has no impact on student motivation.

Level-1 HLM: Student Level. At the student level, the spring outcome variable (reading achievement, writing achievement, strategy use, or motivation) will be modeled as a function of fall outcome variables (covariate), intervention/control status and four demographic variables: gender, ethnicity, free/reduced lunch status, and special education.

Level-2 HLM: School Level. This analysis will be performed on ninth-grade students' scores from nine high schools. In addition to the base year Reading KCCT score, other school level variables that will be included are the school percent of students qualifying for free or reduced lunch fees, school percent of white students in the school, and school percent of black students, and the percent of students with disabilities.

Description of the First Year Sample

Nine high schools geographically distributed across the state participated in the study. High school demographic data was collected from the Kentucky Department of Education website for the 2009-10 academic year. The average number of 10^{th}-12^{th} grade students enrolled at the participating schools was 454, ranging from 301 to 803 students. The average percent of White students was 91.58% (53.9%, 98.8%), and the average percent Black students was 5.76% (0%, 37.7%). The average percent of students receiving free/reduced lunch was 62.25% (40.7%, 83.5%), and the average number of students enrolled in special education classes was 12.73%, ranging from 7.2% to 16.5%.

Student demographic data was collected from the middle schools for every enrolled eighth-grade student. Schools were contacted for student demographic information if there

were students that were not on these lists but completed the eighth-grade. Table 2.4 shows demographic characteristics of students in the intervention and control groups. Students in the Striving Readers classes were typically White males, receiving free/reduced lunch services and are not assigned to special education classes. Students that received the intervention were very similar in demographics as compared to the control group, with the possible exception of gender, where a slightly higher percent of males received the intervention.

Table 2.4

Intervention and Control Student Demographics (and Proportions)

	Gender		Ethnicity		Lunch		Special Education	
Group	Male	Female	White	Minor-ity	Reg Pay	Free/ Red	Not In	Special Ed.
Interv	136 (.59)	96 (.41)	205 (.88)	27 (.12)	40 (.17)	192 (.83)	161 (.69)	71 (.31)
Contl	140 (.55)	113 (.45)	219 (.87)	34 (.13)	45 (.18)	208 (.82)	179 (.71)	74 (.29)
Total	276 (.57)	109 (.43)	424 (.88)	61 (.12)	85 (.38)	400 (.62)	340 (.73)	145 (.16)

Impacts on Students

Table 2.5 below shows the results on student reading achievement, writing achievement, reading strategy use self efficacy and reading motivation for intervention and control students after one year of intervention. The unadjusted means and standard deviations for each measure is displayed, and the means adjusted for the HLM results are displayed. The estimated impact of the intervention, the effect size, and the significance level are shown.

Table 2.5

Impact of the Target Intervention on Student Reading Achievement, Writing Achievement, Strategy Use Self Efficacy, and Motivation

	Unadjusted Means		HLM-adjusted Means				
	Control	Tx	Control	Tx	Estimated Impact	Effect Size	*p*
			Reading Achievement				
Spring NCE	36.7 (13.49)	35.6 (13.48)	37.2	36.4	-0.79	-0.059	.439
No. of students	253	232					
			Writing Achievement				
Spring score	826.3 (9.41)	827.2 (11.78)	826.9	827.6	0.62	0.066	.481
No. of students	193	172					
			Strategy Use Self Efficacy				
Spring score	3.3 (0.62)	3.5 (0.61)	3.4	3.5	0.154	0.250	.012*
No. of students	173	154					
			Motivation				
Spring score	2.9 (0.59)	3.0 (0.62)	2.9	3.0	.128	0.217	.015*
No. of students	173	154					

Note. Standard deviations are presented in parenthesis. Effect size calculated as the impact divided by the control group standard deviation.
*Designates statistical significance at the .05 level of significance.

There is no significant effect of the intervention at the .05 level on the reading and writing achievement after the first year of the program. However, a significant effect of the intervention is shown for strategy use self efficacy and reading motivation.

Discussion and Conclusions

The impact results from one year of study do not reveal significant effects of the KCLM intervention on students' reading or writing achievement, but there were significant impacts on students' self-efficacy for strategy use and students' reading motivation. Development of demonstrable improvements in reading performance may require greater lengths of time to gain comfort with flexible strategy use and to reap benefits of increased motivation. While it seems the students in this study reported increased confidence with using reading strategies, they may not have internalized and practiced strategy use to a sufficient enough extent to achieve purposeful flexible use under a wide range of conditions. Nevertheless, the impacts of the intervention on students' strategy use and motivation are noteworthy given the emphasis placed on these dimensions of learning in recommendations for improving adolescents' literacy achievement (Biancarosa & Snow, 2006; Kamil, Borman, Dole, Kral, Salinger, & Torgesen, 2008).

Although the planned professional development model was implemented at high levels, implementation of the classroom model was lower. Elements of the KCLM model were evident in each classroom observation, but the teachers in this project implemented some components of the intervention to a greater extent than other important components. Also, the majority of teachers implemented the intervention at developing levels of quality. Higher levels of implementation may have resulted in higher levels of achievement for students. It is probable that teachers would have been able to achieve higher levels of implementation in future years with ongoing support had the project extended for the full planned project duration.

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Appendix A

Summary of Analytic Approach

Hierarchical Linear Models (HLMs) were used to estimate the impact of the intervention on student achievement in reading and writing, and motivation, and self-efficacy outcomes. The GRADE Normal Curve Equivalents (NCEs) were used to estimate the impact of the intervention on reading achievement, and the standard writing scores were used to measure the impact on writing. The average survey scores were used to estimate the impact on self-efficacy in reading strategy use and impact on motivation.

A two-level HLM model (students assigned to intervention or control group within schools) was used to determine the impact of the targeted intervention. At the student level, the spring outcome variable (reading achievement, writing achievement, self-efficacy in strategy use, or motivation) was modeled as a function of fall outcome variables, intervention/control status, and four demographic variables: gender, ethnicity, free/reduced lunch status, and special education.

Level-1 Model: Student Outcomes (achievement, reading strategies, or motivation)

$$Y_{ij} = \beta_{0j} + \beta_{1j}(Y^*_{ij}) + \beta_{2j}(T_{ij}) + \sum_{m=3}^{M} \beta_{mj}\,\alpha_{mij} + \varepsilon_{ij}$$

where

Y_{ij} is the spring student outcome (post-test) score for student i at school j;

β_{0j} is the mean student outcome (post-test) score for control students at school j;

Y^*_{ij} is the fall student outcome (pre-test) score for student i centered at school j;

β_{1j} is the average student outcome (pre-test) slope for students at school j;

T_{ij} = 1 if student i is assigned to LSC intervention at school j, and 0 if control;

β_{2j} is the mean difference of student outcome pre-post gain between intervention and control students at school j;

α_{mij} are additional covariates representing demographic characteristics of student i at school j (gender, ethnicity, free/reduced lunch, and special education status);

β_{mj} are coefficients corresponding to student demographic covariates (gender, ethnicity, free/reduced lunch, special education status), and

ε_{ij} is the random effect representing the difference between student ij's score and the predicted mean score for school j. These residual effects are assumed normally distributed with mean 0 and variance σ^2.

Level-2 Model: Student Achievement – School Level

This analysis was performed on data from 9th grade students collected for one year. The covariates in this model pertain to the concurrent year the student was in the intervention or

control group with the exception of the Reading Kentucky Core Content Test (KCCT) score, for which the score for the base year, spring, 2010, was used. In addition to the base year Reading KCCT score, other school level covariates included enrollment, percent of white students in the school, percent of African American students, percent of students qualifying for free or reduced lunch fees and percent of students with disabilities..

$$\beta_{0j} = \gamma_{00} + \sum_{q}^{Q} \gamma_{oq} W_{qj} + \mu_{0j}$$

$$\beta_{1j} = \gamma_{10}$$

$$\beta_{2j} = \gamma_{20}$$

$$\beta_{mj} = \gamma_{m0}$$

where

γ_{00} is the mean student outcome (post-test) score of 9th grade control students in Kentucky Striving Readers middle schools

W_{qj} are school level covariates including base year Reading KCCT (spring, 2010), and average school percent free/reduced lunch, percent white students, percent black students, and percent disability;

γ_{oq} are coefficients corresponding to school-level covariates;

μ_{0j} is the unique effect of school j on mean student outcome, holding W_{qj} constant (or conditioning on W_{qj}) - this effect is assumed normally distributed with mean 0 and variance τ^2;

γ_{10} is the fall student outcome (pre-test) slope;

γ_{20} is the overall target intervention treatment effect on spring student outcome (post-test) scores;

γ_{m0} is the fixed m^{th} student covariate effect (gender, ethnicity, free/reduced lunch, special education status) on the spring outcome variable.

Selection of Covariates. The random assignment procedure included all student demographic variables in the HLM model, so were included regardless of significance. Interaction effects were not considered.

Appendix B

Study Measures

Student Survey

Items for the student survey were adapted from the following pre-existing inventories:

Eccles, J. S., & Wigfield, A. (1995). In the mind of the actor: The structure of adolescents' achievement task values and expectancy-related beliefs. *Personality and Social Psychology Bulletin, 21*(3), 215-225. doi: 10.1177/0146167295213003

Hopper, R. (2005). What are teenagers reading? Adolescent fiction reading habits and reading choices. *Literacy 39*(3), 113-120. doi: 10.1111/j.1467-9345.2005.00409.xc

Mokhtari, K. & Reichard, C. A. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology, 94*(2), 249-259. doi: 10.1037/0022-0663.94.2.249

Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology, 89*(3), 420-432. doi: 10.1037/0022-0663.89.3.420

COLLABORATIVE CENTER FOR LITERACY DEVELOPMENT

Student Survey

Grade 8 ○ Female ○

Grade 9 ○ Male ○

LastName

FirstName

MI

ID NUMBER

BIRTHDATE

M M D D Y Y

This survey contains statements about what people can do when they read academic or school-related materials to help them understand what they read. Answer each question as honestly and truthfully as you can, there are no right or wrong answers. Please completely BUBBLE in each answer.

Your answers on this survey are completely confidential. Information will be released in summary form only.

Please BUBBLE the number that shows how CONFIDENT you are in each item, using the following scale:

1	2	3	4	5
Not at all Confident				Completely Confident

1. I am able to have a purpose in mind when I read..... ① ② ③ ④ ⑤

2. I can take notes while reading to help me understand what I read..... ① ② ③ ④ ⑤

3. I can think about what I know to help me understand what I read..... ① ② ③ ④ ⑤

4. I can preview the text to see what it's about before reading it..... ① ② ③ ④ ⑤

1 Not at all Confident	2	3	4	5 Completely Confident
5. When text becomes difficult, I can read aloud to help me..... understand what I read.	①	②	③	④	⑤
6. I can summarize what I read to reflect on important information..... in the text	①	②	③	④	⑤
7. I can think about whether the content of the text fits my..... reading purpose	①	②	③	④	⑤
8. I can read slowly but carefully to be sure I understand what I'm reading	①	②	③	④	⑤
9. I can discuss what I read with others to check my understanding.....	①	②	③	④	⑤
10. I can skim the text first by noting characteristics like length and..... organization	①	②	③	④	⑤
11. I can get back on track when I lose concentration.....	①	②	③	④	⑤
12. I can underline or circle information in the text to help me remember it	①	②	③	④	⑤
13. I can adjust my reading speed according to what I'm reading.....	①	②	③	④	⑤
14. I can make good decisions about what to read closely and what to ignore	①	②	③	④	⑤
15. I can use reference materials such as dictionaries to help me..... understand what I read.	①	②	③	④	⑤
16. When text becomes difficult, I can pay closer attention to..... what I'm reading	①	②	③	④	⑤

1 Not at all Confident	2	3	4	5 Completely Confident
17. I can use tables, figures, and pictures in text to increase my..... understanding	①	②	③	④ ⑤
18. I can stop from time to time and think about what I'm reading.....	①	②	③	④ ⑤
19. I can use context clues to help me better understand what I'm reading	①	②	③	④ ⑤
20. I can paraphrase (restate ideas in my own words) to better..... understand what I read.	①	②	③	④ ⑤
21. I can picture or visualize information to help remember what I read.....	①	②	③	④ ⑤
22. I can use typographical aids like boldface, and italics to identify..... key information.	①	②	③	④ ⑤
23. I can critically analyze and evaluate the information presented..... in the text	①	②	③	④ ⑤
24. I can go back and forth in the text to find relationships among..... ideas in it	①	②	③	④ ⑤
25. I can check my understanding when I come across conflicting..... information	①	②	③	④ ⑤
26. I can predict what the material is about when I read.....	①	②	③	④ ⑤
27. When text becomes difficult, I can reread to increase my understanding	①	②	③	④ ⑤

Please BUBBLE the number that shows how TRUE each item is for you, using the following scale:

1	2	3	4	5
Not at all True		Somewhat True		Very True

28. I can ask myself questions I would like to have answered in the text.....	①	②	③	④	⑤
29. I can check to see if my guesses about the text are right or wrong.....	①	②	③	④	⑤
30. I can guess the meaning of unknown words or phrases.....	①	②	③	④	⑤
31. I like hard, challenging books.....	①	②	③	④	⑤
32. If the project is interesting, I can read difficult material.....	①	②	③	④	⑤
33. I like it when the questions in books make me think.....	①	②	③	④	⑤
34. I don't like it when we get a lot of difficult reading.....	①	②	③	④	⑤
35. I usually learn difficult things by reading.....	①	②	③	④	⑤
36. If a book is interesting I don't care how hard it is to read.....	①	②	③	④	⑤
37. If the teacher discusses something interesting I might read..... more about it	①	②	③	④	⑤
38. I have favorite subjects that I like to read about.....	①	②	③	④	⑤

1 Not at all True	2	3 Somewhat True	4	5 Very True

39. I read to learn new information about topics that interest me.....	①	②	③	④	⑤
40. I read about my hobbies to learn more about them.....	①	②	③	④	⑤
41. I like to read about new things.....	①	②	③	④	⑤
42. I do as little schoolwork as possible in reading.....	①	②	③	④	⑤
43. I read because I have to.....	①	②	③	④	⑤
44. I read things that are not assigned.....	①	②	③	④	⑤
45. I always do my reading work exactly as the teacher wants it.....	①	②	③	④	⑤
46. Finishing every reading assignment is very important to me.....	①	②	③	④	⑤
47. I always try to finish my reading on time.....	①	②	③	④	⑤
48. I do schoolwork so that the teacher can make sure I am paying..... attention	①	②	③	④	⑤

Here are some questions about YOURSELF AS A STUDENT. Notice that the choices are under each question.

49. How well do you think you will do in reading this year? *(1=not at all well, 3=somewhat well, 5=very well)*.....	①	②	③	④	⑤
50. In general, how hard is reading for you?..... *(1=not at all hard, 3=somewhat hard, 5=very hard)*	①	②	③	④	⑤
51. In general, I find working on reading assignments *(1=not at all interesting, 3=somewhat interesting, 5=very interesting)*	①	②	③	④	⑤
52. Is the amount of effort it will take to do well in reading worthwhile to you? *(1=not at all worthwhile, 3=somewhat worthwhile, 5=very worthwhile)*	①	②	③	④	⑤
53. How useful is reading for what you want to do after you graduate and go to work? *(1=not at all useful, 3=somewhat useful, 5=very useful)*	①	②	③	④	⑤
54. How good at reading are you? ..... *(1=not at all good, 3=somewhat good, 5=very good)*	①	②	③	④	⑤
55. Compared to most other students in your class, how hard is reading for you? *(1= not at all harder, 3=somewhat harder, 5= much harder)*	①	②	③	④	⑤
56. How much do you like reading? *(1=don't like it at all, 3=somewhat like it, 5=like it very much)*.....	①	②	③	④	⑤
57. I feel that, for me, being good at reading is: *(1 = not at all important, 3=somewhat important, 5 = very important)*	①	②	③	④	⑤

Here are some questions about YOURSELF AS A STUDENT. Notice that the choices are under each question.

58. How useful is reading for your daily life outside school? *(1=not at all useful, 3=somewhat useful, 5=very useful)*.....	①	②	③	④	⑤
59. How have you been doing in reading this year? *(1=not at all well, 3=somewhat well, 5=very well)*.....	①	②	③	④	⑤
60. How important is it to you to be a good reader? *(1=not at all important, 3=somewhat important, 5=very important)*	①	②	③	④	⑤

Please tell us about the READING YOU DO AT HOME, using the following scale:

1. **None**
2. **Less than an hour**
3. **One up to three hours**
4. **Three up to five hours**
5. **More than five hours**

61. How much time have you spent reading a book for school at..... home this week?	①	②	③	④	⑤
62. How much time have you spent reading a book that was NOT..... for school this week?	①	②	③	④	⑤
63. How much time have you spent reading a newspaper this week?.....	①	②	③	④	⑤
64. How much time have you spent reading a magazine this week?.....	①	②	③	④	⑤
65. How much time have you spent reading on the internet that..... was for school work this week?	①	②	③	④	⑤
66. How much time have you spent reading on the internet that..... was NOT for school work this week?	①	②	③	④	⑤

Please BUBBLE the number that shows how CONFIDENT you are in each item, using the following scale:

1 Not at all Confident	2	3	4	5 Completely Confident

67. I can figure out hard words when I am reading.....	①	②	③	④	⑤
68. I can sound out long words when i am reading.....	①	②	③	④	⑤
69. I can recognize words easily when I am reading.....	①	②	③	④	⑤
70. I can read and understand the textbooks for my classes.....	①	②	③	④	⑤
71. I can read and understand the newspaper.....	①	②	③	④	⑤
72. I can read and understand magazine articles.....	①	②	③	④	⑤
73. I can read and understand information on the internet.....	①	②	③	④	⑤

THANK YOU FOR COMPLETING THIS SURVEY!

Teacher Observation Protocol

Teacher First Name: _____

Teacher Last Name: _____

School: _____

Date (including day of the week):_____

Time:_____

Observer:_____

Notes:

Model Component: Motivation and Engagement	Quality Description:		
Area of Interest:	Developing	Adequate	Exemplary
☐ Teacher makes connections between learning activities and real world issues	Students do not appear engaged throughout most of the observation.	Students appear engaged through some of the class period, but seem disengaged during other portions of the class.	All students appear highly engaged in learning during the full observation period.
☐ Teacher varies instructional format, i.e. group work, lecture, and partner work.	Learning activities relate only minimally to real world issues.	Teacher makes some connections to real world issues, and these connections support learning.	Real world issues are central to the student learning.
☐ Student prior knowledge, interest and background used in determining content.	Issues are not necessarily relevant to students' interest. Some attempts are made to connect content and activities to students' prior knowledge or background, but connections are weak or do not seem to support learning	Teacher makes some connections with instruction to students' lives, interests, cultures, experiences and backgrounds, and these connections support student learning.	Students' interests, background, experiences, cultures and/or interests are the focus of the instruction and guide teacher and students decisions about learning and instruction. Instruction is highly relevant to students' lives, backgrounds, cultures, and interests. Instruction affirms students' cultural identity.
☐ Technology is used to facilitate learning.			
☐ Teacher provides students with private feedback.			
☐ Teacher facilitates and engages students in the problem solving process.	Some attempts are made to vary instructional format, but variations (i.e. student collaboration) are not well structured, well-managed, or students do not participate equally	Instructional format varies with regular transitions and is generally well-structured and managed; most students participate.	Varying instructional formats are well-structured, well-managed, and students engage purposefully and equally
☐ Students have autonomy for learning with opportunities to make meaningful choices.			
Notes:	Feedback is given, but it is not connected to student goals or does not seem to support student self regulation	Student set goals, and teacher provides feedback to students that support student self-regulation.	Students set goals for their learning, receive feedback from the teacher that supports student self-regulation, and students exhibit self-regulation
	Students make minimal choices or choices do not seem to support student engagement or learning	Students make choices about either what is read, learned or how they demonstrate their learning.	Students make choices about both what is learned (read and written), and how they demonstrate learning

Model Component: Strategic Processing	Description:		
Area of Interest:	Developing	Adequate	Exemplary
☐ Teacher explains cognitive strategies for comprehension. ☐ Teacher models using cognitive strategies for comprehension.	Teacher mentions comprehension strategies, but does so briefly. Strategies are covered superficially. Teacher does not check for student understanding of comprehension strategies.	Teacher explicitly explains reading comprehension strategies.	Comprehension strategies are explicitly taught, and differentiated according to student need. Teacher frequently checks for student understanding.
☐ Teacher encourages and provides opportunities for students to practice using cognitive strategies for comprehension. ☐ Teacher asks students to reflect on reading comprehension and strategy use.	Teacher does not effectively model reading strategies (i.e. modeling is confusing or unclear).	Teacher models reading strategies.	Teacher models reading, varying according to student need.
☐ Teacher provides explicit instruction in foundational reading skills. (i.e. fluency, decoding, word recognition, etc.)	Teacher suggests students use strategies but does not monitor student use.	Teacher encourages and monitors use of reading strategies and checks that students are using them.	Teacher encourages use of reading and writing strategies according to student need. Students use different comprehension strategies according to their need and the requirements of the text. Students work with different texts and different strategies according to where they are developmentally.
Notes (document specific strategies used):	Students are asked to reflect on strategies, but how they should do that is unclear, and teacher does not check for this reflection.	Students are asked to reflect on reading strategy use. Students are clear about how to reflect on their strategy use. Teacher checks for this reflection.	Students reflect in their reading and writing on the strategies they use, and the reflection drives the subsequent instructional decision-making for the teacher. Teacher encourages students to use their own reflections to guide their reading and writing across content areas.
	Strategy instruction is isolated (i.e. not connected to meaningful text; links are not made to other strategies or processes).	Teacher is beginning to integrate strategies (discusses more than one and how they work together). Teacher begins to focus on application of strategies.	Teacher encourages and supports students in integrating and applying multiple strategies across contexts.

Model Component: Instructional Strategies	Description:		
Area of Interest:	Developing	Adequate	Exemplary
☐ Teacher explicitly incorporates higher level questions. ☐ Teacher uses instructional tools to support student comprehension or vocabulary, i.e. anticipation guides, word storm.	Instructional tools for comprehension or vocabulary are used, but they are not well-implemented (not clear to students how to use them)	The use of instructional tools supports students' understanding of vocabulary , text, text or content to some extent; Tools are clearly explained	Instructional tools effectively used to support students' learning. The teacher clearly explains how the tool is to be used, and instruction in the tool supports students' independent comprehension and vocabulary development
☐ Teacher encourages students to process vocabulary through visual, auditory, physical and/or emotional experiences, i.e. students work in groups to discuss new words or play games related to vocabulary. ☐ Students are provided the opportunity to use their own words or non-linguistic representations to define new words.	Vocabulary instruction is not well structured or does not seem to promote students' vocabulary learning; instruction is not clear or does not seem to build students' conceptual knowledge	Instruction builds students' conceptual understandings and some transfer of learning to other contexts and subject areas is evident.	Vocabulary instruction supports students' conceptual understandings; Instruction focuses on transfer of learning to other contexts and subject areas and students are encouraged to reflect on their use of new vocabulary or strategies in other contexts
☐ Teacher describes, explains and provides an example of new, key terms. ☐ Teacher explicitly teaches and encourages students to use summarizing. ☐ Teacher explicitly teaches identifying similarities and differences.	Explanation of strategies is not clear. Students are not asked to apply them to other subjects or contexts.	Explanations of instructional strategies are clear and there is some evidence that students are learning to use them in other subjects or contexts	Explanations are clear, and scaffolding is provided to support students' growing independence
Notes (Be sure to list the names of specific tools that are used.):	Students are exposed to tools but do not make connections to their use in other situations.	Students have learned some instructional tools and teacher clearly communicates situations to use tools	Students have a large repertoire of tools from which to select. Students are able to appropriately select tools, and use them in other contexts or subjects.

Cantrell , Carter, & Rintamaa (2012)

Model Component: Communication Skills	Description:		
Area of Interest:	Developing	Adequate	Exemplary
☐ Teacher uses pre-text based discussion strategies, i.e. teaching discussion skills	Discussions are not well managed; Some students do not participate in discussions or are marginalized in discussion groups; discussions do not support student learning of content.	Discussions are well structured and well managed; There is some participation from all students in discussions; Discussions support students' learning of content to some extent	Discussions are well structured and managed. The teacher promotes equitable social relationships, and students participate equally in discussions; discussion supports student learning of content.
☐ Teachers uses during text-based discussion strategies, i.e., question formation			
☐ Teacher uses post text-based discussion strategies, i.e. Student reflection	Writing to learn activities are used, but they are not clearly implemented or do not seem to support students' understanding of texts or content	Writing to learn activities support students' understanding of texts or content	The teacher focuses on students' use of writing to learn strategies independently in different contexts and classes.
☐ Teacher includes writing to learn activities (i.e. any KCLM teaching tool that requires writing)			
☐ Teacher explicitly teaches writing strategies. (i.e. pre-writing, outline, revising, etc.)	Instruction of writing strategies is attempted, but strategies are not clearly taught	Explicit instruction of writing includes elements of modeling, explanation, guided practice	The teacher supports students' independent use of writing strategies and asks students to reflect on their writing strategies.
☐ Teacher explicitly teaches foundational writing skills. (i.e. mechanics, DOL, grammar, etc.)			
Notes:	Teacher does not discuss with students about "how" to effectively engage in discussion	Teacher discusses with students about "how" to engage in discussion.	Teacher engages the students in modeling and engaging in effective classroom discussion in which all students are active participants.