Cargill Core Knowledge Connection

Second progress report

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Key findings from the second year

Evaluation data collected in this second year show evidence of progress in a context of challenges. Many of the challenges were foreseen from earlier research done elsewhere, but others were not as easily anticipated.

The original national evaluation conducted by Johns Hopkins University not only identified the key school implementation factors that our evaluation is tracking, but also provided the bottom-line finding that well-established, stable public schools typically required three to five years to reach full implementation. The schools in the Cargill Core Knowledge Connection differ from those in the national study in two important ways:

- Rather than a representative sample of schools in a variety of kinds of districts, it focuses on some of the most at-risk schools in a district with many students at considerable risk of not making good educational progress.
- In addition to the two stable, established public schools, the initiative also includes a mix of alternative and charter schools. In these schools with varying degrees of stability, leadership, and resources, the three-to-five-year implementation window needed for stable public schools may prove too short.

Progress

For the six schools in their second year, evaluation data generally show progress toward full implementation on the factors we measured (curriculum alignment, resource inventory and coordination, common planning time, annual planning, principal leadership, and teacher skills and understanding of the curriculum). More importantly, much of what teachers and principals did with respect to these factors in the first year – such as lesson planning, identifying instructional resources, and becoming familiar with the interrelationships among different parts of the curriculum's scope and sequence – required significant time and concentration. However, in this second year, it appears that at most schools these vital activities are becoming easier, more routine, and more productive. Teachers show more appreciation for the curriculum, and more comfort with using it. They continue to report that students are responding positively to the curriculum.

Training, common planning time, and resources

The first two years of implementation bear out the importance of the factors identified by the Johns Hopkins evaluation that are incorporated into our logic model for the Cargill Core Knowledge Connection. Our findings confirm that the basic "activities" –

especially staff training, common planning and preparation time, and resource acquisition – are as important to successful implementation as was anticipated. The schools that have found ways to incorporate all of these into their basic operations – Dowling, Longfellow, and WISE – are the schools in which teachers and principals report the most success with further implementation, including the short-term outcomes relating to principal leadership and teacher knowledge and skills.

Principal leadership

Although the logic model identified the principal's leadership and support as a short-term outcome, our observations in the first two years suggest that it may be better to consider this a necessary "activity" instead. The effectiveness of the principal's leadership and management skills appears to be significantly related to the school's success in addressing the other basic activities of training, planning, and resource acquisition.

Student response

In the second-year survey, teachers indicated that students who are exposed to Core Knowledge demonstrate higher levels of factual knowledge. They also indicated that their students are slightly more attentive, enthusiastic, and engaged than comparable students who did not receive Core Knowledge instruction.

Humanities Commission support

As in the first year, this second year again provided evidence that the effectiveness of the support provided by the Humanities Commission is related to the quality of the relationships developed between MHC staff and the staff at the schools, beginning with the planning period before entry into the initiative. The new MHC staff in 2003-04 have worked hard to develop relationships that were interrupted by prior staff turnover, and our interviews and surveys with principals and teachers shows that their help – and availability – is much appreciated.

Challenges

The main barriers to implementation relate to school-level leadership and resources. In addition, time is an important consideration: both time within the day or week (such as for joint planning or finding instructional materials) and longer-term time to practice and gain experience to become comfortable with new ways of doing things.

School leadership

Leadership at the school level was a problem at some schools. As suggested above, this factor appears to be strongly related to a school's success in scheduling the needed

trainings and planning time, and in supporting the identification, acquisition, and coordination of instructional resources. MHC staff invested significant time and energy in 2003-04 in helping identify and address some school leadership issues, but some problems are outside of the scope of the initiative to address.

Resources

The Johns Hopkins evaluation, on which our logic model is based, included only schools with relatively stable district-level support structures, including provisions for basic instructional resources. Not all schools in the Cargill Core Knowledge Connection have this level of resources available to them. Where such resources are lacking, implementation appears to be much more difficult. The funds available through the grant appear to be contributing considerably to the ability of teachers to deliver adequate instruction to their students. However, the grant was not intended as more than a supplement (assuming a school already had all basic needs), and it may not be enough to compensate for inadequate core resources.

Time

In most respects short-term time, such as for common planning among teachers, depends on a combination of school leadership and resources. Schools with skilled principals and adequate resources have found ways to build the needed time into their schedules. Schools with less time for training or planning tend to be those with fewer resources, principals with less management skill, or both.

As mentioned above, the value of long-term time has been seen in the progress made by the initial schools in this second year. The growth in skill that appears to have come with time and experience has also been nurtured and augmented by the availability of tailored trainings and other supports from the Minnesota Humanities Commission.

Prospects for long-term outcomes

Long-term outcomes anticipated in the third or later years include:

- Continuation of Core Knowledge in half of participating schools, with identification of resources needed for sustainability
- "Full implementation" in which Core Knowledge curriculum represents about half of the overall instructional content in each classroom (or half of the content in the curriculum areas in which Core Knowledge was adopted)
- Increased teacher, parent, and student involvement and satisfaction

- Student test scores that are at least as good as when the school entered the initiative, or as in comparison schools
- Community and parent understanding and support

Of the six schools that have now completed two years of implementation, we see no reason to doubt that successful implementation will be achieved in at least the projected 50 percent of schools, with the incorporation of the expected 50 percent of curriculum in those areas included in schools' proposals. Teacher (and principal) involvement and satisfaction are showing continued growth, and teachers report positive student response and enthusiasm for the curriculum.

Student test scores will not be collected until the end of the third year of implementation. The expected outcome with respect to test scores was that they would not decrease from scores before implementation. The district-wide tests in Minneapolis are in two areas of curriculum (reading and math) that are not closely related to the main content areas adopted by most of the participating schools. The resources and activities of the Cargill Core Knowledge Connection are thus only indirectly related to this measure of achievement, and we would not expect a significant change in reading or math scores based just on the introduction of this initiative.

In addition, student test scores are also known to be affected by a wide variety of other influences that are outside the control of the Cargill Foundation, the Minnesota Humanities Commission, or the participating schools themselves. These include levels of student poverty and mobility, the level of state funding, and the experience level and continuity of principals and teachers.

While it is probable that successful implementation of the Core Knowledge curriculum cannot by itself achieve high test scores in schools where such outside forces are not favorable, it is likely that it can help to improve students' interest and learning, and give principals and teachers additional means to support children's enthusiasm for learning. Initial teacher survey results about students' factual knowledge, attentiveness, enthusiasm, and engagement suggest that the Cargill Core Knowledge Connection is on track to accomplishing these goals.

Introduction

Background

During the 2001-02 school year, the Cargill Foundation and Minnesota Humanities Commission invited elementary schools and preschools in Minneapolis and its suburbs to apply for three-year grant funding to introduce the Core Knowledge curriculum in their schools. In the spring of 2002, six schools' proposals were accepted, including:

- Two Minneapolis public schools:
 - Dowling Urban Environmental School
 - Longfellow Elementary School
- Two charter schools:
 - Carter G. Woodson Institute of Student Excellence, also known as WISE
 - Excell Academy for Higher Learning
- Two preschools:
 - Longfellow School's Hi-5 preschool program
 - Elim Nursery School

Three more schools were added in the fall of 2003:

- One charter school:
 - Twin Cities International Elementary School, also known as TIES
- One alternative school, and its associated preschool:
 - Urban League Academy Elementary School

Both Longfellow Community School and Urban League Academy include elementary and preschool programs within a single building, faculty, and administrative structure. For the purposes of the evaluation, the elementary and preschool programs are counted as separate "schools," but some teachers may work in both programs at the same school, and the same principals are responsible for both.

The Core Knowledge curriculum is based on the premise that effective elementary education requires a foundation in a specified body of common knowledge to be learned by every student, in a coordinated, grade-by-grade sequence. It seeks to ensure that students in any given grade can be assumed to share common knowledge and concepts introduced in previous grades. As a result, less time is needed for review, and more time

can be devoted to building on that common foundation with new learning. In promoting the curriculum, its developer, E.D. Hirsch, has argued that the specific, shared curriculum promotes not only greater student learning (including higher literacy) but also greater fairness, as it makes fewer assumptions about knowledge to be picked up from sources outside of the school.

The specific content of this core curriculum is outlined in two books, the *Core Knowledge Preschool Sequence* and the *Core Knowledge Sequence*, *K*-8, as well as in the more widely read series of books *What Your First Grader* [Second Grader, etc.] Needs To Know.

The Core Knowledge curriculum attracted the interest of the Cargill Foundation because of the foundation's strong commitment to promoting student academic achievement in Minneapolis and its western and northern suburbs. The Minnesota Humanities Commission was already actively engaged in supporting the use of the curriculum in Minnesota, in part because of the curriculum's strong humanities components.

Activities of the initiative to date

In their applications to the Cargill Core Knowledge Connection, schools were encouraged to present specific plans for implementation tailored to their own school's needs and circumstances. They were expected to begin gradually, with selected grades and/or content areas, and take up to the full three years to reach full implementation. In discussions with authorities in the Minneapolis Public Schools, it was agreed that Core Knowledge implementation in the public elementary schools would not displace or disrupt the district's own common reading and mathematics curriculum for the two participating public schools. To help defray costs of implementation, the Cargill Core Knowledge Connection awarded each elementary school \$10,000 to start the first year, and \$5,000 for each preschool. The full grant period covers three years of implementation, with a fourth annual payment at the conclusion of the third year; the grants over this period total \$40,000 per elementary school and \$15,000 per preschool.

In the first year of implementation, the different contexts of the six participating schools made for six different sets of goals and strategies. In terms of pace and focus, no two schools took the exact same approach. As a charter school in its first year of operation, WISE set specific goals for content areas to cover, and worked to meld the content of Core Knowledge with their institutional focus on African culture and history. As another young charter school, Excell Academy had partially implemented Core Knowledge during the previous school year and sought to use that experience as a springboard to cover as much material as possible in several content strands. In contrast, Dowling and Longfellow are established public schools with other curricula in place and experienced teachers on staff, so both schools chose to implement the curriculum more gradually – Dowling with some

activity in four different strands, Longfellow with a focus on Language Arts and Music. Longfellow's Hi-5 program shared the implementation goals of their school overall, but used the separate Core Knowledge Preschool Curriculum to do so. And Elim, a private preschool with limited classroom hours and a small teaching staff, wanted to implement parts of Core Knowledge as a way to reinforce existing teaching practices and methods.

The second year of the Cargill Core Knowledge Connection has seen further development in the implementation efforts of participating schools, the training and support activities of the Minnesota Humanities Commission, and the evaluation activities of Wilder Research Center. In the past year, all first-round schools (i.e. the six schools in their second year of implementation) solidified the implementation areas taken on in the 2002-2003 school year, and expanded into new Core Knowledge units and content areas.

	Implementation plan for Year One	Implementation plan for Year Two
WISE	All teachers at each grade level will implement at least two Core Knowledge units in History and Geography, and Mathematics	Implement four Core Knowledge units in History and Geography, Mathematics, and two units of both Music and Literature
Excell	All grades implement the Language Arts, History, Geography, and Science components	All grades and specialist are teaching at a minimum of 90% of all content areas.
	Begin to implement Art and Music content in grades K-4	
Dowling	All grades implement some History and Geography content	Implement Art and Music strands in grade levels 3-5
	All grades will implement poetry component of Language Arts	
	Begin to implement Art and Music content in grades K-2	
Longfellow and Longfellow Hi-5	All grades implement Music, Poetry, Fiction/Drama, Sayings and Phrases along with any alignments that fall into place with the Minneapolis curriculum in Science, Math, and Language Arts (no distinction between implementation strategies for Elementary and Hi-5 levels)	Implement World History and Geography, and Physical Education strands
Elim	Room 5 implements selected sections of preschool sequence, mainly for Level 2	Room 5 implements more sections of preschool sequence
	Room 4 and Tuesday/Thursday classes implement smaller sections of preschool sequence, Level 1	Room 4 class implement larger sections of preschool sequence (Tuesday/Thursday
	As a part-time, half-day school, implementation levels will always reflect this reduced schedule.	class has been eliminated)

1. Core Knowledge implementation plans for each school in the first two years

Sources: Grant proposals and progress reports from each participating school.

The second year of the overall initiative also marks the first implementation year for three new schools, including one public alternative school, its associated preschool, and one charter school.

Cargill Core Knowledge Connection in 2003-2004						
	Implementation plan for Year One					
Fresh Start Academy (preschool and elementary)	Start implementing Music, Art, Science, History, and Geography (no level specified in grant proposal)					
Twin Cities International Elementary School	Continue implementation of several strands of Core Knowledge (unspecified in grant proposal)					

2. Implementation plans for the three schools entering their first year of the Cargill Core Knowledge Connection in 2003-2004

Sources: Grant proposals from the three new participating schools.

Evaluation design and methods

As first-round schools in their second year of implementation have built on the knowledge and resources acquired last year and taken more steps toward their particular implementation goals, our evaluation of the Cargill Core Knowledge Connection has moved forward accordingly. Beyond gaining more lessons from the continuation of evaluation activities conducted last year and documented in the first progress report, the evaluation has expanded this year to address additional activities, outputs, and outcomes.

Purpose

Based on the experiences of the participating schools, the Cargill Foundation and Minnesota Humanities Commission are interested in learning:

- Whether the implementation of the Core Knowledge curriculum results in higher student achievement
- What it takes to successfully implement Core Knowledge in Minneapolis public and private elementary schools and preschools
- What kinds of support are needed and helpful to the participating schools.

Wilder Research Center was invited to evaluate the Cargill Core Knowledge Connection to help answer these questions.

Wilder designed the evaluation based on findings from a prior national evaluation of Core Knowledge implementation in public elementary schools conducted by researchers at Johns Hopkins University using matched comparison schools. The Johns Hopkins study examined not only student achievement outcomes, but also the contexts and conditions that affected the success of implementation. Where it occurred, full implementation typically developed over a three- to five-year period. The evaluation found that schools achieving high implementation showed significant improvements over non-Core Knowledge schools in student test scores in the content areas covered by the curriculum. For more general tests, such as statewide or nationally normed achievement tests, more fully implemented Core Knowledge schools had somewhat better scores than lower-implementing Core Knowledge schools. Because of the variation in the levels of implementation schools achieved, the overall group of Core Knowledge schools had test scores similar to those of the overall group of comparison, non-Core Knowledge schools.

This evaluation of the Cargill Core Knowledge Connection is based on the findings of the Johns Hopkins study, and focuses mainly on the factors found likely to be related to successful implementation by the end of the three-year grant period. In order to track the progress made by each school year-by-year, a logic model (found in the Appendix) was developed that combines the activities included in participating schools' grant proposals with the Johns Hopkins factors of successful implementation into a sequence of interrelated activities, outputs, short-term outcomes, and long-term outcomes. The logic model represents our theory of what it takes for schools to successfully implement Core Knowledge. It examines not only how Core Knowledge is being taught in individual classrooms, but how that teaching is coordinated and supported both within each school and by the Minnesota Humanities Commission.

More specifically, the factors of successful implementation addressed in the logic model include:

- Teacher planning and preparation: Records of content implemented, common planning time, an annual plan for content implementation, and alignment of Core Knowledge with other curricula
- Resource organization and acquisition: Current resources are inventoried, and new resources are acquired
- School leadership: Principal¹ supports and provides leadership for planning and instruction
- Community participation and support: Basic awareness of Core Knowledge among parents and other community members
- **Staff training:** Training modules and technical assistance provided by MHC

¹ At the participating public schools, the administrative and academic leader is the principal; at the charter schools and preschools the person in this position is the director. For simplicity in this report, we use the term "principal" when referring to both.

According to the logic model, data relating to these factors are to be collected at appropriate stages in each school's implementation of Core Knowledge by either the Humanities Commission, as a function of their grant monitoring activities, or Wilder, as part of our evaluation, or both. Overall, the evaluation plan was designed to answer three primary research questions:

- 1. What evidence is there that schools are fully implementing Core Knowledge?
- 2. What evidence is there that students may achieve higher academic performance when Core Knowledge is fully knowledge?
- 3. What use have schools made of the training and on-going support available from the Minnesota Humanities Commission, and how satisfied have they been with it?

For this interim report, the questions have been adjusted to reflect the expectation that no school will have achieved full implementation within the first or second year of participation in the Cargill Core Knowledge Connection. This primarily affects the first research question, which adjusts to more aptly consider what evidence can be found that participating schools are likely to reach full implementation by the end of the grant period. As addressed above, it is crucial to recall that each school's definition of "full implementation" of the Core Knowledge curriculum is determined principally by what the particular school agreed to in their grant proposal. These variations take into account important other considerations such as the district curricular requirements for the participating public schools, and the limited class-time hours of Elim Nursery School.

Therefore, although the discussion of findings in this report concentrates on the Johns Hopkins research generally, the reader should bear three important considerations in mind:

- Different schools entered the initiative at different starting points and with different levels of access to resources relative to these features
- Different schools, with the approval of the initiative, had different plans and goals for what they hoped to implement and how they hoped to do so
- The Johns Hopkins research on which the logic model is based studied regular public schools only, not charter schools or preschools, so its assumptions should not be presumed to be equally valid for these other kinds of schools

The contents of this report should therefore be interpreted as descriptions of what the schools have reported and the researchers have observed, but not as finding fault where these observations suggest that a school's implementation may not conform to the description of the research-based feature.

However, while the scope of the Johns Hopkins research and the diversity of schools participating in the Cargill Core Knowledge Curriculum limit how conclusive our conclusions can be at this interim point, these factors also represent the potential benefit for this evaluation to add to the body of extant research on Core Knowledge. Beyond the impact of assisting schools with the implementation of Core Knowledge in its own right, the Cargill Foundation is also adding to the available knowledge on implementation by supporting an evaluation that systematically documents the experiences and outcomes of charter and alternative schools.

Methods

This second-year progress report is based on five main sources of information:

- Principal interviews: Wilder research staff conducted a one-on-one, face-to-face interview at the first-round schools in November and December, and the second-round schools in February and March. The interview focused on the school's organization to support implementation, successes and obstacles to date and expectations for the remainder of the year, and perceptions of the training and support provided by the Humanities Commission. For the second-round schools, it also included a question about how the school's decision was made to apply for the program. On average, interviews lasted approximately 45 minutes.
- Teacher focus groups: Wilder research staff conducted a group discussion with teachers at both second-round schools in February. Each discussion lasted approximately one hour and addressed teachers' expectations for the Core Knowledge curriculum, implementation accomplishments and challenges to date, and perceptions of the training and support from the Humanities Commission. In schools with more than a dozen staff, principals were asked to invite a selection of teachers representing the full range of grades and specialties as well as the full range of participation in planning and implementing Core Knowledge.
- Teacher mid-year survey: Wilder research staff designed a four-page, paper-and-pencil self-administered questionnaire with 17 closed-ended questions, three required open-ended questions, and four optional open-ended questions. This was distributed to each teacher in first-round schools identified by their principals as having used Core Knowledge in the classroom during the year. All six schools participated in the survey. Sixty-two teachers completed the surveys and mailed them back directly to Wilder in pre-stamped, preaddressed envelopes. This represents a response rate of 94 percent of teachers identified by the principals of these six schools as having used Core Knowledge during the year.

- Teacher end-of-year survey: Wilder research staff designed a four-page, paper-and-pencil self-administered questionnaire with 12 closed-ended questions, one required open-ended question, and two optional open-ended questions. This was distributed to each teacher in both first- and second-round schools identified by their principals as having used Core Knowledge in the classroom during the year. All nine schools participated in the survey. Sixty-seven teachers completed the surveys and mailed them back directly to Wilder in pre-stamped, preaddressed envelopes. This represents a response rate of 77 percent of teachers identified by the principals of these nine schools as having used Core Knowledge during the year.
- Focused discussion with MHC staff: Wilder research staff met with the Humanities Commission staff members who work directly with participating schools in July, in order to discuss the training and support services provided over the past year and learn more about the schools from their experiences providing those services.

Two other sources of information were also consulted for background information and to shed further light on researchers' and school staff members' perceptions and interpretations:

- The original grant proposals from the participating schools
- Documents submitted to the Humanities Commission by the schools, and by the Humanities Commission to the Cargill Foundation, describing implementation activities and challenges

Information from the interviews and focus groups was prepared in the form of detailed typed notes and analyzed using ATLAS analytical software. Data from the mid-year and end-of-the-year teacher surveys were entered by Wilder staff into a data base, from which research staff computed frequencies, cross-tabulations, and correlations using SPSS statistical software.

Report structure

The research conducted in the second year of the Cargill Core Knowledge Connection will be used to describe the progress made by participating schools in two sections within this second interim report. The first section will describe the activities of schools in the first year of implementation, and will generally follow the same format as the previous progress report. However, the lessons taken from that report, which described the first year implementation experiences of six schools, will inform the analysis of the second-round schools, and serve as points of comparison. In turn, the second section will examine what first-round schools have accomplished in the second year of implementation, and specifically how they may have integrated the lessons of the previous year into how they conduct the

implementation of Core Knowledge. Both sections will also consider how the Minnesota Humanities Commission has used the lessons of the first year to inform their efforts to assist all the participating schools reach their implementation goals. The report will conclude with a consideration of how the findings of this report should inform how one understands what it takes to successfully implement Core Knowledge, and what the third year of the Cargill Core Knowledge Connection may hold.

Results for schools in Year One

As the first progress report described, the first year of the Cargill Core Knowledge Connection was a learning process for all concerned. Although the schools and the Humanities Commission began the endeavor with expertise in many key areas, implementing Core Knowledge requires bringing a sequence of content areas to life in the classroom, which is rarely a simple, straight-forward process. Moreover, the establishment of the CCKC entailed the formation of a new web of relationships: between the training and support staff at MHC and the staff at participating schools; between the members of each teaching staff, who were often asked to plan and coordinate at new, unfamiliar levels; and, at times, between teachers at different schools facing similar challenges. In the end, much of what the schools and MHC learned in the first year boiled down to teachers, administrators, support staff, and the Humanities Commission figuring out how to utilize the resources of an individual school and the support structure of the initiative to bring Core Knowledge to life in the classroom. All things considered, there was no indication that the barriers faced by participating schools would make any of them unable to reach their implementation goals.

Much of the impact of that learning process is the expertise gained through experience that first-round schools carried into their second year of implementation, which could not be directly transferred to the staff at second-round schools. However, Urban League Academy and Twin Cities International Elementary School may have indirectly benefited from the first year of the initiative by receiving more sophisticated training and support from the Minnesota Humanities Commission. While there is substantial evidence that the training and support MHC offered second-round schools was informed by the lessons of Year One, the data suggest that the circumstances and exceptional contexts of both new schools mitigated the impact of these supports.

Evidence of implementation

Information concerning the first research question, regarding levels of implementation in the first year of the grant period, was gathered both in interviews with principals and focus groups with teachers. Principals of participating schools were asked directly to estimate the level of Core Knowledge implementation at the time of their interview (February and March 2004), teachers were asked to describe what changes they have made in the classroom as a result of Core Knowledge, and other questions posed to both

teachers and principals concerned activities which have been linked with eventual successful implementation of Core Knowledge, including:²

- Aligning the Core Knowledge curriculum with that already in place in the school, district, and state (district alignment is applicable only for the public schools; state alignment is applicable for public and charter elementary schools)
- Making an inventory of current resources, both school-wide and in the classroom
- Ensuring the regular availability and use of common planning time for each grade level
- Drafting an annual plan for the Core Knowledge content to be taught (elementary schools only)

Implementation findings for both schools are based on considering principals' and teachers' self-reporting about these activities. All told, the data suggest that the signs and factors of successful implementation are more evident for TIES than for Urban League.

3. Activities posited to lead to successful implementation – second-round schools in Year One

	Percentage of class time that is Core Knowledge content	Aligning CK with other curricula	Resource coordination	Common planning time	Annual plan
TIES	20-30%	Yes	Partial	Yes	Yes
Urban League	50%	Partial	Partial/No	No/NA	No

Sources: Percentage of time: Teachers' estimates for the months of March, April, and May (end-of-theyear survey). All other columns: Teacher focus groups and principal interviews, February & March 2004.

TIES

As a young charter school serving a high-risk student population, TIES initially appears to closely resemble WISE and Excell, but language and cultural characteristics make this school a unique case. In comparison to the other schools in the Cargill Core Knowledge Connection, and most elementary schools in general, the teachers at TIES face a unique set of challenges and opportunities due to the population of students they serve: refugees, asylees, and other immigrant children, mostly from East Africa.

² This section addresses the components found in the Activities and Outputs columns of the logic model. Sections to follow will address items found in the Short-term Outcomes column.

Together with the Minnesota International Middle School, TIES serves primarily East African refugee children from Kindergarten through eighth grade, many newly arrived in the US, and virtually all with very limited English proficiency levels and educational backgrounds. The school is designed to help provide students with the skills necessary to assimilate into American society in a way that respects and allows them to preserve their home cultures. This philosophy is reflected in a unique school environment, which includes the presence of several East African community members, and incorporates the pedagogical adjustments necessary in order to serve a population of foreign-born English Language Learners (ELLs).

In one way, the fact that TIES serves a student population of foreign-born children with low English language skills is an opportunity ripe for Core Knowledge. A curriculum carrying a common core of culturally-critical content seems ideally suited for a school with a student population that likely has the lowest aggregate level of American cultural knowledge of any of the participating schools. Indeed, the administration specifically chose to implement Core Knowledge as a way to build up their students' American cultural competence. However, this fact itself, and the language barriers of the students, mean that every aspect of Core Knowledge must be adjusted to be appropriate for ELLs.

Despite these concerns, the signs of successful implementation are generally positive. Like Excell, the staff at TIES had been implementing Core Knowledge in the previous year before participating in the CCKC, and that is reflected by fewer of the problems typical to schools just getting started with Core Knowledge. As reported by teachers in the spring survey, teachers are devoting an average of 20 to 30 percent of class time to Core Knowledge. This is a very similar figure to the rates reported by Dowling and Longfellow last year - two public schools with more district requirements and more curricula in place than TIES. The curriculum checklists completed by TIES teachers at mid-year, which represent how many units of each content strand were planned to be implemented this year in each classroom, tell a similar story. As is evident in the table below, the level of implementation was generally high, but not uniform within grades. For instance, there are nine World History and Geography units in the third grade, and implementation varied from three units covered in one classroom, to seven units covered in the other two classrooms. When present, variation within grade levels is indicated in the table by parenthetical numbers, representing the units taught in particular classrooms. The variability is indicative of the fact that, much like Dowling and Elim last year, the principal left the specifics of implementation up to the discretion of the individual teachers.

In interpreting these data, it is important to note that implementation levels at TIES are affected by unique concerns about some of the content that spring from cultural concerns, such as reproduction and religion.

		First grade	Second grade	Third grade	Fourth grade	Fifth grade
World history	Units taught	6	8	(3)(7)(7)	16	(6)(7)
and geography	Total units	7	8	9	16	16
American history and geography	Units taught	8	(10)(11)(11)	9	8	(6)(8)
	Total units	8	11	9	10	9
Language arts and	Units taught	(5.5)(6)(6)	(4)(5)(5)	0	(3)(4)(4)	4.5
literature	Total units	6	6	5	7	8
Science	Units taught	11	(8.5)(9)(9)	9	(11)(12)(12.5)	(7)(8.5)
	Total units	13	10	11	13	14
Music	Units taught	(0)(0)(.5)	(.5)(.5)(3.5)	0	0	0
	Total units	5	5	5	6	4
Art	Units taught	(0)(1)(2)	(0)(0)(2)	1	5	(0)(1)
	Total units	6	5	5	5	3

4. Curriculum implementation for TIES

Source: Teacher mid-year content updates (February 2004).

Notes: While TIES is part of a K-8 academic program, our evaluation only concerns Grades 1-5. The Kindergarten classes use a different curriculum, and our initial research design did not include students beyond the fifth grade.

As the table shows, four strands of the Core Knowledge curriculum were implemented at high and relatively consistent levels over the past year. Most units of World History and Geography, American History and Geography, Language Arts and Literature, and Science were covered in nearly every classroom. The grant proposal from TIES offered no specifics on content strands to be implemented, but no data suggest that implementation of Music and Art was planned for this year, so the sparse reporting in those strands can be interpreted not as a general mistake but as individual teachers choosing to implement content that was not required of them.

In general, more units in the History and Geography strands were covered than in Language Arts and Literature, which reflects teachers' stated concerns that covering topics concerning language is especially difficult with the population they serve. Many teachers noted that ELL concerns made much of the Literature difficult to cover.

By grade, implementation was generally the lowest in the fifth grade, which appears to be more a product of the school's structure than a marked difference in teachers' goals. The fifth grade is a stepping-stone to the middle school years, which involve higher academic expectations, as well as increased emphasis on reading fluency as a necessary condition for learning in all content areas. For newly-arrived immigrants, the gap between their actual and expected English and academic skills is thus not only larger than in the earlier grades, but also represents a greater threat to further progress. Some fifth grade teachers commented that in order to prepare their students for the transition to middle school they feel obliged to spend disproportionate amounts of class time on basic English and reading skills, at the expense of other curriculum areas such as social studies, science, and the arts.

Beyond the actual content covered, the other signs of successful implementation – such as curriculum alignment, an inventory of resources, common planning time, and annual plans – are all generally positive. The principal reports that they are required to align with state standards, but they have found the two relatively easy to reconcile. They have not done a school-wide inventory of resources, but the staff expressed a preference to keep it that way, and maintain autonomy in that regard. The teachers meet once every two weeks for common planning time, and they were all required to make an annual plan. In all, the data suggest an unexpectedly high rate of implementation thus far.

Urban League

Unfortunately, this is not the case for Urban League.

As an alternative school, Urban League serves a student population similar to the charter schools, and is supervised by the Minneapolis School District to a degree similar to the public schools. In terms of institutional structure, this makes Urban League yet another unique case.

With classes ranging from a Hi-5 program to the sixth grade, Urban League also bears a superficial resemblance to Longfellow. However, although our evaluation has treated the preschool program at Longfellow as a separate school up to this point, there is less functional separation between the two at Urban League, and there is in fact only one Hi-5 classroom. This Hi-5 class will also not be in existence next year, due to a dip in state funding of Hi-5 programs and a need for physical space for the seventh grade class to be

added next year. Consequently, beyond considering implementation areas and levels, the elementary and preschool will be treated as one entity for most of this evaluation.

In terms of first year implementation goals, Urban League took a similar approach to that of Excell Academy last year – jumping right in and trying to cover as much as possible in all content strands, rather than treading lightly and establishing specific intermediate goals. In at least this respect, the data suggest that the teaching staff successfully covered, or planned to cover, a lot of ground in the first year. Teachers estimated that 50 percent of class time was devoted to Core Knowledge, a similar figure to Excell last year, and the content checklists required by MHC that elementary teachers filled out show a consistent and relatively high level of implementation in all grades for most content strands.

		Kinder- garten	First grade	Second grade	Third grade	Fourth grade	Fifth grade
World history and geography	Units taught	2	5	5	9	12	11
	Total units	2	7	8	9	16	16
American history and geography	Units taught	7	8	9	9	10	8
	Total units	7	8	11	9	10	9
Language arts and literature	Units taught	5.5	6	4	2.5	6.5	5.5
	Total units	7	6	6	5	7	8
Science	Units taught	6	12	10	11	8.5	13
	Total units	7	13	10	11	13	14
Music	Units taught	2.5	5	5	0	6	2
	Total units	3	5	5	5	6	4
Art	Units taught	3	6	3	5	4	2
	Total units	4	6	5	5	5	3

5. Curriculum implementation for Urban League Academy

Sources: Teacher mid-year content updates (February 2004).

Apart from no Core Knowledge music content reportedly taught in the third grade, these figures in all six content strands can be compared flatteringly to those of schools in their second year of implementation (shown later on). This is also true for the school's preschool classroom. Indeed, apart from the content areas of orientation in time and space, most of the units in the 11 other content areas were covered by the Hi-5 teacher.

		Urban League Pre-K
Physical well-being and motor development	Units taught	4
	Total units	5
Autonomy and social skills	Units taught	2
	Total units	2
Work habits	Units taught	1
	Total units	2
Oral language	Units taught	4
	Total units	4
Nursery rhymes, poems, fingerplays, and songs	Units taught	2
	Total units	3
Storybook reading and storytelling	Units taught	3
	Total units	3
Emerging literacy skills in reading and writing	Units taught	3
	Total units	4
Mathematical reasoning and number sense	Units taught	5
	Total units	7
Orientation in time	Units taught	1
	Total units	3
Orientation in space	Units taught	1
	Total units	4
Scientific reasoning and the physical world	Units taught	1
	Total units	3
Music	Units taught	3
	Total units	4
Visual arts	Units taught	1
	Total units	3

6. Preschool curriculum implementation for Urban League

Sources: Teacher mid-year content updates (February 2004).

For the elementary grades and the preschool at Urban League, this degree of content implementation is higher than might be expected from a consideration of their attainment of factors linked to successful implementation.

- More than half of the teaching staff was hired two days before the first day of school this year, and there was no planning or curriculum alignment that happened at the overall school level, or that was explicitly directed by the administration.
- There was an effort to have appropriate Core Knowledge resources available and accessible to teachers, but there were two main problems with how this happened: first, resources that were ordered before the beginning of the school year never arrived; second, most of the school's resources were located in the director's office, where they were often less than accessible, and not organized in a way that teachers were helped to understand. If requests for resources were made, teachers were satisfied with the assistance received from the director, but the environment for soliciting help was less than completely welcoming.
- With one teacher per grade level, the potential for meaningful common planning time is limited, and did not happen.

In all, the data suggest that teachers implemented as much of the content as they could, with a striking lack of support or direction from within the school.

Indicators of future student achievement

By basing the evaluation plan on previous longitudinal research, we are able to observe implementation features as early as the first year of implementation that we know have a relationship to successful implementation in the longer term, and thus are also related to ultimate student achievement. Apart from teachers' reports about students' reactions to the Core Knowledge curriculum, this report on schools in their first year of implementation therefore focuses on tracking a few crucial short-term outcomes. The activities and outputs that were described in the previous section are posited to lead to the following short-term outcomes (which in turn are expected to increase the likelihood of improved student achievement):

- Staff are familiar with Core Knowledge scope and sequence, familiar with content in topics to be taught, familiar with assessment options, have completed a planning process for the upcoming year, and have energy and ideas for lessons
- Principal shows support and leadership for planning and instruction
- Teachers collaborate (elementary only)

- Teachers have a clear conception of curriculum goals
- Students are more interested and enthusiastic (elementary only)

Evidence relating to these short-term outcomes was collected in the teacher focus groups and principal interviews. Similarly to last year, this evidence suggests that students are reacting positively to the curriculum.

The logic model's representation of the sequence of implementation activities, outputs, and outcomes was developed out of the Johns Hopkins research. However, it is important to recognize that the factors listed above as short-term outcomes in the logic model may not be strictly the consequences of implementation, but may also be important at the outset to facilitate and enable successful implementation. The role of strong support and leadership from the principal is a striking example of this: school leadership has proven to be a very significant factor in establishing sufficient training, planning, and resource coordination, and thereby setting the school's trajectory of implementation. For the purposes of this progress report, however, we have followed the model established in the first year report by analyzing and discussing the principal's role among the short-term outcomes.

	Staff indicators	Principal indicators	Teacher collaboration	Teacher understanding of curriculum	Student response
TIES	Positive	Positive	Positive	Positive	Moderately positive
Urban League	Moderately negative	Negative	Limited	Moderately negative	Mixed

7. Indicators of future student achievement – second-round schools in Year One

Sources: Teachers focus groups, principal interviews (February and March 2004).

TIES

Staff indicators/teacher understanding of curriculum: There is ample evidence that the staff members at TIES "get it." The comments made by teachers in the focus group demonstrated a solid level of comprehension of Core Knowledge. With the high amount of preparation needed to get lessons together and adjust materials for the ELLs, the one concern was their energy for lessons.

- Principal indicators: Most of the support for teachers in terms of Core Knowledge came from the Curriculum Director, not either of the Co-Directors, but teachers seemed happy with the arrangement, and well-supported.
- Teacher collaboration: The teachers reported that they collaborate quite often, with some grades' teachers taking turns writing lesson plans, and all meeting regularly to keep updated.
- Student response: When asked, teachers had positive things to say about students' reactions to the material, but they did not rave about the response from students to the degree that some schools did last year. This might be related to the fact that these teachers had been exposed to Core Knowledge in the previous year.

Urban League

- Staff indicators/teacher understanding of curriculum: The knowledge that most teachers at Urban League have of Core Knowledge came from gaining experience as they went along, not from orientation from MHC or their director. However, most seemed to understand the general concept.
- Principal indicators: Unfortunately, most teachers expressed that they felt under-supported and under-trained about the basics of the curriculum. This has a lot to do with concerns about the administrative structure at Urban League, and specifically the director. In fact, the director's support and leadership was perhaps the most determinative variable for this school in its first year of implementation. This led to Urban League being put on probation in the summer after their first year, and they are currently working with Cargill and MHC staff to abide by the terms of the grant. The teachers commended their director for her willingness to help and devotion to her students, but there are lingering concerns about her administrative philosophy, placing high demands on staff to work very hard to serve their high-risk student population, but with very little organization to support that work, or moderation in expectations.
- **Teacher collaboration:** There is only one teacher per grade level, so collaboration, like common planning time, is very limited.
- Student response: Teachers were hesitantly positive in the focus groups about the student reaction to Core Knowledge.

End-of-year survey on student response to Core Knowledge

More data on the response of students to Core Knowledge is available from the spring survey. First, teachers were asked to compare this year's class with previous classes on five kinds of behavior: attentiveness, enthusiasm, quality of homework (if any was regularly given), engagement, and cooperation. After a few questions on other things, they were then asked to compare this year's class on the same behaviors, during lessons using Core Knowledge and during lessons on similar content but using other curriculum.

In assessing student response to Core Knowledge, we wished to control for possible yearto-year differences among classes of students. Therefore, we used a conservative estimate based on a combination of two questions. Core Knowledge was judged to have a positive result on student response (on one of the five behaviors) if teachers reported that this year's class responded more positively during Core Knowledge sessions than during non-Core Knowledge sessions *and* that this year's class did *not* respond more positively compared to previous years' classes. Using a score of +1 for each positive result, 0 for a neutral result, and -1 for a negative result, average impact scores across all classrooms were computed for each of the five behaviors.

Since most teachers used the Core Knowledge curriculum for only a small proportion of total instructional time, any estimates of impact should be interpreted with caution, and considered only as preliminary indications of possible effects.

Student attentiveness

Overall, of the 13 respondents from Urban League and TIES, two teachers reported that this year's class was more attentive than those of previous years, five reported they were about equally attentive, and five reported they were less attentive. Considering only this year's class, and comparing their attentiveness when using Core Knowledge material with their attentiveness when presenting similar material using other methods, two teachers said the children were more attentive during Core Knowledge sessions, seven said they were about equally attentive, and three teachers said they were less attentive during Core Knowledge sessions.

Twelve teachers provided answers to both questions, allowing us to compute an estimate of impact on this measure. One teacher (Urban League) answered the two questions in a way that suggests a positive impact of Core Knowledge on student attentiveness, compared to eight whose responses suggest no impact. There were two teachers (TIES, Urban League) whose answers suggest a negative impact on attentiveness. The average impact score for student attentiveness was -0.1, where -1 would represent a decrease for all classes, 0 would represent no net impact, and +1 would represent an increase for all classes.

These findings are summarized in the first line of the table below. In the first set of three columns, the numbers show how many teachers rated this year's class as showing more of the indicated behavior, about the same amount, or less of it, when compared with previous year's classes. In the second set of three columns, the numbers show how many teachers rated the class each way compared to themselves when using or not using Core Knowledge curriculum. The last set of columns shows, for teachers who answered both questions, how many pairs of answers reflect a positive impact for Core Knowledge, how many reflect no impact, and how many reflect a negative impact. The rightmost column (labeled "average score") shows the average across all teachers.

8. Student response to curriculum

		ired to pi irs' stude		clas	pared to s when u CK curric	ising		Impact (d	computed)	I
Type of student response	More	Same	Less	More	Same	Less	Positive	Neutral	Negative	Average score
Attentive	2	5	5	2	7	3	1	8	2	-0.1
Enthusiastic	4	5	3	2	8	2	0	10	1	-0.1
Quality of homework	0	5	8	0	9	2	0	11	0	0.0
Engaged	3	6	4	3	6	4	3	8	2	0.1
Cooperative	1	6	6	2	9	2	2	10	1	0.1

Source(s): Wilder Research Center survey of teachers, May 2004.

Note: A total of 13 teachers answered the survey, but not all teachers answered each of the questions reflected in this table. Thus the totals for each set of three columns on a line may vary, and the totals also vary from line to line.

Student Enthusiasm

Eleven teachers provided answers to both questions about student enthusiasm. Comparing pairs of responses, none of their reports suggest that Core Knowledge may have had a positive impact on student enthusiasm. The answers of 10 teachers suggest no impact. One response (Urban League) suggests a negative impact. The average impact score for student enthusiasm was -0.1.

Quality of homework

Eleven teachers indicated that they assigned homework regularly and were able to rate their classes on its quality. All 11 respondents indicated student responses that would suggest no impact. As one might imagine, the average impact score for quality of homework was 0.0.

Student engagement

All 13 respondents provided answers to both questions. Of these, three (TIES, two from Urban League) provided responses that suggest a positive impact of Core Knowledge on this measure, and eight suggest no impact. Two teachers' responses (both from Urban League) suggests a negative impact. The average impact score for student engagement was 0.1.

Cooperativeness of students

We hypothesized that the introduction of a new curriculum, not directly aimed at changing students' behavior towards each other or the teacher, was unlikely to have any particular effect on student cooperativeness in the classroom. This question was included in part to check whether survey answers were affected by any tendency to rate Core Knowledge uniformly positively or negatively across the board. However, results were just as close to neutral on this measure as were results for attentiveness, enthusiasm, and engagement, which are more likely to be affected by the new content.

Of the thirteen teachers who answered both questions, two (TIES, Urban League) answered them in a way that suggests a positive effect for Core Knowledge, compared to ten whose answers suggest a neutral effect, and one (TIES) whose answers suggest a negative effect. The average impact score for cooperativeness was 0.1.

Conclusion

In short, by this conservative measurement, there is no conclusive data at this time that Core Knowledge is having any measurable effect on the attentiveness, enthusiasm, engagement, or quality of homework of students at either TIES or Urban League. In all four cases, the magnitude of the computed average score was equal to or less than that of the average score for the factor that is seemingly unrelated to Core Knowledge (i.e. cooperativeness). This was not the case for the first-round schools last year, when the average scores on attentiveness, enthusiasm, engagement, and quality of homework were all positive, and exceeded the average score for cooperativeness. However, with such a small number of respondents from these second-round schools, it would be unwise to read too much into these preliminary figures.

Minnesota Humanities Commission training and support

This evaluation undertook to obtain information from principals and teachers about the helpfulness of the training and support provided to the schools by the Minnesota Humanities Commission. This assistance consists of the following:

- Introductory training: One week in August before the beginning of school, provided separately for each school. Elementary training, for principals and all teachers, is conducted by an experienced local Core Knowledge teacher contracted by the Humanities Commission. It consists of standard modules developed by the national Core Knowledge Foundation. Preschool training, also using nationally developed modules, is presented by a national Core Knowledge trainer who specializes in the preschool curriculum.
- Additional training: This is spread across different dates, usually on workshop days for the schools, scheduled separately for each school. The content of these trainings, again led by the locally contracted trainer, roughly followed predetermined national modules, but the focus was determined by the concerns of the individual school.
- Follow-up support: Follow-up support is also coordinated by Humanities Commission staff, and provided by them or the locally contracted trainer. There was a considerable change in how this support is provided to schools during the past year. In response to concerns about communication and responsiveness to each school's unique situation, the Humanities Commission changed the staffing of Core Knowledge support services. Two new staff members were brought in to work more closely with the teachers in each school, instead of the old arrangement, in which more communication occurred through the principal or a representative of the teachers. While the structure changed, the array of support services remained largely the same, and included help with resources, planning, and peer connections.

Data sources for this section consist mainly of interviews and focus groups in February and March 2004, during which principals and teachers were asked to comment both on the training and on the ongoing support. Additionally, in the year-end survey teachers were asked to rate the training on a 6-point scale, and some took the opportunity to volunteer further comments.

TIES

In the spring survey, the eight respondents from TIES expressed moderately positive opinions of the training received – the introductory session, and one day out of a three-day training on assessments. Five thought it was good, three thought it was okay. An

issue unrelated to Core Knowledge caused TIES to have no staff development days for additional trainings during the year, which limited this activity.

However, the teaching staff repeatedly stated that any training or support services that did not take into account their student population of ELLs was, and would continue to be, of limited utility. This may have led to a perception among the staff at TIES that MHC staff could do little to help them. However, MHC staff clearly stated this summer that they have received that feedback, and have made plans to have training sessions that address this need in the future.

Although teachers appear to have made limited use of the supports offered by MHC, the staff and the co-director expressed gratitude for the support of MHC – and many teachers said that they appreciated their MHC contact's persistent attempts to be helpful.

Urban League

With the structural concerns at Urban League, the data suggest that the Humanities Commission's ability to aid teachers was circumscribed.

As mentioned above, the new teachers at Urban League were hired just two days before the beginning of the school year, and new staff did not receive the new staff orientation until January. An additional training on World Religions was provided at that time, and a training session on Music was provided in March. Humanities Commission staff made repeated attempts to offer more training, but this required arrangements made through their principal, so training contact between MHC and the staff was generally limited.

In the spring survey, the five respondents from Urban League had mixed opinions of the training they received. Two thought it was very good, one thought it was okay, and two thought it was poor. Of all the 67 respondents to the spring survey, only three thought the training was poor, so this level of dissatisfaction with the training from MHC is a clear exception among participating schools.

Much like the teachers at Excell Academy reported last year, Urban League teachers stated several times that they just did not have the resources to teach Core Knowledge. MHC staff made repeated attempts to intervene and provide help, but this was made difficult by the fact that the first training contact could not be scheduled until January, and teachers were left to implement the curriculum with very little support from within the school.

However, MHC has continued to very deliberately attempt to intervene and lead Urban League to take the steps they consider necessary to successfully implement the curriculum, and the signs look good that, with the clear expectations set by the probation agreement, the second year will start "on track."

Results for schools in Year Two

The differences between schools in their second year of implementation may seem less dramatic now that TIES and Urban League are involved in the initiative, but these schools each remain unique in important ways. The two public schools differ from the other three in the extent to which other curricula are already in place, and they differ from one another both in how implementation is overseen, and in the grades they serve. The two charter schools are different from the other three in their relative youth as institutions, and they differ from one another in charter and implementation strategy. The Elim preschool resembles the Hi-5 program at Longfellow in the age of students served and the curriculum followed, but stands apart as a private, denominational nursery school with limited class time hours.

While these five first-round schools are all unique in their own rights, there are reasons to believe that the structural differences between them as public, charter, or preschools fundamentally affect how they implement Core Knowledge. For example, there is a stark contrast between these three types of schools in terms of the experience levels of their teaching staffs. The teaching experience levels among the staff at Elim vary greatly, but only one teacher among 38 surveyed at Dowling and Longfellow has taught for less than six years, and only 2 of the 20 teachers at WISE and Excell have taught for at least six years.

	Public	Public schools			Preschool		
	Dowling (n=23)	Longfellow (n=15)	WISE (n=9)	Excell (n=11)	Elim (n=4)	Overall (N=62)	
0 years	0	0	1	1	1	3	
1-2 years	0	0	2	4	0	6	
3-5 years	0	1	5	5	0	10	
6-10 years	3	5	1	1	2	12	
11-15 years	8	3	0	0	1	13	
16-20 years	5	3	0	0	0	8	
More than 20 years	7	3	0	0	0	10	
Mean	18.6 years	14.7 years	3.3 years	3.8 years	7.0 years	12.1 years	

9. Years of teaching experience

Sources: Winter teacher surveys (March 2004).

As described in last year's progress report, these schools approach the implementation of Core Knowledge from unique institutional situations, and with unique challenges.

In the second year of implementation, all five first-round schools planned to implement more Core Knowledge content, in the following ways:

- Dowling: Move from implementing "some" History and Geography content, the poetry component of Language Arts, and beginning to implement Art and Music content in grades K-2, and into solidifying those content strands plus implementing Art and Music strands in grades 3-5.
- Longfellow: Move from implementing Music, some components of Language Arts, and whatever other components align with other curricula, and into implementing the World History and Geography and Physical Education strands.
- WISE: Move from implementing at least two units in History and Geography, and Mathematics, and into implementing four units in History and Geography, and Mathematics, and two units each of Music and Literature.
- Excell: Move from implementing the Language Arts, History and Geography, and Science components, and beginning to implement the Art and Music content strands, and into teaching at a minimum of 80 percent of all content areas.
- **Elim:** Implement more of the preschool curriculum in both classrooms.

In order to tackle these expanded implementation goals, each school has assets gained during the first year of implementation they carry with them into the second year, such as expanded content knowledge, more resources, and better awareness of what it takes to implement Core Knowledge. However, many schools have experienced changes since last year that may have disrupted the continuity between their first and second years of implementation: for instance, WISE added a grade level, Elim hired a new director, and – to varying degrees – most of the schools were somehow affected by staff turnover. As the following table illustrates, while the teaching staff at Longfellow appears to have stayed virtually the same, both Dowling and Excell experienced turnover of at least five teachers.

10. Teachers' previous experience with Core Knowledge

	Dowling (n=17)	Longfellow (n=15)	WISE (n=7)	Excell (n=11)	Elim (n=4)	Overall (N=62)
No previous experience	5	0	2	6	1	14
One previous year	17	14	6	2	2	41
Two to three previous years	1	1	1	3	1	7
More than three previous years	0	0	0	0	0	0
Pct. with previous experience	78%	100%	77%	45%	75%	77%

Source(s): Winter survey of teachers, March 2004.
The continuity between the first two years of Core Knowledge implementation was affected by staff turnover, and also by turnover in the student population.

Despite being in the second year of implementation, considerable proportions of the students present in most of the classrooms in these five schools were either not present the previous year or added during the school year, and consequently were learning Core Knowledge content for the first time. On average, the classroom teachers indicated that roughly 30 percent of their students in September had no previous experience with Core Knowledge, and that by February, nearly 1 in 10 students (9%) had been added to their classroom since the beginning of the year and had no previous Core Knowledge experience. Dowling appears to have had fewer changes in student population than Longfellow, and WISE appears to have had fewer changes than Excell. As a preschool, Elim serves primarily students with no prior schooling, so these figures are less meaningful.

	Dowling (n=15)	Longfellow (n=10)	WISE (n=8)	Excell (n=6)	Elim (n=4,3)	Overall (N=43,42)
Average class size (students)	23.2	22.8	18.6	20.5	28.0	22.3
Average number of students with no previous CK experience in September	2.4	7.3	4.3	9.8	21.5	6.7
Average proportion of students with no previous CK experience in September*	10%	32%	23%	48%	77%	30%
Range of proportions of inexperienced students in September	0 - 63%	0 – 100%	0 – 47%	0 – 100%	50 - 100%	0 – 100%
Average number of students without CK experience added between September and February	1.1	3.9	2.6	2.3	3.7	2.4
Average proportion of class composed of students without CK experience added between September and February	3%	18%	16%	12%	12%	9%

11. Students' previous experience with Core Knowledge

Source(s): Winter survey of teachers, March 2004.

Note(s):* The average proportions of students with no previous Core Knowledge experience at the beginning of the school year are expected to be affected by very high estimates from teachers at each school's youngest grade level.

Therefore, with these changes in personnel at often multiple levels, these schools may have entered their second year of participation in the Cargill Core Knowledge Connection with some assets gained from the previous year, but there is no guarantee that the schools' progress from year to year will be entirely linear. In general, however, the data strongly suggest that schools have made marked progress towards full implementation of the curriculum during the past year.

Evidence of implementation

Information concerning the first research question, regarding levels of implementation in the second year of the grant period, was gathered in interviews with principals, the winter teacher survey, and the spring teacher survey. Principals of participating schools were asked directly to estimate the level of Core Knowledge implementation at the time of their interview (November and December 2003), teachers were asked to describe what changes they have made in the classroom as a result of Core Knowledge, and other questions posed to both teachers and principals concerned activities which have been linked with eventual successful implementation of Core Knowledge.

While there is evidence that first-round schools are making good progress towards meeting their own implementation goals, the changes each made in implementation did not generally translate into a marked change in classroom time used to teach Core Knowledge content. As the table below shows, according to teachers' estimates provided in last year's spring survey ("Y1S") and the two teacher surveys this year ("Y2W" for winter, "Y2S" for spring), the percentage of classroom time devoted to Core Knowledge has increased only slightly.

	ſ	Dowling		Lo	ongfello	w		WISE			Excell			Elim			Overall	
	Y2S (n=23)	Y2W (n=21)	Y1S (n=20)	Y2S (n=11)	Y2W (n=13)	Y1S (n=13)	Y2S (n=8)	Y2W (n=8)	Y1S (n=0)	Y2S (n=6)	Y2W (n=10)	Y1S (n=4)	Y2S (n=4)	Y2W (n=4)	Y1S (n=3)	Y2S (N=52)	Y2W (N=56)	Y1S (N=40)
10 percent	8	9	9	0	1	1	0	0	-	0	0	0	0	0	0	8	10	10
20 percent	11	10	8	2	4	3	0	4	-	1	0	0	0	0	0	14	18	11
30 percent	4	1	3	7	6	7	2	3	-	0	0	0	0	0	0	13	10	10
40 percent	0	0	0	2	0	2	6	0	-	0	2	0	0	0	0	8	2	2
50 percent	0	1	0	0	2	0	0	1	-	1	2	2	1	1	0	2	7	2
60 percent	0	0	0	0	0	0	0	0	-	1	3	1	0	1	0	1	4	1
70 percent	0	0	0	0	0	0	0	0	-	0	0	0	1	1	2	1	1	2
80 percent	0	0	0	0	0	0	0	0	-	2	2	1	1	1	0	3	3	1
90 percent	0	0	0	0	0	0	0	0	-	1	1	0	1	0	1	2	1	1
100 percent	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
Mean (%)	18%	17%	17%	30%	28%	28%	38%*	28%*	-	63%*	61%	60%*	73%*	65%*	77%*	33%	33%	29%

12. Percentages of classroom instructional time devoted to Core Knowledge in Year 1 and Year 2

Sources: Spring teacher surveys (June 2003, June 2004), Winter teacher survey (March 2004).

Notes: An asterisk indicates that the percentage shown represents the average of fewer than ten responses. The median response for each school from each of the three surveys is signified by a box around the entry in the row representing the closest percentage.

However, this general stability in the amount of classroom time devoted to Core Knowledge is not necessarily a distressing finding. Once again, it is important to keep in mind that some schools have other curricula and requirements in place, which directly affect how much classroom time should be spent on Core Knowledge. Additionally, as the Johns Hopkins research reports:

The Core Knowledge Foundation suggests that Core Knowledge material comprise "about half of any schools' curriculum, thus leaving ample room for skills instruction and local requirements and emphases."

This benchmark of roughly 50 percent of classroom time refers to schools that are implementing Core Knowledge in its entirety, which is not the case for many schools in the Cargill Core Knowledge Connection. The levels reported by teachers should be interpreted with the variance in implementation plans in mind, and with some skepticism when teachers have reported more than 50 percent, as was the case at Excell and Elim. Therefore, these data are included principally to give a sense of how schools' implementation plans translate into actual classroom time.

The other available data that describes what the schools were doing with the time they spent on Core Knowledge demonstrates that signs and factors of successful implementation are evident, and teachers are having an easier time with the curriculum than they did last year.

13. Activities posited to lead to successful implementation – First-round schools in Year Two

	Percentage of class time that is Core Knowledge content	Aligning CK with other curricula	Resource coordination	Common planning time	Annual plan	Communication with parents
Dowling	18%	Partial	Not considered necessary	Yes	Yes	Yes
Longfellow	29%	Aligned with state guidelines	Yes	Yes	Yes	Yes
WISE	34%	Aligned with state guidelines	Not applicable	Yes	Yes	Yes
Excell	62%	Partial	Not applicable	No	Unclear	Yes
Elim	69%	Not applicable	Partial	Yes	Partial	Yes

Sources: Percentage of time: Average of teachers' estimates from winter and spring teacher surveys. All other columns: Principal interviews and teacher surveys.

Dowling

As described above, Dowling is an established public elementary school with an experienced teaching staff and several other curricula in place besides Core Knowledge. In consideration of the limited time available for Humanities content in the school day and the wide berth Dowling teachers are allowed to teach how they see fit, the initial implementation plan at Dowling was limited, gradual, and flexible.

In the second year of the grant period, Dowling planned to move from implementing "some" History and Geography content, the poetry component of Language Arts, and beginning to implement Art and Music content in grades K-2, and into doing those things plus implementing Art and Music strands in grades 3-5. The limited data last year suggested that their implementation expectations for the first year had been met, and the principal was confident that they would reach their definition of full implementation by the end of the third year. However, the evolution of Core Knowledge implementation at Dowling was not without its complications in the second year:

- Some classes at Dowling are combinations of multiple grade levels (e.g. 4th and 5th grade in one classroom), which slightly complicates the implementation of Core Knowledge. Not only do teachers have to determine which grade level's material of the curriculum to teach their students, but the learning curve may be slower for the teachers themselves, as some teachers have covered brand new content both of the past two years.
- The school has been affected by issues at the district level, which led to a general sense of instability among the staff. According to the principal, these issues at the district level have resulted in many teachers taking early retirement, which led to a substantial amount of turnover.

Despite turnover and uncertainty, the data suggest that most of the activities related to successful implementation have occurred at Dowling.

Curriculum alignment and annual plan

The process of planning the implementation of Core Knowledge is complicated at the participating public schools by the stringency of curricular requirements in place at the district and state levels. In their original grant proposal, Dowling proposed a gradual implementation strategy that included a year-to-year progression of content to be covered that fit with the rest of the curricula in place.

An annual plan for Core Knowledge content to be taught was not mandated by Dowling's principal the first year, which resulted in degrees of intentional planning that varied

among and within the grades. In spite of some inertia against such a change, steps were taken during the second year to plan the sequence of units to be covered more deliberately. At the time of the November principal interview, teacher study groups were starting to work on developing that sequence, and the ownership of implementation was being maintained mostly at the teacher level, as they are the ones choosing which units to introduce in what sequence among themselves. This process will be important, considering that limited opportunities to plan was the most common response volunteered by Dowling teachers to an open-ended question about the biggest challenge in the first year of implementation.

Resource coordination

As reported last year, there has been no formal inventorying of all school resources, but gaps in school-wide Humanities materials have been identified, and Cargill Core Knowledge Connection funds have been used to fill them. This is another area in which teachers are allowed to manage their own operations, and centralized resource collections (beyond the school's media center) school staff consider ineffective. In terms of lesson plans, however, sessions were scheduled during the summer after the second year for teachers to develop lesson plans, which will be made available to MHC.

Common planning time

Common planning time by grade was already in place at Dowling, and is continuing to be used by teachers to plan Core Knowledge activities.

Level of curriculum implemented

As at the second-round schools, the Humanities Commission asked the staff at Dowling and the other first-round schools to fill out a curriculum checklist describing the content implemented, or planned to be implemented, during the year. This evidence shows that Dowling classrooms covered:

- 50 percent to most of World History and Geography content
- 50 percent to most of American History and Geography content
- No Language Arts content (i.e. poetry)
- All of the Music content
- Roughly half of Art content in grades K-2, and almost none in grades 3-5

In this curriculum implementation table, and those that follow, the designation "OC" signifies that there are other curricula in place for that grade level at that school. A dash mark indicates that a school had not planned to implement that content strand at that grade level during the second year of implementation. If a parenthetical number follows either designation, it represents one teacher volunteering how much the Core Knowledge curriculum overlaps with the other curriculum in place, or work done beyond the implementation expectations of their school.

		Kinder- garten	First grade	Second grade	Third grade	Fourth grade	Fifth grade
World history and geography	Units taught	2	6	5	(8)(9)(9)	(11)(12) (16)	16
	Total units	2	7	8	9	16	16
American history and geography	Units taught	(6)(7)	(5)(7)(8)	(6)(6)(7)	9	(5)(7) (10)	8
	Total units	7	8	11	9	10	9
Language arts and literature	Units taught	OC	OC	OC	OC	OC	OC
	Total units	7	6	6	5	7	8
Science	Units taught	OC (2)	OC	OC	OC	OC (5)(5)	OC
	Total units	7	13	10	11	13	14
Music	Units taught	3	5	5	5	6	4
	Total units	3	5	5	5	6	4
Art	Units taught	OC (2)	OC (3.5)	OC (3)	OC (1)	OC (0)	OC (0)
	Total units	4	6	5	5	5	3

14. Curriculum implementation levels for Dowling Elementary

Sources: Teacher mid-year content updates (February 2004).

As the table shows, there was relatively consistent variation within grade levels in the implementation of History and Geography content, which follows logically from the flexibility teachers had to choose what Core Knowledge content to cover. One

consequence of this philosophy is that not all students in the same grade at Dowling will get the same material for the first few years, which will affect the knowledge base of students entering their respective next grades.

Data from the principal interview and teacher surveys suggest that their manner and level of implementation this year fit with Dowling's strategy for reaching full implementation by the end of the third year – with emphases on keeping expectations moderate and carefully paced.

Longfellow

As another public elementary school, the circumstances Longfellow faces in implementing Core Knowledge are essentially the same as those faced by Dowling: a very experienced teaching staff working Core Knowledge into a set of several other required curricula already in place. Also like Dowling, some classrooms contain two grade levels, which leads to the complications with implementation mentioned above. However, both the school environment and structure in place to manage implementation at Longfellow differ in important ways from Dowling.

- The specifics of monitoring implementation progress are managed by the Humanities Committee, not by the principal.
- Longfellow's student population includes 50 Somali English Language Learner (ELL) students, which requires intense collaboration between ELL staff and classroom teachers to ensure that these students understand Core Knowledge concepts.
- The school includes a Hi-5 preschool program.

In the second year of implementation, Longfellow planned to go from implementing Music, some components of Language Arts, and whatever other components align with other curricula, and into implementing those strands more solidly plus implementing the World History and Geography and Physical Education strands. Fortunately, Longfellow experienced very little staff turnover, and therefore virtually all of the teaching staff have previous experience teaching Core Knowledge.

Curriculum alignment and annual plan

Teachers developed implementation plans at the outset of last year, and Longfellow worked to align their activities with the state guidelines for Social Studies. The principal expressed a sense that Core Knowledge can fit with the state expectations, and is a much more specific curriculum. However, the chair of the Humanities Committee (who was also interviewed in December as part of our principal interviews), reported that aligning curricula school-wide has been a difficult task to organize, since teachers are generally following their own implementation plans. This finding also showed up in the responses to the open-ended question about the biggest challenge of the first year of implementation -5 of the 13 respondents from Longfellow mentioned curriculum alignment as the biggest challenge they faced.

One notable wrinkle in reconciling Core Knowledge with the district Social Studies standards reported by Longfellow staff is that students in grade four are required to study Minnesota History. This unit is specifically prescribed by the district and makes it difficult for teachers to implement all the Core Knowledge content material at that grade level. In response, teachers just decided to cover as much of the Core Knowledge curriculum as the schedule allows, and they have met with grade level teachers from Dowling School to discuss ways to deal with this dilemma.

Resource coordination

Like Dowling, Longfellow has a media center within their facility, and therefore started implementation with an advantage in resources in comparison with other first-round schools. For instance, most of the literature necessary to teach the preschool curriculum was already in the school's possession last year, and the Media specialist worked on correlating the materials in the Media Center to Core Knowledge. This year, a new system was developed to encourage teachers to use grant monies to develop their resource collections.

Common planning time

Like last year, teachers have a daily common prep time and an hour after school every day to work in grade level or content focused teams. Although this clearly meets our definition of common planning time, teachers continue to express that more time to plan and collaborate would be useful.

Level of curriculum implemented

The data from the curriculum checklists from Longfellow show that elementary classrooms covered:

- Most of World History and Geography content (except for fourth grade see above)
- 50 percent to all of Language Arts content (despite commitment to maintain district reading curriculum)

- 50 percent to all of Music content
- All of the Music content
- Between none of the Science content and just over half of it (i.e. integrating Core Knowledge material into district curriculum)

Additionally, both Kindergarten classrooms worked ahead and implemented most or all of the American History and Geography content strand.

		Kinder- garten	First grade	Second grade	Third grade	Fourth grade	Fifth grade
World history and geography	Units taught	2	6	8	9	5	13
	Total units	2	7	8	9	16	16
American history and geography	Units taught	- (6)(7)	-	-	-	-	-
geography	Total units	7	8	11	9	10	9
Language arts and language	Units taught	7	5	5 3		4.5	5
	Total units	7	6	6	5	7	8
Science	Units taught	OC (4)(5)	OC (2)	OC (1)	OC (2)	OC (5)	OC
	Total units	7	13	10	11	13	14
Music	Units taught	3	2.5	2.5	3.5	4.5	2
	Total units	3	5	5	5	6	4
Art	Units taught	-	-	-	-	-	-
	Total units	4	6	5	5	5	3

15. Curriculum implementation for Longfellow

Sources: Teacher mid-year content updates (February 2004).

Despite the chair of the Humanities Committee's concern about the variability of implementation, these data suggest that classes within the same grade level are implementing the curriculum at very similar, and relatively high levels.

A high level of implementation is also evident from the preschool checklist filled out by a teacher in the Hi-5 program.

		Longfellow Hi-5
Physical well-being and motor development	Units taught	3
	Total units	5
Autonomy and social skills	Units taught	2
	Total units	2
Work habits	Units taught	1
	Total units	2
Oral language	Units taught	4
	Total units	4
Nursery rhymes, poems, fingerplays, and songs	Units taught	3
	Total units	3
Storybook reading and storytelling	Units taught	3
	Total units	3
Emerging literacy skills in reading and writing	Units taught	3
	Total units	4
Mathematical reasoning and number sense	Units taught	5
	Total units	7
Orientation in time	Units taught	2
	Total units	3
Orientation in space	Units taught	2
	Total units	4
Scientific reasoning and the physical world	Units taught	1
	Total units	3
Music	Units taught	2
	Total units	4
Visual arts	Units taught	3
	Total units	3

16. Preschool curriculum implementation for Longfellow

Sources: Teacher mid-year content updates (February 2004).

WISE

The first year of the grant period also represented the first year that WISE was in operation, and their first year of implementation bore only a slight resemblance to the experiences of Dowling and Longfellow. WISE began implementing Core Knowledge with a very young teaching staff and limited school resources, but these resources were leveraged by the staff's enthusiasm for Core Knowledge to reach a surprisingly high level of attainment of factors relating to successful implementation. This enthusiasm was especially evident in the efforts of two staff members who worked intensively to organize and coordinate Core Knowledge resources. Their chances of continuing that progress into the second year were aided by minimal turnover through the first semester of 2004, although one staff member departed shortly thereafter, and the staff member who departed in the fall was the Resource Coordinator. The director decided not to fill this position, but rather to use those funds to hire several contractors to come in throughout the year for specific staff development projects, enabling teachers to acquire more depth with a variety of subject areas.

Another notable change was the expansion of the teaching staff from 7 up to 10 teachers, concurrent with the expansion of the school from grades K-3 to K-4. This expansion was managed so that every new teacher would be team-teaching with someone who taught Core Knowledge the previous year.

The plan at WISE for the second year of implementation was to move from implementing at least two units in History and Geography and Mathematics, and into implementing four units in History and Geography, four units in Mathematics, and two units in both Music and Literature.

Curriculum alignment and annual plan

As a charter school, WISE is not required to align their curricula with district and state Social Studies standards, but Core Knowledge was aligned with the state Social Studies standards last year nonetheless. There are also developed plans for the year-to-year progression of Core Knowledge, which are being followed.

Resource coordination

As a brand-new school, there was no preexisting pool of resources at WISE that would necessitate undergoing an inventory in Year One of the grant period. However, with both a staff person performing the organizational role of Resource Coordinator and another teacher taking charge of generating resource binders for each grade, resources were carefully gathered and organized with Core Knowledge in mind in the first year. The director reported that the effort expended in collecting and organizing resources last year has made this year much easier in comparison.

Common planning time

There is common staff development time, which is often used to plan upcoming lessons.

Level of curriculum implemented

The data from the curriculum checklists from WISE show that classrooms covered:

- All of the World History and Geography content in grades K-3, and 50 percent in grade four
- Nearly all of the American History and Geography content
- 50 percent or less of Language Arts and Literature content
- Almost no Music content

Classrooms also covered some material that was beyond the content strands planned to be implemented this year:

- A bit of Art content in grades 2 and 3
- Just over 50 percent to nearly all of Science content

		Kinder- garten	First grade	Second grade	Third grade	Fourth grade
World history and	Units taught	2	7	8	9	8
geography	Total units	2	7	8	9	16
American history and	Units taught	7	8	8	9	9
geography	Total units	7	8	11	9	10
Language arts and	Units taught	3.5	1.5	1	0	2
literature	Total units	7	6	6	5	7
Science	Units taught	(4.5)(5.5)	(10)(11)(11)	8	9	12
	Total units	7	13	10	11	13
Music	Units taught	0	0	.5	0	0
	Total units	3	5	5	5	6
Art	Units taught	-	-	- 1	- 2	-
	Total units	4	6	5	5	5

17. Curriculum implementation for WISE

Sources: Teacher mid-year content updates (February 2004).

Apart from the Science content strand, the concerted effort made in both years to coordinate the implementation of Core Knowledge is reflected by minimal variability in content covered within grade levels. There is no conclusive explanation readily available for the drop in World History and Geography implementation in the fourth grade, although the alignment with the state standards raises the possibility that WISE elected to teach the same Minnesota history unit that caused a similar dip for Longfellow.

Excell

As a young charter school with a correspondingly young teaching staff, Excell faced similar challenges as WISE, but with a less gradual philosophy and even fewer resources. There were positive changes in the second year in how Core Knowledge implementation is supported within Excell. These included hiring an administrative assistant, and bringing the Resource Coordinator out of the classroom to work primarily on resource coordination, communication with MHC, and staff development session scheduling. However, more challenges have also emerged, including an increase in the number of special education students, adding another grade level, high student and staff turnover, and losing the Federal monies they had received as a new charter school.

Despite these challenges, and the persisting lack of resources, Excell planned to expand implementation from content in the Language Arts, History and Geography, and Science components into beginning to implement the Art and Music content strands, and teaching at a minimum of 80 percent of all content areas.

Curriculum alignment and annual plan

Like WISE, Excell had only existed as a Core Knowledge school, making it unnecessary to realign curriculum already in place. The director believes that Core Knowledge aligns very well with the proposed Social Studies standards, and that having the standards in place will help with accountability. Curriculum mapping was conducted in the first year of the grant period to some degree, and a plan for the year-to-year progression was completed this year with assistance from MHC staff.

Resource coordination

Teachers at Excell have been compiling lesson plan binders over the course of the past two years, which appears to have helped the continuity of implementation in the face of staff turnover. However, MHC staff reported that the level of organization varies considerably between the grades, and that the Resource Coordinator has not worked consistently to direct those efforts. In response to an open-ended question in the winter survey about the biggest challenges of teaching Core Knowledge in the first year of the grant period, four of the five teachers from Excell who responded mentioned a difficulty in finding appropriate resources. This corroborates other data that suggest that Excell continues to lack some elemental resources necessary to meet their implementation goals.

Common planning time

The common planning time that they had lost midway through last year is still lost, and they have made do with staff development time in the summer before Year 2, and development sessions scattered throughout the year.

Level of curriculum implemented

The data from the curriculum checklists from Excell show that classrooms covered:

- All of World History and Geography and American History and Geography content, except for roughly half of fifth grade World History and Geography
- Nearly all of the Language Arts and Literature content
- Nearly all of Science content
- Nearly all of Music content
- Nearly all of Art content in grades K-2, partial in grades 3-5

		Kinder- garten	First grade	Second grade	Third grade	Fourth grade	Fifth grade
World history and geography	Units taught	2	7	8	9	16	9
	Total units	2	7	8	9	16	16
American history and geography	Units taught	7	8	11	9	10	9
	Total units	7	8	11	9	10	9
Language arts and literature	Units taught	7	6	5.5	5	6	5.5
	Total units	7	6	6	5	7	8
Science	Units taught	(6.5)(7)(7)	13	10	11	12	12
	Total units	7	13	10	11	13	14
Music	Units taught	3	5	5	4.5	6	4
	Total units	3	5	5	5	6	4
Art	Units taught	(3)(3)(4)	6	5	2	3	0
	Total units	4	6	5	5	5	3

18. Curriculum implementation for Excell

Sources: Teacher mid-year content updates (February 2004).

Apart from one classroom in Kindergarten, there is virtually no variability evident within grades levels. However, while MHC staff have reported that "they [Excel] have come a long way this year," they are concerned about how much of that can be retained with so many staff leaving – again.

Elim

In the first year of the grant period, the implementation strategy at Elim was very informal. The staff reported that they believed that most of what they had always done at Elim closely resembled the Core Knowledge curriculum, so there was very little new planning or coordination. Some new lesson plans were acquired, and teachers attended trainings, but their progress was difficult to ascertain without any real organizational structure. The school's schedule itself may have contributed to this lack of activity, as it was unclear how teachers would implement the entire preschool curriculum with less than half of the expected time available for classroom instruction. The process of determining how Core Knowledge could work at Elim required a concerted effort, and this effort did not take place during the first year of implementation.

Adding to the ambiguity going into the second year of implementation, the plan for the second year in Elim's grant proposal simply stated that teachers would implement more of the preschool sequence. However, there were no formal records kept of how much content was implemented during the first year, so the most important step taken by the staff at Elim this year was to become more deliberate about capturing what specific content was being implemented. Fortunately, this change appears to have taken place in the second half of this year, and was facilitated largely by the leadership of the new director, who has helped bring about fairly radical changes in how Core Knowledge is implemented and supported in the three classes at Elim.³

Curriculum alignment and annual plan

Despite serious operational concerns, such as a budgetary crisis in the face of declining enrollment, implementation activities changed and plans were made to implement Core Knowledge more deliberately in the following ways:

- Developing a form to record the daily classroom activity, designed especially to capture the relevant Core Knowledge objectives and content areas covered
- Compiling all of the daily records into a central resource, with specific references to the relevant Core Knowledge objectives and resources.
- Tailoring the appropriate scope and sequence for both Level I and Level II classrooms

These are activities that were begun this year, and were still being completed by Elim staff at the end of the year. Optimally, these planning and organizational activities would have been completed before the first year of implementation, but considering how Elim entered the second year of implementation, these activities represent several very positive steps forward.

³ According to the original grant proposal, Core Knowledge was to be implemented in a fourth class that was to have a Spanish language component. However, due to a decrease in enrollment, that class has since been cancelled.

Resource coordination

As stated above, this process is underway.

Common planning time

The classes at Elim are team-taught, with a lead and assistant teacher in each classroom. As was true last year, these teams of teachers do plan together, but common planning time between the classroom using the Level I preschool curriculum and the classroom using Level II is limited, because these are essentially two different grade levels in the curriculum.

Level of curriculum implemented

Teachers were not required to fill out curriculum checklists by the Humanities Commission, so data concerning how much of the curriculum has been implemented in the past year is limited. However, teachers estimated that roughly 70 percent of class time was spent on Core Knowledge content during the last three months of the school year.

Communication with parents

In keeping with the logic model, there is one additional activity that is considered a factor of successful implementation: community participation and support. This factor was not formally addressed in the first progress report, as data are only intended to be collected for community participation in the second and third years of implementation. The reasoning behind this is to allow participating schools time to focus on getting started with Core Knowledge in the first year, and then to look for ways that these schools get their communities involved with supporting Core Knowledge in subsequent years.

In their second year of implementation, all five first-round schools made efforts to share information about Core Knowledge with parents, and potentially other community members.

Of the five, Dowling was perhaps the most exemplary. Beyond informal conversations with parents, Core Knowledge is featured prominently on promotional literature, an intranet page has been developed for communicating content covered with parents, and they held an exceptional gathering that is being called a "culminating event." As part of a comprehensive, inter-grade [1, 3, and 5] collaboration on the theme of "Westward Expansion," which included many different disciplines, this culminating event demonstrated the content knowledge acquired by students for parents and community members. Humanities Commission staff report that teachers, students, parents and

administration were very pleased with the day, and teachers were eager to do similar activities next year.

Longfellow has engaged in similar methods to build awareness and support of the curriculum among parents and community members. Core Knowledge has been mentioned in the parent newsletter, the school hallways are filled with examples of the curriculum, and several Core Knowledge parent nights have been held.

Outreach activities have been less extensive at WISE, although parents are provided a weekly newsletter listing the academics covered and are visually informed of what is occurring in the classroom through school-wide displays.

The director at Excell believes that most parents know the term "Core Knowledge," but fewer understand the curriculum as a whole at this point. However, Core Knowledge has been featured prominently in promotional materials, and special events for parents have been held. The kindergarten graduation was attended by MHC staff, and was considered a positive community event, although there was no actual demonstration of content learned by the students. Raising awareness of Core Knowledge was cited as a key opportunity area by the director.

In the class of older students at Elim, two culminating events were also held, which demonstrated the Core Knowledge lessons that students had learned to parents and community members, and helped build awareness of the curriculum. Information about the curriculum has also been integrated in parent newsletters. Raising awareness among parents and being able to use Core Knowledge as a marketing tool were key goals of the director at midyear.

The following table presents teachers' estimates of the proportion of their students' parents who know something about Core Knowledge. This question was asked in the winter survey, which was conducted before many of the most significant parent nights and culminating events took place, so it should be considered with that timing in mind. Overall, teachers estimated that just over half of parents knew something about Core Knowledge by the middle of the second year of implementation.

	0%	<25%	26-50%	51-75%	76-100%	Mean (%)
Dowling (n=20)*	4	0	4	1	9	59%
Longfellow (n=12)*	2	2	0	4	3	51%
WISE (n=7)*	0	3	0	0	2	40%
Excell (n=10)*	0	1	2	0	6	68%
Elim (n=3)*	0	1	1	0	0	33%
Overall (n=52)*	6	7	7	5	20	56%

19. Estimated proportions of parents who know something about Core Knowledge

Sources: Winter teacher surveys (March 2004).

* **Note:** Seven teachers (two from Dowling, one from Longfellow, two from WISE, one from Excel, and one from Elim) indicated that some of their students' parents know about Core Knowledge, but did not provide an estimate.

Indicators of future student achievement

By basing the evaluation plan on previous longitudinal research, we are able to observe implementation features midway through the initiative that we know have a relationship with successful implementation in the longer term, and thus are also related to ultimate student achievement. This second progress report focuses on teachers' reports about students' reactions to the Core Knowledge curriculum, and tracking a few crucial short-term outcomes. The activities and outputs that were described in the previous section are posited to lead to the following short-term outcomes (which in turn are expected to increase the likelihood of improved student achievement):

- Staff are familiar with Core Knowledge scope and sequence, familiar with content in topics to be taught, familiar with assessment options, have completed a planning process for the upcoming year, and have energy and ideas for lessons
- Teachers collaborate (elementary only)
- Teachers have a clear conception of curriculum goals, and curriculum is sequential and non-repetitive
- Principal shows support and leadership for planning and instruction
- Students are more interested and enthusiastic (elementary only)

In addition to these five short-term outcomes, there are two more in the logic model that apply to the second year of implementation that were effectively addressed in the last section:

- Core Knowledge lesson plans are written, taught, and included in school resource collection
- Evidence that parents and other community members understand and support the purpose and goals of Core Knowledge

With the data available, these two outcomes are most effectively measured by the activities behind them: resource coordination, covering Core Knowledge material in the classroom, and communication with parents. However, the data collected over the past year address the other five short-term outcomes more directly as outcomes, which is to say results of previous activity. Data were collected concerning teacher, principal, and student indicators of future student achievement in: principal interviews, closed- and open-ended responses to both teacher surveys, interview responses from MHC staff, and materials provided to MHC by first-round schools. Altogether, the ratings for first-round schools on short-term outcomes are generally similar to last year, but more data on indicators of future student achievement have been collected, and they continue to be generally positive.

	Staff indicators	Teacher collaboration	Principal indicators	Student indicators
Dowling	Positive	Yes	Positive	Positive
Longfellow	Positive	Yes	Moderately positive	Positive
WISE	Positive	Yes	Positive	Positive
Excell	Moderately positive	Limited	Mixed	Positive
Elim	Moderately positive	Yes	Positive	Moderately positive

20.	Indicators of future student achievement -	 First-round schools in Year Two
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Sources: Principal interviews and teacher surveys.

Staff indicators

In the first progress report, most of the data suggested that teachers at first-round schools generally understood the Core Knowledge curriculum, and how it was being implemented at their school, and to what end. The teachers' reactions to the curriculum varied between the schools, ranging from a firm embrace from the staff at WISE, to a

skeptical but hopeful acceptance from the teachers at the public schools, but most teachers appeared to generally accept Core Knowledge, and the preparation work it entails. Despite turnover at most schools, the data collected in the second year of implementation suggest that these indicators of future student achievement have seen substantial progress over the past year.

As mentioned above, the teachers at Dowling and Longfellow have more teaching experience than those at the other first-round schools, and their experience levels appear to have directly affected the implementation process for their staffs at both schools. In the first year of implementation, there was little to suggest that many teachers at either public school did not understand the general concept of Core Knowledge, its general scope and sequence, or how – as public schools – it would fit in with their other curricula. Instead, the areas of concern were gaining familiarity with new material, and, to a lesser degree, adopting a curriculum that several teachers considered to have a Western bias. The available evidence suggests that these concerns have not entirely disappeared, but teachers at Dowling and Longfellow have become more comfortable with Core Knowledge in Year Two.

For Dowling, both the principal and the staff at MHC expressed a belief that the staff is a strong suit of the school in implementing Core Knowledge. To an even greater degree than last year, teachers seem to understand both what content to teach, and how to teach it. Beyond the additional time teachers have had to gain familiarity with the curriculum in the second year of implementation, a committee at Dowling also worked to identify specific content areas for teachers to work on. Additionally, the responses from Dowling teachers to open-ended question in both surveys this year were generally more positive about their experiences implementing the curriculum, and several volunteered that having a previous year of experience had given them an increased familiarity or comfort level implementing Core Knowledge. However, some other responses illustrated the persistence of some skepticism about the curriculum overall, and corroborated an impression reported by Humanities Commission staff – that the level of acceptance of Core Knowledge is not uniform or universal for any first- or second-round school.

As the staff at Longfellow has moved into implementing the World History and Geography content strand during the past year, data suggest that they have also found more to like about Core Knowledge overall. The principal reported that she saw the teachers observe a positive response from students to the content covered, which led to teachers having more energy themselves. Much like Dowling, both content knowledge and an awareness of scope and sequence across the grades were still concerns for the teachers at Longfellow, but neither was raised as particularly worrisome. The teachers at WISE and Excell did not have the same general level of teaching experience as those at the public schools, but there is evidence that this has not worked entirely against the charter schools in the second year of implementation.

In Year One, the energy and focus that the staff at WISE brought to implementing Core Knowledge was clearly a major factor in their promising first year of implementation. All staff members had been hired on the condition that they understood and supported Core Knowledge, and there was an uncommon level of planning and coordination of curriculum and resources. According to both the director and Humanities Commission staff, the staff is very motivated and excited about the learning going on. On the other hand, the director mentioned that the moderate staff turnover WISE experienced this year has affected the new staff members' familiarity with, and understanding of, Core Knowledge.

The effects of staff turnover were felt in a similar way at Excell, although to a greater degree. While the director cited the motivation and energy the staff brings to implementation as a primary key to Excell's successes thus far, other data suggest that turnover and the scarcity of resources may have mitigated that motivation.

As for Elim, the director was unsure how familiar the staff at Elim was with Core Knowledge in the November principal interview. The two lead teachers were believed to be familiar with the purpose and rationale of Core Knowledge, but that was likely to be less true of the assistant teachers, and it was unclear how familiar the staff was with both the curriculum's scope and sequence, and the existing assessment options. However, even at that point the director reported a high level of energy for the curriculum among teachers, and by the end of the year, the school reported to MHC that the staff was demonstrating an increasing awareness of Core Knowledge goals and objectives.

The differences between first-round schools were more apparent in the data from principals and MHC than in teachers' self-assessments of their understanding of Core Knowledge in the winter survey. Respondents were asked to indicate their level of agreement with three statements concerning: their understanding of the purpose and rationale of Core Knowledge, their familiarity with the scope and sequence of Core Knowledge, and their knowledge of assessment options for Core Knowledge material. The responses to these questions were all very positive, with at least three-quarters of respondents either agreeing or strongly agreeing with the three statements. The degree of agreement was highest for understanding purpose and rationale, slightly lower for familiarity with scope and sequence, and the lowest for assessment options.

21. Teacher-related signs of future student achievement - Understanding of purpose, scope and sequence, and assessment options

	"I know the purpose and rationale of Core Knowledge"				"I am familiar with the scope and sequence of Core Knowledge"*				"I know enough about how to assess the Core Knowledge units I teach"*						
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Dowling (n=23)	7	15	0	0	1	6	14	1	1	1	5	12	4	2	0
Longfellow (n=14,15,15)	3	10	1	0	0	1	10	2	1	1	0	12	2	1	0
WISE (n=9)	3	6	0	0	0	3	6	0	0	0	2	5	2	0	0
Excell (n=11)	4	7	0	0	0	4	5	1	1	0	2	7	1	1	0
Elim (n=4)	1	3	0	0	0	0	3	0	1	0	0	1	2	1	0
Overall (N=61,62,62)	18	41	1	0	1	14	38	4	4	2	9	37	11	5	0
Overall (%)	30%	66%	2%	0%	2%	23%	61%	6%	6%	3%	15%	60%	18%	8%	0%

Sources: Winter teacher survey (February 2004). Note: An asterisk indicates that the original wording of the question was phrased negatively.

All but 2 of the 62 respondents (97%) either agreed or strongly agreed with the statement that they knew the purpose and rationale of Core Knowledge, with roughly 3 out of 10 strongly agreeing. One respondent was neutral, and one respondent, a content specialist, strongly disagreed. This is consistent with other data that suggest that some content specialists at first-round schools may be less integrated into their school's implementation activities than they might like.

Respondents were slightly less enthusiastic about their familiarity with the scope and sequence of Core Knowledge, with 84 percent either agreeing or strongly agreeing with the statement. Roughly a quarter of respondents strongly agreed. Of the remainder, 6 percent of respondents were neutral, 6 percent disagreed, and 3 percent strongly disagreed. The two respondents who strongly disagreed were a Kindergarten teacher and a specialist from public schools. In terms of proportions, the charter schools were the most enthusiastic about their familiarity with scope and sequence.

In terms of knowledge of assessment options, the results were still positive, but less so than for the other two teacher implementation factors. Roughly three-quarters of respondents reported that they either agreed or strongly agreed with the statement, "I know enough about how

to assess the Core Knowledge units I teach," with 15 percent strongly agreeing. Of the remainder, 18 percent indicated that they were neutral, and 8 percent disagreed. No respondents strongly disagreed. There were no striking differences between the schools to this question.

Teacher collaboration

Another key element of Core Knowledge implementation is collaboration, both within each school, and between the schools participating in the CCKC. In most cases, the level of collaboration is directly related to the availability of common planning time mentioned in the previous section, which was only unavailable for Excell. The available data suggest the following levels of collaboration:

- Collaboration within grade levels at Dowling, Longfellow, WISE, and Elim
- Collaboration between classroom teachers and specialists at Dowling and Longfellow
- Collaboration between grade levels at Dowling, and, to a lesser degree, Longfellow

As mentioned above, collaboration within grades is naturally limited where there is only one class per grade level, as was the case for Excell, and some grades at WISE. Additionally, there are no content specialists at WISE or Elim, so that level of collaboration is not possible for those schools.

In the winter survey, teachers were asked to assess the adequacy of the opportunities they had to collaborate both within the school and with teachers at other schools teaching Core Knowledge. Teachers were decidedly more likely to indicate that there had been enough chances to collaborate within their school than with other schools, and there was no positive relationship between the two responses. Overall, roughly two-thirds of respondents (66%) either agreed or strongly agreed that opportunities to collaborate within the school had been adequate, compared with about one in five respondents (21%) who agreed or strongly agreed that they had had enough contact with teachers from other schools.

22. Other school implementation factors - Collaboration within schools, and between schools

	to co at m	llabora y scho	ite with ol in pl	oportur collea anning nowled	igues j and	"I have had enough contact with other teachers teaching Core Knowledge at my grade level/specialty area from another school"						
	Strongly agree Agree Disagree Strongly Disagree Strongly agree Agree Neutral									Strongly Disagree		
Dowling (n=23)	4	12	5	2	0	2	5	8	6	2		
Longfellow (n=14,15)	2	5	3	3	1	0	5	3	7	0		
WISE (n=9)	4	4	0	1	0	0	0	0	6	3		
Excell (n=11)	0	6	3	2	0	0	1	5	3	2		
Elim (n=4)	0	3	0	1	0	0	0	1	2	1		
Overall (n=61,62)	10	30	11	9	1	2	11	17	24	8		
Overall (%)	16%	49%	18%	15%	2%	3%	18%	27%	39%	13%		

Sources: Winter teacher survey (February 2004).

In terms of collaboration within the school, the teachers at WISE were the most likely to agree that enough opportunities had been provided. They were also the most likely to indicate that they had not had enough contact with teachers at the same grade level or content specialization from other schools. This same disparity between the two kinds of collaboration was true to a lesser extent for the four other schools. The facilitation of collaboration between schools is generally arranged by the Humanities Commission, and will be addressed in that section of the report.

Principal indicators

In addition to what teachers do to implement Core Knowledge in the classroom, the leadership and support provided by a school's principal for planning and instruction is another key factor related to student achievement. The indicators relating to principals were all at least moderately positive in the first year of implementation, and there have been some improvements in how principals have kept their staffs accountable for meeting curriculum goals, provided guidance and vision, and monitored implementation.

Unlike with many other indicators, the two public schools differed from each other in terms of leadership and guidance from the principal in Year One. These differences set Dowling and Longfellow on different trajectories in their second year of implementation.

As was true last year, there is ample evidence that the implementation of Core Knowledge is taken seriously at Dowling and that the principal is carefully leading his staff in the necessary planning. Core Knowledge was added to the other curricula as part of a more general vision to create a more balanced curriculum "portfolio," and this strategy has been put into writing and formalized over the past year. While maintaining a high degree of communication with the staff, there is little formal monitoring by the principal, and this is another reflection of the centrality of trust at the school.

With a similarly experienced staff, Longfellow has an atmosphere that is generally similar to that of Dowling. However, the way the principal fits into the atmosphere, and the way the school is structured to coordinate the implementation of Core Knowledge are both quite different. Last year, the principal of Longfellow inherited the implementation of the Core Knowledge curriculum from her predecessor, and worked to assist an existing Humanities Committee with implementation. At the end of Year One, the Humanities Commission expressed concern to the principal about her lack of involvement in Core Knowledge implementation, and she took a much more active role in the second year of implementation. Some data suggest that the arrangement of monitoring and accountability may cause some friction, but there is clearly more communication between the principal and the staff, and this marks progress for Longfellow in this area.

As mentioned in the first progress report, both the structure for implementing Core Knowledge at WISE created by the director, and the guidance provided to see it through were, and continue to be, very positive indicators of future student achievement. As a result of lessons learned last year, one adjustment made by the director was to add flexibility to the curriculum map to avoid any disappointment among teachers that goals could not be met.

For Excell, there was less evidence of clear leadership activity by the director, although Humanities Commission staff did report that the administration may be more dedicated to implementing the curriculum than was true previously. This was reinforced by the director's own assessment that her own commitment to implementation was stronger in the second year. However, there were few data to suggest a clear change from the previous year.

Nearly the opposite was true for Elim. In stark contrast with the previous year, the new director at Elim took an active role in monitoring the implementation of Core Knowledge. While it appeared that the staff never met once last year to discuss Core

Knowledge, the director has arranged monthly meetings to discuss implementation progress, and considers it to be a very helpful activity for the staff. Especially in the latter part of the second year of implementation, it appears that the director at Elim has provided much-needed leadership to make the implementation of Core Knowledge more deliberate.

In order to gain from their perspective, teachers were asked in the winter survey to indicate their level of agreement with three statements relating to the leadership provided by their principal. Despite the very different approaches taken by these principals, the levels of agreement across the five schools on these three criteria were generally quite similar. In all three questions relating to the principals, over three-quarters of respondents from all schools either agreed or strongly agreed with positive statements about the principals' performances.

23.	Principal implementation factors – Accountability, guidance and vision, and
	implementation monitoring

"My school's director/principal	"holds our staff accountable for meeting our curriculum goals"					gui ດເ	dance ur sta	ides s e and ff to c ledge	visio do Co	n to re	"monitors the implementation of Core Knowledge"					
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
Dowling (n=22,23,22)	7	10	5	0	0	6	14	2	0	1	3	14	3	1	1	
Longfellow (n=15)	4	10	1	0	0	3	7	4	1	0	2	9	3	1	0	
WISE (n=9)	3	6	0	0	0	2	5	2	0	0	3	3	1	2	0	
Excell (n=11)	2	7	1	1	0	3	5	2	0	1	1	7	2	1	0	
Elim (n=4)	2	2	0	0	0	4	0	0	0	0	3	1	0	0	0	
Overall (N=61,62,61)	21	32	7	1	0	18	31	10	1	2	12	34	9	5	1	
Overall (%)	34 %	52 %	11 %	2 %	0 %	29 %	50 %	16 %	2 %	3 %	20 %	56 %	15 %	8 %	2 %	

Sources: Winter teacher survey (February 2004). Note: An asterisk indicates that the original wording of the question was phrased negatively.

The factor for which the principals received the highest marks was holding the staff accountable for meeting implementation goals – just over 85 percent of respondents agreed or strongly agreed with the statement, with roughly one-third strongly agreeing. Of the remainder, 11 percent were neutral, and one respondent from Excell disagreed. All of the respondents from WISE and Elim either agreed or strongly agreed that the principal holds them accountable for meeting curriculum goals. Most respondents who indicated that they were neutral about their principal holding them accountable for meeting curriculum goals came from Dowling, which fits with what the other data has suggested that Dowling's principal focuses more on providing support than accountability.

When asked to indicate their level of agreement with the statement, "My school's principal/director provides sufficient guidance and vision to our staff to do Core Knowledge well," respondents were only slightly less positive. Nearly four out of five (79%) either agreed or strongly agreed, with 29 percent who strongly agreed. Of the remainder, 16 percent were neutral, one respondent (2%) disagreed, and two respondents (3%) strongly disagreed. The two respondents who strongly disagreed were content specialists, one from Dowling and one from Excell. Strikingly, all four respondents from Elim strongly agreed that their director provides sufficient guidance and vision. The distribution of teachers' responses was similar among the rest of the schools between strong agreement and neutrality, with Dowling slightly more positive than the rest.

With regard to the third implementation factor relating to principals, the degree to which their principals monitor the implementation of Core Knowledge, respondents were only slightly less positive than with the other two factors. Roughly three-quarters of respondents either agreed or strongly agreed that their principal does monitor implementation, with one in five strongly agreeing. The teachers at Elim and WISE were slightly more positive than respondents from other schools in their assessments of their principals' monitoring of implementation. Of the remainder, 15 percent were neutral, eight percent disagreed, and one respondent from Dowling, a classroom teacher in an early grade, strongly disagreed.

Taken in aggregate, these figures suggest that teachers in CCKC schools are generally satisfied with the structure and guidance provided by their principals. In particular, the absence of anything less than agreement in responses by the teachers at Elim suggests that their perception of their director's leadership is particularly strong. However, the support structures in place in some of the other schools (i.e. strong common planning time systems, teacher-led Core Knowledge committees, support staff, etc.) means that these data should not be interpreted as conclusive assessments of the entire structure in place to support implementation at these schools.

Respondents were also asked to indicate their level of agreement with two other implementation factors relating to their particular school environment: the help provided to get Core Knowledge resources, and the reasonableness of implementation expectations. In contrast to the factors relating to principals, the responses to these questions relate to factors jointly affected by the school itself and outside forces. In other words, help in getting resources is provided both within most schools and by the Humanities Commission, and the schools' implementation goals are affected by the expectations of the CCKC overall that schools will achieve full implementation in three years time. The responses given to these questions, while less emphatically positive than some of the others, do suggest relatively high satisfaction among teachers with resource assistance and implementation expectations.

	the	resour	help I ces ne re Kno	cessar	"The expectations for teaching Core Knowledge this year have been realistic"*						
	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	
Dowling (n=23)	4	13	5	0	1	3	14	4	2	0	
Longfellow (n=15)	2	8	4	1	0	1	9	2	3	0	
WISE (n=9)	1	5	3	0	0	0	9	0	0	0	
Excell (n=11)	1	6	3	0	1	3	7	1	0	0	
Elim (n=4)	0	3	1	0	0	0	3	1	0	0	
Overall (N=62)	8	35	16	1	2	7	42	8	5	0	
Overall (%)	13%	56%	26%	2%	3%	11%	68%	13%	8%	0%	

24. Other school implementation factors – Resources help and implementation expectations

Sources: Winter teacher survey (February 2004). Note: An asterisk indicates that the original wording of the question was phrased negatively.

Roughly 7 out of every 10 respondents either agreed or strongly agreed that they had the necessary help getting resources to teach Core Knowledge, with 13 percent strongly agreeing. Just over a quarter of respondents were neutral about the adequacy of resource help provided. Out of 11 questions asked in this format, this figure represents the thirdmost ambivalent response, in terms of the number of respondents expressing neutrality. Of the remainder, one respondent disagreed, and two strongly disagreed. The two who

strongly disagreed that adequate resource help had been provided were content specialists.

Respondents were more positive about how realistic the expectations for teaching Core Knowledge had been. Nearly four out of every five respondents (79%) either agreed or strongly agreed that the expectations had been realistic, with 11 percent strongly agreeing. Thirteen percent of respondents were neutral, and 8 percent disagreed that expectations were realistic. Curiously, six out of the eight respondents who were neutral, and all five of those who disagreed, were from the two public schools. One possible explanation for this is that, as schools with other well-established curricula in place and the most stringent district requirements of the five schools, the implementation of Core Knowledge may be a more stressful proposition in already busy schedules for some of these teachers.

Student reaction to Core Knowledge

The last short-term outcomes related to future student achievement have to do with the students themselves. In Year One, teachers offered many examples of students reacting positively to Core Knowledge content, and the responses to questions in the spring survey suggested that Core Knowledge had a moderate impact on the degree to which students were attentive, engaged, and enthusiastic. More data on student response have been collected in the second year of the evaluation of first-round schools. In addition to a comparison of student response data from the two spring teacher surveys, teachers with students who had previous Core Knowledge experience were asked in the winter survey to assess the impact of previous experience on student performance, and other data addressed student response less directly.

Winter survey

In the winter survey, teachers who reported that some of their students had previous Core Knowledge experience were asked to indicate their level of agreement with four statements about the impact of that experience on those students in the classroom. The statements read, "In general, students with prior Core Knowledge experience...

- ...have a higher level of factual understanding."
- ...do better work in the classroom."
- ...are better able to connect facts to their own lives."
- ...are no different from other students when it comes to classroom participation."

The first three statements pertain to possible impacts that previous experience with the Core Knowledge curriculum might have on students. The fourth concerns classroom participation, which we hypothesized would not be directly influenced by Core Knowledge, and was included in part to check whether survey answers were affected by any tendency to rate Core Knowledge uniformly positively or negatively across the board.

First, they were asked whether they agreed, were neutral, or disagreed with the statement that, "Students with prior Core Knowledge experience have a higher level of factual knowledge." In a way, this is the most directly relevant to Core Knowledge of the four, as it addresses the impact of a content-based curriculum on students' content knowledge. The responses from teachers at all five schools were similar, and similarly positive: overall, 62 percent of respondents agreed that students with prior Core Knowledge experience did have a higher level of factual knowledge, 38 percent were neutral, and no respondents disagreed. Among the schools, WISE had the highest proportion of teachers who agreed that previous Core Knowledge had a positive impact on factual knowledge.

"Students with prior Core Knowledge experience	leve	ve a hi I of fac owledg	tual		better in the ssroor		to co	e better onnect their o lives."	facts	are no different from other students when it comes to classroom participation"		
	Agree	Neutral	Disagree	Agree	Neutral	Disagree	Agree	Neutral	Disagree	Agree	Neutral	Disagree
Dowling (n=22)	14	8	0	5	16	1	14	7	1	4	13	5
Longfellow (n=12)	6	6	0	1	8	3	3	6	2	3	4	5
WISE (n=9)	7	2	0	3	3	3	4	4	1	4	2	2
Excell (n=8)	5	3	0	1	7	0	2	5	1	3	4	1
Elim (n=2)	1	1	0	1	1	0	1	1	0	0	2	0
Overall (n=53)	33	20	0	11	35	7	24	23	5	14	25	13

25. Impact of previous Core Knowledge experience on student performance

Sources: Winter teacher survey (February 2004).

Teachers were then asked to indicate their level of agreement with the statement, "Students with prior Core Knowledge experience do better work in the classroom." In the second year of implementation, it was not expected that Core Knowledge would have had such an immediate effect on all work done in the classroom, and this expectation was borne out by teachers' responses: only one in five (20%) agreed that students with prior experience with Core Knowledge did better work in the classroom, roughly two-thirds were neutral, and 13 percent disagreed with the statement. The teachers at WISE and Longfellow were the most likely to disagree that prior Core Knowledge led to better work in the classroom in general.

Respondents were also asked to indicate their level of agreement with the statement, "Students with prior Core Knowledge experience are better able to connect facts to their own lives." As a content-based curriculum, the possibility exists that Core Knowledge will help students make connections outside the classroom environment, and 45 percent of teachers agreed that students with prior Core Knowledge experience were better able to do so. Forty-three percent were neutral, and 9 percent disagreed. The teachers at Dowling and WISE were slightly more likely to agree with this statement.

Finally, teachers were asked to indicate their level of agreement with the statement, "Students with prior Core Knowledge experience are no different from other students when it comes to classroom participation." As expected, the responses to this question were inconclusive, but respondents were unexpectedly slightly more likely to have an opinion on this than be neutral. Roughly a quarter of respondents (26%) agreed that students with prior Core Knowledge experience were no different from other students when it comes to classroom participation, almost half (47%) were neutral, and roughly a quarter (25%) disagreed. That means that roughly a quarter of respondents reported that previous Core Knowledge experience did have an impact on classroom participation, but the data do not show what impact each teacher signified with that response.

Spring survey

As mentioned in the section regarding second-round schools, the preliminary measurements of student response to Core Knowledge suggest that first-round schools observed a more positive reaction from students than second-round schools in the first year of implementation. At the conclusion of the second year of implementation, firstround teachers were asked once again to compare this year's class with previous classes on five kinds of behavior: attentiveness, enthusiasm, quality of homework (if any was regularly given), engagement, and cooperation. While using the same conservative estimate as previously, the results for these schools are similarly positive this year, though slightly less so in terms of enthusiasm and engagement than in the previous year.

These figures include the responses from teachers at WISE, which was not true last year, but their inclusion was not the cause of the slight dip in these figures.

Student attentiveness

Overall, of the 54 respondents from first-round schools, 11 teachers reported that this year's class was more attentive than those of previous years, 24 reported they were about equally attentive, and 14 reported they were less attentive. Considering only this year's class, and comparing their attentiveness when using Core Knowledge material with their attentiveness when presenting similar material using other methods, 23 teachers said the children were more attentive during Core Knowledge sessions, 27 said they were about equally attentive, and only three teachers said they were less attentive during Core Knowledge sessions.

Forty-eight teachers provided answers to both questions, allowing us to compute an estimate of impact on this measure. Fifteen teachers (31%) answered the two questions in a way that suggests a positive impact of Core Knowledge on student attentiveness, compared to 32 (67%) whose responses suggest no impact. There was one teacher whose answer suggested a negative impact on attentiveness. The average impact score for student attentiveness was 0.3, where -1 would represent a decrease for all classes, 0 would represent no net impact, and +1 would represent an increase for all classes. This is virtually the same as the average score from the previous year, which was also 0.3.

These findings are summarized in the first line of the table below.

	Compared to previous years' students			clas	pared to s when u CK curric	ising	Impact (computed)					
Type of student response	More	Same	Less	More	Same	Less	Positive	Neutral	Negative	Average score		
Attentive	11	24	14	23	27	3	15	32	1	0.3		
Enthusiastic	14	31	5	25	26	2	14	35	0	0.3		
Quality of homework	7	25	8	8	28	1	5	25	1	0.1		
Engaged	15	28	8	25	26	2	15	35	1	0.3		
Cooperative	14	18	19	14	38	1	7	43	0	0.1		

26. Student response to curriculum

Source(s): Wilder Research Center survey of teachers, May 2004.

Note: A total of 54 teachers answered the survey, but not all teachers answered each of the questions reflected in this table. Thus the totals for each set of three columns on a line may vary, and the totals also vary from line to line.

Student Enthusiasm

Forty-nine teachers provided answers to both questions about student enthusiasm. Comparing pairs of responses, the reports of 14 of them (29%) suggest that Core Knowledge may have had a positive impact on student enthusiasm. Answers of 35 (71%) suggest no impact. No responses suggest a negative impact. The average impact score for student enthusiasm was 0.3, down slightly from 0.5 the previous year.

Quality of homework

Thirty-one teachers indicated that they assigned homework regularly and were able to rate their classes on its quality. Of these, five (16%) provided responses that suggest a positive impact of Core Knowledge on this measure, and 25 (81%) suggest no impact. One teacher's response suggests a negative impact. The average impact score for quality of homework was 0.1, which was the same average figure as in the first year of implementation.

Student engagement

Fifty-three teachers answered both questions, allowing an impact measure to be calculated. Of these, 15 (29%) indicated student responses that would suggest a positive impact of Core Knowledge, 35 (66%) suggest no impact, and one suggests a negative impact. The average impact score for student engagement was 0.3, down slightly from 0.4 the previous year.

Cooperativeness of students

As mentioned above, we hypothesized that the introduction of this content-based curriculum was unlikely to have any particular effect on student cooperativeness in the classroom. This question was included in part to check whether survey answers were affected by any tendency to rate Core Knowledge uniformly positively or negatively across the board. As expected, and as was true last year, results were closer to neutral on this measure than were results for attentiveness, enthusiasm, and engagement, which are more likely to be affected by the new content.

Of the 50 teachers who answered both questions, seven (14%) answered them in a way that suggests a positive effect for Core Knowledge, compared to 43 (86%) whose answers suggest a neutral effect. No answers suggest a negative effect. The average impact score for cooperativeness was 0.1, which was also the average score the previous year.

Conclusion

In general, these figures corroborate the other data from both years of the evaluation that suggest a moderately positive student reaction to Core Knowledge. No clear patterns are evident to explain the slight dip in student enthusiasm and engagement, but these figures should not be cause for alarm. By this rough and conservative measure, students at first-round schools are still more likely to be attentive, enthusiastic, and engaged when Core Knowledge content is being presented. When taken in aggregate with the winter survey data on the impact of prior Core Knowledge, and the qualitative data mentioned in previous sections, these are all positive signs of initial student response.

Minnesota Humanities Commission training and support

As an important resource for schools in the Cargill Core Knowledge Connection as they work towards their implementation goals, the Minnesota Humanities Commission's training and support activities are the subject of the third research question.

In Year One, the evidence concerning the third research question pointed to a mix of strong features to conserve and build on and features that could be improved or better tailored. Across the board, the most valued assistance appears to have been that which helped teachers identify specific training materials and resources for use with the new content areas. Training sessions were generally rated as "Good," but teachers with greater professional experience reported finding less in these introductory modules to meet their needs. Many teachers requested opportunities to interact with other teachers in their grade level or specialty area, and were less interested in being a passive audience at a training session.

School representatives similarly expressed different perceptions of the follow-up support depending on their perceptions of how well it fit with their purposes and needs. The public schools were less eager to receive outside assistance, and did not always feel that the assistance that was provided took account of the scale of the grant, and their tailored implementation plan. The charter schools, faced with both more extensive implementation goals and more limited resources, were generally more eager for assistance, and more appreciative of the Humanities Commission overall. Again, however, if help was offered in a way that did not explicitly take into account the unique context of implementation at the school, many teachers expressed frustration that the services provided were too generic.

In part, the difficulties faced by first-round schools and the Humanities Commission in Year One were the products of outside forces. The Humanities Commission lost a key member of its staff right at the beginning of the year, and, in some ways, the relationships
built between that staff member and the teachers at some schools could not be rebuilt over the course of the year. In other ways, effective channels of communication were not created at the beginning of the year, and this led to teachers being unable or unwilling to go to MHC with their implementation concerns.

The importance of relationships, recognizing the diversity of participating schools, and expecting some bumps in the road were all communicated with the Humanities Commission in the first progress report. And, as mentioned in the first section of the report, MHC took steps to integrate those lessons into how they approached their training and support roles. In order to ensure that there was adequate communication with schools in the Cargill Core Knowledge Connection, two new support staff were hired in late Fall 2003. In comparison with the old arrangement, it was intended that these staff members would work more intensively with teachers, conducting more site visits if necessary, and generally establishing more of a presence as a resource for the schools. Part of this effort was to respond to requests by the public schools for more contact with other schools implementing Core Knowledge, which resulted in a site visit to a Core Knowledge school in Houston, Minnesota for 15 people from Dowling and Longfellow.

Since the staffing change at the Humanities Commission happened towards the middle of the school year, some of the data concerning the training and support services provided in Year Two were collected before these changes took place. Consequently, not all data reflect how the Humanities Commission responded to the lessons of the previous year.

However, there is enough data to confirm that many teachers took note of the change in approach taken by MHC, and appreciated the more direct relationships created by the new service strategy.

Support services

Ignoring its training function and the specific changes in approach for a moment, the Humanities Commission has been positioned throughout the grant period to help participating schools in a variety of ways. If resource help is needed, grant dollars can be used to purchase resources, staff is available to provide advice, and there is a resource library in the MHC facility itself. If a teacher would like to talk with someone in order to discuss an implementation issue that is unique to an individual grade, content area, or set of circumstances, Humanities Commission staff can coordinate communication between peers at different schools, set up a meeting or site visit, or address the issue themselves. And, if time can be made available to them, MHC staff can coordinate a session or event to address various other kinds of needs.

When asked in an open-ended question in the winter survey what supports or resources they needed, or needed more of, to plan and teach Core Knowledge, teachers' responses

varied considerably within schools between unique requests for resources, time, and opportunities to collaborate, but some patterns were evident:

- Four of the 10 respondents from Excell mentioned needing Science materials specifically, and two more mentioned resources in general
- Seven out of nine respondents from WISE mentioned needing resources, with many specifically citing a desire to get the resources mentioned in official Core Knowledge materials
- Five out of the 11 respondents from Longfellow, and two of the three respondents from Elim indicated that they needed more time to plan

At first, these patterns of need for resource help and opportunities to plan appear to fit naturally with the support services MHC is equipped to provide, but this is not exactly the case. The resource needs expressed by teachers at Excell include a piano, an additional classroom, and a classroom set of microscopes. The staff at WISE needs help with resources, but they are not looking for help in identifying appropriate resources, instead they have identified additional resources they would like but did not allocate grant monies for. And the requests for time to plan from Longfellow and Elim might not necessarily mean that those respondents would like a planning session organized by MHC; they are more typically requests for more time in general. In other words, even for schools in the second year of implementation, even for schools that are generally wellestablished and well-supplied, there are natural limits in an initiative of this scope to the level of support that can be provided by a support organization.

With that said, there is evidence that the kinds of support services that the Humanities Commission is able to provide are being positively received. Almost one-third (31%) of respondents who had received assistance from MHC staff outside of training sessions described that service as "Outstanding," and roughly half (51%) described it as "Good." Fourteen percent rated the services as "Fair," and one respondent said "Poor."

	Outstanding	Good	Fair	Poor	Not received
Dowling (n=23)	4	7	2	0	10
Longfellow (n=13)	2	3	1	1	6
WISE (n=9)	1	2	0	0	6
Excell (n=10)	3	4	1	0	2
Elim (n=4)	1	2	1	0	0
Overall (n=49)	11	18	5	1	24

27. Perception of support services (outside of training sessions) received from MHC in Year Two

Sources: Winter teacher surveys (March 2004).

Although roughly half of respondents reported that they did not have direct contact with a staff person from the Humanities Commission during the past school year, there was no evidence that this was due to that resource being inaccessible to teachers who wanted it. Most teachers have a number of resources to choose from, and many teachers told us in last year's focus groups that they either thought highly of the support services in place at their school and elected to rely principally on that resource, or did not have much interest in advice from outsiders.

Dowling

That self-reliance in schools was especially prevalent for teachers at public schools. In an open-ended question in the winter survey about what resource teachers use to help plan and teach Core Knowledge, the public schools were less likely than the other schools to volunteer that they use the support services from MHC to help plan or teach the curriculum. As the table above illustrates, however, 11 of the 13 Dowling teachers who received support services from the Humanities Commission rated those services either "Good" or "Outstanding." Over the course of Year Two, support services included the site visit to Houston, MN with teachers from Longfellow to discuss and observe how they implement Core Knowledge, and the coordination of plans for summer unit writing sessions.

Longfellow

Respondents from Longfellow were only slightly less positive about support services received from the Humanities Commission than their counterparts at Dowling, with five of the seven respondents rating those services as "Good" or "Outstanding," and the other

two respondents rating those services as "Fair" and "Poor," respectively. However, because support service requests primarily concerned more connections with other schools implementing Core Knowledge, there is evidence that these ratings might have been higher had they reflected the support services provided later in the spring – which included the site visit to Houston, MN. Longfellow staff expect that a continuing relationship has been established with the teachers in Houston, and plans for a visit by Houston teachers to Longfellow have been discussed. There is other evidence that Longfellow staff appreciated that MHC had become clearer about communication expectations, and were considered very supportive by many teachers.

WISE

As response to the open-ended question in the winter survey about the resources used to implement Core Knowledge, most of the respondents from WISE indicated that they rely primarily on resources developed from within the school, rather than external assistance. Consequently, only three of the nine respondents from WISE indicated that they had used MHC support services by midyear. However, these three respondents all rated those services as either "Good" or "Outstanding." The director highlighted the help with resources as particularly useful, and a notable support service underway in the spring of Year Two was determining how collaboration between WISE and Excell could be facilitated.

Excell

When asked in the open-ended question in the winter survey about what supports or resources they use to plan and teach Core Knowledge, three teachers from Excell volunteered that the support from MHC staff was a very important resource for them. The director also mentioned that the increase in communication and contact by Humanities Commission has been appreciated, and that MHC had been instrumental in helping them cope with turnover at the beginning of the year (and the expansion of the school by one grade level). The relative importance of MHC support services at Excell is also reflected by the rate of use and levels of satisfaction illustrated above. Of the 10 respondents from Excell, eight had used support services by the time of the winter survey, and seven rated those services as either "Good" or "Outstanding." One respondent rated the services as "Fair." They are looking forward to opportunities to partner with the staff at WISE. A plan has also been put in place to formalize communication with teachers, with assigned monthly times to discuss implementation issues, and this has been positively received.

Elim

At the time of the November principal interview, MHC had not yet hired new support staff members, so little contact had been made between MHC and Elim. However, several school visits have since taken place, and the Elim staff seems to welcome the assistance from MHC.

In an accompanying space on the winter survey for comments, most comments from respondents from all five schools were positive, and several respondents expressed an appreciation for how helpful and accessible the MHC staff had been during the second year of implementation.

Training

In terms of the actual training sessions organized by the Humanities Commission, teachers' perceptions were slightly more positive in Year Two than they had been in Year One. While only two respondents rated the training as "Outstanding" this past year compared with four in the first year of implementation, only one respondent rated the training as "Poor" in Year Two, and four respondents had rated the training in Year One as either "Poor" or "Terrible."

	-		-					-				
	Dowling		Longfellow		WISE		Excell		Elim		Overall	
	Y2 (n=24)	Y1 (n=20)	Y2 (n=11)	Y1 (n=14)	Y2 (n=9)	Y1 (n=0)	Y2 (n=6)	Y1 (n=4)	Y2 (n=4)	Y1 (n=4)	Y2 (n=54)	Y1 (n=42)
Outstanding	1	2	0	0	0	-	0	0	1	2	2	4
Very good	9	5	1	5	3	-	4	1	2	2	19	13
Good	8	7	4	1	2	-	1	2	1	0	16	10
OK	6	4	5	6	4	-	1	1	0	0	16	11
Poor	0	2	1	1	0	-	0	0	0	0	1	3
Terrible	0	0	0	1	0	-	0	0	0	0	0	1

28. Perception of all training received from MHC in Year Two, compared with Year One

Sources: Spring teacher surveys (June 2003, June 2004).

Of the schools, satisfaction with training by the Humanities Commission appears to have increased slightly for Excell and Dowling, stayed roughly the same for Elim, and decreased slightly for Longfellow.

The patterns noted above relating to the first-round schools' preferences for styles of training and the training opportunities that had been made available to them by the time of the winter survey are borne out by their ratings of training received by mid-year.

Teachers were asked what kinds of training they had received by the time of the winter teacher survey in February, and to assess the usefulness of the training received. In addition to the option to describe and assess types of training that were not on the list, there were five kinds of training listed: a peer presentation during a pre-school workshop, a session led by Humanities Commission staff, individualized support by Humanities Commission staff, a relationship with a teacher at another school doing Core Knowledge, and a site visit to another school doing Core Knowledge. Teachers' responses indicate a relatively high degree of perceived usefulness of the services provided by the Humanities Commission.

- 92 percent of respondents attended training sessions led by MHC, of whom roughly four out of five (79%) rated that training as either "Somewhat useful" or "Very useful," and roughly one-third (32%) said "Very useful."
- Roughly two-thirds of respondents (66%) reported receiving individualized support from MHC staff, of whom 88 percent rated that support as at least "Somewhat useful" and roughly half (49%) said it was "Very useful." However, only half of teacher reported receiving assistance from MHC staff outside of training sessions in a previous question, so these responses may reflect some individualized support received in the context of training sessions.
- Peer presentations during pre-school workshops, a type of training not organized by MHC, were attended by exactly half of the respondents (50%), of whom roughly two-thirds (68%) rated those presentations as at least "Somewhat useful" and slightly less than a quarter (23%) said they were "Very useful."
- Roughly one-third of respondents (34%) reported having a relationship with a teacher at another school doing Core Knowledge, some of which may have been facilitated by MHC staff. Of these respondents, 71 percent rated that relationship as at least "Somewhat useful" and 29 percent said it was "Very useful."
- Roughly one out of five (19%) had gone on a site visit to another school doing Core Knowledge by mid-year, of whom roughly two-thirds (67%) rated that visit as at least "Somewhat useful" and 58 percent said it was "Very useful."

	,		,		,	,		••••												
	Peer presentation during pre- school workshop?				by	Session(s) led by Humanities Commission staff?			l s	Individualized support by Humanities Commission staff?			Relationship with a teacher at another school doing Core Knowledge?			Site visit to another school doing Core Knowledge?				
	Yes – very useful	Yes - somewhat useful	Yes – Not very useful	No	Yes - very useful	Yes - somewhat useful	Yes – Not very useful	No	Yes – very useful	Yes - somewhat useful	Yes – Not very useful	No	Yes – very useful	Yes - somewhat useful	Yes – Not very useful	No	Yes – very useful	Yes - somewhat useful	Yes – Not very useful	No
Dowling (n=23)	3	8	4	8	5	14	4	0	4	9	2	8	2	3	4	14	2	0	2	19
Longfellow (n=15)	0	2	4	9	4	5	5	1	4	2	2	7	2	5	1	7	3	1	1	10
WISE (n=9)	2	2	1	4	3	3	1	1	3	1	1	4	0	0	1	8	1	0	0	8
Excell (n=11)	1	1	1	8	5	3	2	1	7	2	0	2	2	1	0	8	1	0	1	9
Elim (n=4)	1	1	0	2	1	1	0	2	2	2	0	0	0	0	0	4	0	0	0	4
Overall (n=62)	7	14	10	31	18	26	12	5	20	16	5	21	6	9	6	41	7	1	4	50

29. Training received by mid-year, and perceived usefulness

Sources: Winter teacher survey (February 2004).

Teachers at Dowling were slightly more likely to rate the MHC training they attended as at least "Somewhat useful" (83% compared with 79% overall), but were less likely to report that it had been "Very useful." They were about as likely as other schools' teachers to have received individualized support from the Humanities Commission and to have rated that support as at least "Somewhat useful." However, the staff at Dowling was less likely to rate individualized support from MHC as "Very useful" (27% versus 49% overall).

The teachers at Longfellow were more likely to report that MHC training had not been very useful (36% compared with 79% overall), but were about as likely as other teachers to say it had been "Very useful" (29% compared with 32% overall). They were less likely to have received individualized support from MHC (53% versus 66% overall) and to have rated those services as at least "Somewhat useful" (75% compared with 88% overall), but just as likely to rate the support as "Very useful."

Teachers at WISE were equally likely to have attended MHC training as other teachers, but were more likely to rate that training as at least "Somewhat useful" (86% versus 79% overall) and to rate it as "Very useful" (43% versus 32% overall). They were less likely to have received individualized support from MHC (56% compared with 66% overall) and to rate that support as at least "Somewhat useful" (80% versus 88% overall), but were more likely to say it had been "Very useful" (60% versus 49% overall).

Staff at Excell were about as likely to have attended an MHC training session and to rate it as at least "Somewhat useful," but were slightly more likely to say it was "Very useful" (50% compared with 32% overall). However, they used individualized support from MHC more than other schools (82% versus 66% overall), and found that support more useful, with all of the teachers who received that service reporting that it had been at least "Somewhat useful," and 78 percent of them rated it as "Very useful" (compared with 49% overall).

Elim was the only school at which none of the teachers reported either having a relationship with a teacher at another school doing Core Knowledge, or going on a site visit to another school doing Core Knowledge. Additionally, two of the five teachers who did not attend a training session led by Humanities Commission staff were from Elim. However, all of the teachers who attended an MHC training or received individualized support rated those services as at least "Somewhat useful."

Issues to consider

Last year, the interim report concluded with three issues to consider: the diversity of participating schools, the incidence of unexpected bumps in the road, and the importance of relationships. This year's study findings show that these themes continue to be important in the development of the Cargill Core Knowledge Connection. Highlighted below are additional issues from this year's experience, for consideration in the coming year.

First issue: Facilitating changes at schools always takes time, and more so after the beginning of the year

The Humanities Commission made staffing changes in the second year of the grant period that represented a positive reaction to the challenges faced in the first year. Training and support services became more responsive to each school's needs and requests, and there was evidence that these changes had been perceived and welcomed by the schools by the end of the year. However, circumstances and timing affected how much progress was possible for first- and second-round schools during the second year of the grant period.

In terms of training, both of the second-round schools were in a position to benefit from the feedback shared with the Humanities Commission last year. However, separate and unrelated circumstances prevented the Humanities Commission from being able to start the year as hoped. Because of unforeseen developments outside of the Humanities Commission's control, neither school was able to make time available for teachers to gain more than a cursory introduction to the curriculum and the services available from the Humanities Commission at the start of the year.

Most of Urban League's staff was hired after the Humanities Commission's introductory training, so they began their implementation with no training at all until receiving a condensed training in January. TIES received introductory training before the start of the school year, but then used up all of their staff development days in the fall, moving to a new facility. When lines of communication with the teaching staff were opened mid-year, it became clear that they were only interested in ESL-focused training. However, the school had no days left on the calendar during which MHC could address that need.

For the first-round schools, expectations that were set going into Year Two were resistant to change later in the year. Based on their experiences in the first year of implementation, schools began the year with assumptions about what kinds of assistance they could receive from the Humanities Commission. The loss of key MHC staff just before the start of the year made it more difficult to communicate new expectations at a time when teachers are most open to doing things differently, and it appears to have taken a great deal of time for teachers to recognize and take advantage of opportunities for more individualized and responsive support.

Second issue: The level of training and support available through the initiative are supplemental by nature, and can not address some fundamental challenges faced by under-resourced schools

Some of the schools in the Cargill Core Knowledge Connection have limited resources and other fundamental needs that can not be fixed with the tools at the Humanities Commission's disposal. Larger concerns with budgets, scheduling, and staffing can only be partially ameliorated by training and support services. This was especially true for Excell Academy and Urban League Academy.

When asked in the spring survey, "What supports or resources do you need, or need more of, to plan and teach Core Knowledge effectively?" the music teacher at Excell replied: "...CDs of [Core Knowledge] songs; musical instruments; piano; music room." The Humanities Commission has the capacity and funding to help a music teacher find a recording, but not many pianos. The Humanities Commission's experiences in helping the Urban League Academy through its first year in the initiative also made it clear that some issues of school structure and administration may be beyond the Commission's resources to address.

Acknowledging the limitations of Humanities Commission services for participating schools has one very important implication: In the real world, some schools that want to implement Core Knowledge face challenges (i.e. lack of teaching resources, turnover in staff, mobile student populations, administrative weaknesses, other curricular requirements, etc.) that seriously undercut their ability to do so. As mentioned in the introduction, the diverse composition of schools in the Cargill Core Knowledge Connection – public elementary schools, charter elementary schools, an alternative school, and a private preschool – carries with it the potential benefit of enriching existing knowledge about what it takes to implement Core Knowledge. However, although the introduction of Core Knowledge may be a significant improvement compared to other curricula, the possibility exists that Core Knowledge may not achieve all of its desired effects if the barriers faced by schools are too great, even if supplemental assistance is available.

Third issue: Diverse schools make diverse implementation choices, which involve trade-offs with both positive and negative implications

The schools in the CCKC are more diverse than ever. Despite the premise of uniformity inherent in the Core Knowledge curriculum, the diverse implementation paths taken by these schools, for reasons of school culture, resources, or structure, lead to differing challenges and benefits.

In some schools in the initiative, the course charted by the principal is specific and strictly enforced. In others, the goals are set by the entire staff and monitored by the principal, but the path itself is up to individual teachers.

In some schools, lesson plans are collected, inventoried, and centrally-located. At others, teachers are unaccustomed to the thought of letting someone else significantly influence what they do in the classroom.

In some schools, Core Knowledge implementation is primarily controlled by a committee. In other schools, implementation progress is monitored by the principal or support staff.

While our evaluation is based on the Johns Hopkins research, the logic model is general enough to allow for variations in tack and philosophy. However, there has been emerging evidence in the second year of the CCKC that some of these variations, while chosen for specific positive features, nevertheless have corresponding costs.

- In Dowling, teachers have the latitude to make the most of their individual strengths and interests in what they choose to teach within their own classroom. This latitude led to significant variation within grades in content areas taught. This means that, for now, the students are moving on to their next respective grades not having been taught the same core knowledge.
- Some schools opted not to create central resource notebooks for common use, preferring to have teachers make the greater individual investment in developing their own sets of lesson plans. On the other side of the coin, those schools that developed lesson plan binders and other reference tools are not as vulnerable to the effects of turnover.

There is no current evidence that the trade-offs will have a long-term negative effect on the quality of implementation or results. However, it is important to recognize both the strengths and potential weaknesses of the different options, so that other schools that follow can pick the options that will be most suitable for their needs.

Conclusion

Looking forward: Year Three of implementation

No new schools will be added to the Cargill Core Knowledge Connection in the third year, although one (the Urban League preschool) has been closed, and the possibility exists that a preschool connected with WISE may take its place in the future.

There will be some significant changes in students and staffing at the schools that remain in the initiative. The principal at Dowling will be required to divide his time between that and a second elementary school. Longfellow is scheduled to take on 150 students from another public school that is closing. Many of these students are Native American, which will change the cultural dynamic of their student population. Excell will lose at least five of their teachers, and Elim will lose two. Both of these figures represent losses of half their teaching staffs. In addition, Excell's turnover will complicate their ability to collaborate with WISE as planned. All of these changes will likely require continued flexibility from the Humanities Commission in identifying and responding to shifting training and resource needs.

Schools' grant proposals contained little specific information about timing or content of training, school-level structures for planning and coordination, or classroom-level expectations for what would be considered "full implementation." The Humanities Commission staff may wish to discuss these issues with principals early in the year, to help principals, support staff, and teachers make plans to wrap up their last year in the program with the greatest possible success.

In the third year of implementation for first-round schools, Wilder Research Center will collect data concerning the longer-term outcomes on the logic model, including:

- Student achievement in public schools, measured by norm-referenced testing results
- Levels of involvement and satisfaction for teachers, parents, and students (including community and parent contribution of volunteer resources to Core Knowledge classroom units)
- Level of content implementation (recognizing that not all schools intend to implement all strands, and that the Core Knowledge Foundation considers "full implementation" to take about 50 percent of total instructional time)
- Identification by the schools of resources necessary to sustain Core Knowledge beyond the grant period

Appendix

Logic models

Instruments

Logic Models



Cargill Core Knowledge Connection – Logic Model (Preschool)

Overall program goal: To strengthen and improve academic achievement for students in participating schools.



Winter 2004 Teacher Survey

School Name:	Office Use Only
Teacher Name:	ID#:
Grade or Specialty:	
Cargill Core I Winter 2004 Tea	•

Dear Teacher:

This survey is for teachers using the Core Knowledge curriculum. We are asking teachers to take part in the survey to help us understand their experiences in implementing the Core Knowledge curriculum and the response of students to this material. Even if you have used only a small amount of the Core Knowledge curriculum with your students, we are interested in your impressions and ask that you answer the questions the best you can. The survey is, of course, voluntary, but your help is needed to learn more about how the program is working. Your answers will be kept confidential. It only takes 15 to 20 minutes to complete the survey. Please return it to Wilder Research Center by March 5 in the postage paid envelope provided. Thanks for your help!

1.	How many students did you have in your classroom as of September 1, 2003? number of students	1a.	Of the students in your classroom in September, how many did <u>not</u> receive at least some Core Knowledge instruction during the last school year (2002-2003)?
			number of students
2.	How many students did you have in your classroom as of February 1, 2004? number of students	2a.	How many new students have been added to your class since September who did not have prior Core Knowledge experience? number of students

3. Please indicate your level of agreement with the following statements comparing students who have prior Core Knowledge experience to those who do not:

In general	AGREE	NEUTRAL	DISAGREE
a. students with prior Core Knowledge experience have a higher level of factual knowledge		1 ²	
b. students with prior Core Knowledge experience do better work in the classroom	\square^3	\square^2	\square^1
c. students with prior Core Knowledge experience are no different from other students when it comes to classroom participation		\square^2	
d. students with prior Core Knowledge experience are better able to connect facts to their own lives	\square^3	\square^2	\square^1

4. When using the Core Knowledge curriculum, do you have to adjust what you present and how you present it in order to meet the needs of children who have less experience with Core Knowledge material?

$\square^1 \text{ Yes } \rightarrow $	4a. IF YES: What adjustments have you made?
\square^2 No	
\square^8 Don't know	
\square^9 Have not used C	Core Knowledge curriculum yet

5. Please indicate your level of agreement with each of the following statements:

					STRONGLY DISAGREE
a. I know the purpose and rationale of Core Knowledge	\square^5	\square^4		\square^2	
b. I am not familiar with the scope and sequence of Core Knowledge		\square^4		\square^2	
c. I do not know enough about how to assess the Core Knowledge units I teach	5	\square^4		\square^2	
d. I have enough opportunities to collaborate with colleagues at my school in planning and teaching Core Knowledge	s D ⁵	\square^4		\square^2	
e. I do not have the help I need to get the resources necessary to teach Core Knowledge	y 🗖 ⁵	\square^4		\square^2	
f. My school's director/principal does not provide sufficient guidance and vision to our staff to do Core Knowledge we		\square^4		\square^2	
g. My school's director/principal monitors the implementation of Core Knowledge	5	4		\square^2	
h. My school's director/principal holds our staff accountable for meeting our curriculum goals	5		3	2	
i. The expectations for teaching Core Knowledge this year have not been realistic		\square^4		\square^2	
j. I have had enough contact with other teachers teaching Core Knowledge at my grade level/ specialty area from another school	D ⁵	4	3	\square^2	
k. Core Knowledge is a good fit with the testing requirements of the "No Child Left Behind" law	5	\square^4	3	2	

6. Do any of the parents of children in your classroom know about the Core Knowledge curriculum?

		a. IF YES: About what percentage do you think know something about Core Knowledge	
\square^2		and why the school is using it?	
	Don't know	%	

7. What supports or resources do you use to help you plan and teach Core Knowledge?

8. What supports or resources do you need, or need more of, to plan and teach Core Knowledge effectively?

9. Which of the following types of training related to Core Knowledge have you participated in during the <u>current school year</u>? (CHECK ALL THAT APPLY)

Г		IF CHECKEL	VERY USEFUL	SOMEWHAT USEFUL	NOT VERY USEFUL
a. 🗋	Peer presentation during pre-school works	юр		\square^2	
b. 🗖	Session(s) led by Humanities Commission	staff	3	2	
c. 🗖	Individualized support by Humanities Com	mission staff	3	\square^2	
d. 🗆	Relationship with a teacher at another scho Knowledge	ol doing Core	3	\square^2	
e. 🗆	Site visit to another school doing Core Kno	owledge		\square^2	\square^1
f. 🗖	Other (please describe:)		\square^2	
10. 11.	Have you had any direct contact (outside Commission during the current school ye \square^1 Yes \square^2 No \square^8 <i>IF YES TO QUESTION 10:</i> Would you say	ear? Don't know			
	Commission during this school year has 1 Outstanding Comments 2 Good	been			es
12.	classroom during December, January,	 Language arts/Engl History/Geography Visual arts Music 		Mathematics Science Did not use Cor during those m	e
13.	percentage of classicolin instructional	10 percent 5 2 10 percent 6 3 20 percent 7 4 30 percent 8	40 percent 50 percent 60 percent 70 percent	9^9 80 perc 1^{10} 90 perc 1^{11} 100 perc 1^{-8} Don't k	cent rcent
14.	How many years of teaching experience of	did you have before this	s school yea	r?	
	number of years				
15.	How many years have you used the Core \square^1 This is my first year using Core Knowl \square^2 I had <u>one previous year</u> of experience with \square^3 I had <u>two or three years</u> of experience with \square^4 I had <u>more than three years</u> of experience	ledge with Core Knowledge bet with Core Knowledge bet	fore this scho	ol year ol year	chool)?

[IF THIS IS YOUR FIRST YEAR TEACHING CORE KNOWLEDGE, PLEASE SKIP TO QUESTION 20 AT THE END OF THE SURVEY ON PAGE 4]

- 16. Was your previous experience with Core Knowledge at your current school or elsewhere?
 - \square^1 Current school \square^2 Different school
- 17. Have you started teaching any new Core Knowledge content areas during this school year (2003-2004)?

$\square^1 \text{ Yes } \rightarrow $	17a. IF YES: PLEASE CHECK ALL	NEW CONTENT AREAS TH	IAT APPLY
\square^2 No	\square^1 Language arts/English	\square^3 Visual arts	\square^5 Mathematics
	\square^2 History/Geography	\square^4 Music	\square^6 Science

18. What was your biggest challenge in teaching Core Knowledge last year (2002-2003)?

19. Have there been significant changes in how Core Knowledge is implemented and supported at the overall school level compared with last year?

$\square^1 \text{ Yes, mostly} \\ \underset{\text{changes}}{\text{positive}} \longrightarrow$	19a. Please describe:
$\square^2 \text{ Yes, mostly} \\ \begin{array}{c} \text{negative} \\ \text{changes} \end{array} \longrightarrow$	19b. Please describe:

20. Do you have any suggestions for other teachers who are working to use Core Knowledge in their classrooms?

\square^1 Yes \rightarrow	→	20a. IF YES: Please describe
\square^2 No		

Please return completed survey to Wilder Research Center in the self-addressed, postage-paid envelope or Fax the survey to Ben Shardlow at 651-647-4623. *Thank you!*

Spring 2004 Teacher Survey

Office Use Only

ID#: _____

School Name:	 	
Teacher Name:	 	
Grade or Specialty:	 	

Cargill Core Knowledge Spring 2004 Teacher Survey

Dear Teacher:

This survey is for teachers using the Core Knowledge curriculum. We are asking teachers to take part in the survey to help us understand their experiences in implementing the Core Knowledge curriculum and the response of students to this material. Even if you have used only a small amount of the Core Knowledge curriculum with your students, we are interested in your impressions and ask that you answer the questions the best you can. The survey is, of course, voluntary, but your help is needed to learn more about how the program is working. Your answers will be kept confidential. It takes only 5 to 10 minutes to complete the survey. Please return it to Wilder Research Center as soon as possible in the postage paid envelope provided. Thanks for your help!

First, please think about the group of students that you have in your classroom this year. Think of this group of students in relationship to students whom you have taught during the previous two years and answer the following questions.

- 1. Compared to students you have taught in the previous two years, would you describe this year's group of students in your classroom as...
 - \square^1 Somewhat more attentive
 - \square^2 About as attentive as students in previous years
 - \square^3 Somewhat less attentive than previous students
 - \mathbf{J}^8 Don't know
- 2. Compared to students in the previous two years, would you describe this year's students as...
 - \square^1 Somewhat more enthusiastic
 - \mathbf{J}^2 About as enthusiastic as students in previous years
 - ³ Somewhat less enthusiastic than previous students
 - \square^8 Don't know

3.	Thinking about the quality of any homework that students turn in to you, would you describe the quality of homework turned in by this year's group of students as
	\square^1 Somewhat better than that of students from previous years
	\square^2 About the same as students in previous years
	\square^3 Somewhat worse than previous students
	\square^4 No homework assigned
	\square^8 Don't know
4.	Regarding classroom participation, would you say this year's group of students is
	\square^1 Somewhat more engaged than students in previous years
	\square^2 About the same as students in previous years
	\square^3 Somewhat less engaged than previous students
	\square^8 Don't know
5.	With regard to cooperation with peers, would you describe this year's group of students as
	\square^1 Somewhat more cooperative
	\square^2 About as cooperative as students in previous years
	\square^3 Somewhat less cooperative than students in previous years
	\square^8 Don't know
The	next set of questions is about your experience with the Core Knowledge curriculum.
6.	Thinking back to the training that you received for implementing the Core Knowledge curriculum, would you say that the training you received to prepare you for Core Knowledge classroom teaching was
	Outstanding Comments (optional):
	\square^2 Very good
	Good

- 7. Please describe the primary content areas in the Core Knowledge curriculum that you have used in your classroom during the last several months.

8.	During February, March and April of this school year, what percentage of classroom instructional time
	did you spend using Core Knowledge curriculum? Would you say that it was about

\square^1 10 percent	\square ⁵ 50 percent	99 90 percent
\square^2 20 percent	\square^6 60 percent	\square ¹⁰ 100 percent
\square^3 30 percent	\square^7 70 percent	-8 Don't know
\square^4 40 percent	\square^8 80 percent	

Now, please think about this year's class of students during those times <u>when you have been using the Core</u> <u>Knowledge curriculum</u>.

9.	During the times when you are teaching Core Knowledge material in your classroom, would you
	describe your students as

1	Somewhat more attentive than when	n covering similar content	t without the Core Knowle	dge curriculum
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2	About as attentive a	s when	covering	similar	content	without	Core	Knowled	lge
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3	Somewhat less	attentive than	when	covering	similar	content	without	Core	Knowl	edge
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⁸ Don't know

10. During the times when you are teaching Core Knowledge material in your classroom, would you describe your students as . . .

- \square^1 Somewhat more enthusiastic than when covering similar content without the Core Knowledge curriculum
 - ² About as enthusiastic as when covering similar content without Core Knowledge
 - ³ Somewhat less enthusiastic than when covering similar content without Core Knowledge
 - ⁸ Don't know

11. During the times when you are teaching Core Knowledge material in your classroom, would you describe the quality of homework turned in by your students as . . .

- \square^1 Somewhat better than when covering similar content without the Core Knowledge curriculum
- \square^2 About the same as when covering similar content without Core Knowledge
 - ³ Somewhat worse than when covering similar content without Core Knowledge
 - \mathbf{J}^4 No homework assigned
- \square^8 Don't know

12. Regarding classroom participation during the times when you are teaching Core Knowledge material in your classroom, would you say your students are . . .

- \square^1 Somewhat more engaged than when covering similar content without the Core Knowledge curriculum
 - \mathbf{J}^2 About the same as when covering similar content without Core Knowledge
 - ³ Somewhat less engaged than when covering similar content without Core Knowledge
 - ⁸ Don't know

13.	With regard to cooperation with peers during the times when you are teaching Core Knowledge
	material in your classroom, would you describe your students as

 \square^1 Somewhat more cooperative than when covering similar content without the Core Knowledge curriculum

- \square^2 About as cooperative as when covering similar content without Core Knowledge
- \square^3 Somewhat less cooperative than when covering similar content without Core Knowledge
- \square^8 Don't know

If you have anything that you would like to add about your experience with Core Knowledge (good or bad) please write it in the space below.

Please return completed survey to Wilder Research Center in the self-addressed, postage-paid envelope or Fax the survey to Ben Shardlow at 651-647-4623.

Thank you!