Colorado Springs Charter Academy

Charter Application

January 26, 2005

Submitted to:

The Charter School Institute
1525 Sherman, #150
Denver, CO 80203

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Executive Summary

The future is not a result of choices among alternative paths offered by the present, but a place that is created—created first in the mind and will, created next in activity. The future is not some place we are going to, but one we are creating. The paths are not to be found, but made, and the activity of making them, changes both the maker and the destination.

—John Schaar, futurist

Colorado Springs Charter Academy

We, the founding committee of Colorado Springs Charter Academy, are pleased to present this application to create a new charter school within the confines of Colorado Springs School District 11. As concerned parents, we strongly believe that the school we are proposing in this application is needed and wanted, and does not yet exist as a choice for our community.

Colorado Springs Charter Academy's essential tools are summarized in Table 1: Academic Cornerstones, which shows the methods by which the school's values will be instantiated in practice. This table highlights those practices and programs that we feel are the most indispensable to our children's success. The main factor that contributed to our selecting each of these tools or practices for our school was that each program or practice increases student achievement. These methods are proven and successful. The remainder of this charter application provides detailed support and context for our choices.

Table 1: Academic Cornerstones

Fundamental Tools		
Curricula		
Core Knowledge	Phonics-Based Literacy	Shurley English
Saxon Math	3-Tier Reading Program	Step Up to Writing
Character	Spanish & Latin	6+1 Trait Writing
Policies		
Uniforms	Parent Volunteering	Longer School Year
K-8	Contracts	Memorization
No Excuses	High Expectations	Focus on Achievement

By offering a unique option currently unavailable in District 11, we are confident that many parents will choose CSCA for their children. Briefly, CSCA's program comprises a K-8 (Kindergarten through 8th grade) facility emphasizing parental involvement, with uniforms, teaching the Core Knowledge curriculum in a longer school year, and offering world language and character instruction. Also, through consultation with literacy experts, we have designed an innovative three-tier reading program to make sure that no students fall through the cracks—we will have a laser-like focus on literacy. Although some of these programs and options are separately available across the District, this combination of best practices is not yet available under one roof in school that is located within District 11 boundaries.

We hope to open our doors for the 2005-2006 school year with a target population of all students. We are not targeting only gifted children or only at-risk children or only reading-disabled children. We have instead designed a program—built on Core Knowledge—that works with most populations. Those who accuse Core Knowledge of being elitist do not understand its successes, for just the opposite is true. Research has shown that Core Knowledge is successful at closing the achievement gap, truly resulting in No Child Left Behind.

Formal Application

Democracy cannot succeed unless those who express their choice are prepared to choose wisely. The real safeguard of democracy, therefore, is education.

—Franklin D. Roosevelt (1882–1945)

Introduction and Goals

The Founding Committee of Colorado Springs Charter Academy is pleased to submit this charter school application to the Colorado State Charter School Institute. The parents and community members submitting this application are eager to participate in bringing an additional option—emphasizing academic rigor, high expectations, and parental involvement—into the public education marketplace.

This application is divided into four parts. Following the Executive Summary, which characterizes the school at a glance, is the application proper. That section includes specific responses to the Institute's Request for Applications, to which this document conforms. Supplementing the application proper are two further sections: Supporting Research and Appendices.

Pursuant to CRS 22-30.5-504(1), this charter school application shall be a proposed agreement upon which the charter applicant and the chartering authority negotiate a charter contract.

Charter School Name	The school name is Colorado Springs Charter Academy, occasionally referenced as "the Academy" or "CSCA" in this document.
Spokesperson	Any questions about this application may be directed to Lisa Miller, who may be reached at P.O. Box 50093, Colorado Springs, Colorado 80949-0093, 719-264-9359.
School Opening Date	Colorado Springs Charter Academy is poised to begin operations in August, 2005 for the 2005-2006 academic year.

A. Mission Statement

This section comprises Colorado Springs Charter Academy's vision, mission, and core values. The vision is the Academy's compelling raison d'être, fired with gravitas, fervor, and poetry. The mission is the future we promise—one that inspires, challenges, and endures.

Vision	**We kindle enthusiasm to craft bold and effective citizen-scholars.**
Mission	Colorado Springs Charter Academy is love for community expressed in action. We are entrusted with dear purchase, to bind our students' days of innocence and joy with structure, content, and character. To accomplish this, we cultivate the individual potential of all our students by: • Providing academically rigorous, proven, content-rich educational programs; • Developing incisive analytical skills and well-stocked minds; • Fostering self-advocacy, passion, citizenship, and exemplary character; • Holding individualized high expectations; • Involving and welcoming parents and community members.

Core Values

Expanding on these highlights above are the Academy's core values. These are our bedrock beliefs—an enumeration of the principles that buttress our mission and vision.

Table 2: Core Values

Core Values	
Fundamentals	Students need voluminous and foundational facts, many of which must be memorized. They must master basic skills in order to analyze, solve problems, and pose considered questions.
Character	Strong character complements learning. We foster respect, integrity, ethics, courage, honesty, pride, and perseverance. In this regard, our employees and volunteers serve as models for our students.
Parental Involvement	Parents should participate actively in all aspects of their child's education. Those who do not should expect inferior results. Parents will be respected, expected, welcomed, and involved.
High Expectations	Potential is wasted if not challenged. We demand outcomes that can ensue only from self-discipline and inspired effort.
Results	We believe that grades matter, that progress trumps effort, that esteem follows from accomplishment. However, we do not teach towards any specific test: we teach towards acquisition of skills and knowledge.
Accountability	We hold students, teachers, parents, and administrators all accountable to clearly defined goals. Joint effort does not sever individual responsibility. Grades, pay, placement, accolades, and censures are all necessary measures of accountability.
Individualized Pacing	Through frequent assessments, students are grouped according to achievement level and given appropriate personalized attention. Aptitude outweighs age.
Research-Based Programs	Quod Erat Demonstrandum. Our children are not guinea pigs.
Literacy for All	We ensure that all students are literate. This begins with early identification of students with reading difficulties, and means providing research-based interventions for them.
Discipline	A structured environment where students accept responsibility and bear the consequences of their actions promotes productivity and safety.
Self-Expression	The ability to communicate effectively through multiple media, but especially in writing, is an indispensable talent required for meaningful scholarship and civic participation.
Openness	Informed students and parents are effective and empowered. Expectations and results are communicated rapidly and clearly. Questions are encouraged, and answered respectfully.
Appreciation	Exposure to great works of art, literature, music, and heroic human endeavor inspires students to excel.
Passion	Our employees, students, and volunteers love what they do.

B. Goals, Objectives, and Pupil Performance Standards

CSCA's primary goal, based upon our mission statement, is to provide an academically rigorous program that increases student achievement. To this end, we will set ambitious and attainable goals for all children. We will aim for academic excellence, which will be demonstrated with a body of evidence based upon multiple indicators of progress including:

- CSAP
- National Standardized tests taken two times a year
- Curriculum-embedded assessments

The assessment methods are listed in detail in Table 15: Assessment Types on page 45.

Pupil Performance Standards

Reflecting our focus on achievement, Table 3: Pupil Performance Standards, below, shows how each objective is indicated and measured.

Table 3: Pupil Performance Standards

Primary Goal: *to provide an academically rigorous program that increases student achievement*	
All students will make substantial progress toward the following objectives:	
Indicator	**Measurement**
Longitudinal educational growth—gain one year's growth in one year's time.	CSAP & other National Standardized exams
The percentage of students scoring P or ADV on CSAP will increase each year.	CSAP
CSCA will meet adequate yearly progress (AYP) targets for all disaggregated groups as measured by CSAP and defined by the Colorado Department of Education starting in year two and continuing every year after that.	CSAP reading and math
Reduce achievement gap—students below grade level should increase more than one year for each school year.	CSAP reading and math, National Standardized test given twice a year

Setting specific numeric goals (other than AYP targets, defined by state law—see page 12) at this time is unreasonable, as CSCA does not know what achievement level will comprise its student population. After we set our baseline data in year one, we will revise our objectives in SMART terminology. SMART terminology means the following:

- **Specific** Specific and concise
- **Measurable** Measurable criterion is stated
- **Attainable** Attainable—within reason, but still a challenge
- **Research** Research/results-based methodology is identified
- **Time** Time-specific

Furthermore, collecting and analyzing this body of evidence will form the foundation of our Data Management Plan. We will make data-driven research-based decisions in order to be continually improving student achievement.

The curriculum-embedded assessments are particularly important for subject areas where CSAPs are not given. We will ensure that all of our students are making progress toward the Colorado Model Content Standards, regardless of their age or CSAP-taking status.

Accreditation Indicators

CSCA will eagerly comply with the Institute's Accreditation process. One of CSCA's founders, Lisa Miller, has been a member of School District 11's Accreditation/Achievement DAAC Subcommittee, and therefore is very knowledgeable about the accreditation process. The most important indicator in the accreditation contract is meeting AYP—if a school fails AYP two years in a row, that school is automatically placed on Accreditation Watch. There is no discretion or flexibility in that designation. We have designed our accountability plan to be aligned with the CDE's 11 Accreditation Indicators,[1] which are shown below.

Table 4: Accreditation Indicators

	Colorado Accreditation Report Indicators	CSCA Addresses Indicator in Mission/Vision, Core Values, Policies/Practices
A	Educational Improvement Plan	Yes
B	CSAP Goals	Yes
C	Closing Achievement Gaps	Yes
D	Value-Added (longitudinal) Growth--Reading, Writing, Math	Yes
E	Data regarding Achievement in Other Curriculum Standards Areas	Yes
F	Compliance with School Accountability Report	Not Applicable – applies to District
G	Compliance with Educational Accreditation Act	Not Applicable – applies to District
H	Compliance with Safe Schools Act	Yes
I	Compliance with Colorado Basic Literacy Act	Yes
J	Annual Assessment Review will include CDE written report	Not Applicable – applies to District
K	Compliance with Budgeting, Accounting, etc.	Yes

[1] http://www.cde.state.co.us/cdeedserv/download/pdf/AccredGuidelines.pdf.

Additionally, we will participate in the Colorado League of Charter Schools Accountability Program, which focuses on accountability planning, longitudinal data analysis, data management, and assessment strategies.

Although CSCA will request waivers to C.R.S. 22-7-106 & 107, the charter school board will fulfill the duties that are laid out for a School Advisory Council. As outlined in statute, the CSCA Board shall make recommendations regarding the prioritization of expenditures of school monies. We shall also discuss student achievement, the school improvement plan, the educational performance of the school, and safety issues related to the school environment. Additionally, one member of the CSCA Board will be appointed as a CSI Accountability and Advisory Committee representative in the event that the CSI creates a LEA-level committee that is similar to District Advisory Councils.

Accountability Targets

Colorado Springs Charter Academy will comply with mandatory accountability programs, comprising 1) Accreditation, 2) the School Accountability Report (SAR) program, and 3) Adequate Yearly Progress (AYP) as defined in No Child Left Behind (NCLB) legislation.

Colorado Springs Charter Academy is confident of making AYP by the end of the 2005-06 school year. These targets, as defined by state law,[1] are set forth in Table 5: AYP Proficiency Performance Targets by Grade Level, Content Area, and Year, below.

Table 5: AYP Proficiency Performance Targets

Year	Elementary School		Middle School	
	Reading	Math	Reading	Math
2005-06	82.69	81.90	80.21	69.63
2006-07	82.69	81.90	80.21	69.63
2007-08	88.46	87.94	86.81	79.75
2008-09	88.46	87.94	86.81	79.75
2009-10	88.46	87.94	86.81	79.75
2010-11	94.23	93.98	93.41	89.88
2011-12	94.23	93.98	93.41	89.88
2012-13	94.23	93.98	93.41	89.88
2013-14	100	100	100	100

In Table 5, the targets are the percentages of CSAP test-takers who must score Partially Proficient, Proficient, or Advanced. Included also are CSAP-A students, whose target is Emerging or above, instead.

These performance targets must be met statewide as a whole, for each school district as a whole, for each school as a whole, and for every subgroup of thirty or more students. If there are less than thirty in any subgroup at the school or district level, then performance targets do not need to be reached for that subgroup. For these targets, the subgroups are: Whites, Blacks, Hispanics, Native American/Alaskan Native, Asian/Pacific Islander, Economically Disadvantaged, Students with Disabilities, and Limited English Proficient (LEP).

[1] Colorado Department of Education: *AYP Proficiency Targets and Safe Harbor*. http://www.cde.state.co.us/ayp/prof.asp#table 2003.

Other Goals

In addition to the pupil performance standards listed above, Colorado Springs Charter Academy has also identified the following goals that are essential to achieving the school's mission.

Professional Development

A fully-trained staff is essential to the success of the Academy. The majority of this training will be completed by the end of the first year of operation, and will be ongoing in future years to target full staff or individualized needs.

Parent Involvement

Parents will sign an Educational Compact in which they acknowledge their responsibility in helping students complete homework assignments and in reading to their children at home, among other agreements. Please see Appendix E: Educational Compact. All parents will sign this letter of commitment.

Families will be asked to volunteer forty hours per year (or fifteen hours per year for single parent families). The goal is that 80% of families meet this target.

World Language

World language is an important aspect of a liberal arts curriculum, and therefore Colorado Springs Charter Academy students will be taught Spanish beginning in kindergarten. The successful implementation of a Spanish language program will be measured by program-specific mastery tests. At least 85% of all students will master Spanish unit exams before the teacher proceeds to the next unit. Additionally, we will teach Latin in the higher grades.

Attendance and Enrollment

Colorado Springs Charter Academy will maintain an average attendance rate of 95% or higher, and a voluntary re-enrollment rate of 85% or higher from year to year.

Other Program Attributes

The success of other components of the school's program, including curriculum implementation, character education, parent involvement, world language instruction, professional development, school safety, discipline, communication, etc., will be measured annually via parent, teacher, and student satisfaction surveys.

The Academy's goals, objectives, and pupil performance standards were created by the founders through numerous discussions. However, they remain open to modification by the future board of directors of the Academy. As with any school policy, they may need to be revised as the result of continuous improvement reviews.

Community Need

Charter schools are authorized by the Colorado General Assembly as a way for communities to make education more flexible, innovative, and responsive to the needs of all students. In accordance with these sentiments, Colorado Springs Charter Academy intends to deliver a needed choice for its community.

C. Evidence of Support

Community Demographics

Colorado Springs Charter Academy will open its doors in August 2005 serving 184 students in grades K-6. The school ultimately will grow to 420 students in grades K-8. Our population will be diverse: gifted, twice-exceptional, learning disabled, advanced, average, and kids who need help catching up. We are not targeting only gifted children or only at-risk children or only reading-disabled children. We have instead designed a program—built on Core Knowledge—that works with most populations.

Although our expectations for academic achievement are not influenced by a student's race, ethnicity, socioeconomic background, or primary language, we include Table 6: Community Demographics at the Institute's request.

Table 6: Community Demographics

Category	District 11 %	% CSCA Estimates
African American	9.6	10
Hispanic American	17.5	20
Anglo American	68.7	66
Native American	1.3	2
Asian American	2.9	2
Title I	40	38

Letters of Support

CSCA has collected letters of support from elected officials, parents, teachers, and community leaders. A partial list of these enthusiasts is shown in Table 7: Academy Supporters.

Table 7: Academy Supporters

Supporters of Colorado Springs Charter Academy			
Elected Representatives			
Keith King	Colorado State Representative, SD 21	**Dave Schultheis**	Colorado State Representative, HD 14
Mark Hillman	Colorado State Senator—SD 2	**Ed Jones**	Colorado State Senator—SD 11
Sallie Clark	Innkeeper; District 3 County Commissioner	**Andy McElhany**	Colorado State Senator, SD 12

Community and Educational Leaders			
Mark Hyatt	President, The Classical Academy	**Barry Fagin**	Columnist for The Gazette and Air Force Academy Professor, II Fellow
Sandy Kraemer	Former University of Colorado Regent	**Trudy Strewler**	Executive Director of CASA—Court-Appointed Special Advocates
David Martin	Senior Systems Engineer, SPARTA	**Linda Carroll**	Founder, Cheyenne Mountain Classical Academy

With their kind words these leaders honor CSCA and applaud its emphasis on achievement. For example, Representative King agrees with us that "academic achievement of students must be the central focus of public schools," and acknowledges that Core Knowledge charter schools "have been some of the most successful in the state." This is a pattern of success that Dr. Fagin notes as well: "Your commitment to educational excellence is exactly what the children of Colorado Springs need. Colorado Springs Charter Academy will make a vital contribution to excellence in public education." These sentiments are echoed by Ms. Carroll. "They are truly committed to creating the best school possible, using effective best practices, scientific research-based curriculum, and proven methodologies. These parents agree with me that all children can learn if given the appropriate curriculum."

Even "rival" institutions admit the demand for more schools of this type, and welcome an additional public choice for our community. Mr. Hyatt makes the point succinctly: "Our experience at TCA indicates that there is a great demand for a school such as CSCA." Representative Schultheis, in comparing CSCA to Cheyenne Mountain Charter Academy and The Classical Academy, says that "Those two charter schools of excellence have been at capacity for years, and the families on their waiting lists deserve more chances for their children to succeed. Colorado Springs Charter Academy will help overcome a gaping deficiency for these grateful parents."

Finally, these supporters emphasize the tenacity of the founding committee. From Mr. Hyatt: "I am impressed with their vision, enthusiasm, commitment, and knowledge." From Senator Hillman: "Even without vouchers, parents still have public school choices, thanks to the stalwart efforts of committed citizens like those behind Colorado Springs Charter Academy." And from Commissioner-Elect Clark: "CSCA's 'no excuses' philosophy won't let them fail."

Colorado Springs Charter Academy is humbled to be tasked with creating a school that matches the aspirations of these supporters and fills a recognized need for the community.

The complete collection of endorsement letters is attached as Appendix B: Letters of Support.

Letters of Intent

There is considerable support for Colorado Springs Charter Academy among local families as demonstrated by the attached letters of support and the 138 students whose parents have completed Intent to Enroll Forms as of January 26, 2005. The breakdown of these students by

grade level is shown in Table 8: Intent to Enroll, by Grade, below. Please see also Appendix C: Letter of Intent for a sample of the form used.

Table 8: Intent to Enroll, by Grade

Grade Level for Fall 2005	Number of Students
Pre-K (future enrollment)	21
K	25
1	20
2	15
3	20
4	9
5	14
6	14
Total	**138**

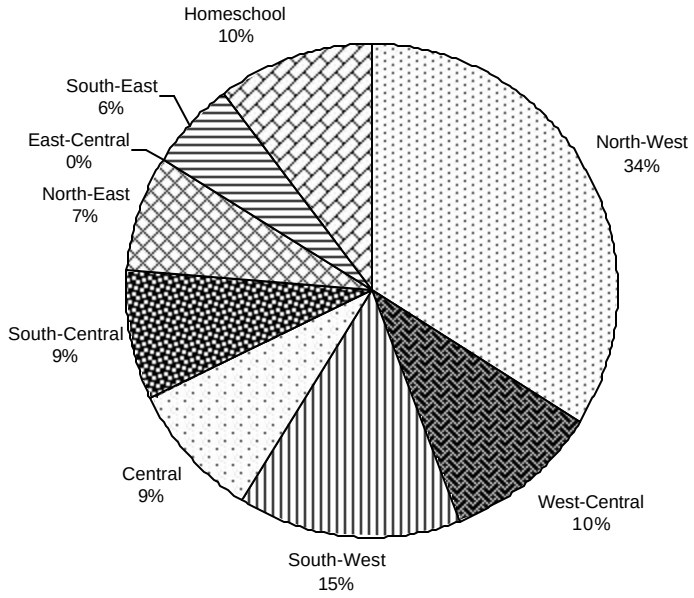
Financial Support

Individual donors have indicated their tangible support by making substantial financial contributions to CSCA's success. As of January 26, 2005, the Academy has received over $2500 from 15 benefactors. Additionally, through the Colorado Department of Education (CDE) we have been awarded a Title V Charter School Startup Grant in the amount of $175,000, the maximum given in 2004-05. This award carries with it a near-certain renewal for $150,000 in each of the first two operational years following. Finally, we have been approved for a grant from the Walton Family Foundation in the amount of $180,000, with these funds to be distributed before the end of January.

Geographic Distribution of Students

Based on the Intent to Enroll forms already collected, we see that early interest is geographically widespread, including student not only across District 11, but out of district also. This distribution is shown in Figure 1: Distribution of Prospective Students, below.

Figure 1: Distribution of Prospective Students



Although these data are current as of the date of this application, they are necessarily incomplete, as we expect many more students to enroll over the next several months. Even now, well prior to the Academy's approval, and without a significant advertising budget, we receive Intent to Enroll forms for approximately five new students per week.

Community Outreach

Our school has been publicized on local television and in the Colorado Springs Gazette. To date, three community meetings about CSCA were held in different parts of Colorado Springs to make it more likely that a broad cross-section of parents would be able to

attend. Press releases for our community meetings were distributed to the major media outlets in Colorado Springs including *Hispania News.* Our founders are fluent in multiple languages (including Spanish) so we are able to produce our documents in both English and Spanish. CSCA has also partnered with Padres Unidos/United Parents, a grassroots group in D-2 and D-11, which uses parent and community volunteers to walk the streets of the more disadvantaged parts of Colorado Springs. They share information about educational choices, including CSCA, with the parents they meet. We did a limited mailing to 65 families in south Colorado Springs who indicated an interest in charter schools. Our marketing budget also includes a larger targeted mailing to households around the Title 1 schools, especially where achievement is low. Eight D-11 schools would meet these criteria based on 2003 SAR ratings.

Statement of Need

Table 9: Flight from District Eleven

Student Is Now Attending District	Student Count
Academy 20	543
Harrison 2	379
Manitou Springs 14	283
Cheyenne Mountain 12	259
Widefield 3	60
Branson Reorganized 82	56
Fountain 8	39
Lewis-Palmer 38	38
Denver County 1	27
Falcon 49	24
Vilas Re-5	10
Monte Vista C-8	10
Other Districts	43
Total Exodus from D-11	**1886**

Many students in District 11 look elsewhere for rigorous academic expectations, either by attending or being on waiting lists for non-District-Eleven schools. Students from District 11 are enrolled in Core Knowledge[1] (CK) schools in Academy District 20, Widefield District 3, Cheyenne Mountain District 12, Calhan District RJ1, and Harrison District 2. Additionally, there are large numbers of District Eleven students *on waiting lists* to enter these and other schools. Table 9: Flight from District Eleven shows this trend in alarming detail. The table counts students whose home district is Colorado Springs District 11 for the school year of 2003-2004.[2]

Of students who leave District Eleven, many clamor for a local Core Knowledge option with fidelity. Whereas Table 9 showed students attending other schools of varying composition, Table 10: Waiting for a CK Charter School, below, shows those students who are waiting for the specific kind of school that Colorado Springs Charter Academy aims to become.

[1] Throughout this application, "Core Knowledge" refers to the trademarked *Core Knowledge® Sequence, K-8*, published by the Core Knowledge Foundation, Charlottesville, VA.
[2] Colorado Department of Education: http://www.cde.state.co.us/cdereval/download/pdf/2003PM/2003NRStudentsbyParentsDistrictofResidence.xls.

Table 10: Waiting for a CK Charter School

District	School	D-11 Student Count
20	The Classical Academy	1162
12	Cheyenne Mt Charter Academy	229
20	The Classical Academy: Homeschool	94
	D-11 Students Waiting	**1485**

Although some of these programs and options are separately available across the District, this combination of best practices is not yet available under one roof in District 11.

Best Practices

A compendium of effective methods is shown in Table 11: Best Practices, below. It provides, pursuant to CRS 22-30.5-106(e), "a description of the charter school's research-based educational program that has been proven to be effective."

Table 11: Best Practices

Best Practices	K-8	Saxon Math	Uniforms	Core Knowledge	Foreign Language	Character Education	SAR (2003-2004)
Cheyenne Mountain Charter Academy	✓	✓	✓	✓	✘	✓	Excellent
Liberty Common Academy	K-9	✘	✓	✓	✓	✓	Excellent
Littleton Academy	✓	✓	✓	✓	✓	✓	Excellent
Cesar Chavez Academy	✓	✓	✓	✓	✓	✓	Excellent
The Classical Academy	K-12	✓	✓	✓	✓	✓	Excellent
Colorado Springs Charter Academy	✓	✓	✓	✓	✓	✓	

This combination of characteristics has been shown to be effective for diverse populations, regardless of, for example, the degree of participation in a free and reduced lunch program. Recognizing that no school in District Eleven implements all of these practices, we are confident that regardless of the makeup of the population we are eventually able to attract, our unique combination of practices will prove effective.

Curricula, Delivery, and Evaluation

This section describes Colorado Springs Charter Academy's curricular choices, how students and the school will be held accountable, and the philosophy that underpins the Academy's existence.

D. Educational Program

Our projected educational agenda in brief is a K-8 facility emphasizing parental involvement, with uniforms, teaching the Core Knowledge curriculum in a longer school year, and offering world language and character instruction. These, and our visionary program for reading-disabled children (page 26), offer a unique combination structured to challenge potential students and propel them to higher than expected levels of attainment.

I. Students to be Served

Colorado Springs Charter Academy proposes to open as a kindergarten through sixth grade school in the fall of 2005, with the intent of adding grades seven through eight at the rate of one grade each year thereafter. A content-rich, rigorous curriculum will be offered to our students, and high academic standards will be the foundation of our program.

We propose to open Colorado Springs Charter Academy within the District Eleven boundaries. After examining the CSAP scores of the students who live in this school district, Colorado Springs Charter Academy intends to focus heavily on literacy and mathematics, and will have intervention programs and strategies available for challenged learners. We intend to employ a "catch up and keep up" philosophy, wherein lagging students are brought to grade level and given the resources and attention to maintain academic excellence. The Core Knowledge curriculum we will employ is designed to be effective regardless of prior achievement levels, and is effective at closing achievement gaps. Of course if our ultimate student population differs from our projections, we reserve the right to alter focus to better serve that community.

Likewise, there could be several reasons why we might change the curricular choices identified in this application. As a result of the Academy' continuous improvement reviews, any of the following might arise: 1) new scientific evidence, 2) changes to what are considered best practices, 3) a proven decline in effectiveness for a given program, 4) a substantial change in a product such that it no longer supports our mission, or 5) the appearance of scientifically proven better products on the market.

Parent involvement is a high priority for Colorado Springs Charter Academy. While parents will be asked to volunteer time and resources to the school, we also hope that the Core Knowledge Sequence will involve parents in their children's academic program and success. Core Knowledge outlines each child's curricular path, and thus parents will be informed of where their children stand academically and where their children will go in years to come.

Projected Enrollment

The Academy intends to offer grades K-8, opening in year one as a K-6 school, with plans to add 7th grade in year two, and 8th in year three. This organic growth model is depicted in Table 12: Projected Number of Classes, by Year, below.

Table 12: Projected Number of Classes, by Year

Grade	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
K	2	2	2	2	2	2
1	1	2	2	2	2	2
2	1	1	2	2	2	2
3	1	1	1	2	2	2
4	1	1	1	1	2	2
5	1	1	1	1	1	2
6	1	1	1	1	1	1
7	0	1	1	1	1	1
8	0	0	1	1	1	1
Total Students	**184**	**230**	**276**	**300**	**324**	**348**

These enrollment totals are based on an average class size of 23. Class size will be limited to approximately 22 in K-2 and approximately 24 in grades 3-8. Maximum enrollment allowed in any class will be 26.

Colorado Springs Charter Academy will consider accelerating these projections should community support prove sufficient.

II. Curriculum and Instructional Design

Outlined below are the key principles of our educational philosophy, which, together with our mission and core values, will guide our opening objectives and overall program.

- **CSCA will set high academic expectations and promote high academic achievement.** The administrator and teachers will use measurable goals to establish a culture of achievement. Required homework and a grading scale (see page 42) will reinforce academic achievement goals and will encourage students to practice and master the curriculum.
- **All children can learn in a supportive environment.** We believe that all students who are motivated and receive appropriate instruction and academic support are capable of high levels of learning. We have specified the knowledge and skills that we want all of our students to know and master, and thus a level playing field is built through curriculum and specific academic expectations. Highly qualified and dedicated teachers will work together with staff, parents, and leadership so that students are as successful as they can be.
- **Core Knowledge is the foundation of our educational philosophy.** Colorado Springs Charter Academy will implement the Core Knowledge Scope and Sequence to provide students with a content-rich curriculum that leads to "cultural literacy." The Core Knowledge curriculum will provide the best educational opportunities for *all* Colorado Springs Charter Academy students, and will prepare them for the expectations of the next grade level.
- **Literacy is essential and a gateway to success in all other subjects, and in life.** An intense focus will be upon developing literacy in our students at a very early age. We will plan extended blocks of time dedicated to literacy instruction. Systematic phonics will be

the tool used to teach students to read and spell. Students must first learn to decode and then to read for comprehension in order to grasp the content-rich curriculum.

- **CSCA will address character, respect, citizenship, and responsibility as part of its curriculum.** Character education will be woven into the existing curriculum so that students recognize modeling of good character within the context of what they are already studying. Students will become productive and responsible citizens both at school and in their communities.
- **Self-esteem should be derived from true academic achievement.** Colorado Springs Charter Academy recognizes that self-esteem comes with accomplishment and achievement. Self-esteem is earned, not given; therefore, we will provide opportunities for personal growth through academic achievement.
- **Differentiation enables all students to be appropriately challenged and better meets students' needs.** Language arts and math will be taught in differentiated groups (at least two per grade level) so that accelerated students will be able to move ahead and receive added curricular enrichment, and challenged students will receive the support they need to meet district and state standards. Teachers will also be expected to differentiate when possible in other subjects.
- **Student success is more likely when parents participate in the life of the school and when the school actively elicits parent support and involvement**. Parents must support the overall philosophies of the school, and work to support their children in their academic endeavors.
- **Class size will be limited.** Smaller class size allows for more individualized attention and instruction. Instructional assistants will help students on an academic basis as well.
- **Effort is directly related to ability.** Time on task and in school directly affects student achievement. Colorado Springs Charter Academy will have a longer school day (see page 40) and a slightly longer school year than most District Eleven schools.
- **Spanish and Latin instruction will be taught.** World language instruction is an important part of a liberal arts education. In addition, research proves that children can learn a world language much more rapidly than adult learners. To capitalize on this fact, Colorado Springs Charter Academy students will be taught Spanish on a weekly basis starting in grades kindergarten through eighth grade. At higher grades, a Latin curriculum will be introduced as well.
- **Discipline will be appropriately enforced by the administrator and teachers.** A school-wide discipline plan will be implemented consistently by all staff members of Colorado Springs Charter Academy to reduce distractions and promote focused learning. School uniforms are part of this plan to encourage an orderly, structured learning environment.

General Instructional Methods and Practices

Instruction at Colorado Springs Charter Academy will be differentiated and modified to meet the academic needs of all students. We realize that students will come to Colorado Springs Charter Academy with varying levels of skills and background knowledge, and we plan to accommodate those differences through differentiation. In the differentiated classroom, our teachers will use grade level benchmarks and standards as one way to monitor students' progress, in addition to considering the individual growth of each student.

While all teachers will be held accountable for student mastery of the Core Knowledge content and state and district standards, Colorado Springs Charter Academy believes that a "one size fits all" approach to instruction is not the most effective way to teach children. A perfect example of this is if a teacher is covering the Civil War, students are asked to read a biography that constitutes as an example of literature from the Civil War era. However, the titles of the books are at varying reading levels. Students get the content, but are reading at their instructional level. Additional programs to supplement and meet the needs of our students in reading, writing, and math will be purchased or developed when those needs are determined through assessment and observation.

In language arts (reading, writing, grammar and spelling) and math, differentiated grouping will be used to meet students at their readiness levels and then to teach the appropriate skills and concepts at their respective levels. There will be at least two differentiated groups per grade level. Because of this differentiated grouping, all students in the school will be studying language arts and math at the same time. This will allow teachers the flexibility to move students in and out of differentiated groups as needed, and even between grade levels. Frequent assessment will inform the teacher as to whether the student will need to change groups or not.

Most of the concepts in this section are gathered from *Leadership for Differentiating Schools and Classrooms* by Carol Ann Tomlinson[1] and "Differentiating Instruction: Finding Manageable Ways to Meet Individual Needs" by Scott Willis and Larry Mann.[2]

K-8 Configuration

Colorado Springs Charter Academy is designed to serve students from kindergarten through 8th grade (K-8). Begun in the 1970s, this once-standard configuration had given way to a model of K-5, followed by a 6-8 middle school—a trend which has lately begun to reverse.[3] The K-8 configuration serves especially those parents eager for their children to remain in neighborhood schools after the elementary grades. The thinking is that these children can make the transition to grades 6 and beyond easily in the familiar and less stressful atmosphere of a school that knows them and their families.

Research holds this to be true. Achievement losses are noted in the transition from elementary school to a 6-8 middle school, but are absent in an integrated K-8 model. Furthermore, students transitioning from middle school to high school experience a more pronounced achievement loss than student from a K-8 school.[4] Noting this, Philadelphia schools superintendent Paul Vallas called failing to shift most middle-grade pupils to K-8 schools "the equivalent of educational

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[1] Tomlinson, C.A., and Allan, S.D., *Leadership for Differentiating Schools and Classrooms*, Association for Supervision and Curriculum Development, Alexandria, VA, 2000.
[2] Willis, S., and Mann, L., "Differentiating Instruction," *Curriculum Update*, Association for Supervision and Curriculum Development, http://www.ascd.org/ed_topics/cu2000win_willis.html, Alexandria, VA, Winter 2000.
[3] Bowler, M. (2004) *Middle school goes the way of junior high. Cities: Many districts, including Baltimore, are discarding the 1970s invention and turning to K-8 facilities.* Baltimore: Baltimore Sun. (June 4).
[4] "Achievement loss associated with the transition to middle school and high school," Alspaugh, John W. *The Journal of Educational Research*, v 92 n 1, Sept/Oct 1998, p. 20-25.

malpractice."[1] Hayes Mizell, a middle school reform expert and Distinguished Senior Fellow of the National Staff Development Council, agrees. "It is not learning, but control of students that sets the school's agenda," he says.[2]

One strong argument in favor of K-8 schools is that more students are more well known by more adults. Especially for at-risk students, this gives greater opportunities for success by allowing them to build relationships with staff over a course of nine years. Less alienation of students naturally follows. Not only are students more familiar to staff, but they are much more likely to attend with another family member. Older children with younger family members attending the same school take on the part of protector, tutor, and role model. With multiple students attending, parents are also more likely to stay connected to the school longer, and for Colorado Springs Charter Academy, this parental involvement is vital.

What's especially true for the Academy is that a K-8 school can incorporate a distinct, rigorous, and developmentally appropriate middle grades program within a K-8 grade span. For us, this means continuing the Core Knowledge curriculum in a proper environment of high expectations and exemplary character.

Core Knowledge

The Core Knowledge movement is an educational reform based on the premise that a grade-by-grade core of common learning is necessary to ensure a sound and fair elementary education. The movement was started by Dr. E. D. Hirsch, Jr., author of *Cultural Literacy* and *The Schools We Need*, and is based on a large body of research in cognitive psychology, as well as a careful examination of several of the world's fairest and most effective school systems. Dr. Hirsch has argued that, for the sake of academic excellence, greater fairness, and higher literacy, early schooling should provide a solid, specific, shared core curriculum in order to help children establish strong foundations of knowledge.[3]

We agree, and have chosen Core Knowledge as the backbone of our educational program. We align with approximately seventy other Colorado schools, and hundreds of schools nationwide, in embracing this core curriculum.

Expected Results

The Core Knowledge Sequence, when comprehensively implemented in a school program, should produce two significant results. First, because the Sequence presents a challenging body of specific content designed to build cumulatively throughout children's elementary and middle school years, children should steadily **gain important knowledge** widely shared by educated Americans (cultural literacy). Secondly, especially for children whose circumstances preclude the extra learning that goes on outside school in advantaged families, the Sequence should help

[1] Edney, H. (2004) *Black students still struggle in post-Brown era.* The Louisiana Weekly. (May 31).
[2] House Editorial. (2004) *Stuck in the Middle With Schools: Studies suggest children do better in a K-8 setting.* Altlanta: The Atlanta Journal-Constitution (July 31).
[3] E. D. Hirsch, Jr., *The Schools We Need and Why We Don't Have Them*, an Anchor Book: Doubleday, New York, 1999.

narrow the achievement gap in academic performance between children from well-off and disadvantaged homes.

These two key expected results are borne out by data from an increasing number of qualitative and quantitative studies of Core Knowledge schools.[1] These studies generally indicate that Core Knowledge has a positive effect both on overall student performance and on narrowing the equity gap.[2]

Supplementary Curricular Choices

Colorado Springs Charter Academy, in accord with the design of the Core Knowledge Sequence, plans for CK to comprise over half of our school's curriculum. This design acknowledges the strong correlation of the Core Knowledge Sequence to the Colorado Model Content Standards for Grade Level Expectations.[3] The complete alignment of these standards is included as the very substantive Appendix H: Core Knowledge Standards Alignment, and is available online as well.[4]

Appendix D: Core Knowledge shows the specific CK Scope and Sequence that the Academy plans to implement in grades kindergarten through eight. As described in the sections that follow, the Core Knowledge series will be complemented by the Saxon math series, Open Court reading, Shurley English, Step Up to Writing, and 6+1 Trait™ Writing.[5] Completing the curriculum will be world language, character education, art, and music study.

Supporting Arguments

The following points further explain why Colorado Springs Charter Academy has selected Core Knowledge to be the best curricular underpinning for this proposed school. As the references show, most of the information below is taken from *The Schools We Need and Why We Don't Have Them*:

- The CK Sequence consists of knowledge requirements that students should know to participate fully and effectively in the classroom and the outside world. A classroom's fairness depends upon a shared knowledge that its students possess. This helps students communicate with teachers and other classmates. E.D. Hirsch states, "To the extent that lack of relevant knowledge keeps some students from comprehending today's lesson, it will cause them to fall even further behind in comprehending tomorrow's."[6]
- The CK Sequence provides a framework for background knowledge to be continuously built upon. If some students do not have this necessary background knowledge to build

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[1] *Results at Core Knowledge Schools: Improving Performance and Narrowing the Equity Gap.* Core Knowledge Foundation, http://www.coreknowledge.org/CKproto2/about/eval/EvalPktRpt.htm, Charlottesville, VA, 1998.
[2] *The Newsletter of the Core Knowledge® Foundation*. Volume 17, Number 1, January/February 2004.
[3] *Colorado K-12 Academic Standards & Suggested Grade Level Expectations*, Colorado Department of Education, http://www.cde.state.co.us/index_stnd.htm, Colorado, 2004.
[4] *Core Knowledge Standards Alignment*, National Core Knowledge Coordinator of Colorado, http://www.ckcolorado.org/stalignment/Align_complete.pdf, Colorado, 2004.
[5] Throughout this application, where 6+1 Trait Writing is mentioned, the ™ is implied, with concomitant trademarks applicable to Northwest Regional Educational Laboratory, Portland, OR.
[6] Hirsch (1999), op. cit., page 14.

upon, and the class needs to move on, some students are hopelessly left behind. On the other hand, if the teacher needs to back up and fill the gaps of this background knowledge, then the progress of the class will move slowly for better-prepared students. Therefore, a common thread of knowledge that is taught at certain grade levels aids the teacher in effectively pacing his or her instruction.

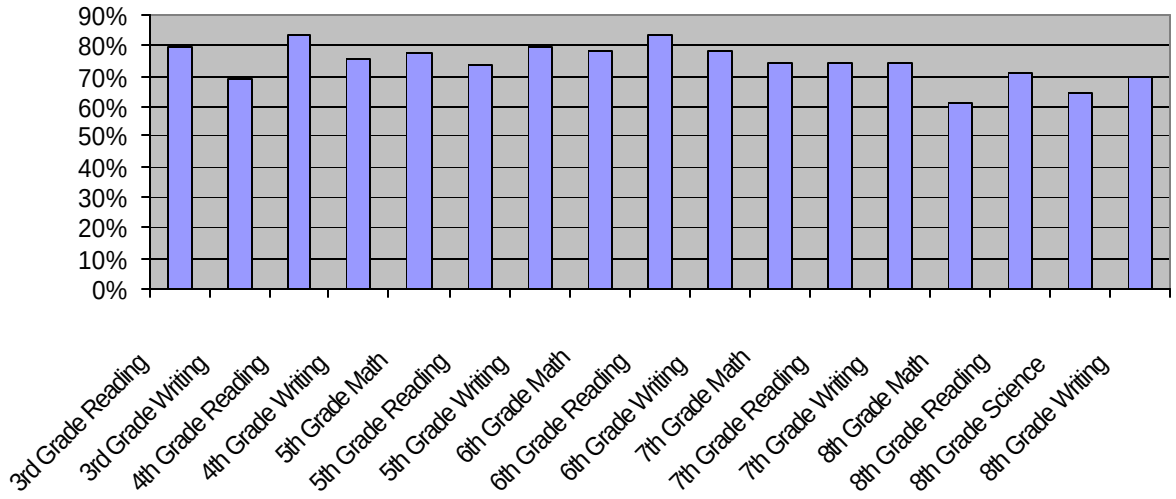
- CK encourages children to learn, and sparks an innate curiosity in them. Children naturally want to build off what they already know. Sandra Scarr, a child psychologist offers this example: "A child walks into the school library and sees a book called *Exploring the Nile*. She says to herself, 'I've already learned something about the Nile. Let's see what this book has to say'".[1] However, if a student has never heard of the Nile or studied Africa, that child is likely to simply pass by the *Exploring the Nile* book without even giving it a second thought. Hirsch proposes that Core Knowledge provides *all* students with the advantage of exposure to a wide knowledge base, not just advantaged ones who learn in the home and have "curiosity hooks" to hang new knowledge upon. CK schools can level the playing field.
- CK offers a coherent and specific plan that builds year by year. Instead of teaching just general subjects in certain grades, such as Rocks and Soil in third grade, or Simple Machines in fourth grade, using the CK sequence, teachers can cover particular topics within larger ones. These topics continue to be developed in later years. The specificity of the CK Sequence ensures that gaps or repetitions in instruction do not occur.
- CK provides a model for teacher-directed instruction rather than learner-directed instruction. With learner-centered instruction, one student is often given attention at one particular time, but the rest of the students are not. Teacher-directed instruction ensures that all students in the classroom are receiving attention.
- Developing more knowledge facilitates critical thinking. Critical thinking happens when we make estimates, inferences, and hypotheses based upon the knowledge we already possess. Teaching students "how to learn" and "to think critically" in the abstract is not effective. CK provides a knowledge base from which students can then begin to think critically and recognize connections.
- CK ensures that a rich, relevant learning experience is offered at an early age. Learning builds upon prior learning. If rich learning experiences are offered at an early age, learning at a later age becomes easier and more durable. At Colorado Springs Charter Academy, we take the philosophy of "the earlier the better."
- CK integrates the arts into the curriculum—it is not an "additive." Often the result of the pressures of training students adequately in literacy and mathematics means forfeiting quality art and music instruction. The CK Sequence recognizes that the arts are not on the periphery of the curriculum, but are an integral part of providing students with a complete cultural context.
- Implementing the CK Sequence is an attempt at closing the fairness gap between students of different social classes. E.D. Hirsch explains that the fairness gap between our students of different social classes widens each successive grade level in American schools.[2] The CK Sequence provides for a core curriculum that encourages grade readiness for all

[1] Ibid., page 26.
[2] Ibid., page 226.

children, and was originally designed to promote fairness in urban situations and thus provide a solution to the increasing social injustice in our schools.

Core Knowledge schools in Colorado generally outperform the state averages in regards to CSAP scores. The following graph, which uses data compiled from the Colorado Department of Education and the National Core Knowledge Coordinator of Colorado, depicts this correlation.

Figure 2: Percent of Core Knowledge Schools Scoring above State Average



Please refer to the Supporting Research section *Core Knowledge* on page 102 for research on the success of Core Knowledge provided by the National Core Knowledge Foundation.

Language Arts: Reading

A strong reading program will be a cornerstone of Colorado Springs Charter Academy. We plan to break out into multiple, small reading groups during our reading time. We will schedule these classes at the same time in all grade levels to allow for the most effective differentiated grouping. Children will be grouped by ability, not age. Ongoing assessment will ensure that children will move between groups as their progress dictates.

It will not stop here, however. Several of the founding members have children with reading disabilities and have seen firsthand how poorly the average public school supports these children. Sadly, national longitudinal studies show that more than 17.5 percent of the nation's children—about 10 million children—will encounter reading problems in the crucial first three years of their schooling.[1] Further studies suggest that approximately 75 percent of students identified with reading problems in the third grade are still reading-disabled in the 9th grade.[2]

[1] National Reading Panel (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* [on-line]. http://www.nichd.nih.gov/publications/nrp/smallbook.htm.
[2] Shaywitz, S. E., Escobar, M. D., Shaywitz, B. A., Fletcher, J.M., & Makuch, R. (1992). Distribution and temporal stability of dyslexia in an epidemiological sample of 414 children followed longitudinally. *New England Journal of Medicine, 326*, 145-150,

At Colorado Springs Charter Academy, our vision is to craft a reading program that will challenge and excite the gifted reader, but which will also identify and support the reading-disabled child. To that end, we have crafted a three-tiered reading program: one for our general, non-disabled population, and two for the reading-disabled population we hope to attract to our school. All children's reading ability will be assessed when they enter the school, and used to place the students into ability-based reading groups.

To craft a plan for our struggling readers, we have consulted with, and are continuing to consult with, renowned researchers, diagnosticians, and specialists in the area of reading disabilities to learn how to best structure our reading program for this student population. Experts consulted include Dr. Marge Riddle, who is the clinical supervisor for the Developmental Neuropsychology Clinic at the University of Denver, and who has extensive experience in the identification of children with reading disabilities. We have also consulted with Dr. Barbara Wise, president of *Remedies for Reading Disabilities, Inc.*, and research associate at the Center for Spoken Language Research at the University of Colorado. Dr. Wise has extensive research credentials in the area of reading disabilities, she maintains an active practice where she works one on one with reading-disabled children, and she has lectured and written extensively on issues related to children with reading disabilities. Of note, she has lectured and written on how to recognize and help reading-disabled children in the schools, and how to implement a long-term remedial reading study in the public schools. Both of these experts, combined with the expertise of reading consultant Avivah Polmer, have contributed to the vision we have for our school.

Assessments

In addition to assessment pieces embedded in our core reading programs, Colorado Springs Charter Academy will utilize other assessment programs such as the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment tests. These assessments are a set of standardized, individually administered measures of early literacy development. They are designed to be brief (one minute) fluency measures used to regularly monitor the development of pre-reading and early reading skills.

The DIBELS assessments measure student development of phonological awareness, alphabetic understanding, and automaticity and fluency with the alphabetic code. These essential early literacy domains were discussed by the National Research Panel[1] and the National Research Council,[2] and demonstrated to be reliable and valid indicators of early literacy. As well, they are predictive of later reading proficiency, and thus useful to aid in the early identification of students who are not progressing as expected.

For those children who are having unexpected difficulties with reading, funding permitting, we will suggest additional assessment tests to try to pinpoint the cause of their reading difficulties. To offer the most options in this area, we are applying for multiple, specific grants targeted at

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and Francis, David J., and Others. (1996). Developmental Lag versus Deficit Models of Reading Disability: A Longitudinal, Individual Growth Curves Analysis. *Journal of Educational Psychology, 88*, 1, 3-17.

[1] National Reading Panel (2000), op. cit.

[2] National Research Council (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

creating effective strategies for troubled readers. Additional assessment tools we are considering include CTOPP (Comprehensive Test of Phonological Processing), subtests of Woodcock Johnson, the Gray Oral Reading Test, and cognitive assessments.

Reading Program: Tier 1

For our general, non-reading-disabled population, Colorado Springs Charter Academy has chosen *Open Court Reading* as its core reading program, to be supplemented with other programs as needed. We have chosen *Open Court* for the following reasons:

- *Open Court* is research-based. This program was originally created based upon researched techniques that worked. The authors and researchers of *Open Court* continue to research the program and have monitored its progress in improving classroom instruction and achievement for nearly 40 years. Through this extensive field research, *Open Court* has been able to incorporate important findings to strengthen the program. A summary of this research is set forth in the Supporting Research section of this document titled *Open Court Reading* on page 117.
- *Open Court* is structured to teach children through a systematic scaffolding of skills that build upon one another. Each lesson plan essentially holds to the same pattern: first, it introduces reading skills including phonemic awareness, phonics, and word knowledge skills. Next, *Open Court* uses literature to demonstrate and practice reading skills and comprehension. Students engage in inquiry and investigation, and students learn how to generate questions about the text and find answers. Lastly, the focus shifts from reading to expressing ideas through writing. Like the philosophy behind the Core Knowledge Sequence, *Open Court* teaches students in a spiral-like fashion, and skills are constantly revisited and developed.
- *Open Court* is carefully paced and teacher directed. Since the *Open Court* program guides explicit, teacher-directed instruction, there is consistency in what and when skills are being taught across grade levels and groups.
- *Open Court* is phonics-based.
- *Open Court* allows for and supports differentiation, the recognition of varying types and levels of learners. These are resources within each lesson that address the needs of English Language Learners (ELL), those that need reteaching, and those that are working above grade level.
- A variety of tools are embedded in the program beyond the basal. *Open Court* provides a wide variety of textbook materials including readers, decoder texts, phonics packages, writing books, practice books, "Big books", and teacher support materials. The anthology for literature selections is rich and includes a variety of genres.
- *Open Court* includes a variety of assessments to be used frequently and diagnostically. There are whole program assessments (pre-, mid-, and post-tests), and unit assessments that monitor oral fluency, writing, spelling, vocabulary, listening, grammar, and comprehension. Finally, there are diagnostic tests for placement in reteaching, intervention, challenge, and ELL groups. Additional teacher rubrics and record templates are available as well.

Reading Program: Tier 2

Through the use of DIBELS and other indicators (such as children not reading at grade level when entering our school), we hope to identify and support reading-disabled children at the earliest possible time. Our second-tier reading program is anticipated to serve those who are not progressing satisfactorily under the Open Court reading program. In the second tier, students will be taught in a 1 teacher to 4 student ratio, using an Orton-Gillingham-based, multi-sensory, remedial reading program such as Wilson Fundations or other similar program. Any program selected will utilize a multi-sensory approach involving phonemic awareness, phonics, phonological processing, and sequential, repetitive and incremental curriculum. Supporting research for using this approach is included in the Supporting Research section titled *Orton-Gillingham Method* on page 130. We will also be exploring the use of assistive technology for our reading-disabled population.

Recognizing that early intervention leads to faster and more effective remediation, we will also plan on screening our kindergarten students in November for alphabet and phonological awareness. If any candidates are identified as needing Tier 2 intervention, we will then shift them to the 1-on-4 teaching model identified above. With these children, we will provide an additional 20 minutes per day of phonological work to reach, at a minimum, CVC (consonant-vowel-consonant) words by the end of kindergarten. By working with our student population at the earliest possible time, we believe that over time the ratio of students in either Tier 2 or Tier 3 of our reading program will decrease.

Reading Program: Tier 3

The final component of our reading program will be geared towards the very small percentage of students who do not progress satisfactorily under the second-tier approach outlined above. Tier 3 would involve the same type of remedial, multi-sensory approach outlined above, but with one-on-one instruction and additional time spent on reading. We would anticipate that intensive instruction for this student population might encompass 60 to 90 minutes per day. It is possible that parents or guardians of children in Tier 3 may need to provide additional support to the student beyond what the Academy will be able to provide. We do pledge to support these children to the best of our ability, while recognizing the financial limitations we might have fulfilling our obligations to all the students entrusted to us.

Language Arts: Writing

At Colorado Springs Charter Academy we believe that students will struggle at expressing themselves via the written language if they do not understand the structure of our language, how to organize their ideas, and how to make their writing accurate and interesting. To prepare our students for excellence in writing, we have determined that a combination of three different programs will best meet this goal. Those programs are *Shurley English* (Shurley Instructional Materials, Inc.), *Step Up to Writing* (Sopris West), and *6+1 Trait Writing*.

Shurley English

Through *Shurley English*, our students will learn to identify basic parts of speech, will learn how to compose a grammatically correct sentence, and will reinforce these skills through both classroom and individual work. We believe that *Shurley English* will reach all of our students because of its "see it, hear it, say it, do it" methodology. These activities reach all learners: visual, auditory and kinesthetic. Our students will be able to diagram sentences after exposure to *Shurley English*—a sometimes forgotten skill in public education.

Step Up to Writing

Step Up to Writing is a collection of multi-sensory, logically organized, "teacher friendly" strategies that improve the writing skills of kindergarten through post-secondary-grade students. We have chosen *Step Up to Writing* for several reasons:

- The *Step Up* program is organized in a way that is consistent with the Colorado Springs Charter Academy's philosophy regarding effective teaching methods. *Step Up* provides direct instruction and modeling by the teacher, guided practice, and then independent practice by the students.
- *Step Up* is teacher friendly, in that they provide substantial tools for teachers to teach diverse groups of students how to write. Maureen Auman (founder, *Read-Write Connection* and *Step Up to Writing*) explains that by using *Step Up to Writing*, teachers can move from "theory about writing to concrete 'how to' strategies and practical tools."[1]
- *Step Up to Writing* is a multi-sensory approach to teaching writing. Different learning styles are addressed when students use folded paper, color, lists of words, informal outlines, and other methods to form sentences, paragraphs, essays, and the like.
- *Step Up to Writing* teaches the students how to pre-write and plan, how to draft, revise and edit. Finally, the student will produce a final, proofread document.
- As with *Shurley English*, students will be required to practice and master many different forms of writing: paragraphs, summaries, letters, essays, reports, creative pieces and responses, to name some. Students will be exposed to such a wide variety of writing forms because we believe strongly that our students should be able to respond competently, in writing, to whatever task might present itself as they move forward through school and beyond.

6+1 Trait Writing

The final piece of our writing curriculum will be *6+1 Trait Writing*. This program, already utilized in some District Eleven schools, identifies common characteristics of good writing and synthesizes them into seven identifiable areas: ideas, organization, voice, word choice, sentence fluency, conventions, and presentation. We believe that *6+1 Trait Writing* will benefit our students for the following reasons:

[1] Auman, Maureen. *Step Up To Writing*, Sopris West, Longmont, CO, 1999.

- *6+1 Trait Writing* provides a framework within which students will learn how to organize and effectively present their writing.
- *6+1 Trait Writing* is flexible enough that teachers will be able to make adaptations to their writing instruction so as to meet the different needs of their students.
- Once teachers are trained in scoring criteria, the students will experience a consistent, school-wide set of expectations regarding their writing. These expectations will be high, and we will provide our students with the tools to meet these expectations.

Writing Program Synthesis

These three literacy-based programs, in conjunction with the Open Court Reading Series, were chosen by CSCA for the cohesive, embedded, and parallel instructional structures that ensure success for all students. As indicated by Table 13: Writing Program Comparisons, below, these writing and mechanics programs work cooperatively to reinforce foundational skills required for success in the core reading programs as well as all other subject areas.

Table 13: Writing Program Comparisons

	Shurley English	Step Up to Writing	6 +1 Trait Writing
Framework Concepts	Teaches connected, integrated concepts so students always have a clear picture of how to write complete sentences.	Uses multi-sensory techniques. Students are taught in small groups for organization of ideas. Teaches formal outlining.	Identifies common characteristics of good writing that are the framework for the six-trait analytical model.
Skill Mastery	Provides enough repetition to master each concept taught, using daily practice of old skills while new skills are being added.	Traditional grammatical conventions and writing genres are taught explicitly.	Creation of rubrics and barometers of good writing add to the students' personal writing toolboxes.
Writing Composition	Students are taught how to merge a strong skill foundation with writing. Teachers spend less time reviewing, and more time introducing and enhancing advanced grammar and writing.	Teachers model good compositional writing for students. The program invokes both collaborative writing and independent practice.	The Six Traits can and should be applied at all levels of proficiency and intricacy of the writing process.
Varying Achievement Levels	Successfully teaches language skills to students with different learning abilities and to students who learn English as a second language.	The skills acquired are applicable and attainable for English Language learners, and can be earnestly used to build skill sets.	The Six Traits are the basis for the criteria used to define the qualities of good writing at different levels of achievement.
Higher-Level Thinking	Students use their grammar and writing skills automatically, leading to higher-level thinking skills. Students are stimulated to learn and use their own thought processes to solve difficult language problems.	Students are taught skills to detect textual skills (i.e. For syntax, parallel structure).	Through direct instruction of the foundations of good writing, teachers lead students to more intricate writing models, building on the basic models used to first learn the craft.
Foundational Skills	Students gain confidence in English, and can carry this improved attitude into other subject areas as well.	This program can be considered foundational and fundamental for all subjects.	Used by teachers of math, science, social studies, world language, art, music—anyone for whom writing is an important part of instruction.

Math

Student achievement in mathematics in the United States, both as shown by national and international tests of math ability, is not good. As documented by Dr. Tom Loveless, director of

the "Brown Center on Education Policy" at the Brookings Institution,[1] students lost ground during the 1990's in most computational skills. He documents the following reasons why good computational or arithmetic skills are essential if students are to be successful at higher level mathematics:

- Basic skills are equalizers for all children. Dr. Loveless tracked the black-white achievement gap, which expanded in every computation skill area in the 1990's, and noted that "this is typical of what happens when basic sills are shortchanged. The students who pay the biggest price are those with the least to lose—those for whom the educational system has never worked very well. When basic skills are not taught, the least privileged in our society—those who cannot afford tutors, fancy computer programs, or academic summer camps—suffer the most."
- Basic skills are essential if our children are going to succeed in more advanced mathematics.

We believe that it is essential to the future success of our students to provide them with a mathematics curriculum that emphasizes the learning, and fluency, of basic arithmetic skills as the first building block towards successful completion of more advanced and challenging mathematics. With this goal in mind, we have chosen Saxon Math as the program we will be implementing at Colorado Springs Charter Academy.

Saxon Math provides incremental development, continual practice, building off prior knowledge, and frequent, cumulative assessment. Research shows the following:

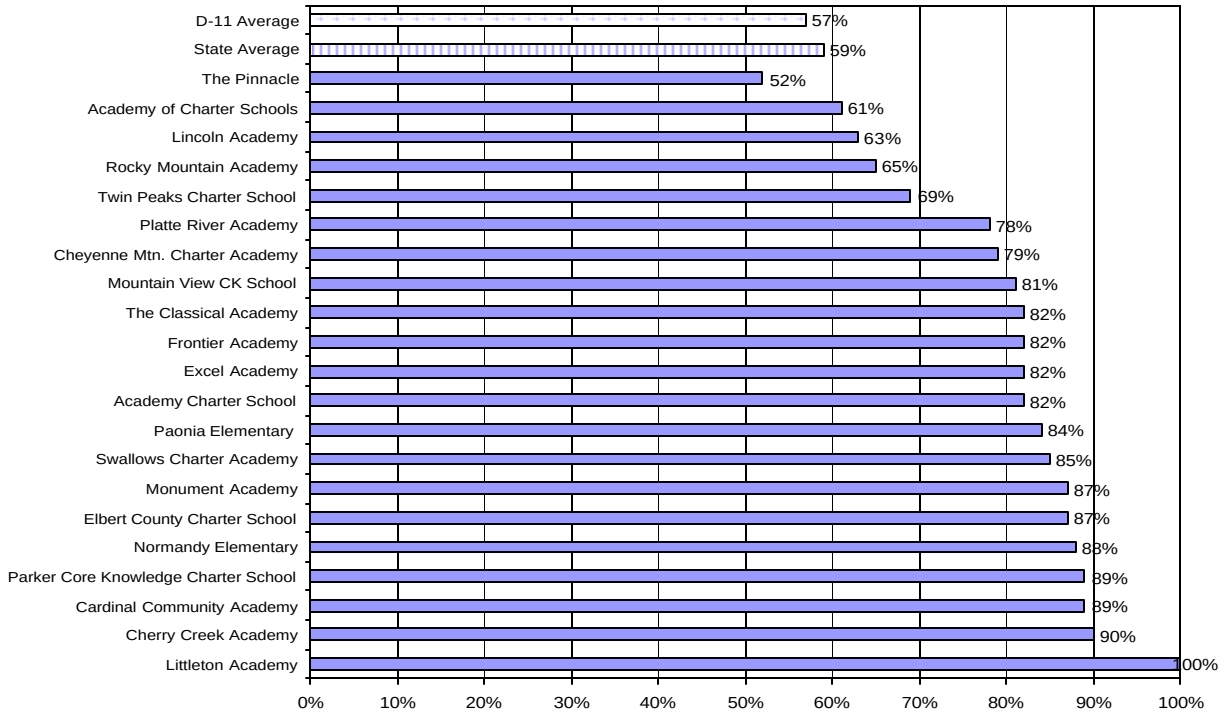
- The program is based on introducing a topic to a student and then allowing the student to build upon that concept as they learn new ones.
- Topics are never dropped but are instead increased in complexity and practiced every day, providing the time required for concepts to become totally familiar. This technique is called both spiraling and scaffolding.
- This incremental approach to math differs from most traditional programs, which are "chapter-based." In these traditional texts, students are presented with and expected to learn an entire mathematical concept in one day. The homework for that day consists of twenty or thirty problems, all of which deal with that concept. The topic is then only reviewed prior to a test, if at all.
- Saxon textbooks, however, divide concepts into smaller, more easily grasped pieces called increments. A new increment is presented each day and students work only a few problems involving the new material. The remaining homework consists of practice problems involving concepts previously introduced. Thus, every assignment (and every test) is a cumulative review of all material covered up to that point.
- Saxon is structured so that the teacher provides direct instruction, the students are guided in practice, and then are monitored in independent practice.

[1] "Trends in Math Achievement: The Importance of Basic Skills," delivered to the Secretary of Education's Mathematics Summit in Washington, D.C. on February 6, 2003, by Tom Loveless, Senior Fellow, Governance Studies, Brookings Institution.

These features of Saxon Math track closely with the philosophy of Colorado Springs Charter Academy in that the curriculum provides incremental development, continual practice, building off prior knowledge, and frequent, cumulative assessment. Mastery of math facts will be encouraged at an early age.

Tests scores in Colorado show the success of the Saxon Math program, especially in conjunction with a Core Knowledge curriculum. The following four graphs depict this relationship dramatically. Each shows the percentage of students scoring "Proficient" or "Advanced" for all of the state's Core Knowledge/Saxon Math schools.[1] Included for comparison are the state and District Eleven averages for each respective grade.

Figure 3: Percent of Student Proficient and Advanced: 2004 5th Grade Math CSAP



We choose to neither indicate nor recognize the economic status of schools for test score comparisons, considering such labels demeaning at best. Instead, at CSCA we hold high expectations for all students, regardless of Free and Reduced Lunch status. Cesar Chavez Charter Academy is a fine example of this: 100% of their 3rd graders read at or above grade level yet 68% of the students are considered poor and at-risk. Therefore, we do not hold different achievement expectations based on poverty. Additionally, it is believed that Free and Reduced lunch rates are underreported for many charter schools for one significant reason: such schools are often in facilities without full kitchens or cafeterias, so there is no hot lunch program. If the incentive of receiving meals at a reduced or free rate does not exist, it is not as likely that parents

[1] As identified by the National Core Knowledge Coordinator of Colorado, http://www.ckcolorado.org/schlist/.

will fill out the complicated and time-consuming paperwork each year. Many charter schools are in non-conventional facilities that were not equipped with cafeteria facilities, like converted warehouses, churches, office space and modular units. On the other hand, nearly all traditional public schools offer hot lunch. Also, one must acknowledge that some impoverished parents do not want their children to be "labeled" poor, so they do not fill out the FRL paperwork. They may want to prevent teachers from holding lowered expectations for their students, they may feel the children will be stigmatized, or they may not want governmental handouts.

Figure 4: Percent of Student Proficient and Advanced: 2004 6th Grade Math CSAP

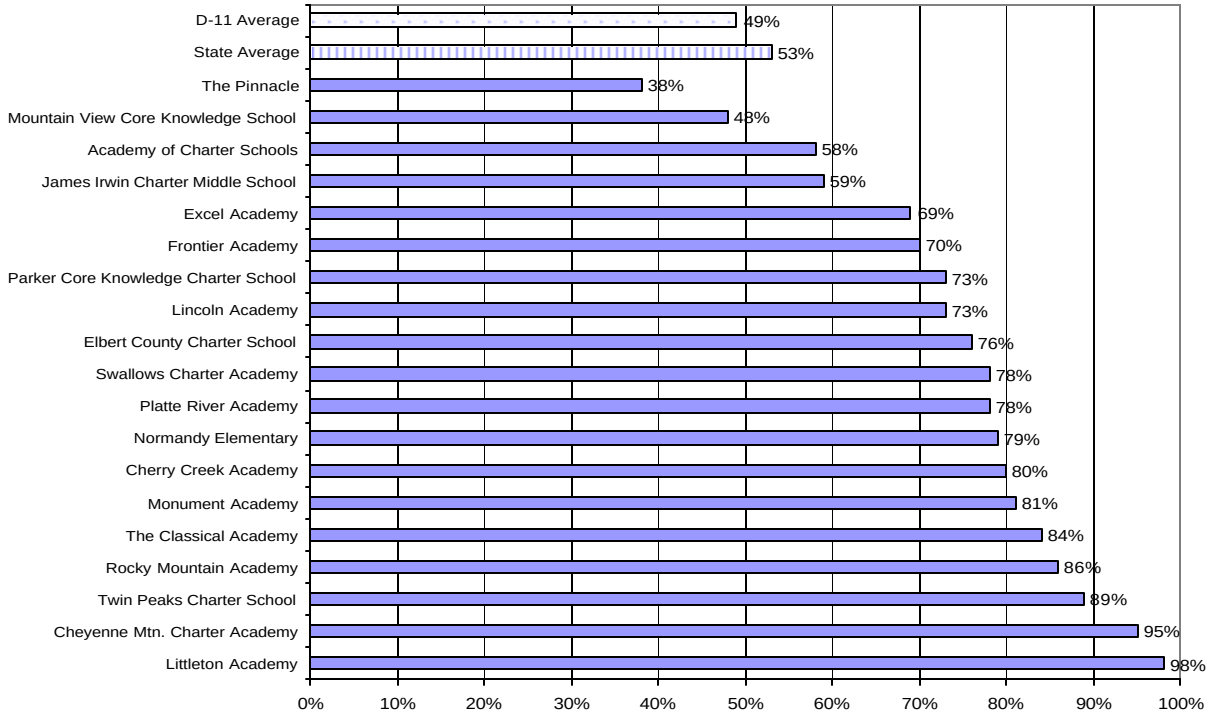


Figure 5: Percent of Student Proficient and Advanced: 2004 7th Grade Math CSAP

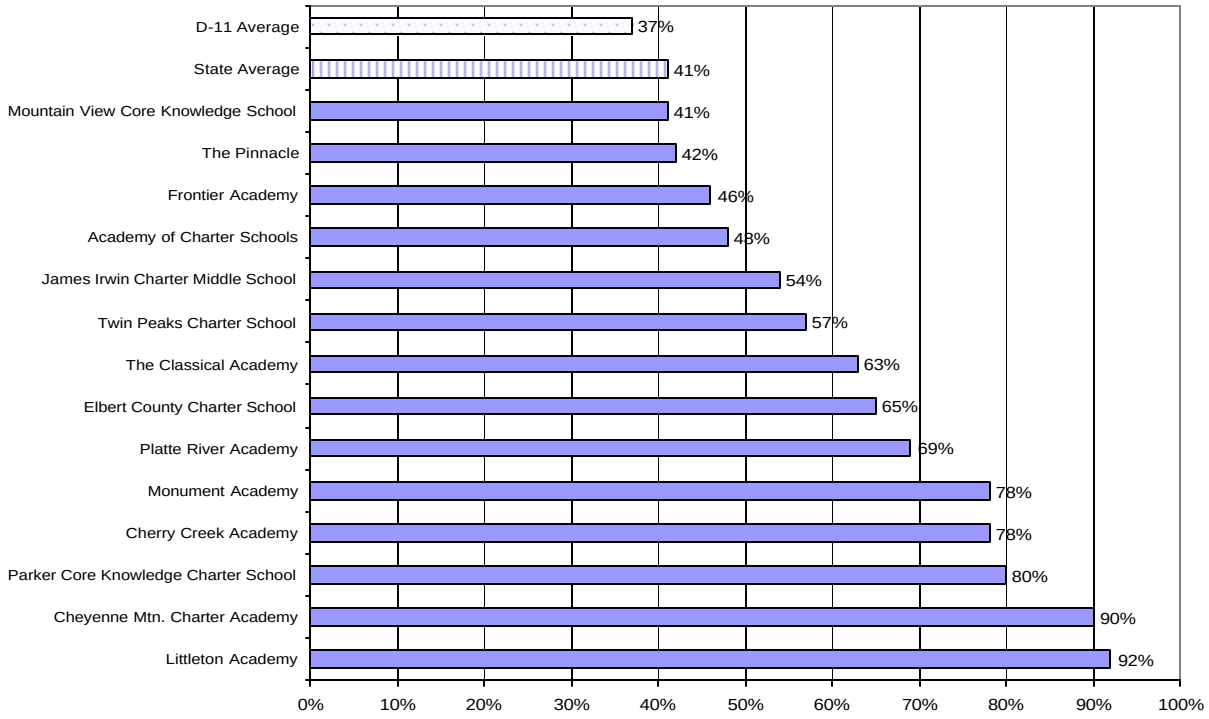
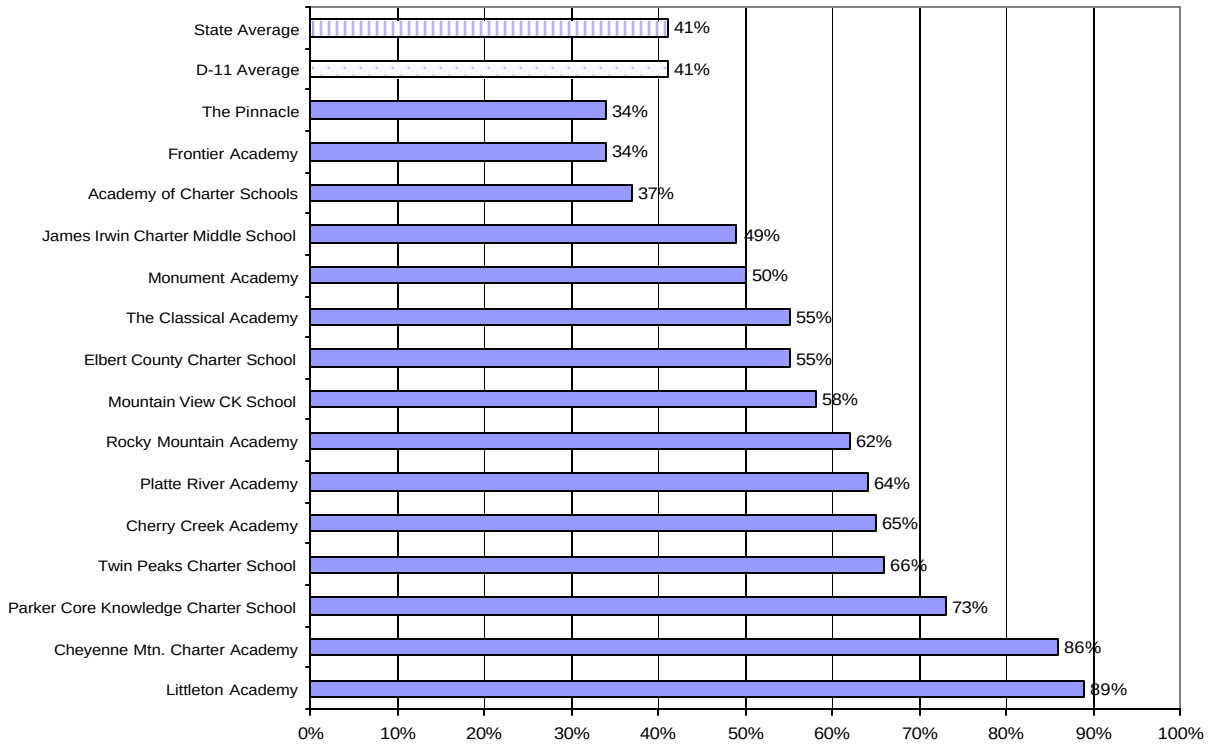


Figure 6: Percent of Student Proficient and Advanced: 2004 8th Grade Math CSAP



See the Supporting Research section *Saxon Math* on page 83 for further elaboration.

World Language

America trails the modern world by its inattention to world language study. Studying another language benefits the learner and society in general. Regardless of the language, benefits accrue to the world language student. For example, knowledge of more than one language, regardless of the language, leads to academic, cognitive, and cultural benefits. Students who speak more than one language perform higher than their monolingual counterparts on tests of academic achievement, cognitive flexibility, and creativity.[1] Students of world languages score statistically higher on standardized tests conducted in English, which is in itself not unexpected, but these students also increase their problem solving and math skills.[2] It is the study itself that has value, regardless of whether the language is Spanish or Swahili.

Even national and state agencies recognize the merit of language study, recently proclaiming 2005 to be the "Year of Languages" by the United States Senate, and the "Year of World Languages" by the Colorado State Board of Education.[3] In so doing, they acknowledged that language study leads to "increased cognitive skills, better academic performance, and greater understanding of the English language."

Additionally, by studying another language, students learn about other cultures and ways of life, thus expanding their world view. Especially when the language studied is Latin, this exposure recognizes the cultural foundations of western civilization, reinforcing the value of a classical education.[4] The benefits to society are many; the values to the students are clear. World language study merits space in the precious classroom time of Colorado Springs Charter Academy.

Uniforms

At Colorado Springs Charter Academy, our focus is to create the most effective learning environment: safe, serious, and free from external distractions. The adoption of school uniforms is in accord with this intent. Additionally, we mandate uniforms in order to:

- foster discipline;
- diminish peer pressure;
- reduce visible (to students and to teachers) status differences;
- promote unity; and
- reduce absenteeism, tardiness, and crime.[5]

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[1] Ginsburg, H. and I. McCoy (1981). An Empirical Rationale for Foreign Language in Elementary Schools. *Modern Language Journal*, 65, 36-42.
[2] Saxe, G.B. (1983). *Linking language with mathematics achievement: Problems and prospects.* Washington D.C.: National Institute of Education.
[3] *A Resolution: Concerning Proclaiming a Year of World Languages*, Colorado State Board of Education, adopted July 8, 2004.
[4] Masciantonio, R. (1977). Tangible Benefits of the Study of Latin: A Review of Research. *Foreign Language Annals*, 10;4.
[5] *Manual on School Uniforms*, U.S Department of Education, 1996.

Although school uniforms usually cost less than the clothing students typically wear to school, we anticipate offering financial assistance to any family for whom the purchase of uniforms is an excessive burden.

Memorization

At Colorado Springs Charter Academy, we believe that memorization is the key to a well-stocked mind. As basic skills are mastered and fundamental facts are learned, students are able to build upon this body of accumulated knowledge to reach higher levels of learning. Although we believe that memorization is important in all academic content areas, it is particularly important in the study of mathematics. Accordingly, the Academy emphasizes memorization of basic math facts at an early age.

While some in the education establishment argue that memorizing stifles creativity, we believe instead that research supports its benefits. Studies in cognitive science show that computational automaticity in basic arithmetic skills increases retrieval speed and reduces the amount of time required for recognition of the information, thus leading to increased problem solving ability. A study by Tronsky and Royer[1] showed that automaticity in arithmetic skills decreased the working memory resources used, thus leading to successful problem solving. When the amount of working memory necessary to retrieve basic information is reduced, it leaves room for the cognitive system to process other details and allows the brain to function at a higher level.

Finally, while we strongly believe in the importance of requiring our students to memorize facts, poetry, and the like, we also affirm that we are trying to attract reading-disabled children to our school. It is recognized and understood that children with reading disabilities tend to have difficulties with rote memorization, whether with the written word, or even with the memorization of math facts. While our expectations will be high for this student population, we will support them and provide appropriate accommodations as needed.

In the realms of language and history as well, memorization etches the ideals of their civilization on children's minds and hearts. It creates patterns that become part of the student's language store as exemplars of rhythmic beauty and complex syntax. These patterns enrich the student's capacity to apply metaphor and context, encapsulating complex ideas in distilled form. And of course memorization is a kind of exercise that strengthens the powers of the mind, just as physical exercise strengthens those of the body. For an even more complete and compelling argument, please see the Memorization section on page 130, text that will be required reading for teachers at Colorado Springs Charter Academy.

Although the examples above relate to mathematics and poetry, this philosophy of the importance of memorization is equally applicable to all academic subjects. Our goal is to provide students with a wealth of information they can use to analyze new information critically, to solve

[1] Tronsky, L. N., & Royer, J. M. (2003). "Relationships Among Basic Computational Automaticity, Working Memory, and Complex Mathematical Problem Solving: What We Know and What We Need to Know." In J. M. Royer (Ed.), *Mathematical Cognition*. Greenwich, CT: Information Age Publishing

problems, and to create. We believe that only when students have a well-stocked mind can they truly be creative and explore the world around them on multiple levels.

Parental Involvement

Parental involvement is mandatory. Families sign educational compacts[1] at the beginning of the year, agreeing to support their students' academic achievement, to support the Academy's culture of character and ownership, and to volunteer as active, contributing members of the school community.

To support **Academic Achievement**, parents agree to:

- read with students at home;
- supervise homework;
- provide a place and time for homework to be completed;
- help students develop the necessary time-management skills to complete all assignments on time; and
- check homework assignments nightly.

To sustain the **Culture of Character** and discipline, parents agree to:

- support the conduct code;
- ensure that students arrive with homework completed;
- ensure that students arrive at school and in class on time;
- ensure that students comply with uniform policy;
- communicate regularly with teachers, especially via regular parent-teacher conferences; and
- participate in school activities.

To **Volunteer** as active, contributing members of the school community, parents agree to commit a minimum of four hours per month, and a total of forty minimum hours per year (fifteen hours for single-parent families) to school activities. The hours can be worked by any member of the child's extended family. Requesting that families participate in this manner accents the important part a family plays in the child's education. This work also helps parents experience the philosophy of the school in action, and can be satisfied with such tasks as:

- aiding in the classroom—copying, preparing classroom materials, planning classroom parties, and assisting teachers as requested;
- helping with the school carpool;
- sharing expertise for various Core Knowledge units;
- assisting in the office with filing, typing, and other administrative tasks;
- organizing PTO events;
- supporting the library—cataloguing and shelving books;
- supervising unstructured times, such as recess and before/after school safe zones;

[1] See Appendix E: Educational Compact.

- chaperoning field trips;
- advising after-school "clubs" such as Chess, Choir, or Drama;
- helping with special events and extracurricular activities at the school; or
- tutoring students after school.

Families who fail to fulfill their volunteering commitment, and who do not receive a hardship exemption, risk losing the "good standing" (see page 68) that guarantees their child priority enrollment for the following year.

In addition, parents will always be welcome in the school and in classrooms. Colorado Springs Charter Academy will encourage parents to visit the school and be involved in day-to-day activities. We have an open-door policy. The only exceptions are if a visitor is disruptive or if testing is in progress.

Character Education

> *It is character that will conquer materialism, demonstrate respect for life and property, and stem the tide of violence in our land. And it is character that will search for truth and demand diligent scholarship.*
>
> *—David L. Davenport*

> *To educate a person in mind and not in morals is to educate a menace to society.*
>
> *—Theodore Roosevelt*

As defined by Dr. Thomas Lickona, character education is the deliberate effort to develop virtues that are good for the individual and good for society.[1] The objective goodness of virtues is based on the fact that they:

- Affirm our human dignity;
- Promote the well-being and happiness of the individual;
- Serve the common good;
- Define our rights and obligations; and
- Meet the classical ethical tests of reversibility (Would you want to be treated this way?) and (Would you want all persons to act this way in a similar situation?).

As students progress through public school, it is important that their education provide instructional opportunities, explicit and implicit, that help them develop their beliefs about what is right and good. Developing positive character traits among youth is vital in today's society.

[1] Lickona, Thomas. *Educating for Character, How Our Schools Can Teach Respect and Responsibility*. New York: Bantam Books, 1991.

Character education will be infused into the climate and daily routine of Colorado Springs Charter Academy.

Values and character education development usually occur over a number of years and within a number of environments. Since family members are the first individuals with whom one comes into contact, the influence of the family continues to be extremely important to a child's character and values development. CSCA recognizes the importance of involving every stakeholder in our educational community in the support and active involvement of a quality character education program.

The founders, administration, teachers, staff, and students of the Academy will model character traits that will support our school's vision, mission, and goals.

Table 14: Foundational Character Traits, below, identifies the inter-relatedness of character traits and thus acknowledges the ability to teach and model various traits in concurrence.

Table 14: Foundational Character Traits

Character Traits	We Mean	Related Traits
Responsibility	Being accountable in word and deed. Having a sense of duty to fulfill tasks with reliability, dependability, and commitment.	Dependability, Reliability, Integrity
Perseverance	Pursuing worthy objectives with determination and patience while exhibiting fortitude when confronted with failure.	Diligence, Patience
Caring	Showing understanding of others by treating them with kindness, compassion, generosity, and a forgiving spirit.	Kindness, Compassion, Generosity, Charity, Helpfulness
Self-Discipline	Demonstrating hard work controlling your emotions, words, actions, impulses and desires. Giving your best in all situations.	Self-Control, Cheerfulness
Citizenship	Being law abiding and involved in service to school, community, and country.	Patriotism, Sportsmanship
Honesty	Telling the truth, admitting wrongdoing. Being trustworthy and acting with integrity.	Truthfulness, Loyalty, Integrity
Courage	Doing the right thing in face of difficulty and following your conscience instead of the crowd.	Passion, Self-Advocacy
Fairness	Practicing justice, equity, and equality. Cooperating with one another. Recognizing the uniqueness and value of each individual within our diverse society.	Tolerance, Civility
Respect	Showing high regard for an authority, other people, self, and country. Treating others as you would want to be treated. Understanding that all people have value as human beings.	Self-Respect, Respect for Others

There has been a renewal of public concern about teaching and learning values—standards that everyone should have about what is good or bad. Teaching methods that stress only cognitive

skills in the analysis and clarification of choices about values have fallen from favor. Rather, the trend is for teaching values in concert with methods of analysis and judgment that yield answers about right and wrong, better and worse concerning personal behavior and the common good.[1]

Prominent educators recommend that certain widely held values or virtues should be at the core of the school curriculum for the purpose of systematically developing the character of students. They stress the integration of cognitive development and character development through "perspective-taking, moral reasoning, thoughtful decision-making, and moral self-knowledge."[2] And they also urge the use of personal models—heroes—in history, fiction, and current events to exemplify and encourage emulation of particular virtues or desirable traits of character. Exactly these ideas will permeate Colorado Springs Charter Academy's character education program.

Grading Scale

The adjacent traditional grading scale will be used for assignments and report cards.

Score		*Score*		*Score*		*Score*	
97-100	**A+**	**87-89**	**B+**	**77-79**	**C+**	**67-69**	**D+**
93-96	**A**	**83-86**	**B**	**73-76**	**C**	**60-66**	**D**
90-92	**A-**	**80-82**	**B-**	**70-72**	**C-**	**0-59**	**F**

II.a. Calendar, Schedule, Hours

Student hours for Colorado Springs Charter Academy will be from 8:00 AM to 3:30 PM, Monday through Friday. This is 7.5 hours per day, a full hour longer than the schedule at traditional District Eleven elementary schools. This extra hour per day equates to 24 more school days per year. Added to the proposed annual calendar of 180 days, this totals 204 days of instruction. Compared to District Eleven's current target of 171 days, our calendar represents a 19% increase in classroom time for students in grades one through five. Within the school day, all students will spend at least 2 hours per day in reading/language arts, and 1 hour per day in math.

District Eleven middle schools have a length of six hours and fifty-five minutes. Thus, for grades six through eight, our longer calendar represents an additional 14 days, still a 13% increase—the equivalent of more than an *entire additional instructional year* should a student attend Colorado Springs Charter Academy from grades one through eight.

CSCA's calendar well exceeds the minimum guidelines stated in C.R.S. 22-33-109(1)(n)(I), which dictates a minimum of 160 days in session, with no fewer than 990 hours of instructional time.

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[1] Leming, James S. "Teaching Values in Social Studies Education—Past Practices and Current Trends." In Byron G. Massialas and Rodney F. Allen, Eds., *Crucial Issues In Teaching Social Studies*. Belmont, CA: Wadsworth Publishing Company, 1996, pp. 145-180.

[2] Lickona, Thomas. "The Return of Character Education." *Educational Leadership* 51 (November 1993): 6-11.

II.b. Research-Basis

For too many years, too many schools have experimented with lessons and materials that have proven to be ineffective—at the expense of their students. This stops with us. Programs and practices grounded in scientifically based research are not fads or untested ideas; they have proven track records of success. These are the programs that Colorado Springs Charter Academy will use.

We rely on the U.S. Department of Education for guidance here. They explain that the term "scientifically based research" means research[1] that:

- employs systematic, empirical methods that draw on observation or experiment;
- involves rigorous data analyses that are adequate to test the state hypotheses and justify the general conclusions drawn;
- ensures that studies and methods are presented in sufficient detail and clarity to allow for replication or, at a minimum, to offer the opportunity to build systematically on the findings of the research;
- relies on measurements or observational methods that provide valid data across evaluators and observers and across multiple measurements and observations; and
- has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

We embrace these criteria and are using them to validate our curricular choices.

III. Professional Development

A fully-trained staff is essential to the success of the Academy. Literature is replete with examples of educational programs that failed in practice for not being implemented "with fidelity"—which is to say without commitment on behalf of the whole school that all teachers not only be trained, but be enthusiastic cheerleaders for the chosen programs. Thus, aggressive and ongoing professional development will be a cornerstone of CSCA's philosophy. School-year calendars will reflect adequate time for ongoing professional development, including significant training in the weeks before CSCA first opens, with extra time for novice teachers. These programs, already included in the professional development budget, will cover especially Core Knowledge, Saxon Math, and Open Court Reading, along with other curricula.

Initial needs assessments will be completed by the board upon hiring the administrator, teachers, and staff. Ongoing needs assessments and evaluations will be conducted on a quarterly basis to ensure that all members of the CSCA team have adequate training and education to support our rigorous curricula. The focus of the needs assessments will be continual instructional improvement that will create and support master educators.

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[1] Public Law 107-110, the *No Child Left Behind Act of 2001*, http://www.ed.gov/about/offices/list/ies/index.html, and see the section *Supporting Research* starting on page 81.

The CSCA board will support the professional development of the administration by conducting yearly needs assessments through the use of board evaluations, teacher feedback, and introspective evaluation. The administration will submit professional goals to the board and follow-up on the progress of these goals throughout the year.

The CSCA board and administration will support the professional development of its teachers by encouraging and suggesting observations of master educators. The needs of teachers will be determined on an individual basis as supported by administrator evaluations, student performance and professional goals. Teachers will submit individual professional goals to the administration at the beginning of each school year and follow-up on the progress of these goals throughout the year. At year-end, teachers and the administrator will collaboratively assess the progress and challenges for the year, and draft each teacher's individual learning plan for the following year.

CSCA recognizes especially the leadership role of the board in setting the professional development example for the administration, staff, and teachers. In leading by example, the CSCA board will participate in ongoing training in various aspects of Core Knowledge, Saxon Math, Shurley English, Open Court Reading, character development curriculum, program assessment practices, and other training necessary to effectively lead the school.

E. Plan for Evaluating Pupil Performance

Colorado Springs Charter Academy will have a comprehensive pupil performance assessment program. We will make data-driven research-based decisions in order to be continually improving student achievement.

I. Evaluation Plan

The assessment methods listed in Table 15: Assessment Types, below, comprise the primary tools the Academy will use to gauge progress towards achievement standards. We recognize the value that must be struck between overtesting and undertesting, and we believe that our plan strikes that balance. It is very much in line with assessment best practices. For example, District 11 also tests at least this often, including: CSAPs, CogAT, Terra Nova two to three times per year, multiple reading assessments per year (AR, STAR, Adams 50), district quarterly assessments, and curriculum-embedded assessments.

Table 15: Assessment Types

Assessment Type	Frequency	Functions
CSAP	Annually	To comply with Accreditation, AYP-NCLB, and SAR.
Norm-Referenced Tests	Likely twice a year	For longitudinal analysis. These tests include ITBS, Terra Nova, or NWEA.
Curricula-Based Placement Assessments	Before school starts and as dictated in instructional program	To identify initial placement and to measure mastery before moving to next unit and also to monitor whether students are in the appropriate learning group.
DIBELS Assessments	Ongoing numerous, repeated fluency probes	Rapid, efficient assessment to aid in literacy instruction.
CogAT Exam	Once per year starting at end of 1st grade	For GT identification and as a triangulation method for strengths and weaknesses.

Our students will participate in all state-mandated assessments, including the Colorado Student Assessment Program (CSAP) exams. Furthermore, we plan to collect and use longitudinal assessment data to determine and improve the academic progress of the students. Sometimes called Value-Added Assessment, this method is used mainly to demonstrate the extent to which students gained a year of academic growth during that school year. To perform the non-CSAP longitudinal analysis, we will compare test scores from the beginning of the school year with test scores from the end of the school year. For this analysis we will use the NWEA Assessment Systems, a series of computer-based assessment system of dynamic tests offering immediate feedback. Unique benefits of the NWEA assessments include:

- They adapt dynamically during the test to each student's current achievement level.
- They are aligned to Colorado Model Content State Standards.
- They provide test results immediately following the assessment, so that teachers are more quickly able to modify instruction or provide intervention.

- The NWEA Learning Continuum is definitively tied to the numeric score in a way that allows the teachers to identify what students know and have yet to master.

Longitudinal analysis of the CSAP data will also be scrutinized to look for areas of strengths and weaknesses.

II. Data Management

Properly collecting and analyzing data is key to helping our students meet their goals. The results will show us where we have instructional weaknesses and therefore where we need to modify instruction. In order to help all students make significant progress toward the academic goals, we need to clearly know the topics that students have or have not mastered.

To perform the non-CSAP longitudinal analysis, we will compare test scores from the beginning of the school year with test scores from the end of the school year. For this analysis we have chosen an appropriate vertical scale scoring methodology as identified by the Colorado Department of Education: the NWEA system. Collecting and analyzing this body of evidence will form the foundation of our Data Management System. This method of analysis is used mainly to demonstrate the extent to which students gained a full year of academic growth during that school year.

Additionally, we will be using the PowerSchool software for our Student Information System (SIS). As a school which has been awarded an Implementation grant by the Walton Family Foundation, we are required to participate in an evaluation of student achievement that is being conducted on behalf of the Walton Family Foundation by CREDO of the Hoover Institute at Stanford University. The Foundation will provide our school with a computer-based student information system (PowerSchool) at no charge, provided that we share the data on an annual basis with the research team at Stanford.

Further, we intend to participate in the Colorado Education Performance Network (CEPN). This is a program of the Colorado League of Charter Schools and a consortium of schools committed to working together to learn from data. Through the generous support of the Rose Community Foundation, Donnell-Kay Foundation, and the Walton Family Foundation, the CEPN is able to cover part of schools' costs in purchasing data management and assessment services. Due also to the benefits of economies of scale, we will be able to procure these services more economically by participating in the consortium.

Within CSCA the Academic Dean (in conjunction with the Technology Team) will be responsible for warehousing the data, interpreting the data for classroom teachers and designing professional development training to enhance student academic achievement.

III. Corrective Action

This section describes CSCA's procedures when academic achievement goals are not being met.

School Level

We will collect and use longitudinal assessment data to monitor and improve the academic achievement of the students from year to year, as well as to guide instructional decision-making aimed at closing the achievement gap between disaggregated student groups.

At the school level, CSCA is bound by its AYP targets and other internal goals as listed in section B of this document, on page 10. Once baseline achievement data have been gathered at the end of the first operational year, we will create a formal school improvement plan.

Classroom Level

At CSCA, teachers do not teach in a vacuum. They are supplied with CSAP, NWEA, and curricular test results; they confer with colleagues and master teachers; they are evaluated by the administrator and the academic dean. Amid this interaction, should student academic goals not be achieved in the classroom, all attention will shift towards teacher professional development, coaching, and remediation. Although we do not "teach to the test," teachers know that one component of their performance pay is tied to such results, and are motivated to engage their students for maximum performance. Should classroom scores be consistently sub-par, a teacher may be placed on probation, but only if other factors correlate that a teacher's competence is at fault.

Inasmuch as the Academy will support teachers' professional development and growth, we nonetheless will not long tolerate underachievement. There is no tenure nor guaranteed employment at Colorado Springs Charter Academy. As a last resort, ineffective teachers will be let go.

Student Level

Our data management system will allow us to identify which students are not progressing at rate necessary for them to achieve their academic achievement goals. The practices described below address remediation and intervention steps for individual students.

The first step for any student is a correct initial placement based on current achievement level. Differentiated grouping in math and language will allow teachers a great deal of flexibility in meeting a diverse group of students' needs. There will be at least two differentiated groups at each grade level, and students will also be able to move into differentiated groups that are above or below their own grade level. However, when students are moved into a group that is below their grade level, every effort will be made to remediate that student as quickly as possible so that the student can be moved back into his or her own grade. This differentiated grouping allows students who are struggling to work with other students at their same level, and it allows the teacher to focus on these students' specific needs. As a result, the differentiated grouping will ideally prevent the need for significant corrective action.

If a student is in the appropriate differentiated group and still demands corrective action, as determined by low performance on internal assessments, the teacher will call for a parent conference to discuss possible interventions. This conference will explore specific measures for increasing the student's achievement, such as one-on-one or group tutoring after school, computer-based instruction, homework assistance from parent volunteers, special education assistance if warranted, or any combination of these. We will implement a pyramid of interventions, and while one of the tools available will be retention, it will only be chosen as a last resort. If a problem appears to be more rooted in a student's attitude and/or behavior, the staff will search for underlying causes in an attempt to refer students and families to resources that will address the issue. The corrective action plan will also be reviewed with the student and the student's parent or guardian. Students and parents will be asked to sign the plan to assure the school of their willingness to participate in corrective action.

Finances

Colorado Springs Charter Academy recognizes the value and necessity of fiscal soundness, and thus holds strong financial accountability as a goal. This responsibility to the community and to the charter authorizer will be met through the policies described in this section.

Of special import are the following fundamental guidelines:

- CSCA will maintain a balanced budget each year of its operation.
- As described in the *Audits* section on page 53, Colorado Springs Charter Academy will have an independent audit conducted each year. This audit will find no major problems or exception with the school's finances, budgeting, or accounting practices.
- Monthly financial statements including comparisons to projected budgets will be reviewed by the Academy Board and Administrator and shared with appropriate CSI staff as requested.
- CSCA will promptly meet all appropriate CSI requests for various financial reports.

F. Budget and Finance

Colorado Springs Charter Academy agrees to maintain its financial records in accordance with all applicable federal, state and local laws, rules and regulations, and make such records available to the CSI upon request or as required by the Charter School Contract. Revenue and expenditures will be consistent with the Colorado Department of Education's Financial Policies and Procedures Handbook and Chart of Accounts. The Academy will maintain a comparison of actual expenditures to budgeted expenses.

Financial Processes

Fiscal soundness has required that we develop not only broad strategies for accounting and auditing, but also policies for routine financial transactions such as accepting cash receipts, disbursing checks, managing petty cash, and authorizing purchases.

Accounting and Payroll

CSCA plans to contract with a local firm (Accounts Plus) for routine bookkeeping, payroll, and accounting services. This firm has been serving several District 11 charter schools for years, and is thus intimately aware of federal, state, and local reporting policies. In accordance, revenues and expenditures will be consistent with the CDE's Financial Policies and Procedures Handbook and Chart of Accounts.

Among the timely management reports created will be balance sheets, income statements (P&L's or revenues vs. expenditures), cash flow and cash flow projections, and budget-vs.-actual reports. These working documents will be available for review in monthly Board meetings and will be made available to the district upon request.

Our annual reports will add compliance with GASB-34[1], especially with regard to the MD&A and the capitalization and depreciation requirements. The MD&A will introduce the financial statements by presenting an analysis of the Academy's financial performance for the year, and its financial position at year end.

Purchasing

For purchases, a requestor will submit a requisition to the Administrator (or designee) for signatures. Authorized signatories will be the Administrator and the Directors of the Board. For purchases under $500, one signature will be needed. Purchases above $500 require two signatures, including one Board approval; purchases above $2,500 require three signatures, including two from the Board. The Administrator will return the authorized request (along with a purchase order if necessary) to the requestor for processing, or forward it to the Administrative Assistant (AA) if appropriate. When the order is received, the packing slip or requisition will be signed "received" and returned to the AA. If the school is not billed directly, the requestor will complete a check request for reimbursement, attach all receipts, and turn the packet in to the AA.

Audits

As described further in the *Audits* section on page 53, CSCA will have an independent audit of its financial and administrative operations conducted each year by an outside CPA. This audit serves to assure that the expenditures of public funds are properly made and that accounting procedures are properly completed. It will evaluate, at the very least, cash reconciliation, disbursements, payroll, inventory, receipts, and related-party transactions. The audit will find no major problems or exception with the school's finances, budgeting, or accounting practices.

Contract Services

When the Academy begins its operations, certain specialized services will be contracted. Over time, as expertise and budgets permit, many of these services may be migrated to staff responsibilities. In Figure 7: Organizational Chart on page 61, such services are indicated with patterned boxes. The administrative services include Grant Writing, Bookkeeping, Legal Counsel, and Technology. The board of directors selects those contractors deemed best suited based on experience with charter schools, competitive pricing, and recommendations from disinterested third parties, such as the CDE and the Colorado League of Charter Schools.

I. Budget

The Academy's budget is set forth as an attachment to this application. At the time of this application, Excel templates referenced in the Institute's *Request for Applications* were unavailable. In its stead, our electronic submission includes a budget for the current pre-operational year as well as a five-year operating budget.. Operating budget assumptions are

[1] Government Accounting Standards Board Statement No. 34 (June 1999)— "Basic Financial Statements and Management's Discussion and Analysis (MD&A) for State and Local Governments."

noted in the spreadsheet on a separate tabbed worksheet labeled "Assumptions." Items requiring additional comment are listed below.

Per Pupil Revenue

The PPR is calculated using District 11's projected amount for FY 2005-06. The budgeted PPR is $6,065 in year one, with a general 3% increase (2% inflation plus 1% from Amendment 23) used each year after. Year one includes a projected enrollment of 184 students, including 44 kindergartners, for a Full-Time Equivalent (FTE) count of 162. Incremental increases in FTE over time reflect the addition of seventh and eighth grades, as well as progress towards creating two cohorts for each grade.

The budget includes 100% of PPR, with the two individual buyback costs specifically indicated. The first of these costs is a line item for the Institute retaining up to 5% of PPR. Although this percentage is subject to negotiation, the use of 5% is conservative, reflecting the maximum that the Institute is allowed to retain. The second purchased service is for Special Education Services, the per-pupil value of which was supplied by District 11, to contract through it for SPED services. CSCA anticipates monitoring the marketplace over the next several months to see whether any alternatives arise for this significant budget item.

Variable Income

CSCA anticipates generating significant revenue from grants, donations, and fundraising. Nonetheless, the attached budget includes only those grants which have already been approved. No fundraising income is listed, even though considerable fundraising activities will occur—prudent budgeting excludes this variable income source. A very modest entry is included for donations.

Reserve Funds

The budget recognizes the capital and insurance reserve fund of $268 per student in the first year. This amount will be used to offset anticipated building lease costs. It will be tracked in a capital and insurance reserve fund as required by state law. Also, as required by C.R.S. 22-54-105, at least $165 per student per year will be spent on instructional supplies.

Capital Construction Funds

Included in the budget is $300 per pupil in Capital Construction Funds. This amount is just less than the amount awarded each of the past three years. As CSCA is not utilizing any district facility, we anticipate receiving the entire per pupil allocation for this line item.

Fee-Based Programs

Revenue from activities such as field trips, after school clubs, and other similar activities is not specifically included in the budget, as any such activities will be offset by the same amounts in

activities expenditures. The school's Parent/Teacher Organization will establish a scholarship fund for families who cannot afford these activity fees.

Tuition-Based Programs

Colorado Springs Charter Academy anticipates offering a tuition-based full-day kindergarten option. A fee of $265 per month for 10 months is included for this program. The budget currently reflects one half-day kindergarten class and one full-day kindergarten class, although this configuration may be adjusted based on community need.

A fair assessment of this need has been garnered from the Intent to Enroll forms submitted by interested parents. Of the families whose students will enter kindergarten in 2005 or beyond, over 80% indicated interest in a full-day option.

Expenditure Projections

Expenditure projections are explained in the footnotes of the projected budget. In general, the expenditure plan assumes 2% per year inflation, with any exceptions noted. The Academy will manage expenditures based on the revenue ultimately available.

Table 16: Average Salaries

School	SAR Academic Performance	Teacher	Administrator
Cheyenne Mt Charter Academy	Excellent	29,054	61,659
The Classical Academy	Excellent—K-6 High—7-8	26,909	55,500
James Irwin Middle School	(new)	25,080	40,405

Personnel costs merit a special note. The budget for administrative and instructional staff is set based on prevailing wages in comparable charter schools of excellence in Colorado Springs.[1] Table 16: Average Salaries shows these comparisons. CSCA salaries are projected to be near the range of these schools of excellence. Additionally, our budget includes a pool of 6% of total salaries to be awarded each year based solely on merit. Finally, in addition to inflation, an annual average merit pay increase of 3% for all staff is included in the budget. We are confident that these incentives are sufficient to attract the exceptional staff upon which CSCA will depend. Finally, even if there were a local teacher shortage—a tight labor market—we project it would have little impact. Our small school will be hiring only eight classroom teachers (as well as several specials teachers and aides) in the first year, adding two per year. Experience shows that high quality teachers seek high quality institutions, and indeed, we already have received statements of interest from several local teachers.

[1] Colorado Department of Education: *School Accountability Reports*. http://www.state.co.us/schools. 2003.

II. Audits

The Academy agrees to engage and participate in an independent, outside audit by a certified public accountant of its financial and administrative operations on an annual basis. The results of the audit shall be provided to the Institute in written form within the statutory time limits required by the Institute, and shall be published and posted as required by law. CSCA will adhere to the accounting, auditing, and reporting procedures and requirements that are applied to public schools operating in Colorado.

III. Anticipated Funding Sources

There are numerous national and state funds specifically available to charter schools, especially during their first three years. We have already been awarded $175,000 in grant monies through the CDE as part of the Title V, part b program. This award carries with it implicit approvals of an additional $150,000 for each of the first and second operational years following. Furthermore, we were awarded $180,000 from the Walton Family Foundation as part of their Grant Partners Program with the Colorado League of Charter Schools. We won't stop there though, as other notable private foundations also choose to support charter schools of promise. A very partial and preliminary list follows:

Governmental	CCAP	Gates Foundation	National Endowment for the Humanities
Federal Titles I-X	Power Educators Project	Intel in Your Community	The Charles Edison Fund
IDEA	**Private**	Private Donations	Braitmayer Foundation
Even Start	Walton Family Foundation	Box Tops for Education*	Coke, Albertson's, and RIF Collaboration
Tech Challenge Grant	Daniels Fund	In-Kind Contributions	EDS Technology Grant
Javits Gifted and Talented	Donnell-Kay Foundation	Albertson's Community Partners*	The NEA Foundation
Colorado MathStar	Rose Community Foundation	Coca-Cola Foundation	The Allstate Foundation
Read to Achieve	Dorothy W. Coleman Foundation	The Actuarial Foundation	*Hundreds More …*

Because these funds can be such a significant percentage of a charter school's revenue, and because acquiring these funds can be so time consuming, Colorado Springs Charter Academy is budgeting a full-time commissioned position devoted to marketing and fund raising.[1] This position will be supported by the Fundraising Advisory Committee, comprising interested and qualified parents and community members.[2] More money means more opportunities for students, more attention to at-risk populations, and more academic resources.

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* Already enrolled

[1] As recommended by William Ouchi, in *Making Schools Work*, Simon & Schuster, New York, 2003, page 195.

[2] Please see Table 17: Potential Advisory Committees on page 57.

Given the professional attention we will pay to seeking grants and donations, along with aggressive marketing and fundraising, we would be confident to include significant out-year grant funds in our school's budget. However, in the interests of the most conservative fiscal prudence, the only grants included in the listed budget are those already approved (in the start-up year), and virtually guaranteed (the CDE grant for operational years one and two).

Financial Reserves

CSCA will maintain the required TABOR reserve in compliance with the minimum per pupil dollar amount specified in C.R.S. 22-54-105(2)(b). The Academy also has a goal of carrying an unrestricted reserve equaling 4% of expenditures in future years. The budget set forth as an attached Excel spreadsheet, reflects this reserve, labeled "contingency," being first reached in the second year of operations. Given that this contingency fund is unrestricted, the Academy would be free to use a portion of it should other revenues not materialize as expected.

Colorado Springs Charter Academy will establish a capital and insurance reserve fund as required by state statute. These reserves are included in the budget. Also, to the extent that any grant funds are earmarked for specific programs, such as library or technology purposes, the Academy will account for these expenses in specific reserve fund accounts.

Administration

This section details the administrative structure of Colorado Springs Charter Academy: its operations, policies, governance, and relationship to its employees.

G. Governance

The Academy is a collaboration of parents, educators, administrators, students, community members, and the public at large. Founded by parents, with a board to be elected by parents, CSCA will reflect the will of the community focused on the best interests of the children.

I. Governing Board

Colorado Springs Charter Academy will operate under the auspices of a governing board called the Academy Board of Directors (Board). This board will comprise from 5 to 7 members, and will always have a parent majority. Five of the Directors will be elected by the parents/guardians of the children who attend the school. The five elected Directors then may appoint two more Directors to the Board. The school's administrator will be an advisory, non-voting member of the board.

The Colorado Springs Charter Academy Founding Committee[1] appointed the first interim Board of Directors. After the interim board is formalized, the official Board will serve until the first parent election takes place in October of 2006. This timing reflects that in order to best cement the vision and mission of the CSCA founders, the initial appointed board will serve at least the first full year that the school is in operation. The initial Board will stagger terms—one member will come off after year one, two more members after two years, two more members after three years. Thereafter, all newly elected members will serve two-year terms. There are no term-limits for Academy Directors. Paid employees of CSCA (or household members of such) shall not be eligible to serve on the board, due to potential conflict-of-interest issues.

Academy Board elections will be held annually in October. Each family will have one vote for each open Board seat. In the case of divorced parents, the custodial parent will vote. In the case of joint custody, each parent will have ½ votes. Directors will select the officers of the Board, which will be president, vice-president, secretary, and treasurer. Term of office for officers will be one year, and the Directors will reorganize each year following the election.

In the event of a dismissal, resignation, or other vacancy of the Board, if the Director has completed less than half of his or her term, the Board of Directors will hold a special election to fill the vacancy. If the Director leaving the board has completed more than half of his or her term, the remaining Directors shall appoint a replacement. The Director or Directors so elected

[1] For whom brief bios are given on page 57.

or appointed shall hold office until end of the term of the original vacated position and until his or their successor or successors shall be duly elected and qualified.

Attendance at Board meetings is mandatory. Failure of a member to attend three consecutive meetings will result in dismissal from the Board unless a majority of the remaining Directors determine that circumstances warrant retaining the member.

Operation of the Board of Directors

The Colorado Springs Charter Academy Board will meet the responsibilities of non-profit boards listed below. This list is taken from the BoardSource,[1] an organization dedicated to increasing the effectiveness of nonprofit organizations by strengthening their boards of directors.

The Colorado Springs Charter Academy Board will:

- Determine the organization's mission and purpose. It is the board's responsibility to create and review a statement of mission and purpose that articulates the organization's goals, means, and primary constituents served.
- Select the head administrator. The board must reach consensus on the head administrator's responsibilities and undertake a careful search to find the most qualified individual for the position.
- Provide proper financial oversight. The board must assist in developing the annual budget and ensuring that proper financial controls are in place.
- Ensure adequate resources. One of the board's foremost responsibilities is to provide adequate resources for the organization to fulfill its mission.
- Ensure legal and ethical integrity and maintain accountability. The board is ultimately responsible for ensuring adherence to legal standards and ethical norms.
- Ensure effective organizational planning. The board must actively participate in an overall planning process and assist in implementing and monitoring the plan's goals.
- Recruit and orient new board members and assess board performance. All boards have a responsibility to articulate prerequisites for candidates, orient new members, and periodically and comprehensively evaluate its own performance.
- Enhance the organization's public standing. The board should clearly articulate the school's mission, accomplishments, and goals to the public and garner support from the community.
- Determine, monitor, and strengthen the organization's programs and services. The board's responsibility is to determine which programs are consistent with the organization's mission and to monitor their effectiveness.
- Support the head administrator and assess his or her performance. The board should ensure that the head administrator has the moral and professional support he or she needs to further the goals of the school.

[1] Formerly the National Center for Non-Profit Boards, www.ncnb.org.

In addition, the Colorado Springs Charter Academy Board will be responsible for developing board and school policies. The day-to-day operation of the school will be left to school staff.

The Board will meet at least eight times a year (approximately once a month when school is in session). All Board meetings will be open to the public. A majority vote of the Directors present at a Board meeting will constitute legal action by the Board. The Board may not act unless a majority of the Board is present, which will constitute a quorum. The Board of Directors will fully comply with the requirements of the Colorado Open Meetings Law.

An annual Board retreat will be organized each winter following Board elections. This will include training and orientation for new board members, a review of key documents for all board members, and strategic planning for the coming school year.

Advisory Committees

The Board and/or the Administrator may form additional advisory committees to assist with policy setting and/or operation of the school. Policy-setting committees will report to the Board; operational committees will report to the school's Administrator. Committee membership may consist of a combination of school staff, parents, community members, and at least one board member. Examples of committees the school may implement are listed in Table 17: Potential Advisory Committees, below.

Table 17: Potential Advisory Committees

Committee	Function	Reports To
Accountability	Help evaluate the school's progress toward meeting its stated goals and objectives; develop school improvement plans; survey parents, staff and students.	**Board**
Curriculum	Help evaluate the school's curriculum and textbook choices on an ongoing basis.	**Board**
Facilities	Aid development of a long-term facility plan; assist with minor repairs and improvements on the school building; and, potentially, assist with the acquisition of property maintenance services such as trash removal, carpet cleaning, etc.	**Administrator**
Fundraising	Support grant writing; research and develop other fundraising activities	**Both**
Library	Assist with the development and on-going monitoring of a long-term Library Plan.	**Administrator**
Technology	Assist with development of a Technology Plan; identification of technology needs; and, depending upon the skill of the committee members, assist with troubleshooting software and hardware problems on an ongoing basis.	**Administrator**

Founding Committee

The Founding Committee comprises Carla Albers, Jill Gaebler, Evelyn Hernandez-Sullivan, JoAnne Hilton, Glenn Miller, Lisa Miller, and Tonya Shepherd. Ms. Albers, Ms. Gaebler, The

Millers, and Ms. Shepherd have children who intend to attend Colorado Springs Charter Academy. The other founders are community members committed to bringing educational excellence to the community. Brief bios of each of the committee members follow:

Carla Albers is a stalwart partisan for effective education, devoting her last six years to improving her children's schooling and her district's instructional policies. She obtained her Juris Doctor from the University of Nebraska in 1985 and was admitted to the bar that same year. In her practice, she handled all aspects of litigated cases, from trial through appeal, and has argued in front of the Colorado Supreme Court. In 1998, Carla's priorities shifted when she began an extended sabbatical from the practice of law to stay home with her two young children, then ages 3 and 5. Since then, the majority of Ms. Albers' time has revolved around raising her children, volunteering in the classroom, and pursuing educational issues with school administration officials and the local school board. Since 1986 Carla has served as the principal cellist for the Pikes Peak Philharmonic.

Jill Gaebler is currently a stay-at-home mom who is actively involved with the education of her two children, ages 5 and 6. Jill and her husband have spent many volunteer hours at her children's school, and she stays informed on educational events and trends. Jill received her BS from the University of Arizona in 1988 with an emphasis in Management Information Systems. She subsequently entered the Air Force as a 2nd Lieutenant spending the next six years as a contracting officer involved in the purchasing of numerous major weapon systems. She also worked as a multi-service contracting officer/liaison at Texas Instruments during her last three years in the service. After resigning from the Air Force, Jill spent three years employed by her church working as the assistant to the music minister, where she planned and presented worship services and many musical and drama productions.

Evelyn H-Sullivan is an advocate for children. As District Court Magistrate for Division Q of the Juvenile Bench in Colorado Springs, her docket comprises 40% to 55% of all Dependency and Neglect cases filed in El Paso County. Magistrate Sullivan obtained her Juris Doctor in 1989 from the University of Colorado School of Law and was admitted to the Bar in 1990. She has served as a Volunteer Attorney for the Pikes Peak and Arkansas Valley Legal Aid Office contributing well over 100 hours of pro-bono representation to the needy. As a Deputy District Attorney in Colorado Springs, she established and enforced paternity and child support obligations for six years. Magistrate Sullivan also represented the best interests of children in her capacity as a court-appointed Guardian *Ad Litem* prior to joining the Juvenile Bench. Evelyn and her husband of 22 years, along with her two sons, enjoy hiking, fishing, cycling and other outdoor activities as a family.

JoAnne Hilton, the mother of three grown sons, is a longtime educator and administrator. She received her BA in History from Meredith College in Raleigh, North Carolina, and her MEd. from Queens College in Charlotte, North Carolina. She is currently working on additional Colorado educational and curriculum licensure as well as coursework toward a PhD. in Educational Administration. Professionally, she has been a middle and high school teacher, a district International Baccalaureate/Advanced Placement coordinator, a grant manager/planner, a district Advanced Studies Coordinator, a Director of Curriculum and Instruction, and, most recently, Executive Director of Instructional Services for a Colorado Springs school district. JoAnne has an extensive background working with adolescents in many venues, including acting

as a guide for the Science Museums of Charlotte to lead excursions in which students aged 13-18 take a month-long, cross country camping trip for science credit.

Glenn Miller is a stay-at-home father of three, ages 3, 9, and 10. Previously, he capped his 20-year technical career by selling his software consultation firm, an enterprise he led from conception through its public offering on NASDAQ in 1999. In that capacity he served as president, data warehouse practice manager, and publication czar. He earned his Bachelor of Science in microbiology, and began his career in genetic engineering. Also the author of two technical books, this brown belt now devotes his time to playing games with his children. As a result, his two oldest play a mean game of chess.

Lisa Miller is a committed citizen and mother of three. A former computer systems analyst and project manager, she now serves as Executive Director of a national non-profit organization. As a steadfast civic organizer, she is active at all levels—from organizing a local neighborhood watch to managing the re-election campaign of a candidate for the Colorado State Board of Education—and is a former Vice-President of the Mountain Shadows Community Association. Lisa has spent countless volunteer hours representing her children's school and district, serving as a member of both the Building Advisory Accountability Committee (BAAC) and District Advisory Accountability Committee (DAAC) during the last school year. An exceedingly well-informed parent, she is often quoted by local print and broadcast media on educational topics. She is the current Colorado Masters Women's 500m Cycling Champion. Ms. Miller earned her Master of Science in Sociology from the London School of Economics.

Tonya Shepherd currently spends her time in the exhilarating presence of her two young sons. She and her children love to "go on adventures" (hiking), play soccer, football, baseball, hide-n-seek or endless games of chase. During those rare calmer moments they read, play board games, and do crafts. Tonya graduated *cum laude* from the University of Arizona with a degree in Psychology and Sociology. During her college years she was a volunteer to the Teenage Parent Program—a school devoted to the successful futures of teenage parents and their children. After graduation Ms. Shepherd managed the customer service department of a software company. It is here that she wrote an award-winning newsletter, *GroupSystems News.* Tonya and her husband moved to Colorado Springs in 1995. She earned her Masters Degree in Curriculum and Instruction from the University of Colorado at Colorado Springs. She has worked with at-risk students in academic and therapeutic environments and she has taught in the public school system. Tonya is a certified secondary social studies teacher.

Open Records Compliance

Colorado Springs Charter Academy will comply fully with the state Open Records Law (C.R.S. 24-72-201 *et seq*.) exempting, as required by law, personnel files, library records, addresses of public school children, medical data, and any other mandated exemptions. Likewise, CSCA will comply with the state Open Meetings Law (C.R.S. 24-6-401 *et seq*.), keeping however the following items closed as the law allows: social gatherings, property matters, attorney conferences, personnel matters, and student discipline records.

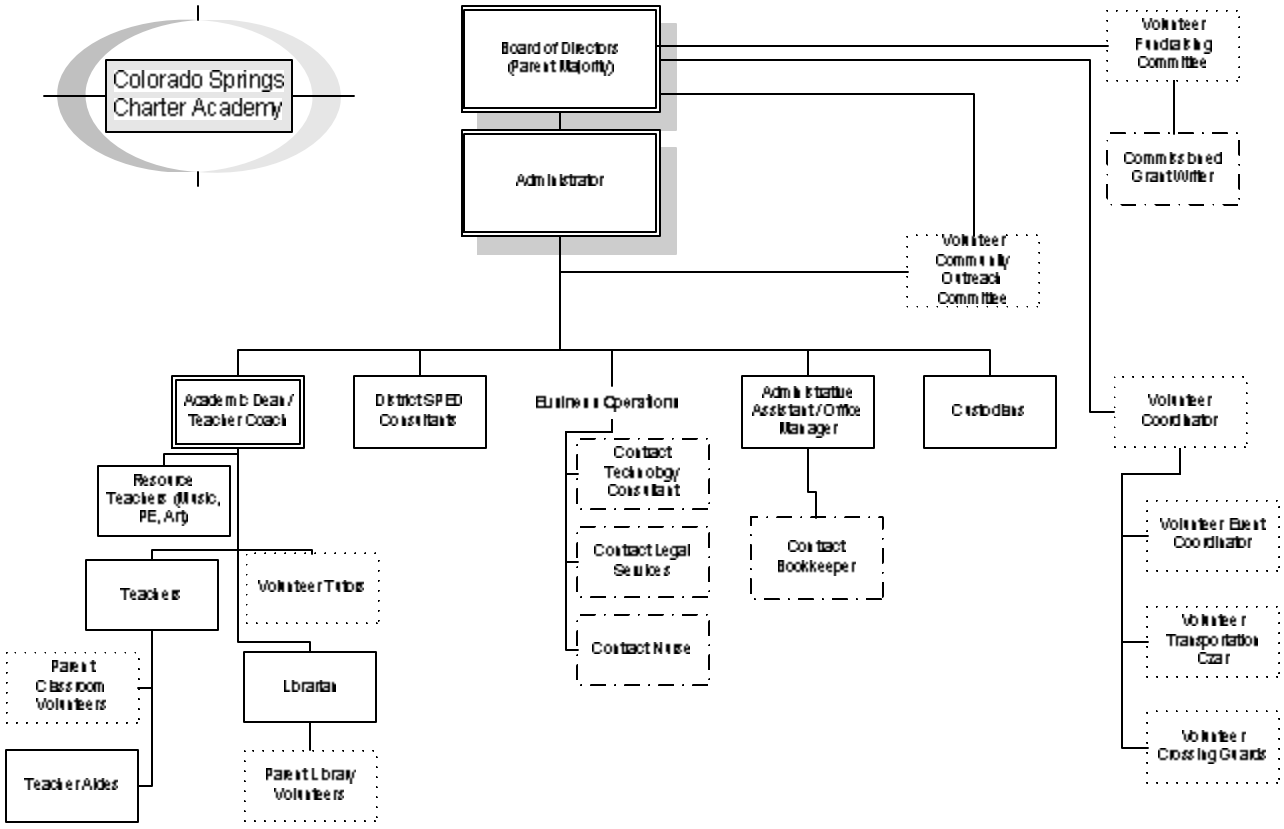
II. Governing Board Training

The school's professional development plan includes not only administrators and faculty, but the board as well. This ongoing and mandatory training includes various aspects of Core Knowledge, Saxon Math, Shurley English, Open Court Reading, character development curriculum, program assessment practices, and other training necessary to effectively lead the school. As well, the board will undergo training in personnel development, fundraising, financial management, and effective stakeholder relations. All board members will undergo training in board policy and effective governance within 30 days of being elected. A majority of the board will also attend the annual Colorado Charter Schools Conference, especially for its board training, leadership training, and coverage of issues directly related to charter schools. As well, the Board Treasurer will demonstrate expertise or attend the CDE conference on charter school finance to develop financial management and budgeting skills. Finally, an annual Board retreat will be organized each winter following Board elections. This will include training and orientation for new board members, a review of key documents for all board members, and strategic planning for the coming school year.

III. Administrative Structure

CSCA will open with a Head of School who oversees academic, personnel, business, and facilities operations. An Administrative Assistant/Office Manager will help with routine financial and facilities oversight. An Academic Dean/Teacher Coach is slated to supplement the administrators' curricular expertise, with independent responsibilities to select and evaluate curricula, offer teacher coaching, organize professional development, and assess the merits of the school's educational programs. Possibly meriting a half-time position, the Academic Dean's responsibilities could be assumed by the Lead Teacher if qualified. Figure 7: Organizational Chart, on page 61, depicts the remainder of the Academy's administrative structure. Note that dotted boxes represent volunteer positions and patterned boxes reflect contracted services.

Figure 7: Organizational Chart



IV. Legal Status

Colorado Springs Charter Academy was incorporated in Colorado as a nonprofit corporation on June 8, 2004. Please see the documentation included as Appendix I: Articles of Incorporation. The Academy is incorporated as a nonmember corporation, which structure allows for more efficient decision-making and operation. Once the charter application is approved, we will apply for federal tax-exempt status.

Upon charter contract approval, the CSCA Founding Committee will convene to develop by-laws governing the Board's operation. Autonomy is a major component of charter school law, and a key to such schools' success. Therefore, to bind CSCA by-laws into this contract would diminish the autonomy that CSCA seeks to retain.

VI. Grievance Process

By the Academy's nature as a parent-run facility, its structure is explicitly designed to solicit and act upon parent input at all times. The school is built by parents and founded on parental involvement—the school board, for example, must always have a parent majority. One of the five tenets of our mission, on par with high academic achievement, is "Involving and welcoming parents and community members." Among our stated core values is "Parental Involvement," expanded as "Parents should participate actively in all aspects of their child's education. Those

who do not should expect inferior results. Parents will be respected, expected, welcomed, and involved." At every stage in CSCA's planning and operation parents will be not only engaged, but necessary.

In addition, CSCA will encourage parents to visit the school to be involved in day-to-day activities, or merely to relax and socialize in the Family Café/Meeting Room. We will have an open-door policy at all times except during testing. School administrators and staff, by interacting with parents so often, will have a keen and ongoing understanding of parental sentiment. Nonetheless, specific measures will be in place to underscore the importance of parent satisfaction. Mechanisms include annual surveys, a prominent anonymous "suggestion box," requests for feedback in the newsletter; direct parent/teacher conferences, and solicitation of parent comments in the board and committee meetings. Using the survey, the school can measure whether it has met its goal that 95% of parents "agree" or "strongly agree" that they are satisfied with the quality of instruction their child is receiving. Results of parent surveys are also used as part of the formula to determine merit pay, and as part of the Administrator's performance evaluation.

Finally, parents retain the ultimate authority to express their preferences with their votes for CSCA's board of directors.

Each family upon attending will receive school documents including a parent/student handbook and will sign an Educational Compact. The reason for these is to ensure that parents understand their responsibilities and rights. As well, the Academy's policy documents, employee handbook, charter contract, budget, and other public documents will remain available for viewing in the Administrator's office upon request. CSCA's board agendas and minutes will also be available on the school's website as well as in person. The only documents reserved from public inspection are personnel files, student records, and negotiating notes that would violate an individual's confidentiality or compromise the Academy' ability to conduct business affairs prudently.

H. Employees

Pursuant to Colorado Revised Statute Section 22-30.5-106(1)(i), the Academy's Board of Directors submits the following explanation of the relationship that will exist between the Academy and its employees, including evidence that the terms and conditions of employment have been addressed with affected employees.

Employment Policies

Hiring of Personnel

All persons who perform services for the Academy are considered "at-will" employees or volunteers of the District itself. The Academy will select its personnel directly without prior authorization from the Institute, subject to compliance with all federal and state rules and regulations, including, without limitation, requirements concerning the recruitment of applicants. No waiver will be requested for criminal and background checks. For positions subject to NCLB Highly Qualified requirements, appropriate training, certifications, and competencies will be required. We will be requesting a waiver from licensed instructional staff, but we of course will comply with the NCLB law as it defines Highly Qualified staff. Relevant waivers are noted in detail in Appendix J: Waivers.

The Administrator will be responsible for human resource management. These responsibilities include hiring, annual reviews, terminations, and staff meetings. Personnel matters will be conducted in accordance with the guidelines prescribed by the Board. In the first year any Administrator's term at Colorado Springs Charter Academy, the Administrator will be required to obtain approval of the Board for all hiring of teaching staff. The Board will actively participate in the hiring process during this time. Additionally, for the first year of Colorado Springs Charter Academy's operations, the Board may terminate the employment of any personnel so long as such employees are not terminated for unlawful reasons.

Staff Evaluation

Staff at the Academy will be formally evaluated at least twice annually. The Administrator will evaluate teachers and associate staff; the Administrator will be evaluated by the Board of Directors. These formal evaluations will include such things as salary, performance reviews, areas for improvement or where additional training is needed, and goals for the following year.

The Academy shall adopt its own policies (in compliance with federal and state law) concerning the recruitment, promotion, discipline, and termination of personnel; methods for evaluating performance; and a plan for resolving employee-related problems, including complaint and grievance procedures; provided, however, the Academy shall not have the authority, by virtue of such policies or procedures or other action of the board of directors, to change the "at-will" nature of the employment relationship.

PERA Membership

All Academy employees shall be members of the Public Employee's Retirement Association and subject to its requirements. The Academy shall be responsible for the cost of the employer's respective share of any required contributions. The budget reflects these amounts.

Equal Opportunity Employer

The Academy affirms that it shall not discriminate against any employee on the basis of race, creed, color, sex, national origin, religion, ancestry, age or disability in its recruitment, selection, training, utilization, termination or other employment-related activities.

Employee Welfare and Safety

The Academy shall comply with all Institute Rules, Regulations and policies, and applicable federal and state laws, concerning employee welfare, safety and health issues, including, without limitation, the requirement of federal law for a drug-free workplace.

Employee Records

The Academy shall comply with all applicable federal and state laws, concerning the maintenance and disclosure of employee records, including, without limitation, the requirements of the Colorado Open Records Law, CRS. Sec. 24-72-204 *et seq*.

Employee Personnel Policy and Procedure Manual

In conjunction with the initial administrator and legal counsel, the Board of Colorado Springs Charter Academy will develop an Employee Personnel Policy and Procedure Manual. At the time of hire, each employee will receive a copy of this manual. Appendix G: Proposed Policy Manual, on page 164 includes the proposed table of contents for this document.

Performance Pay

Colorado Springs Charter Academy intends to implement a performance pay program for teachers as an incentive for quality teaching, and to demonstrate to teachers that their efforts are valued at school. Performance pay will be based on administrator evaluation, parent surveys, students' standardized test scores, and other factors deemed appropriate by school staff and the Colorado Springs Charter Academy Board of Directors.

I. Insurance Coverage

Colorado Springs Charter Academy will arrange to acquire the following types of insurance: comprehensive general liability, worker's compensation, errors and omissions, property (building, if appropriate, and contents), indemnity, D&O, and student accident and catastrophic accident insurance. The Academy either directly or indirectly will also hold a public official bond and an additional umbrella policy.

J. At-Risk and Community Involvement

At-Risk

"At-risk" students are defined many ways in Colorado Law. In the Charter Schools Act,[1] they are defined as "those students who because of physical, emotional, socioeconomic, or cultural factors are less likely to succeed in school." More specifically, among the possible groups that are sometimes referred to as at-risk are:

- Students who have scored "Low" or "Unsatisfactory" on a statewide assessment;
- Students who qualify for Free or Reduced Lunch under the federal "National School Lunch Act;"[2]
- Students who attend a school that has a SAR of "Low Performing";
- Students who attend a Title I-designated school;
- Gifted students and all others not meeting academic expectations befitting their documented ability;
- Students whose dominant language is not English; and
- Expelled students and students not accessing educational opportunities.

Colorado Springs Charter Academy will provide rich educational experiences for all students, whether or not they are viewed as "at-risk." We will hold high expectations for every child, and we will address the educational needs of each enrollee. While this may not sound notable, all too often students perform only to the expectations that are held by their teachers and parents. If students have been in a learning environment where they were held to low expectations, then the fact that they have not yet blossomed is no surprise. Being held to high standards at Colorado Springs Charter Academy will therefore represent increased learning opportunities for such students. We will set our students up to succeed—it will be hard work for some of the students, but they will succeed. Failure is not an option.

An additional "at-risk" group not yet identified in the law, but very prominent in the research literature, are reading-disabled pupils. This could include students who read several years below grade level as well as dyslexic students. Because dropping out of high school is strongly tied to a lack of reading ability, Colorado Springs Charter Academy will place a special emphasis on literacy for all. With the aid of active teachers, professional tutors, and researchers, we are designing an original reading remediation strategy for those who struggle with reading. This innovative program is detailed on page 26. Colorado Springs Charter Academy will lead the way in literacy learning. We refuse to give up on kids.

[1] Colorado Revised Statute 22-30.5-103(a).
[2] United States Code: Title 42—*The Public Health and Welfare.* Chapter 13—School Lunch Programs. Section 1751 *et seq*.

Community Involvement

CSCA's founding committee is homegrown: we're all parents who live within District 11. Further, our school will be self-governing—we will not pay a third-party management company to run the school. The Academy by its nature will therefore reflect the community in both organization and enrollment.

As well, community demand for this school is high. Based on experiences of like schools, current progress (already well over half-full with effectively no budget), and our planned recruiting program, we are confident of opening our doors at full enrollment and with a significant waiting list. We attribute some of this success to our community partnerships, specifically arranged to publicize the school to a broad cross-section of prospective students—including at-risk students. These partnerships include the following.

1. Hispanic Council for Reform and Educational Options	**Recruiting**: HCREO includes CSCA among options when educating Hispanic families about parental choice in education.
2. Padres Unidos / Parents United	**Community Outreach**: canvassing local neighborhoods.
3. Black Alliance for Educational Options (BAEO)	**Community Outreach**: through Colorado Springs Chapter Leader Willie Breazell, BAEO is raising awareness about the need for and value of quality educational options for African-American and low-income families. CSCA is partnering to invite families to enroll.

I. Partnerships

At this nascent stage in CSCA's development—specifically before our site is selected—recruiting and joint community outreach as described above are the primary mechanisms by which meaningful partnerships with local groups are established. As we establish a neighborhood presence once a site is selected, CSCA expects to be a nexus for community programs and activities. Although it is too early to cement such partnerships, we could imagine using local church facilities for assemblies, special events, and gym classes; our music program could be operated in conjunction with a local university; our after-school programs might partner with a nearby YMCA or Girls' Club. We are anxious to establish such bonds

K. Enrollment Policy

Colorado Springs Charter Academy welcomes all students, recognizing diversity as a virtue. Thus, the Academy prohibits discrimination on the basis of disability, race, color, ancestry, national origin, creed, religion, sex, or need for special education services. The enrollment policy is designed to meet the requirements of Colorado Revised Statute 22-30.5-104(3), ensuring equal access to the school for all. Such access encompasses academically low-achieving students, exceptional students, and students with special needs.

Outreach

To attract a diverse student body, the Academy will conduct extensive community outreach activities, especially targeting those populations who otherwise might not recognize the inclusive and public nature of charter schools. Outreach activities will include attendance at school fairs, posting notices in churches, community centers, and clubs in traditionally underserved neighborhoods, as well as door-to-door canvassing of targeted areas.

Our school has been publicized on local television and in the Colorado Springs Gazette. To date, three community meetings about CSCA were held in different parts of Colorado Springs to make it more likely that a broad cross-section of parents would be able to attend. Press releases for our community meetings were distributed to the major media outlets in Colorado Springs including *Hispania News*. CSCA has also partnered with Padres Unidos/United Parents, a grassroots group in D-2 and D-11, which uses parent and community volunteers to walk the streets of the more disadvantaged parts of Colorado Springs. They share information about educational choices, including CSCA, with the parents they meet. Our coordinated marketing/outreach program has a budget of $8,225, slated for such activities as targeted mailings, radio and other media purchases, and grass-roots canvassing**.**

Lottery

It is anticipated that enrollment requests will exceed the capacity of the school. As a result, the following criteria will be used to establish priority for admissions:

1. Currently enrolled students in good standing; [1]
2. Children from founding families;*
3. Children of staff; *
4. Siblings of enrolled students.

* (Together, children from founding families and staff shall not exceed 10% of enrollment.)

Should enrollment exceed capacity for any grade level, a blind lottery will be held within that group to determine the order that students will be admitted. If a student is chosen in the lottery

[1] One element of "good standing" is that a family has fulfilled its volunteering requirement of the Educational Compact.

and there is a sibling or siblings who want to attend the Academy, those siblings will be given preference so the family can all attend the same school.

The first lottery, if needed, will be held on January 31, 2005 so that we can identify with confidence the number of children whose families are willing to sign enrollment forms for admission to the Academy. This early, first lottery will help us secure our facility and will also assist us in developing our marketing plan. For each year thereafter, the lottery, if needed, will be held on March 15.

Intent to Enroll Forms

Once an Intent to Enroll form is received (via fax, mail, or hand-delivered) by a CSCA representative, the Administrative Assistant extracts the student data into our prospective student database. A CSCA board member then personally acknowledges the application by phone or email, simultaneously inquiring whether the parent is available to begin participating in the school by joining at least one volunteer committee.

Once the original form is filed, summary enrollment data is tabulated for public release, but individual student data remain confidential.

Pre-Admission

Upon enrollment, parents and students are asked to sign CSCA's Educational Compact (Please see Appendix E: Educational Compact), thus showing their recognition of the vital role of parents in completing their children's education.

L. Transportation

CSCA will not provide transportation at this time. The Academy will facilitate the use of carpools by maintaining a central repository for interested parents. A carpool or transportation czar will coordinate transportation needs of all families, including especially those at risk.

We recognize that transportation may restrict the ability of some students to attend, particularly those who are economically at risk. To address this, a portion of parents' mandatory volunteering may be satisfied by participating in certain carpools serving economically disadvantaged students. On the carpool form, parents who choose to participate will sign a liability waiver that absolves the Academy from any legal liabilities resulting from the carpool.

M. Facilities

CSCA is currently seeking space for lease or sale within the boundaries of District Eleven, and thus within Colorado Springs proper. The board hopes to secure a central location, preferably near Interstate-25, both to make the school more accessible to economically disadvantaged families and to ease access for students commuting from outlying areas.

The Founding Committee anticipates needing a minimum space of 14,000 square feet initially,[1] with space needs expected to increase incrementally, doubling within five years (see Table 12: Projected Number of Classes, by Year on page 20). Ideally we will find an appropriate building with close to 30,000 square feet. These figures are based on the following estimated configurations, which address the demands of the Academy's initial enrollment projections:

- Eight K-8 classrooms at 800 square feet per room—6,400 square feet;
- One art/music room at 1,000 square feet;
- One world language/computer room at 800 square feet;
- Lunch/multi-purpose room at 1,600 square feet;
- Administration and office space at 1,000 square feet;
- Teacher's lounge/board room at 800 square feet;
- Library at 800 square feet;
- Hallways, bathrooms, and other space at 1,400 square feet.

Total of 13,800 square feet

Additional criteria include:

- A minimum of 20-60 on-site parking spaces;
- Adequate space and traffic flow for parental drop-offs;

At present, there are at least fifteen facilities meeting these criteria and within our budget. Refer to Appendix F: Real Estate Letter for support of this fact. Candidate sites are currently being considered. Our final determination will be based upon the suitability of the space for the school's needs, the cost, and the proximity to a majority of Colorado Springs Charter Academy's families.

Pursuant to C.R.S. 22-30.5-104(3), CSCA will comply with state and federal law requiring any facility alterations to accommodate special education students.

[1] *Charter School Facility Financing: Constraints and Options.* A Study for the Massachusetts Charter School Resource Center, J. Dolan, D. Murray and G. Walsh, Pioneer Institute for Public Policy Research, February 1998.

I. Leased Facility

CSCA is likely to lease a facility, the search for which is actively underway. The facilities committee is taking all reasonable steps to avoid circumstances where they or any other interested parties (board, staff, parents) would be obliged to weigh the interests of the Academy against other interests to which they have duties or loyalties.

II. Funding

The long term vision for Colorado Springs Charter Academy is a building comprising at least 30,000 square feet that would provide for larger (1,000 sq. ft.) classrooms, numerous multi-purpose spaces where small-group or one-on-one tutoring could take place, a gymnasium-auditorium, and ample administrative space. The budgets provided as part of this application predict a positive cash reserve balance at the end of each year. The target for this reserve is four percent of total expenses, and is in addition to the Capital Reserve Fund mandated by TABOR. The Academy intends to accumulate this reserve over time into a seed fund used to launch the purchase of permanent facilities.

III. Facility Readiness

Numerous steps remain to open the Academy on time. The following timeline gives some flavor of these:

December	Prepare business plan.	—done
	Define location and site parameters, space requirements, and projected facilities needs.	—done
	Budget funds for facilities.	—done
January	Tour possible sites.	—in progress
	Construct and issue RFPs to potential options.	—in progress
	Continue searching market for potential options.	
	Review and compare responses to RFPs.	
	Respond to proposals from landlords.	
February	Conduct initial space plan for short list of options (goal: 2-3 sites).	
	Conduct expert review of site and costs.	
	Review code, fire, safety, and ADA issues.	
	Price space plan with potential contractors.	
	Conduct final proposal negotiations with landlord.	
	Sign letter of intent.	
March	Negotiate final terms.	
	Sign lease.	
April	Plan and design.	
	Finalize construction documents.	
	Submit construction documents for zoning and permits.	
May	Select general contractor.	
	Begin construction.	
June	Construction	
July	Complete punch list (final construction items).	

	Security system/custodial orientation.
	Cosmetic preparation.
	Install technology.
	Begin move-in.
	Install furniture.
August	Final classroom preparation.
	Finalize move-in.

N. Amendment 23 One-Percent Increase

The Colorado State Constitution, in section 17 (Funding) of article IX (Education) explains the creation of a state education fund. Legislated to grow annually at least by the rate of inflation plus an additional one percentage point, this fund is proscribed for use only for certain educational reforms including meeting state academic standards, expanding technology, and for performance incentives for teachers, among others. In compliance with paragraph (4)(b) of this constitutional section, CSCA intends to target these monies to fund the Performance Pay component of its employee benefits package. Our view is that this merit program, by recognizing outstanding teachers, leads to more effective classrooms and thus raises student academic achievement.

O. Waivers

Pursuant to the Charter Schools Act, Colorado Springs Charter Academy requests waivers of certain statutes. Each state statute for which a waiver is being requested, and the rationale for each, is listed in Appendix J: Waivers.

Colorado Springs Charter Academy believes that these waivers will enable the school to better meet its mission, goals, and objectives, and implement its educational program.

P. Student Discipline, Expulsion, or Suspension

Colorado Springs Charter Academy believes that a structured, proactive, and consistent design to discipline is effective and will enable educators to run a safe and organized learning environment. We will have additional expectations of our students which will be outlined in our Conduct Code. High behavioral standards will be the hallmark of the Academy, and therefore considerable time will be dedicated to ensuring that all staff are consistently and appropriately enforcing the school's Conduct Code. This includes a consistent set of rules throughout the school—prominent, authoritative, and universal.

The highlights of CSCA's discipline plan will be to:

- Meet all state laws and district policies regarding student conduct;
- Maintain structured, systematic classroom management;
- Seek out and consistently reward positive behavior;
- Consistently and appropriately enforce all disruptive behavior;
- Train all administrators and teachers on the student Conduct Code yearly;
- Emphasize individual responsibility; and
- Encourage regular attendance at CSCA.

The Conduct Code will be developed in detail by the governing board, administrators, and teachers prior to the start of the 2005-2006 school year. We feel that a positive learning environment, free from disruption, is the foundation of learning for our students, and our discipline principles are the key to this environment. Therefore, each subsequent year, all administrators and teachers will be trained to implement our Conduct Code.

Further, all parents and students will have a copy of the Conduct Code in their student handbooks and it will also be on the school's website. All parents and students will be required to sign a document that states that they have read, understand and will abide by the Conduct Code and all of its associated consequences. This contract will highlight the responsibilities of all parties involved in the student's learning process. Parents, teachers and students will all share in the responsibility of providing a safe, positive, and well structured learning environment.

All students will be expected to comply with the Academy's Conduct Code. Violations of the Code will be dealt with uniformly and consistently in accordance with the policies set forth within the Conduct Code and the limits established in state law. All levels of offenses will have disciplinary consequences, highlighted by the use of a demerit system. Disciplinary infractions will initially require an act of service to be completed by the student. These services will be tightly correlated to the offense, such that a meaningful and constructive outcome is paired appropriately to the infraction. These acts of service will create a positive consequence to a negative act, while reinforcing our school's desire to instill a Culture of Character as defined in the *Parental Involvement* section on page 39.

Colorado Springs Charter Academy's disciplinary program is intended to minimize the need for suspension and avoid the need for expulsion by emphasizing positive character development and

assertive and proactive classroom management. In the event such actions are necessary, they will be carried out in accordance with CSCA's handbook and applicable state policy.

Lastly, CSCA believes that consistent attendance at school is necessary to student achievement and deters discipline problems. We will have high attendance expectations of our students. Our attendance policy will be included in the document signed by both parents and students when they are made aware of our Conduct Code. Parents will be expected to ensure their children are consistently present and punctual at CSCA. Consequences for repeated absences and tardiness will be incorporated into the Conduct Code.

As CSCA more fully develops its policies for discipline, expulsion, and suspension, it will use as guidance C.R.S. 22-33-106 (Grounds for suspension, expulsion, and denial of admission) as well as C.R.S. 22-33-203 (Educational alternatives for expelled students).

Q. Academic Achievement and Accreditation

Colorado Springs Charter Academy is firmly committed to meeting all the accreditation indicators as required by the Accreditation contract between the CSI and the Academy. We will provide all necessary information the Charter School Institute may need in order to prepare the Accreditation indicator Annual Report to the CDE.

It is generally accepted practice that the approved charter application, which is bound into the contract, serve as the school improvement plan for the first year of operation, while baseline student achievement data are being gathered. At the end of year one, we will create our first formal school improvement plan.

For the complete plan to improve academic achievement, including our plan for continuing curriculum development, please see the Curricula, Delivery, and Evaluation section, starting on page 19.

R. Serving Students with Special Needs

At Risk Students

We believe that implementation of the *Core Knowledge Sequence* will expand opportunity for at-risk students. E.D. Hirsch, Jr. makes a strong case for the importance of a core curriculum to equality of educational opportunity. He writes in the introduction to *What Your First Grader Should Know:*

> When all the children who enter a grade can be assumed to share some of the same building blocks of knowledge, and when the teacher knows exactly what those building blocks are, then all the students are empowered to learn. In our current system, children from disadvantaged backgrounds too often suffer from unmerited low expectations that translate into watered-down curricula. But if we specify the core of knowledge that all children should share, then we can guarantee equal access to that knowledge and compensate for the academic advantages some students are offered at home. In a Core Knowledge school *all* children enjoy the benefits of important, challenging knowledge that will provide the foundation for successful later learning.[1]

In addition to implementing the Core Knowledge scope and sequence, Colorado Springs Charter Academy will have an ongoing child study team that will meet regularly to identify and assist students who are at risk of failing. Depending upon the student and his or her needs, the team may be composed of regular classroom teachers, the administrator, and any other relevant learning specialist. Strategies that will be used to assist students at risk of not meeting school standards include one-on-one after school tutoring, individualized learning plans, and supplemental programs.

Disabled

CSCA will comply with all district, state, and federal requirements to ensure that the needs of special education students are met. Students with disabilities will be fully integrated into the programs of the Academy whenever possible, with the necessary materials, mandated services, and equipment to support their learning. CSCA will comply with the Individuals with Disabilities Education Act (IDEA) regulations, Section 504 of the Rehabilitation Act of 1973, and Title 11 of the Americans with Disabilities Act.

Colorado Springs Charter Academy will establish systems to ensure that any student with a disability attending the Academy will be identified and serviced. CSCA will meet all the requirements mandated within a student's Individual Education Plan (IEP) for any student entering with pre-existing disability requirements. The school will seek to offer an inclusion

[1] E. D. Hirsch, Jr., *What Your First Grader Needs to Know : Fundamentals of a Good First-Grade Education (The Core Knowledge Series)*, a Delta Book: Bantam Doubleday Dell, New York, 1997.

program for all students with disabilities. However, if the student's needs and IEP require a program other than inclusion, CSCA will attempt to meet those needs with existing or contracted staff. As necessary, the school will contract with individual providers or arrange for services to be provided by the Institute or a BOCES-type of entity.

CSCA understands that, once approved, the school may purchase certain special education services from the Institute or other providers. We understand the Institute will be responsible for ensuring the provision of necessary special education programs and services, including development of Individualized Education Programs (IEPs), handling administrative proceedings, and providing necessary transportation and specialized services. CSCA staff will assist in developing IEPs, identify and refer students for assessment of special education needs, maintain records, and cooperate in the delivery of special education instruction and services, as appropriate.

English Language Learners (ELL)

CSCA will serve its ELL students in accordance with all applicable Federal Laws and Regulations. We will comply with Section 22-24-105 of the Colorado Revised Statutes, and perform the following with respect to ELL students:

- Identify students whose dominant language may be other than English;
- Assess students, using instruments and techniques approved by the Institute, to determine if their dominant language is other than English;
- Administer and provide programs accordingly;
- Report the number of ELL students attending the school to the Institute and the state.

Until the student enrollment at CSCA is known and the school has had a chance to determine the number and types of English Language Learner students it has (whether the student is Limited English Proficient, English Language Learner, or Fluent English Proficient), it is difficult to define the ELL program the school will implement with any specificity.

However, it has been decided that while students receive instruction in Spanish, those students who are English Language Learners will receive additional instruction in English at that scheduled time, in addition to the daily scheduled Literacy block. In addition, ELL students will be mainstreamed into the regular classroom as soon and as much as possible.

Gifted Students

The CSCA Founding Committee feels that the CK curriculum is so comprehensive and rigorous that most gifted and talented students will find it challenging. In addition, the Academy will do ability grouping in language arts and math. This will allow those students who are advanced to move ahead at a faster rate than the students that might struggle in either of these subjects. In addition, the teachers of the high ability groups will also be encouraged to enrich as much as possible, similar to a gifted and talented program. If, after the first year, we find that we have a high population of gifted and talented students and/or that further gifted and talented services are a high priority for many parents, we will certainly consider additional programs geared towards this population.

Supporting Research

Scientifically Based Research

One of the key components of No Child Left Behind[1] is an effort to target resources to educational programs that have been demonstrated to be effective through rigorous scientific research. Programs and practices grounded in scientifically based research are not fads or untested ideas: they have proven track records of success. When reviewing research findings to determine whether they meet the criteria for scientifically based research, the following questions are important to consider:

Use of Rigorous, Systematic, and Empirical Methods

Does the work have a solid theoretical or research foundation? Was it carefully designed to avoid biased findings and unwarranted claims of effectiveness? Does the research clearly delineate how the research was conducted, by whom it was conducted and on whom it was conducted?

Adequacy of Data to Justify the General Conclusions Drawn

Was the research designed to minimize alternative explanations for observed effects? Are the observed effects consistent with the overall conclusions and claims of effectiveness? Does the research present convincing documentation that the observed results were the result of the intervention? Does the research make clear what populations were studied (i.e., does it describe the participants' ages, as well as their demographic, cognitive, academic and behavioral characteristics) and does it describe to whom the findings can be generalized? Does the study provide a full description of the outcome measures?

Reliance on Methods That Provide Valid Data across Multiple Measurements and Observations

Are the data based on a single-investigator, single-classroom study, or did multiple investigators in numerous locations collect similar data? What procedures were in place to minimize researcher biases? Do observed results hold up over time? Are the study interventions described in sufficient detail to allow for replication? Does the research explain how instructional fidelity was ensured and assessed?

Use of Control Groups

Has a randomly assigned control group or some other kind of comparison group been used?

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[1] Public Law 107-110, the *No Child Left Behind Act of 2001*.

Details Allow For Replication

Does the study clearly explain how the treatment was designed? Is there enough detail to replicate the study?

Acceptance by A Peer-Reviewed Journal or Approved By A Panel of Independent Experts

Has the review been rigorous and objective? Has the research been carefully reviewed by unbiased individuals who were not part of the research study? Have the findings been subjected to external scrutiny and verification?

Saxon Math

Since the passage of the No Child Left Behind Act, demand for mathematics programs and practices that have been proven by scientific research to be effective has increased. The No Child Left Behind Act seeks to improve math education by mandating the use of research-based programs with long-term records of success in instruction and student achievement. For more than 20 years both classroom results and scientific research have shown *Saxon Math* to be effective. Saxon's approach to teaching mathematics is supported by solid foundational research in cognitive science, and it has been found to be consistently effective for children of varying ability levels and socioeconomic backgrounds.

Scientific Research Base for Saxon Math

This following research is made available by Saxon Publishing.[1]

Introduction

A large number of American children are failing to meet minimal standards in mathematics. According to The Condition of Education 2002, a report by the National Center for Education Statistics, nearly three quarters of our nation's fourth- and eighth-graders and nearly four fifths of our twelfth-graders are scoring at levels below proficient in mathematics for their grades (Wirt, et al., 2002).

According to the 2003 National Assessment of Educational Progress (NAEP), a large gap still exists in math performance between white students and Hispanic and African American students. And the latest TIMSS (Trends in International Mathematics and Science Study) data (1999) shows the United States to be behind many other industrialized countries in math achievement. Out of the 34 countries that participated in the study, the United States ranked nineteenth in math performance.

This document focuses on two key areas of research that support and demonstrate the effectiveness of *Saxon Math*: foundational research and program efficacy studies. The foundational research includes studies that were conducted to test the effectiveness of educational practices (such as the use of explicit instruction and continual practice distributed across a level). Foundational studies document proven educational practices that stand the test of time. Program efficacy studies, on the other hand, are conducted to test the effectiveness of a specific program or curriculum. This document highlights the foundational research that supports *Saxon Math* and the program efficacy studies that demonstrate the effectiveness of *Saxon Math.*

[1] *Scientific Research Base for Saxon Math K-12, Foundational Research and Program Efficacy Studies*, Saxon Publishers, Norman, Oklahoma, 2004.

Foundational Research

Theoretical Framework for Saxon Math

Saxon's instructional approach to teaching mathematics is supported by Gagne's cumulative-learning theory (1965, 1962) and Anderson's ACT theory (1983).

Gagne's Theory of Cumulative Learning

Gagne's theory of cumulative learning is based on the premise that intellectual skills can be broken into simpler skills, which can in turn be broken into even simpler skills. When analyzed, intellectual skill objectives are arranged into a pattern that reveals prerequisite relationships among them (Gagne & Briggs, 1974). Thus, lower level skills must be mastered before higher-level skills can be mastered.

Anderson's ACT Theory

Anderson's theory explains the development of expertise through three stages: cognitive, associative, and autonomous. During the *cognitive stage* learners rehearse and memorize facts related to a particular domain or skill that guide them in problem solving. During the *associative stage* learners detect errors and misunderstandings through continual practice and feedback. During the *autonomous stage* learners have practiced a skill to the extent that it becomes automated, so the amount of working memory needed to perform the skill is reduced. At this point the learner has developed expertise.

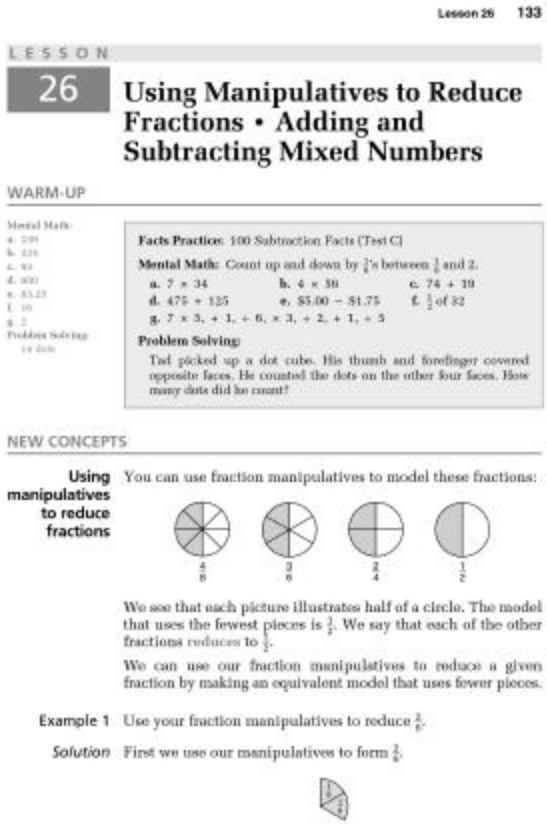
Mathematical Proficiency in Saxon Math

In 2003 the National Research Council released *Adding It Up: Helping Children Learn Mathematics.* The report was the product of a 16-member committee selected to review relevant research on mathematical learning in pre-K through eighth grade. The committee spent 18 months synthesizing the research and developing research-based recommendations. In the report the committee identified five interwoven and interdependent strands of mathematical proficiency:

- *conceptual understanding*—comprehension of mathematical concepts, operations, and relations;
- *procedural fluency*—skill in carrying out procedures flexibly, accurately, efficiently, and appropriately;
- *strategic competence*—ability to formulate, represent, and solve mathematical problems;
- *adaptive reasoning*—capacity for logical thought, reflection, explanation, and justification;
- *productive disposition*—habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one's own efficacy.

Lesson 26 from *Saxon Math 7/6,* Fourth Edition, (below) illustrates how *Saxon Math* provides daily opportunities for students to develop mathematical proficiency in conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive

disposition. These daily opportunities to develop mathematical proficiency can be found in lessons of *Saxon Math* at all grade levels.



Lesson 26 133

LESSON 26

Using Manipulatives to Reduce Fractions • Adding and Subtracting Mixed Numbers

WARM-UP

Facts Practice: 100 Subtraction Facts (Test C)

Mental Math: Count up and down by $\frac{1}{4}$'s between $\frac{1}{4}$ and 2.

a. 7×34 b. 4×30 c. $74 + 39$

d. $475 \div 125$ e. $\$5.00 - \$1.75$ f. $\frac{1}{2}$ of 32

g. $7 \times 3, \div 1, \div 6, \times 3, \div 2, + 1, \div 3$

Problem Solving:

Tad picked up a dot cube. His thumb and forefinger covered opposite faces. He counted the dots on the other four faces. How many dots did he count?

NEW CONCEPTS

Using manipulatives to reduce fractions

You can use fraction manipulatives to model these fractions:

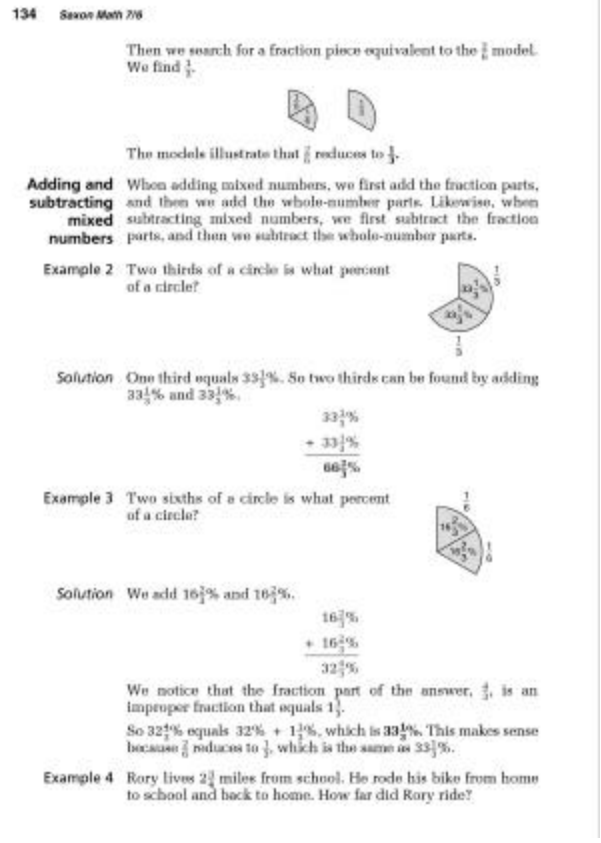
$\frac{4}{8}$ $\frac{3}{6}$ $\frac{2}{4}$ $\frac{1}{2}$

We see that each picture illustrates half of a circle. The model that uses the fewest pieces is $\frac{1}{2}$. We say that each of the other fractions reduces to $\frac{1}{2}$.

We can use our fraction manipulatives to reduce a given fraction by making an equivalent model that uses fewer pieces.

Example 1 Use your fraction manipulatives to reduce $\frac{3}{6}$.

Solution First we use our manipulatives to form $\frac{3}{6}$.



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Then we search for a fraction piece equivalent to the $\frac{3}{6}$ model. We find $\frac{1}{2}$.

The models illustrate that $\frac{3}{6}$ reduces to $\frac{1}{2}$.

Adding and subtracting mixed numbers When adding mixed numbers, we first add the fraction parts, and then we add the whole-number parts. Likewise, when subtracting mixed numbers, we first subtract the fraction parts, and then we subtract the whole-number parts.

Example 2 Two thirds of a circle is what percent of a circle?

Solution One third equals $33\frac{1}{3}\%$. So two thirds can be found by adding $33\frac{1}{3}\%$ and $33\frac{1}{3}\%$.

$$\begin{array}{r} 33\frac{1}{3}\% \\ +\ 33\frac{1}{3}\% \\ \hline 66\frac{2}{3}\% \end{array}$$

Example 3 Two sixths of a circle is what percent of a circle?

Solution We add $16\frac{2}{3}\%$ and $16\frac{2}{3}\%$.

$$\begin{array}{r} 16\frac{2}{3}\% \\ +\ 16\frac{2}{3}\% \\ \hline 32\frac{4}{3}\% \end{array}$$

We notice that the fraction part of the answer, $\frac{4}{3}$, is an improper fraction that equals $1\frac{1}{3}$.

So $32\frac{4}{3}\%$ equals $32\% + 1\frac{1}{3}\%$, which is $33\frac{1}{3}\%$. This makes sense because $\frac{2}{6}$ reduces to $\frac{1}{3}$, which is the same as $33\frac{1}{3}\%$.

Example 4 Rory lives $2\frac{3}{4}$ miles from school. He rode his bike from home to school and back to home. How far did Rory ride?

- Through the use of manipulatives and pictorial representations, students develop *conceptual understanding* of the concept of fractions.
- The instruction moves from the representational to examples of reliable, efficient mathematical procedures. Students then develop *procedural fluency* through practice of the concept after instruction.
- Students develop *strategic competence* through problem-solving practice, solving word problems that include the concept taught and practiced.
- In *Saxon Math*, students develop and demonstrate proficiency in *adaptive reasoning* through Writing About Math and Oral Explanation opportunities in the lesson and practice.
- Connecting math and problem solving to the real world in the lesson and practice problems allows students to develop *productive disposition*. In addition, various independent efficacy studies show that students who use Saxon report higher levels of math enjoyment and higher levels of confidence in their ability to learn math—thus building positive productive disposition (Plato, 1998; Lafferty, 1994; Sistrunk and Benton, 1992).

According to the National Research Council, mathematical proficiency should enable students "to cope with the mathematical challenges of daily life and enable them to continue their study of mathematics in high school and beyond" (2003). *Saxon Math* effectively weaves the five strands

across all grade levels, allowing students to achieve mathematical proficiency and use their math skills in the classroom and in real-world settings.

The Saxon Pedagogy

According to the National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics (2000), "In a coherent curriculum, mathematical ideas are linked to and build on one another so that students' understanding and knowledge deepens and their ability to apply mathematics expands. … A well articulated curriculum challenges students to learn increasingly more sophisticated mathematical ideas as they continue their studies." John Saxon, founder of Saxon Publishers, had a similar philosophy in mind when in the early 1980s he developed his theory-based distributed approach to mathematics instruction, practice, and assessment. Saxon's approach has evolved to include a K–12 textbook series with a comprehensive approach to mathematics.

Bloom (1988), the well-known University of Chicago education professor and researcher, said, "I believe that [Saxon's] method of teaching mathematics is probably even better than what we've been getting under 'mastery learning,' and whether it is as strong as one-to-one tutoring, I don't know, but it must be very close to it." Bloom went on to comment that teachers using the Saxon method could "take a whole generation and make great mathematicians of them."

The *Saxon Math* series was developed by first breaking down complex concepts into related increments, because smaller pieces of information are easier to teach and easier to learn. The instruction, practice, and assessment of those increments were systematically distributed across each grade level. Then the daily lessons were extensively field-tested to ensure their grade-level appropriateness and effectiveness. At the core of the Saxon series is the premise that students learn best if (1) instruction is incremental and distributed across the level; (2) practice is continual and distributed across the level; and (3) assessment is cumulative and distributed across the level.

The Saxon approach differs from most programs in that, instead of massing instruction, practice, and assessments, *Saxon Math* distributes them throughout the lessons and school year. Most math programs use a massed approach, whereby instruction, practice, and assessment of a skill or concept occur within a short period of time and are usually clustered within a single chapter or unit. In *Saxon Math*, as students regularly encounter new increments of instruction, they are also continually reviewing and being frequently assessed over previously introduced math concepts. This approach ensures that students truly integrate and retain math concepts rather than forget them. Saxon's pedagogy is unique and research-based; it is also highly effective, because it allows students to gain and retain critical math skills.

Research Support for the Saxon Approach

Incremental Instruction Distributed Across the Level

Literature suggests there is value in a teaching method that uses small, easily digestible chunks of information (Brophy & Everston, 1976; Ausubel, 1969). Studies by Rosenshine and Stevens (1986) and Brophy and Everston (1976) demonstrated the importance of using incremental steps

when teaching new information. Hirsch (1996) pointed out that the human mind can handle only a small amount of new information at one time: A child's mind needs time to digest the new information, fostering memory and meaning, before the child can move on to a set of new information.

Effective incremental development involves teaching increments several times throughout a school year. This method is called "distributed instruction," or "spaced instruction." Distributed instruction is "the tendency, given an amount of time, for spaced presentations of a unit of information to yield much better learning than massed presentations" (Dempster & Farris, 1990). Foundational research has shown that distributed instruction results in greater student achievement than instruction that is not distributed (English, Wellburn, & Killian, 1934). Research has also provided evidence that student recall is superior under conditions of distributed instruction than under conditions of massed instruction (Glenberg, 1979; Hintzman, 1974). Distributed instruction has been found effective in a variety of subjects, including mathematics, science, and reading comprehension (Dempster, 1988; Hintzman, 1974; Reynolds & Glasser, 1964; English, Wellborn, & Killian, 1934). Dempster and Farris (1990) concluded that distributed instruction "is one of the most remarkable phenomena to emerge from laboratory research on learning. In many cases, two spaced presentations are about twice as effective as two massed presentations, and the difference between them tends to increase as the frequency of repetition increases."

How Saxon Addresses the Research

In *Saxon Math*, each increment builds on the foundation of earlier increments, leading students to a deeper understanding of mathematical concepts. The incremental instruction of related increments is carefully distributed throughout each grade level, ensuring that students have the opportunity to master each increment before being introduced to the next related one.

A study by Imrisek (1989) found that a group of sixth-grade students using the Saxon text scored significantly higher than a non-Saxon group on the posttest and that the Saxon group was exposed to a larger amount and wider variety of subject matter than the non-Saxon group. A number of research studies have shown Saxon's incremental approach to be effective. In 1984 Klingele and Reed explicitly identified incremental development as a point of study, comparing Saxon's approach to a nonincremental teaching approach. They found significantly larger test-score increases with the Saxon group, which used the incremental approach. Hansen and Greene (2000), whose investigation found that Saxon students exhibited greater growth in math achievement than students using a non-Saxon text, noted that "many students attribute their success in math to Saxon's incremental style." In a textbook evaluation Klein and Marple (2000) pointed out that an attractive feature of the Saxon program is the development of mathematical concepts using methods that are gradual, systematic, and accessible to students.

Continual Practice Distributed Across the Level

Studies have shown that practice and review are an effective strategy for improving student achievement at all grade levels. Dempster (1991) noted that the benefits of review have been proven by research since the early part of the twentieth century and that numerous studies suggest that when reviews are incorporated into the learning process, "not only the quantity of

what is learned but also the quality" is affected. Dempster suggested that reviews "may shift the learner's attention away from the verbatim details of the material being studied to its deeper conceptual structure." Dempster also found that it was insufficient to review new material an hour or two after its introduction (often called "massed review"). Instead reviews should occur continually and regularly.

Several research studies have shown that students who are taught with a mathematics curriculum that uses continual practice and review demonstrate greater skill acquisition and math achievement (Mayfield & Chase, 2002; Usnick, 1991; Ornstein, 1990; Hardesty, 1986; MacDonald, 1984; Good & Grouws, 1979). While most textbooks include review at the end of chapters, research has shown that review should be "systematically planned and incorporated into the instructional program. … Long-term retention is best served if assignments about a particular skill are spread out in time, rather than concentrated within a short interval" (Suydam, 1984). Additional studies have concluded that spaced (distributed) practice results in higher performance than massed practice (Dhaliwal, 1987).

Good and Grouws (1979) demonstrated the positive effect of continual, systematic review with fourth-graders, and MacDonald (1984) found gains in achievement with college-level remedial algebra students. Usnick (1991), Ornstein (1990), Finn (1988), and Hardesty (1986) also lent support to the use of continual practice and review. Mayfield and Chase (2002) explained that research has shown that practicing mixed, incrementally introduced concepts produces greater skill acquisition and posttest achievement.

A large research base supports the effectiveness of distributed practice and review, demonstrating that it leads to greater math achievement than massed practice (Dempster, 1988; Dhaliwal, 1987). In one study Gay (1973) found that students who reviewed arithmetic rules on the first and seventh days after the original teaching presentation learned the rules better than students who reviewed the rules on the first and second days after the original teaching presentation. In his investigation into the spacing effect, Caple (1996) concluded:

> The spacing effect is an extremely robust and powerful phenomenon, and it has been repeatedly shown with many kinds of material. Spacing effects have been demonstrated in free recall, in cued recall of paired associations, in recall of sentences, and in recall of text material. It is important to note that these spacing results do generalize to textbook materials, meaning that subjects such as science can be manipulated by spacing effects. Also the effects of spaced study can be very long-lasting.

Studies in cognitive science also support continual practice, because it develops computational automaticity—it increases retrieval speed, reduces time required for recognition, and decreases interference (Klapp, Boches, Trabert, & Logan, 1991; Pirolli & Anderson, 1985; Thorndike, 1921). In addition a number of studies have shown basic-skills/computational mastery to be a predictor of math achievement and problem-solving performance (Hetch, Torgeson, Wagner, & Rashotte, 2001; Kail & Hall, 1999; Geary & Burlingham-Dubree, 1989; Siegler, 1988). Dhaliwal (1987) found that distributed practice resulted in better performance than massed practice for short-term and long-term memory.

Tronsky and Royer (2003) noted that automated arithmetic skill developed via intense practice results in a decrease in working-memory resources used, which, according to research, is a major component of successful problem solving. When working-memory capacity is reduced it leaves room for the cognitive system to process other details and allows the brain to function at higher levels. Several studies have shown the significantly positive relationship between basic fact automaticity and higher-level problem-solving ability (Hetch, Torgesen, Wagner, & Rashotte, 2001; Kail & Hall, 1999; Geary & Brown, 1991; Siegler, 1988). Geary and Burlingham-Dubree (1989) showed that automaticity evidenced by speed of fact retrieval was a predictor of math achievement.

How Saxon Addresses the Research

In *Saxon Math*, practice of an increment is continual and distributed across each grade level. After an increment of a concept is introduced, students are given multiple opportunities and ample time to practice it. This allows students to understand and master the increment before being introduced to a related increment of the concept. Continual, distributed practice ensures that concepts are committed to students' long-term memory and that students achieve automaticity of basic math skills. Saxon's pedagogy emphasizes both the teaching of basic math skills and the continual practice of these skills to develop mathematical automaticity. The Saxon philosophy holds that all students must acquire basic-skills proficiency before they are able to progress to higher-order mathematical thinking.

To help students master basic math skills, Saxon provides daily practice sets that include an assortment of problems, some of which are difficult for students to master in a short period of time. However, by distributing the practice of similar problems across the level, Saxon gives students continual opportunities to master all concepts. In addition, the practice sets help prepare students for upcoming concepts by refreshing them on the skills they will need to use as they learn those concepts. This continual practice distributed across the level ensures that each student has the opportunity to master mathematical concepts to the point of automaticity, thus fostering advanced mathematical reasoning and application.

Hartzler (1984), writing about Saxon textbooks in Oklahoma City Public Schools, concluded that "review-as-you-go" is of great benefit to students of lower ability. Plato (1998) wrote that by using Saxon "students can realize that a concept is not simply learned for a test and forgotten." Hansen and Greene (2000) noted that teachers find Saxon's incremental approach to instruction appealing because it allows "students to develop mastery and automaticity through continuous repetition and practice."

Cumulative Assessment Distributed Across the Level

According to Fuchs (1995), assessments enhance instruction by monitoring student learning, evaluating instructional programs, and revealing remediation needs. In particular, cumulative assessment that is frequent and distributed has been found to be effective. A number of studies have shown that students who are assessed frequently have higher test scores than students who are not assessed frequently (Blair, 2000; Rohm, Sparzo, & Bennett, 1986; Peckham & Row, 1977).

Research has indicated that well-designed classroom testing programs have a positive impact on later student achievement. Benefits are noted when tests are an integral part of the instructional approach; administered regularly and frequently; and collected, scored, recorded, and returned to students promptly so that they can correct errors of understanding before the misunderstanding becomes ingrained. Dempster (1991) found that higher levels of achievement occur when testing is frequent and cumulative rather than infrequent or related only to content covered since the last test. Cotton (2001) noted that students who are tested frequently and given feedback have more positive attitudes toward tests. According to Whitehurst (2003), "We know that at the classroom level, frequent assessment is useful, particularly when teachers are given help on what they should do for children who aren't performing well." And as noted by NCTM (2000), assessment should become a "routine part of the ongoing classroom … rather than an interruption."

How Saxon Addresses the Research

The frequent, cumulative assessments in *Saxon Math* examine both the acquisition and maintenance of concepts. Assessments are provided at regular intervals to help teachers frequently gauge students' progress. And, since each assessment is cumulative, teachers can also monitor students' retention of skills.

Frequent, cumulative assessment is a natural complement to Saxon's distributed approach to incremental instruction and continual practice—assessments are given on a weekly basis and cover mathematical concepts that have been previously taught. The distributed approach to assessment helps students learn to recall mathematical concepts and provides extra opportunities for students to practice those concepts in an assessment setting.

Research Support for Explicit Instruction

Explicit Instruction

Teachers and researchers alike recognize the correlation between the explicit instruction of concepts and the long-term success of students. As Whitehurst (2003) noted, "We know that direct instruction can help students learn computational skills and understand math principles." According to Hall (2002), explicit instruction is a systematic approach that includes a set of delivery and design procedures based on educational research.

Educational researchers have confirmed that explicit instruction is critical to student learning and that it is more effective than nonexplicit instruction in teaching mathematics (Darch, Carnine, & Gersten, 1984). They have also determined that explicit instruction is the most effective way to teach critical-thinking skills (Bangert-Downs & Bankert, 1990). In addition, a number of studies have found explicit instruction to be essential for positive student outcomes (Ellis & Worthington, 1994; Rosenshine & Stevens, 1986; Darch, Carnine, & Gersten, 1984).

A meta-analysis performed by Bangert-Downs and Bankert (1990) found explicit instruction to be the most effective way to teach. A synthesis of relevant literature by Baker, Gersten, and Lee (2002) revealed the positive impact that explicit instruction has on low-achieving students. According to Kroesbergen, Van Luit, and Maas (2004) explicit instruction used with low

achievers was found to be "more effective than constructivist instruction for improving students' problem solving."

Klein (2001) noted that "a mathematics program should explicitly teach skills and concepts with appropriately designed practice sets. Such programs have the best chance of success with the largest number of students." Izumi, Coburn, and Cox (2002) found that empirical evidence supports the superiority of explicit-instruction methods over other teaching methods.

How Saxon Addresses the Research

Each lesson in *Saxon Math* provides a clear, explicit explanation of the concept or increment being taught. Concepts are first introduced through the use of manipulatives or representative models. The instruction then progresses to reliable, efficient mathematical procedures that can be applied to multiple problem-solving situations. In *Saxon Math K–4*, explicit instruction of a concept is modeled in the provided script. By following the script, teachers are able to deliver a well-defined, explicit explanation of the concept being taught. In *Saxon Math 5/4–Calculus* each lesson provides an explicit explanation of the concept as well. Students are able to follow the explanation of the concept provided in the student text as the teacher delivers the clear, concise instruction modeled in the Teacher's Manual. In addition, *Saxon Math* has been extensively field-tested to guarantee its grade-level appropriateness and effectiveness of the explicit instruction. Clopton, McKeown, McKeown, and Clopton (1999) concluded that "the Saxon program has many high-quality features of presentation including clear statements of the lesson objectives, daily structure, [and] clear and explicit instructional materials."

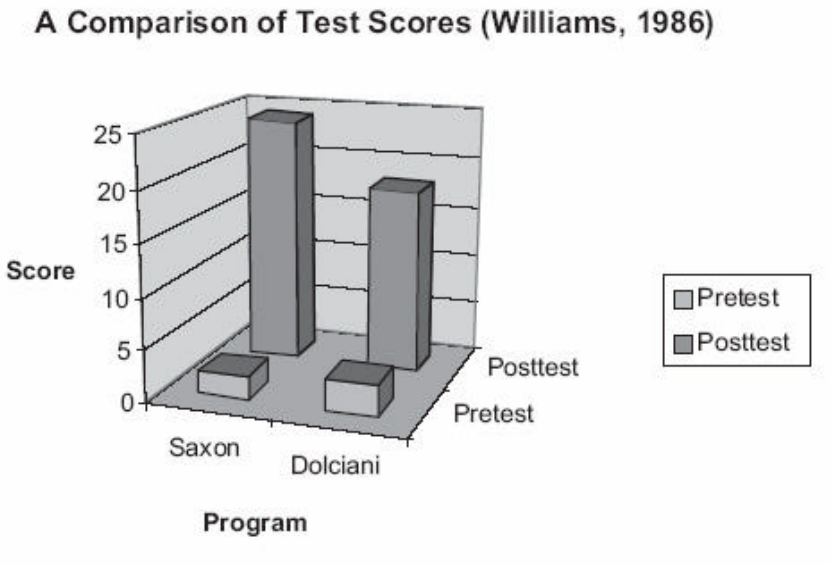
Program Efficacy Studies

A number of scientific studies have proven that *Saxon Math* significantly increases student achievement. In keeping with the mandates set forth in the No Child Left Behind Act, the research that follows was conducted by independent third parties. It includes experimental and quasi-experimental research studies. It is important to note that these research designs are among the most appropriate methods used to measure the effects of a curriculum on educational outcomes such as student performance (What Works Clearinghouse, 2003). Also included is a comparison-group study that, combined with the experimental and quasi-experimental research studies, demonstrates the effectiveness of *Saxon Math* across the grades.

The theory-based distributed approach to mathematics instruction, practice and assessment is the foundation of *Saxon Math* and is used consistently across all thirteen grades. Therefore, research findings on the Saxon approach can be applied to all levels of *Saxon Math*, regardless of whether the research was conducted on a primary, middle, or upper grades textbook.

Experimental Study on the Achievement of Students Using Saxon's Algebra 1 *Text*

Williams's experimental study (1986) investigated the effectiveness of Saxon's *Algebra 1* text. The purpose of this independent research study was to find out how students using an incremental, distributed approach to learning algebra (as in the Saxon textbook) would perform compared to students using a more traditional, massed approach (as in the Dolciani textbook).



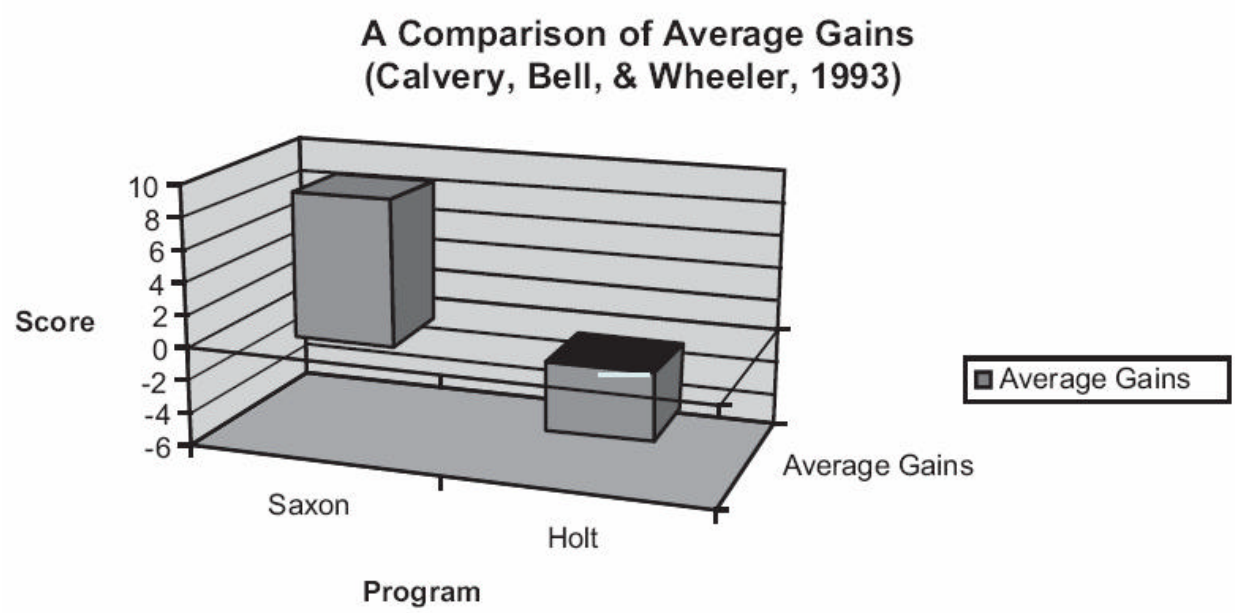
The study took place during the 1985–1986 school year. Forty-six high school students from Excelsior Springs, Missouri, were randomly selected to be in either a Saxon-instructed group or a Dolciani instructed group. Each group contained 23 students who participated in a fifty-seven-minute daily algebra class. At the beginning of every class, both groups received a math lecture that lasted approximately 20 minutes. The remaining time was used for practice. The groups used an equal number of supplemental materials, and tests for both groups were administered at approximately two-week intervals.

A pretest was given to both groups on the third day of class in order to provide a baseline for measuring achievement. The same test was given again at the end of the school year to conclude the study. An analysis of pretest and posttest scores showed that the Dolciani group had a higher mean test score at the beginning of the year. At the end of the study, however, the Saxon group had a higher mean score

A t-test indicated that the mean gain of the Saxon group was significantly larger than that of the Dolciani group. The Saxon group had an average gain of 24.1, while the Dolciani group had an average gain of 18.1. This study showed that the Saxon program had a greater impact on student achievement.

Effects of Saxon Math on the Achievement of Second- and Third-Grade Students

A quasi-experimental study conducted by Calvery, Bell, and Wheeler (1993) investigated the impact of *Saxon Math* on second- and third-grade students in Batesville, Arkansas. A total of 192 students participated in the study during the 1992–1993 school year—four classes of 24 students at each grade level. One class in each grade used the Saxon program, while the other three classes used a non-Saxon math program.



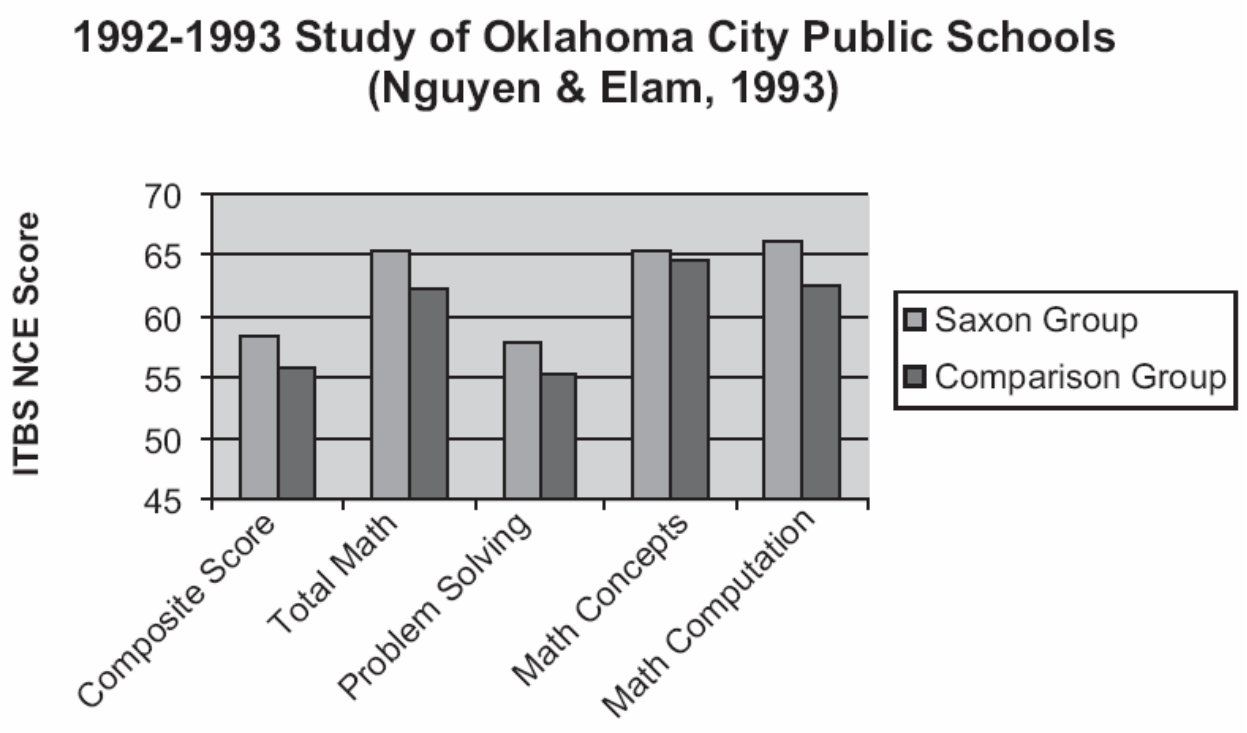
The Stanford Achievement Test 9 (SAT 9) was administered as the pretest and posttest to establish a student baseline and measure progress for the year. The total battery score for math was a composite of three dimensions: concept of numbers, math computations, and math application. Analysis of the student scores in both grades indicated that students in the Saxon instructed group made significantly greater gains than did students instructed with the non-Saxon program. The data also indicated that the Saxon students in both grades started as lower achievers than the non-Saxon group but caught up by the end of the study. As illustrated above, the average gain for the Saxon group was 8.9, while the non-Saxon group showed an average loss of 4.2. These findings led Calvery, Bell, and Wheeler (1993) to conclude that "underachieving math groups could reduce the gap in math achievement by using the Saxon method of instruction."

Effectiveness Studies on Saxon Math and the Achievement of Students in Grades K–5 Conducted by the Planning, Research, and Evaluation Department of Oklahoma City Public Schools

Two large-scale, quasi-experimental studies on the effectiveness of *Saxon Math* were conducted during two school years (1992–1994) by the Planning, Research, and Evaluation Department of Oklahoma City Public Schools (Nguyen, 1994; Nguyen & Elam, 1993).

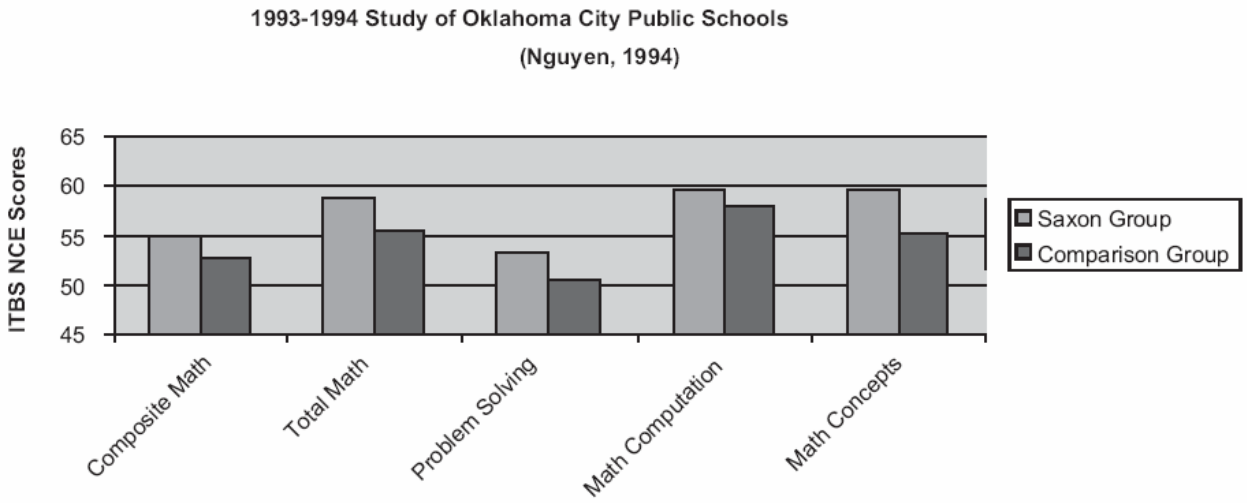
1992–1993 Oklahoma City Study

The first study observed kindergarten through fifth-grade students in 56 classrooms using *Saxon Math* and kindergarten through fifth-grade students in more than 300 classrooms using a Scott Foresman math program. Analysis of 1992–1993 Iowa Tests of Basic Skills (ITBS) scores showed that the Saxon group scored higher than the comparison group on all of the five ITBS math components: composite, total math, problem solving, math concepts, and math computation. The differences in scores were found to be statistically significant. The figure below highlights those differences.



1993–1994 Oklahoma City Study

During the 1993–1994 school year, Oklahoma City Public Schools again studied the effectiveness of *Saxon Math.* This study focused on the five schools that had completely integrated the Saxon program in all grade levels. After comparing all 1993–1994 student ITBS scores, researchers found that the Saxon group again scored higher on all five math components than the comparison group (Scott Foresman) and significantly higher than the comparison group on four of the five math components: composite, total math, math concepts, and problem solving.



An analysis showed that the Saxon groups scored higher than the comparison groups in 14 out of 15 math components. Of these components, eight of the differences in score were found to be statistically significant. In addition, the researchers received teacher feedback in the form of

surveys completed by nearly 400 respondents. The survey responses indicated that the Saxon teachers had "significantly more positive perceptions and experiences with the Saxon program than the [non-Saxon] teachers did with their math program." The figure above illustrates the results of the study.

Effects of Saxon Algebra ½ on the Achievement of Eighth-Grade Students

A quasi-experimental study conducted by Crawford and Raia (1986) examined the achievement of students using the Saxon *Algebra* ½ textbook and compared it to the achievement of a group of students using a Scott Foresman textbook. Three-hundred thirty-one eighth-grade students from Oklahoma City Public Schools participated in the study during the 1984–1985 school year. Seventy-two students used the Saxon textbook, and 259 used the Scott Foresman textbook.

The California Achievement Test (CAT) score from the prior year (1984) was used as the pretest score for each participant. The CAT was again administered in the spring of 1985 (the end of the school year) to provide a posttest score for each student. The analysis of the results showed that the Saxon group significantly outgained the control (Scott Foresman) group in total math score. In math concepts, although the difference was not statistically significant, the Saxon group outgained the control group. And in math computation, the Saxon group again significantly outgained the Scott Foresman group.

Effectiveness of Saxon Math 7/6 with Sixth-Grade Students

Imrisek (1989) conducted a quasi-experimental study to determine whether an "incremental development" method of teaching mathematics (such as the distributed approach used in Saxon) would result in better student achievement and understanding than a more traditional method (such as the massed approach used in many math texts). Two sixth-grade classes from Lycoming Valley Middle School in Williamsport, Pennsylvania, participated in the study during the 1987–1988 school year. Students were randomly assigned to one of the classes (groups). One class used the *Saxon Math 7/6* textbook; the other used a Scott Foresman sixth-grade textbook. Each group was given math instruction for forty minutes every day.

At the beginning of the school year the Stanford Diagnostic Mathematics Test was given to establish a pretest score for each student. Exams were administered at the end of the school year to provide posttest scores. Analysis of student pretest scores indicated no significant difference in the mathematical achievement of the two groups at the beginning of the study. However, at the end of the year the data showed that the Saxon group had greater achievement than the control group.

A separate analysis examined each group's achievement on two final exams, one of which was designed to be used with the Scott Foresman curriculum and the other designed to be used with the Saxon program. Not surprisingly, the analysis revealed that the Saxon group scored significantly higher than the Scott Foresman group on the test designed to be used with the Saxon program.

However, there was no significant difference found in the achievement of the two groups on the test designed to be used with the Scott Foresman program. Imrisek explained, "The incremental style of instruction enhanced the student's ability to reason mathematically. The students who

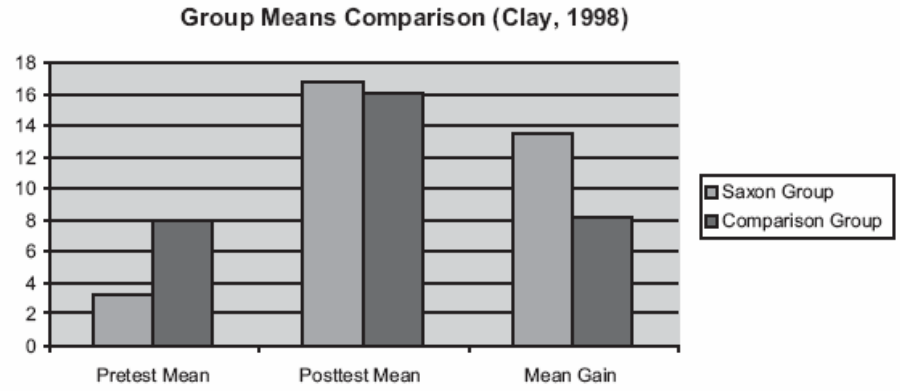
were taught with incremental development showed a greater capacity for determining solutions of problems for which they had received no instruction."

Analysis of the Impact of Saxon Math 6/5 on Students in Philadelphia

A quasi-experimental study by Lafferty (1994) examined the effectiveness of the incremental development approach used by *Saxon Math.* A total of 454 sixth-grade students from suburban Philadelphia schools participated in this study during the 1993–1994 school year. One group of students used the *Saxon Math 6/5* textbook; the other used an Addison-Wesley sixth-grade textbook. The Metropolitan Achievement Test (MAT), which tested math concepts, math computation and problem solving, was given as the pretest. The MAT was administered again at the end of the school year as the posttest. A mathematics-anxiety scale was also used at the beginning and at the end of the study.

An analysis of the scores showed that the Saxon group scored significantly higher overall on the MAT than the Addison-Wesley group. The Saxon group scored significantly higher than the comparison group on both the math computations subtest and the math concepts and problem solving subtest. In addition, the Saxon group was shown to have lower math-anxiety levels than the Addison-Wesley group.

Study of the Impact of Saxon Math on the Achievement of Eighth-Grade Students



A quasi-experimental study conducted by Clay (1998) investigated the impact of the Saxon Algebra 1 textbook on eighth-grade students. Thirty-three eighth-grade students from two schools participated in the study. The study took place during the first nine weeks of the 1996–1997 school year. Half of the students were assigned the Saxon Algebra 1 program; the other half were assigned the Fair and Bragg algebra program. A locally designed criterion-based test was given at the beginning and the end of the nine-week period. The tests covered concepts taught in both the Saxon and the Fair and Bragg programs.

An analysis of the test scores showed that the two groups were statistically different at the beginning of the study. The Saxon group consisted of lower achievers than the Fair and Bragg group. However, the analysis revealed that at the end of the study the Saxon group achieved higher scores than the Fair and Bragg group. Although the difference between the two groups' final test scores was not significantly different, the Saxon group, which had lower pretest scores, made the greater gains in math achievement during the nine-week period. The improvement of the Saxon group was approximately 65 percent more than the Fair and Bragg group's improvement. Figure 14 demonstrates the results of the study.

Independent Studies on the Ability of Saxon Math to Close the Achievement Gap

Closing the Gap with Fourth-Grade Students

Several studies support the notion that *Saxon Math* helps close the achievement gap. Hansen and Green's quasi-experimental study (2000) compared two groups of fourth-grade students (one using *Saxon Math*, one using another text). The Iowa Tests of Basic Skills (ITBS) scores from the prior year were used as pretest scores, and the ITBS scores at the end of the school year were used as posttest scores. Analysis of the scores showed that the Saxon group exhibited greater growth in math achievement than the non-Saxon group. Although the difference between the groups' posttest scores was not statistically significant, the Saxon group began the study with lower achievement scores but ended the study with higher achievement scores—the Saxon group showed the greater increase in learning.

Closing the Gap by Building Math Confidence and Motivation in Students

Saxon Math also builds student confidence and motivation in learning mathematics. Students who use Saxon have reported higher levels of math enjoyment and higher levels of confidence in their ability to learn math (Plato, 1998; Lafferty, 1994; Sistrunk & Benton, 1992).

Closing the Gap with Minority and Low-Performing Students

Patterson (2001) found that "data compiled from nine public schools in Texas, as well as dozens of schools throughout the nation, document improved mathematics proficiency of all students, but most particularly of Hispanic and African American students, after Saxon curricula had been introduced to elementary and middle school classrooms."

Sistrunk and Benton (1992) found that when students used *Saxon Math* for two years, they "made significantly greater gains in number concepts, math application, and total battery scores than did students receiving only one year of [Saxon] instruction." Minority and low-achieving students were particularly likely to benefit from continued use of Saxon programs. According to the study, *Saxon Math* helped minority students increase test scores, self-esteem and independence in work habits. Calvery, Bell, and Wheeler (1993) also noted that the Saxon method of instruction helped close the achievement gap in math for underachieving groups.

Conclusion

The tenets of instruction used in Saxon Math have long been shown to be effective. The Saxon pedagogy and its instructional methods are sound, supported by a variety of scientifically based foundational research studies; independent, program efficacy studies; and documented test score increases. Saxon Math provides incremental instruction, continual practice, and cumulative assessment—all of which are distributed throughout the school year and across grade levels. This unique approach is highly effective with students of varying ability levels and allows students to gain and retain math skills essential for life-long learning.

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Core Knowledge

The choice of a Core Knowledge curriculum is pivotal to Colorado Springs Charter Academy's vision. What follows is an article in total from Robert Holland, Senior Fellow at the Lexington Institute.[1] In addition to summarizing the success of Core Knowledge, the article pays specific mention to certain Core Knowledge successes in Colorado.

Why is Core Knowledge a Successful Route to High Levels of Student Achievement?

A battle raged throughout the 20th Century over the best way to teach children—by teacher-directed, content-rich approaches or through a "progressive" method by which children direct their own learning. It rages still, with progressivism continuing to exert a strong hold, despite mounting evidence that teacher-directed instruction using a core curriculum works best for most children.

Core Knowledge schools have risen to meet the need and demand for schools that teach children facts in a sequential manner, so that they gain the vocabulary and knowledge base for further learning. Implementation of a Core Knowledge Sequence started in 1991 with one school in Florida; this fall, there will be 1,100 Core Knowledge schools operating in 46 states. The parallel charter school movement offers opportunities for parents and teachers to start Core Knowledge schools.

A basic purpose of Core Knowledge and its founder, Dr. E. D. Hirsch Jr., is to advance equity in education by ensuring a full education for all, including children from low-income and minority homes. There is mounting research showing that Core Knowledge is succeeding.

Public Charter Schools and the Core Knowledge Movement

The battle over the surest way to teach children what they need to know has gone on longer than the War of the Austrian Succession. That doesn't mean its resolution should excite pedagogues only. Settling the issue should interest all of us, because the debate has a serious impact on how well our children and grandchildren are educated.

In the past 30 years ample research has made possible a definite conclusion: Tightly focused teacher-directed instruction is more effective for most children than is child-directed instruction in which the teacher acts purely as a coach, mentor, or facilitator. For instance, a 1999 American Institutes of Research look at two dozen models of "whole school" designs reaffirmed the

[1] *Public Charter Schools and the Core Knowledge Movement*, Robert Holland (Lexington Institute), September 2000.

superiority of largely teacher-directed approaches like Direct Instruction, Success For All, and Core Knowledge.[1]

Yet despite repeated proof that this is so, large segments of the education world stubbornly ignore this reality. They remain wedded to the so-called progressive doctrine. In her important new book, Left Back: A Century of Failed School Reforms, education historian Diane Ravitch documents how the progressive movement championed most notably by philosopher John Dewey has exerted a powerful hold on American education from the early days of the 20th Century to the present. Ms. Ravitch argues powerfully that American schools must return to their basic mission of teaching knowledge.[2]

There can be little doubt that most parents prefer the traditional, structured approach over progressive ways. Public Agenda, a nonpartisan research organization, repeatedly asked parents during the 1990s what they expected from their children's schools. Invariably parents of all races and backgrounds wanted schools that taught the academic basics, with attention to children being able to speak and write standard English. Parents also wanted schools where children were expected to obey rules, such as being "neat, on time, and polite." But Public Agenda found quite different goals among professors in the teacher-training schools, where strains of progressivism still exert a powerful grip. True to the old-time gospel of John Dewey, most professional educators thought advancing "social justice" more important than teaching children knowledge. Unlike parents, these teachers of teachers wanted schooling that is less structured and more "learner-centered."[3]

Keeping up with terms is important for anyone who wants to stay abreast of education debates. "Progressive" sounds benign but is the opposite of a structured approach in which the teacher is an authority figure who transmits essential knowledge to pupils. Some terms associated with progressive thinking and style are: child-centered, child-directed, constructivist (children construct their own learning), discovery, applied, hands-on, inquiry, cooperative learning, thematic, performance-based, and learner-centered. The Whole Language philosophy with regard to children learning to read is a latter-day example of progressive thinking.

The competing school of thought is the traditional or classical approach. Some terms associated with this approach are teacher-directed, structured, fact-based, drill, practice, ordered, and disciplined. Systematic phonics to teach reading is an example of this structured approach.

Of course excellent teachers can effectively mix the two approaches to find something that fits their own styles and best meets the needs of their own students. But there needs to be a default method that furnishes order and structure for the experimentation with style. University of Virginia English professor E. D. Hirsch, Jr., who started the Core Knowledge Foundation in 1986 in conjunction with the writing of his seminal work, *Cultural Literacy*, put it this way:

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[1] *An Educator's Guide to Schoolwide Reform*, American Association of School Administrators, http://www.aasa.org/Reform/overview.htm

[2] Diane Ravitch, Left *Back: A Century of Failed School Reforms*, Simon & Schuster, New York, 2000.

[3] Steve Farkas and Jean Johnson, *View Public Education*, Public Agenda, New York, 1997.

> "The only truly general principle that seems to emerge from process outcome research on pedagogy is that focused and guided instruction is far more effective than naturalistic, discovery, learn-at-your-own-pace instruction. But within the context of focused and guided instruction, almost anything goes, and what works best with one group of students may not work best with another group with similar backgrounds in the very same building."

Hirsch himself prefers to use drama or storytelling to engage the interest of students, but within the crucial context of structure.[1]

The Rise of Core Knowledge

In 1990, Dr. Hirsch and his allies convened a national conference at which 24 working groups finalized a draft Core Knowledge Sequence for use in elementary schools. The sequence was based on research into the content and structure of the highest-performing elementary schools around the world, as well as consultation with teachers, parents, scientists, curriculum specialists, and others.[2]

In 1991, the Core Knowledge Sequence debuted in a year of implementation at Three Oaks Elementary in Ft. Meyers, Florida under the leadership of the principal, Dr. Constance Jones (who in 1999 became president of the Core Knowledge Foundation in Charlottesville, Virginia). The Core Knowledge schools were born. The interest in and spread of these schools devoted to content-rich direct teaching has been phenomenal. This fall, there will be more than 1,100 full-fledged Core Knowledge schools in 46 states. Hundreds of additional schools use portions of the Core Knowledge program.

Particularly in the very early stages, adoption of Core Knowledge depended on principals and teachers who had to make the case to an often-skeptical school administration for importing a curriculum that rubs against the grain of education progressivism. James Traub wrote about Jim Coady, a principal in liberal Cambridge, Massachusetts, who had to battle the administration's hostile curriculum supervisors to bring Core Knowledge to Morse Elementary School, which was a struggling school with a relatively high proportion of children from low-income and minority homes. The supervisors argued, among other things, that the Harvard Graduate School of Education was against the experiment. But Coady won the right to experiment and by 1998 all grades at Morse scored at or above the national norm in math and reading, and the first graders were third in the entire city in their reading scores.[3]

With the emergence of the national charter school movement in 1992, Core Knowledge became a viable option for parents, teachers, and others seeking to secure charters to start their own schools. In Colorado, a state evaluation of the performance of 51 charter schools that have been in operation for at least two years found Core Knowledge distinguishing itself both in quantity and quality. Twenty-two of the public charter schools (or 42 percent) used the Core Knowledge

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[1] E. D. Hirsch, Jr., *The Schools We Need and Why We Don't Have Them*, Anchor Book: Doubleday, New York, 1999, p. 174.
[2] http://www.coreknowledge.org
[3] James Traub, *Better By Design? A Consumer's Guide to Schoolwide Reform*, Fordham Foundation, December, 1999.

curriculum. Among charter schools using a "whole-school" model, Core Knowledge was clearly dominant—22 versus three for the next-most-used model. More important, Core Knowledge was delivering results. The evaluators concluded that 14 of the Core Knowledge schools "exceeded expectations set for their performance," and the remaining eight "generally met" expectations.[1]

Furthermore, Core Knowledge schools were a significant part of the reason Colorado charter schools scored, on average, 10 to 16 percentage points higher on basic subjects than public schools with comparable demographics.

Nationally, about 15 percent of Core Knowledge schools are charter schools. Another 70 percent are regular public schools, while the remaining 15 percent are a mixture of secular and religiously affiliated private schools. But as the charter-school movement continues to spread, with more states passing charter school laws, the Core Knowledge model figures to attract many charter organizers who want to provide children a substantive academic fare.

There is considerable research indicating that Core Knowledge is bolstering academic success. But first let's look at what the program is all about.

The Core Knowledge Sequence

"Shared" is an important word in the Core Knowledge lexicon. In his 1996 book, *The Schools We Need And Why We Don't Have Them*, Dr. Hirsch emphasized the importance of shared knowledge.[2] Citizens in a democracy need to share an extensive body of information in order to communicate and function fully in society. The same holds in the classroom: If students draw a blank at mention of the names "Lee" and "Grant" not to mention "Bull Run" and "Appomattox," how can they be expected to engage in critical thinking about the Civil War?

Education progressives claim that knowledge is changing so rapidly that what children learn today will be outdated tomorrow; that schools therefore can at best only teach them "accessing skills," such as how to surf the Internet. But such a rationale does a grave disservice to children, because there is a body of bedrock knowledge—pivotal events in world history, the development of constitutional government, principles of writing and mathematics. And there are masterworks of art, music, and literature—with which they should be familiar in order to be fulfilled individuals.

Progressivism has done a particularly grave injustice to minority and disadvantaged children, according to Dr. Hirsch. One of the "tragic paradoxes" of our times, he has observed, is that the 1954 Brown decision was handed down just as "romantic progressivism finally succeeded in abolishing the emphasis on traditional academic content in the early grades." This foreclosed the chance that school integration would "equalize achievement and enhance social justice." A large

[1] *Colorado Charter Schools Evaluation Study, 1998-99* http://www.cde.state.co.us.
[2] Hirsch, op. cit.

purpose of Core Knowledge is to bring both equity and excellence to schooling through an enriched, carefully designed curriculum for all.[1]

The Core Knowledge idea, as summarized on its Website (www.coreknowledge.org), is "that for the sake of academic excellence, greater fairness, and higher literacy, elementary and middle schools need a solid, specific, shared core curriculum in order to help children establish strong foundations of knowledge, grade by grade." The Core Knowledge approach is not to throw tidbits of information helter-skelter at children. Rather the program specifies important knowledge in language arts, history and geography, mathematics, science, and the fine arts, and lays out a sequence for children to master what they need to know grade by grade.

A guiding principle of the Core Knowledge Sequence is that "knowledge builds on knowledge." Children learn by building on what they already have learned. The Sequence provides in great detail exactly what children should learn at each grade in core subjects so they can carry that knowledge on with them to the next level.

Evidence of Core Knowledge Success

As cited earlier, the 1998-99 Colorado Charter Schools Evaluation Study showed that Core Knowledge schools were contributing in a big way to the success of charter schools in that state. Core Knowledge schools accounted for almost half the charter schools that were studied. And the charter schools outperformed their home districts and schools with comparable socioeconomic profiles. Note these proportions of Colorado charter-school students who scored "proficient" or higher on standardized tests:[2]

- 3rd grade reading: 77 % of charter students; state averages, 67%
- 4th grade reading: 73% of charter students; state average, 59%
- 4th grade writing: 49% of charter students; state average, 34%
- 7th grade reading: 66% of charter students; state average, 56%
- 7th grade writing: 57% of charter students; state average 41%

From other states and researchers evidence of the positive effects of Core Knowledge has begun tumbling in. One of the most impressive studies was done by Gracy Taylor and George Kimball of the Oklahoma City Public Schools.[3] Their study paired 300 Core Knowledge students with 300 students in other schools who had the same characteristics as the CK students on seven critical variables: grade level, pre-score, sex, race/ethnicity, and eligibility for free lunch, Title I services, and special education. The control students were randomly selected via computer according to those variables.

The researchers studied the effects of implementing one year of Core Knowledge in grade 3, 4, and 5. The well-validated Iowa Test of Basic Skills was the measuring stick. Given the almost

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[1] E.D. Hirsch, Jr., *"Why Core Knowledge Promotes Social Justice,"* Convocation Address to students and faculty of the University of Tennessee – Chattanooga, October 6, 1999.
[2] Colorado Charter Schools Evaluation, op. cit.
[3] Gracy Taylor and George Kimball, *The Equity Effects of Core Knowledge*, Oklahoma City Public Schools, May, 2000.

identical backgrounds of the two groups of students, one might have expected one-year differences to be less than pronounced. However, the study found that Core Knowledge students made significantly greater gains in reading comprehension, vocabulary, science, math concepts, and social studies.

Moreover, the greatest gains, which came in reading, vocabulary, and social studies, were judged to be "highly significant." The effect of raising vocabulary—the best predictor of academic success—was particularly noteworthy, because it shows hope for closing the socioeconomic gap in student achievement.

The researchers remarked that "according to the literature and personal conversations with Dr. Hirsch prior to the analyses, the impact on student achievement related to Core Knowledge instruction should be most pronounced in vocabulary and comprehension. The implementation of the Core Knowledge scope and sequence is intended to provide and develop a broad base of background knowledge that children utilize in their reading. According to Dr. Hirsch's cultural literacy theory, the more background knowledge a child has, the greater facility in reading the child will have. The initial results of this study do appear to support that notion."

In other words, the evidence so far is that the Core Knowledge approach accomplishes what it sets out to do. And if its adherents are right that knowledge builds on knowledge, the results should only grow more striking over the years.

Along that line, a three-year study by the Center for Social Organization of Schools, Johns Hopkins University, concluded from looking at 12 schools that use Core Knowledge to varying degrees that when the Core Knowledge Sequence is taken to heart and really implemented, it really works.[1] The study found that the difference in gains on standardized tests between low-and high-implementing schools averaged about 12 NCEs (approximately the same as percentile points), a highly significant gain. The study also found signs that, as predicted, the growth of general knowledge had a cumulative effect for students who had been in Core Knowledge schools since the early elementary grades.

As opportunities expand for parents, teachers, and other entrepreneurs to start charter schools, it is likely that many will be turning to Core Knowledge as not just a program but a philosophy, that works.

The Colorado Connection: Two Core Knowledge Charter Schools

Jefferson Academy

Jefferson Academy in Jefferson County, Colorado is one of the nation's success stories for both the Core Knowledge and charter school movements.

[1] Sam Stringfield, and others, *National Evaluation of Core Knowledge Sequence Implementation: Final Report*, Center for Social Organization and Schools, Johns Hopkins University, 1999.

In the autumn of 1993, a group of parents in the county convened to seek a more academically challenging education for their children. They liked what they saw in the Core Knowledge Sequence. They also were encouraged by the Colorado legislature's passage of enabling legislation for charter schools that year.

The parent-led board of directors of Jefferson Academy submitted a charter-school application to the county Board of Education in January, 1994, and received a rejection in March. But proceeding under the strong Colorado law, which allows for appeals, the parents took their case to the State Board of Education, which remanded the application to the local school district. Finally, the Jefferson County School Board approved the charter proposal on May 12, 1994.

Jefferson Academy opened as a K-6 school that fall with 189 students and 350 on the waiting list. Just three years later, it became the first Jefferson County school to receive the prestigious Colorado School of Excellence Award, one of only 10 schools in the entire state to receive that honor. The Core Knowledge Foundation also has recognized it as a model school.

Upon entering Jefferson Academy in fall, 1994, 41.2 percent of students were performing below grade level. By the spring of 1998, only 12.4 percent of students were operating at below grade level.

Under the leadership of principal Rod Oosterhouse and the parent-led board of directors, Jefferson Academy takes pride in steering a firm course:

"In addition to the Core Knowledge Sequence," says the school's vision statement, "Jefferson Academy emphasizes the teaching of basic skills with a traditional and conventional approach, in a self-contained educational environment. Our academically oriented program is organized so that the entire class generally works as a single group on grade-level material with ability grouping where necessary. Emphasis is placed on the basic foundations necessary for an academically sound education: reading (with emphasis on phonics), mathematics, English, grammar, geography, history, government, penmanship, spelling, fine arts, physical education, and science. Homework will be assigned on a regular basis with the goal of strengthening and/or enriching daily work.

"Strict discipline and order will be maintained. Students are expected to respect authority, accept responsibility, respect the rights of others, take care of their own property, and be careful with the property of others. No student will be allowed to disrupt the education of other students."

Here are some other things worth knowing about this exceptional Core Knowledge charter school:

- Parent involvement is sky-high. Parents have put in more than 60,000 hours of service to the school over the past four years.
- The attendance rate for the past three years has been 96 percent.
- About 9 percent of the Academy's students have special needs. Jefferson does not screen out such children. It serves them diligently.
- On confidential surveys, 99 percent of parents "agree" or "strongly agree" that Jefferson Academy meets the needs of their children.
- The mobility rate has been just 1.5 percent, mostly due to families relocating.

The Jefferson County School Board awarded the Academy a new five-year charter in 1997. The school has expanded to include junior and senior high school. Enrollment has grown to 660 students, and there are 1,200 on the waiting list for elementary school and 2,000 for junior/senior high school.

Liberty Common School

Liberty Common School opened as a Core Knowledge school in Fort Collins, a pleasant community in the Rocky Mountain foothills of northern Colorado, three years ago. Today it enrolls more than 540 students in grades K-9, with a waiting list of close to 1,000. "It is our goal," says headmaster Kathryn Knox, "to equalize the playing field for all students through a common and rich foundation of content and skills, high expectations and good citizenship."

Liberty's Board of directors is composed of seven elected parents. The board establishes and oversees the school's educational and operational policies. It meets twice a month in sessions open to the public.

This charter school supplements the Core Knowledge Sequence with such solid programs as Saxon Math, and the Riggs Writing Road to Reading, with strong emphasis on phonics and literacy. Electives for grades 7-9 include Ceramics/Printmaking, Drawing, French, Spanish, German, Speech, Advanced and Beginning Band, Orchestra, and Sports.

A ninth-grader's curricular fare typically includes: Economics, Survey of British Literature, Algebra I and II, Biology, and Introduction to Chemistry and Physics.

Liberty Common is serious about meeting its academic goals. One of them was that the school would exceed state standards as well as the district's. The following percentages at or above "Proficient" were the results on the Colorado assessment in Liberty's second year:

- 4th grade reading: 91 % of Liberty; 73% of District; 59% of State
- 4th grade writing: 79 % of Liberty; 50% of District; 34% of State
- 7th grade reading: 85 % of Liberty; 66% of District; 56% of State
- 7th grade writing: 72 % of Liberty; 50% of District; 41% of State

In all of the reading and writing tests for grades 4 and 7, Liberty Common School ranked No. 1 in the local school district.

Core Knowledge: An NWREL-Approved School Reform Model

The North West Regional Education Laboratory (NWREL) and National Clearinghouse for Comprehensive School Reform (NCCSR) have catalogued those school reform models that map to the requirements of the national Comprehensive School Reform Program. Core Knowledge is one of these models. The purpose of NWREL and NCCSR is to aid schools, school districts, and states as they investigate external models that can be incorporated into comprehensive school-reform programs. Criteria for selecting models include evidence of effectiveness in improving student academic achievement, extent of replication, implementation assistance provided to schools, and comprehensiveness. Included here is the NWREL and NCCSR summary for Core Knowledge.[1]

NW Regional Educational Laboratory

NCCSR The National Clearinghouse for Comprehensive School Reform

The Catalog of School Reform Models

Core Knowledge (K - 8)

Accepted for Inclusion 2/1/1998
Re-accepted 11/1/2001
Description Updated 1/1/2004

Type of Model	entire-school
Founder	E. D. Hirsch, Jr.
Current Service Provider	Core Knowledge Foundation
Year Established	1986
# of Schools Served (5/1/2002)	600
Level	K - 8 (a separate preschool program is available)
Primary Goal	to help students establish a strong foundation of vocabulary and skills to build knowledge and understanding
Main Features	? sequential program of specific topics for each grade in all subjects ? structured program to build vocabulary and skills to

[1] http://www.nwrel.org/scpd/catalog/ModelDetails.asp?ModelID=11.

	improve literacy
Impact on Instruction	instructional methods to teach core topics are chosen by individual teachers/schools; teachers are expected to teach all of the topics in the Core Knowledge Sequence at the specified grade levels, except where explicitly listed in state standards
Impact on Organization/Staffing	full participation by all staff members is required
Impact on Schedule	common planning time is required; implementation requires full school participation for a minimum of three years
Subject-Area Programs Provided by Developer	yes, in all subjects
Parental Involvement	schools are expected to involve parents in planning and resource development
Technology	none required
Materials	detailed curricular materials provided and/or identified from other sources; schools are required to purchase specific textbooks, testing materials, and lesson plans

Origin/Scope

The Core Knowledge Foundation is an independent, non-profit, non-partisan organization founded in 1986 by E. D. Hirsch, Jr. The foundation's essential program, a core curriculum entitled the *Core Knowledge® Sequence,* was first implemented in 1990. By May 2002, it was being used in over 600 schools.

General Approach

Core Knowledge focuses on teaching a common core of concepts, vocabulary, skills, and knowledge that characterize a "culturally literate" and educated individual. The purpose of the approach is to increase students' receptive and productive vocabulary, increase comprehension, and help build a general knowledge base, thus increasing academic performance.

Core Knowledge is based on the principle that the grasp of a specific and shared body of knowledge will help students establish strong foundations for higher levels of learning. Developed through research examining national and local core curricula and through consultation with education professionals in each subject area, the Core Knowledge Sequence provides a model of specific content guidelines for students in the preschool, elementary, and middle school grades. It offers a progression of detailed grade-by-grade topics in language arts, mathematics, science, history, geography, music, and fine arts, so that students build on knowledge from pre-kindergarten through grade eight. Instructional strategies are modeled for teachers, but the selection of strategies is left to the discretion of teachers.

The Core Knowledge Sequence typically comprises 50 percent of a school's curriculum; the other 50 percent allows schools to meet state and local requirements not included in the

Sequence. Schools are expected to incorporate structured, research-based reading and mathematics programs along with the Core Knowledge Sequence. The Sequence is detailed in the Core Knowledge Sequence Content Guidelines for Preschool through Grade Eight and illustrated in a series of books entitled What Your (First-, Second-, etc.) Grader Needs to Know.

Parental involvement and consensus-building contribute to the success of the Core Knowledge Sequence. Parents are expected to be involved in obtaining resources, planning activities, and developing a schoolwide plan. The year-long plan aligns the Core Knowledge content with district and state requirements and assessments and includes strategies for successful implementation.

Results

A three-year study (1995-98) conducted by independent researchers at Johns Hopkins University compared student achievement at four Core Knowledge schools and four control schools (Stringfield, Datnow, Borman, & Rachuba, 1999). Researchers followed two cohorts of students in the schools, one from first to third grade, and the other from third to fifth grade. They found that the Core Knowledge and control cohorts made similar gains in reading and mathematics on the CTBS and other norm-referenced tests. However, when Core Knowledge schools where less than 50 percent of teachers were implementing the sequence were excluded, the performance of the Core Knowledge students at the remaining schools was higher than that of control students in both subjects, particularly in the third-to-fifth grade cohort. On tests created by the researchers specifically to measure achievement of Core Knowledge subjects, the Core Knowledge cohorts performed considerably better than control schools. Additionally, teachers at Core Knowledge schools reported that the model led to enhanced curricular coherence, increased teacher collaboration, and enriched classroom experiences for students.

Another group of Johns Hopkins researchers examined implementation and student achievement from 1994 to 1999 at five Core Knowledge and five control schools in Maryland (Mac Iver, Stringfield, & McHugh, 2000). Problems in continuity of the sample prevented the researchers from calculating average five-year gains. They did calculate three-year gains, reporting that the first-to-third grade cohort at control schools gained 6.4 NCEs on the CTBS reading comprehension subtest, compared with 4.8 NCEs at Core Knowledge schools. However, when the lowest implementing Core Knowledge school was excluded from the analysis, the Core Knowledge cohort at the remaining four schools outgained their control school counterparts (8.1 versus 4.2 NCEs).

A district official in Oklahoma City, where over 30 elementary schools have implemented the Core Knowledge curriculum, wrote a dissertation examining the academic achievement of Core Knowledge students (Taylor, 2000). The author compared ITBS scores of third-, fourth-, and fifth-grade students in 29 Core Knowledge classrooms across the district (classrooms where teachers were deemed to be fully implementing the model) to scores of non-Core Knowledge students who were matched on six variables: grade, pre-test score, gender, ethnicity, free lunch eligibility, and special education eligibility. From 1998 to 1999, the Core Knowledge students outscored the control students on seven of eight subtests, with statistically significant advantages in reading comprehension, reading vocabulary, and social studies. The author also examined fifth-grade scores in reading and social studies on the 2000 Oklahoma

Criterion-Referenced Text for a smaller set of students. She found statistically significant advantages for the Core Knowledge students on three of four reading objectives and six of eight social studies objectives, with large effect sizes (0.5 or higher) in many cases.

Additional studies have demonstrated promising trends in test scores at a variety of Core Knowledge schools. For example, at Hawthorne Elementary School in Texas, an inner-city school with a large Hispanic population and a 96 percent free/reduced-price lunch rate, a district evaluator examined 1994 and 1995 Texas Assessment of Academic Skills scores for grades three through five (Schubnell, 1996). She found that fifth-graders scored considerably higher than third-graders in reading and mathematics in both years, suggesting a cumulative effect for the program. Also, Hawthorne fourth-graders who took the test in 1994 and again as fifth-graders in 1995 showed a gain of 4.8 Texas Learning Index units in reading, compared to a 0.7 unit gain districtwide. There were no significant differences in mathematics scores.

More recent data are available directly from the Core Knowledge Foundation.

Implementation Assistance

- **Project Capacity:** The Core Knowledge foundation is headquartered in Charlottesville, Virginia. There are cadres of trainers in Arizona, California, Colorado, Florida, Maryland, Minnesota, Nevada, North Carolina, Ohio, Oklahoma, Tennessee, Texas, Virginia, and Washington. Training is provided at the school site.

- **Faculty Buy-In:** The school or school district must obtain the commitment of at least 80 percent of the teachers who will be involved in the implementation. Implementation requires full school participation for a minimum of three years. Teachers are expected to teach all of the topics in the Core Knowledge Sequence at the specified grade levels, except where explicitly listed in state standards.

- **Initial Training:** Initial training involves five days (which may be consecutive or not) of intensive on-site training for all teachers and administrators. The training includes an overview of Core Knowledge; development of a schoolwide plan; alignment of Core Knowledge topics with state and district standards and assessments; advice on obtaining resources and parent involvement; and developing lessons and assessments. In addition, a two-day Core Knowledge Leadership training is required for principals and school-based Core Coordinators.

- **Follow-Up Coaching:** Three two-day follow-up visits conducted by Core Knowledge consultants are required each year for CSR schools during their first three years of implementation. In addition, a variety of workshops to assist with analyzing implementation are offered. Also available are summer workshops that focus on collaborative planning, lesson-writing, and integrating the Core Knowledge Sequence with local curricular guidelines.

- **Networking:** Core Knowledge supports a Web site, publishes a quarterly newsletter, and hosts a national conference each spring.

- **Implementation Review:** After receiving documentation that includes a copy of the

development, and a letter of commitment from the school indicating the Core Knowledge Sequence is being implemented by at least 80 percent of the teaching staff, the school is recognized as an Official Core Knowledge School.

Costs

Schools are required to commit to the implementation of Core Knowledge for a minimum of three years. The cost is determined by the number of staff members and students. For a school with 25 teachers and 500 students, estimated costs would be $45,000 for year one, $37,000 for year two, and $37,000 for year three. These fees cover the following services and materials:

- Leadership training for the principal and Core Knowledge coordinator (two days per year), $1,000 per participant plus travel costs
- Professional development training conducted on-site by Core Knowledge consultants (five days per year), $14,340
- Site visits by Core Knowledge consultants (three two-day visits per year), $12,600
- Attendance at the annual Core Knowledge National Conference (five attendees' travel and lodging), $5,000+
- School Kit, $3,210
- Core Knowledge training materials for teachers (Core Knowledge Sequence, What Your __th Grader Needs to Know, Teacher Handbook, Art Resources, Text Resources, Day-by-Day Planner), $300+ per teacher

In addition to the estimated costs, schools are required to:

- Purchase the Pearson Learning/Core Knowledge history and geography textbooks (grades K-6);
- Allocate a minimum of $1,000 per teacher for Core Knowledge-related materials per year;
- Allocate a minimum of $8 per student in grades 1-5 for administration and scoring of TASA's Core Knowledge Curriculum Referenced Tests; and
- Purchase the Baltimore Curriculum Project lesson plans.

State Standards and Accountability

On-site training includes assistance in helping teachers review and align state standards and assessments with the topics included in the Core Knowledge Sequence. A yearlong plan is developed that organizes the state standards and content into the months of the year or the school's grading periods. This ensures that content and skills are taught prior to testing, and it creates a pacing structure that helps in planning lessons. Sample state alignments for various states are posted on the Core Knowledge Web site.

Special Considerations

Teachers must be willing to implement the Core Knowledge Sequence for three years and to

develop and implement a sequential program of skills instruction in the areas of reading and mathematics. The school must develop a year-long planning document that contains the Core Knowledge topics and district/state standards.

Selected Evaluations

Developer/Implementer

Taylor, G. L. (2000). *Core Knowledge: Its impact on the curricular and instructional practices of teachers and on student learning in an urban school district.* Unpublished doctoral dissertation, Nova Southeastern University.

Independent Researchers

Mac Iver, M. A., Stringfield, S., & McHugh, B. (2000). *Core Knowledge curriculum: Five-year analysis of implementation and effects in five Maryland schools.* Baltimore: Johns Hopkins University, Center for Research on the Education of Students Placed At Risk (CRESPAR).

Schubnell, G. (1996). Hawthorne Elementary School: The evaluator's perspective. *Journal of Education for Students Placed at Risk, 1*(1), 33-40.

Stringfield, S., Datnow, A., Borman, G., & Rachuba, L. (1999). *National evaluation of Core Knowledge sequence implementation: Final report.* Baltimore: Johns Hopkins University, Center for Social Organization of Schools.

Sample Sites

School/Contact	Size	Locale	Race/Ethnicity					Free Lunch	ELL	Stud. with Dis.
			Afr. Amer.	Am. Indian	Asian Amer.	Hisp.	White			
Public School 1 District 7 335 East 152nd Street Bronx, NY 10451 718-292-9191 Contact: Lillian Garcia	800	large city	35%	0%	0%	64%	1%	95%	23%	6%
Sierra Grande School District 17523 Highway 180 Blanca, CO 81123 719-379-3259 Contact: Pam Herrmann	309	rural	0%	0%	0%	71%	24%	76%	40%	10%
Caney Creek 6772 Highway 899 Pippa Passes, KY 41844 606-368-3307 Contact: Margaret Faye Gayheart	140	rural	0%	0%	0%	0%	100%	95%	0%	20%
Liberty Common School 1725 Sharp Point Drive Fort Collins, CO 80525 970-482-9800 Contact: Kathryn Knox	520	mid-size city	1%	0%	5%	5%	85%	16%	0%	0%

Figures for school size, locale, race/ethnicity, and free lunch eligibility are taken from the National Center for Education Statistics electronic database (1997-98 figures). Figures for English language learners and students with disabilities were obtained from each school for the 1999-2000 school year. M = Missing Data

List of all sample sites for this model

Northwest Regional Educational Laboratory
101 SW Main, Suite 500
Portland, OR 97204-3297
Telephone: 503-275-9500

National Clearinghouse for Comprehensive School Reform
2121 K Street, NW, Suite 250
Washington, C 20037-1801
Telephone: 877-766-4277

Open Court Reading

The following research is from McGraw Hill education in collaboration with The Business Roundtable Education Institute and the National Association of Elementary School Principals.[1]

Results with *Open Court Reading*

Lemoore Union Elementary School District, Lemoore, California

During the 1997-1998 academic year, the teachers and administration at Lemoore Union Elementary School District realized that the district had a problem. The reading program that the district was using was not effective for its diverse population. Its students were consistently scoring below the 50th percentile on the state-mandated SAT/9 test. Teachers and administrators in the Lemoore Union Elementary School District resolved to improve students' reading performance.

The district, which consists of four schools of more than 3,000 students, includes 38 percent Hispanic students and 10 percent African-American students. "It was clear that our instruction wasn't working for our students. We were especially troubled by the low performance of our English-Language Learners. We realized that we had to find a program that would reach all of our students. And it had to be well organized and thorough to help the many new teachers we are bringing in every year," said Assistant Superintendent Lois Zercher.

Enter Open Court

So Assistant Superintendent Zercher worked with other district officials to form a plan of action. After reviewing a number of programs, they decided to try the balanced instruction of the *Open Court Reading* program. Teachers and district administrators were impressed not only by the comprehensiveness of the program, but also by the program's commitment to teacher training and instruction. Upon implementation of the program, all teachers received intensive training by *Open Court* consultants, including visits by two experts to district classrooms five days every month for additional support and guidance.

"In 26 years of work in education, I have never experienced the high level of support we receive from *Open Court*," says Zercher. "It's really amazing!"

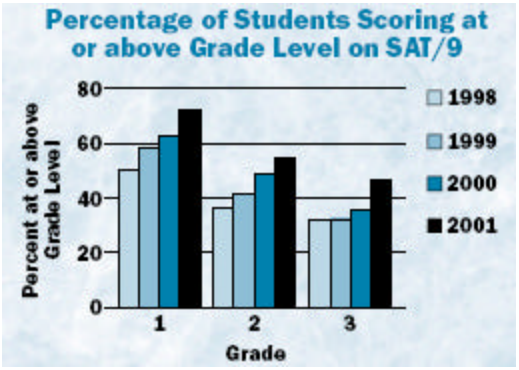
Results

After just one year using the *Open Court Reading* program, reading test scores shot up. Assistant Superintendent Zercher noted convincing improvement particularly among the English-

[1] *Results with Open Court Reading*, http://www.mheducation.com/news_room/MHE_results/MHE_results.htm, McGraw Hill Education, 2004.

Language Learners. An impressive 74 percent of the first grade ELL class at Lemoore Elementary, 65 percent at Meadow Lane Elementary, and 63 percent at Engvall Elementary scored above the 50th percentile on the state-mandated SAT/9. Mr. Rick Rayburn, the principal at Lemoore Elementary, was particularly pleased. "We were confident that we would see improvement, but to have 74 percent of our first grade English-Language Learners improve so much was the best news of all," says Rayburn.

Students in other levels also improved. These results are shown in the table to the right. As can be seen on this chart, in 1998 only 38 percent of second graders in the district scored at or above the 50th percentile. By 2001, that number had reached an incredible 51 percent. Within three years, students in other grades throughout the district saw similar steady climbs.



Lemoore teachers and administrators attribute much of their success to *Open Court's* focus on teaching critical skills for reading, along with the publisher's commitment to teacher support. "The professional development that we received with *Open Court* made all the difference. Not only did we learn how to use the program materials, we learned about why the instruction includes what it does," said one first grade teacher. "Not only did our scores go up, but the students are proud of their reading for the first time. When we have visitors in our classrooms, invariably our children want to read to them. They are so proud of what they've learned."

A Bright Future

Teachers and administrators in the Lemoore Union Elementary School District are confident they will continue to make progress with *Open Court.* Teachers will receive the support they need to be successful teachers, while students continue to build a solid foundation for reading success.

Sacramento City Unified School District, Sacramento, California

Sacramento City Unified School District had been battling poor reading scores for years.

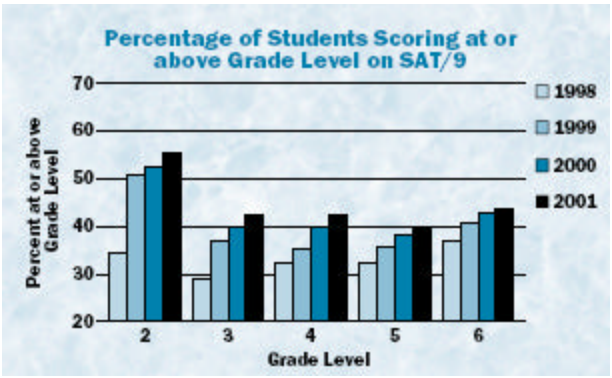
"It was frustrating," said Jim Sweeney, Superintendent of the Sacramento City Unified School District. "Our students couldn't read. Our district, which is 22 percent African-American and 23 percent Hispanic, needed a reading curriculum that would help all of our students, not just a select few."

While searching for a reading program to help his district, Superintendent Sweeney came across Inglewood Unified School District in Inglewood, California. What he saw fascinated him. Inglewood, which has a large number of English-Language Learners (ELL) and socioeconomically disadvantaged students, achieved high reading scores using the *Open Court Reading* program.

The test scores convinced Superintendent Sweeney. At the beginning of the 1997-1998 school year, he implemented the *Open Court* program into the district.

Good Scores

Three years after implementing *Open Court*, nearly 3,500 more elementary students are reading at grade level. As the chart on the following page shows, the percentage of second-grade students scoring at or above the 50th percentile climbed from 35% in 1998 to 56% in 2001. The percentage of third-grade students scoring at or above the 50th percentile was strong as well, climbing from 29% in 1998 to 42% in 2001. Gains were more modest in grades 4 through 6, but students in all grades improved.



Why was the increase in test scores so dramatic? "It is a solid approach with a balance of phonics and rich literature," said Superintendent Sweeney. "Plus we have received great support from the David and Lucille Packard Foundation, which has provided funds for coaching, staff development, materials, and technical support. But what really made the difference is our teachers. Our reading gains are a result of the great job so many did in implementing *Open Court.* We must never forget that program implementation is the key to our success."

To help students, all of the schools in the district maintain a common pacing schedule so that every classroom in the district is at the same place each and every day. "This is most important to transient students because no matter how often they move from school to school, they can pick up where they left off the day before," says Sweeney.

Sweeney notes the importance of professional development for all of the Sacramento City Unified School District teachers. "*Open Court* consultants helped teachers with pacing, as well as bridging the material for ELL students," he said. "They have been with us every step of the way. It's nice to know that the *Open Court* consultants will continue to stand beside us for the long run."

A Future of Success

Superintendent Sweeney is hopeful for the future. "Our district began in 1854, with two teachers and 90 students aged seven through nine. We are now the eighth largest school district in California, with 51,000 students in 77 schools. As we continue to grow, it is imperative that we do not leave a child behind or let a student slip through the cracks. With *Open Court,* our students are actively engaged in learning, and the results show. The ability to read is the foundation to good learning and we are committed to providing a good base for our students."

"*Open Court* is a highly complex teaching approach that demands great skill. We will continue to be successful with *Open Court* because we have the teachers and the commitment to make it work for all of our students."

Kelso Elementary School, Inglewood, California

Kelso Elementary School, located literally underneath the flight path of Los Angeles International Airport, has become one of California's most successful high-poverty schools. It has a student body of 1,650 students, 78 percent of whom qualify for free or reduced lunches. Forty-eight percent of the students are Hispanic and 51 percent are African-American.

Kelso Elementary's road to a good education has been a rocky one. Students were taught using the once-fashionable whole-language approach. "We went downhill for years," says Marjorie Thompson, the recently retired principal of Kelso Elementary. "Due to whole language, the children simply could not read."

Complicating matters, the school gained a large number of students learning English as a second language. "The school district sent us new students with different needs," says Thompson, "but it had not sent any materials to help us adjust to the needs of those students."

Principal Thompson, rejecting low expectations and efforts to "dumb down" the curriculum, recognized that students needed a program that was not only rigorous and structured, but one that had a history of success as well.

A Change

A teacher at Kelso Elementary suggested a switch to *Open Court* because she had seen it help a student who was having difficulty acquiring basic reading skills. With the help of *Open Court's* balanced approach, the struggling student was able to read at grade level in a short amount of time. The teacher was convinced that a program that had spurred so much improvement in one student was worth trying with others.

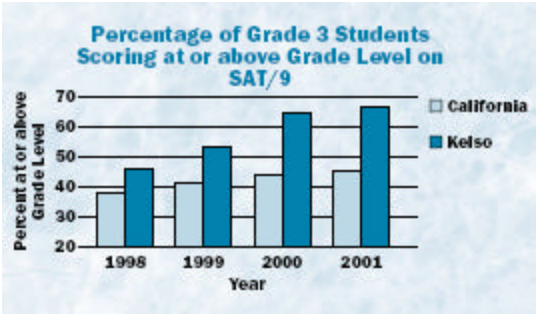
Thompson agreed. Kelso Elementary School implemented *Open Court* as a pilot program in each grade from K through 6. The pilots were successful across the board! "When we got *Open Court*," says Thompson, "our students really turned the corner."

As she explained to a school-board subcommittee, *Open Court* worked in Kelso Elementary School because "the program is not just phonics oriented, but it includes comprehension, and writing." Thompson believes that students in programs that do not include all aspects of reading will not fare nearly as well. "When looking at phonics programs, it is important to consider all aspects of reading instruction. If a school chooses a program that relies on phonics alone, teachers will abandon the program when they realize it does not offer the balanced instruction that *Open Court* does."

Instructors, or reading coaches, helped teachers implement the reading program. These coaches proved particularly helpful to the Kelso teaching staff, especially to those who hold emergency

teaching credentials. If teachers needed to have something clarified or explained, they then knew where to go.

A Long History of Success



Kelso Elementary has been successful with *Open Court* for almost 20 years now. In that time period, the school's reading scores have been consistently higher than in schools across California. And this trend continues to the present. As the chart to the left demonstrates, the strongest scores occurred among third graders. In 1999, more than 50 percent of third graders scored at or above the 50th percentile in reading on the SAT/9 test. In 2001, that number reached more than 60 percent. Since 1998, the numbers of students scoring at or above the 50th percentile on the SAT/9 have skyrocketed. Again, the biggest leap took place in grade 3, where students jumped more than 20 percentile points in only three years.

Those are impressive test scores, especially when compared to similar schools. Students with practically no ability to read fluently continue to enroll at Kelso Elementary School. Mrs. Jacqueline Moore, the current principal of Kelso Elementary, believes that the school's continued focus on reading and literacy is a critical component schoolwide.

According to Mrs. Moore, there are several key factors that make *Open Court Reading* a success:

- Well trained teachers. All teachers must complete training in the *Open Court Reading* program.
- Teachers work collaboratively to make the program a success.
- Constant attention to *Open Court Reading* unit test results.
- A reading specialist who provides additional support for students and teachers.

According to Moore, "The ability to read and use information appropriately is an achievable goal for all children. The Kelso staff is devoted to teaching every child how to read, and read well."

"We immediately immerse them in reading and go year-round," says Thompson. Frequently, we see students come in as nonreaders in December or January and within three to four months they learn to read."

According to Linda Stevenson, a longtime Kelso teacher who was the first to use *Open Court Reading* at the school, "We're committed to overturning a rampant perception in education—that so-called low socioeconomic children can't learn. Of course they can learn. We're here to prove it."

Public School 161, Crown Heights, Brooklyn, New York

P.S. 161, located in the Crown Heights section of Brooklyn, N.Y., has a population of approximately 1,200 students, ninety percent of whom are African-American. Ninety-two

percent of all students qualify for a free lunch. Ten years ago, there was a problem at P.S. 161–reading scores needed to be improved. Something had to be done.

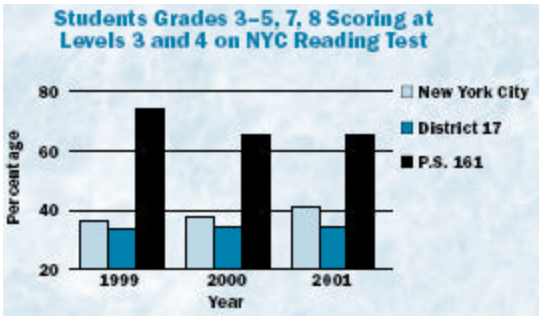
To correct the problem, the administration and staff at P.S. 161 committed themselves to making the reading program more structured, more consistent, and most of all, more effective. They chose *Open Court* to help them fulfill this commitment.

Success

The commitment to *Open Court* spelled success for P.S. 161. After only a few years, fully 80 percent of the school's third graders met the state's minimum score for reading.

Of P.S. 161's third graders, 38 percent tested for reading proficiency at the sixth grade level! By 1996, 93 percent of the school's fifth graders were above the state's minimum level in writing tests, slightly above the state average, and 17 points above the average for schools with similar demographics. In 1998, 80.9 percent of students scored at or above grade level on the citywide reading test (CTB). Compare that to the 47 percent performance achieved by schools with similar demographics.

Since 1998, P.S. 161 has scored consistently higher on the NYC Reading Test than the rest of District 17 and the entire city of New York. In 1999, nearly 74 percent of P.S. 161 students scored at Levels 3 and 4 on the NYC Reading Test. That same year, the rest of the district scored a low 33 percent. In 2000 and 2001, the percentage of P.S. 161 students scoring at Levels 3 and 4 continued to almost double the percentage of the rest of the district.



Open Court has allowed P.S. 161 to enjoy success for many years. "While some educators tried to boost their reading curricula with fad reading programs and whole language instruction, we've relied on the basics," says Deborah Barrett, Principal of P.S. 161. "Students enjoy success after success with the basic, solid instruction offered by *Open Court.* By focusing on phonics and authentic literature, teachers help students build a solid foundation for literacy."

Administrators and reading specialists believe that the program helps students not only develop skills that lead to fluent and automatic reading, but it also helps students learn important comprehension skills. For example, most children who use *Open Court* are able to decode before they leave kindergarten. Students sound out syllables and words at an early age and build strong learning habits. This enables students to read authentic literature independently by the middle of the first grade.

According to Diane Yules, a reading specialist at P.S. 161, "The best aspects of *Open Court* are that the program builds on skills year after year and complements all the other subject areas, like social studies and science."

A Bright Future

With 80 percent of the school's third graders meeting the state's minimum for reading, P.S. 161 has enjoyed exceptional success. Test scores are important, but teachers and administrators have seen other rewards as well: children are actively learning and participating in class activities. Attendance is up and discipline problems have declined. "P.S. 161 is a model school not only because of its test scores, but because it demonstrates that good education, and not socioeconomic status, is responsible for students reaching their potential. And *Open Court* helps students reach that potential," says Principal Barrett.

Principal Barrett speaks highly of her staff. "The *Open Court* program is enhanced by a great team of teachers, which we have here at P.S. 161."

"People are always looking for quick fixes to the education problems in this country, and there aren't any," said Ms. Yules. "*Open Court* requires a lot of work on the part of the teachers and students, but we're happy to work hard if we're going to keep getting such great results."

Research Supporting *Open Court Reading*: A Selected Annotated Bibliography

Following is a summary of several of the most significant studies in reading instruction from the past thirty years. Each study has reported results providing insights into at least one element critical to a successful reading program. These studies and many others serve as the cornerstone of the instruction found in *Open Court Reading*. Several of the studies listed below actually used and/or cited portions of *Open Court Reading* in their investigations for successful practices. Others used instructional methods incorporated in *Open Court Reading*. The sum of the knowledge revealed by these studies continues to support and enhance the philosophy of this program.

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: The MIT Press.

> Draws from decades of research on the nature and development of reading proficiency to show the role that phonics should play in a complete program of beginning reading instruction. Offers research support for the use of systematic, explicit phonics instruction.

American Federation of Teachers. (1998). *Building on the best, learning from what works: Seven promising reading and language arts programs.* Washington, DC.

> Part of a series about research-based programs that show promise for raising student achievement (especially in low-performing schools), this report describes seven promising reading and language arts programs that show evidence of high standards, effectiveness, replicability, and support structures. The seven programs are: (1) Cooperative Integrated Reading and Comprehension; (2) Direct Instruction; (3) Exemplary Center for Reading Instruction; (4) Junior Great Books; (5) Multicultural Reading and Thinking; (6) *Open Court Collections for Young Scholars*; and (7) Success for All.

Anderson, R. C., Hiebert, E. H., Scott, J. A., & Wilkinson, I. A. G. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Washington, DC: The National Institute of Education.

A landmark report that contains a synthesis of extensive research findings on the nature of reading and reading instruction. Proposes that (1) the knowledge is now available to make worthwhile improvements in reading throughout the United States, and (2) if the practices seen in the classrooms of the best teachers in the best schools could be introduced everywhere, improvement in reading would be dramatic.

Anderson, R. C., & Pearson, P. D. (1984). A schema-theoretic view of basic processes in reading. In P. D. Pearson, R. Barr, M. L. Kamil, & P. Mosenthal (Eds.), *Handbook of reading research* (pp. 255–292). New York: Longman.

Argues (1) that one of the most basic insights about learning is that it depends to a large degree on prior knowledge, and (2) that the *system* of understandings, or knowledge structures, about a concept that students bring to learning is more important than facts they may know or not know. Labels this view of learning *schema theory*. Explains that in schema theory, knowledge, or *schema*, is a large network of abstract mental structures that represent individual, personal understandings of the world. Relationships among schemata are like webs, with each schema interconnected to many others. Schemata grow and change as we acquire new information through experience and reading.

Ball, E. W., & Blachman, B. A. (1991). Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling? *Reading Research Quarterly*, 26, 49–66.

Finds that seven weeks of explicit instruction in phonemic awareness combined with explicit instruction in sound-spelling correspondences for kindergarten children was more powerful than instruction in sound-spelling correspondences alone and more powerful than language activities in improving reading skills.

Bereiter, C. & Scardamalia, M. (1993). *Surpassing ourselves: An inquiry into the nature and implications of expertise*. Chicago: Open Court.

Examines the nature of expertise and discusses expert-novice comparisons, which look at what experts in a particular field *know* and at what they *do* that novices in the field do not know or do, or do differently or less often than experts. Concludes that these findings are valuable in education because they show what the results of successful learning look like.

Beck, I. L., & McKeown, M. G. (1999). Comprehension: The sine qua non of reading. *Teaching and Change*, 6, 197–211.

Discusses the relevance to classroom instruction of reading-comprehension research. Notes how knowledge of the world and active engagement with ideas in a text influence comprehension. Examines the power of background knowledge, reading aloud and discussing literature with students, active engagement in independent reading, and questioning the author.

Brown, A., & Campione, J. (1990). Communities of learning and thinking, or a context by any other name. *Human Development*, 21, 109–125.

Discusses the distinction between "experts" and "novices," noting that students are "universal novices," faced constantly with new learning tasks. Argues that the aim of

instruction should be to help students to be *intelligent* novices who, although they do not possess knowledge of a particular subject, know how to get that knowledge and how to learn from texts rather than to memorize facts.

Bruer, J. T. (1993). The mind's journey from novice to expert. *American Educator*, 17, 6–15, 38–46.

Examines the field of cognitive science research—the study of thinking and learning. Argues for the use of teaching methods based on cognitive science and calls these methods "the educational equivalents of polio vaccine and penicillin." Notes, in particular, that such methods have been shown to produce increases in reading comprehension.

Chall, J. S. (1967). *Learning to read: The great debate.* New York: McGraw-Hill.

A landmark examination of a large body of reading- and learning-related research. Concludes that, as a complement to connected and meaningful reading, systematic phonics instruction is a valuable component of beginning reading instruction.

Cunningham, A. E. (1990). Explicit versus implicit instruction in phonological awareness. *Journal of Experimental Child Psychology*, 50, 429–444.

Finds that explicit instruction in how segmentation and blending are involved in the reading process is superior to instruction that does not explicitly teach kindergarten children to apply phonemic awareness to reading. Notes that the children who receive explicit instruction in phonemic awareness did better than did a group of first-grade children who had no such instruction.

Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders*, 20, 19–36.

Draws from research findings to discuss similarities and differences between learning to read and learning to spell words.

Felton, R. H. (1993). Effects of instruction on the decoding skills of children with phonological-processing problems. *Journal of Learning Disabilities*, 26, 583–89.

Describes a longitudinal study of kindergarten through second-grade children that compared the efficacy of reading interventions defined as *code-based*, which emphasized identification of words based on letter-sound relationships and patterns, and *meaning-based*, which emphasized the identification of words based on context and supplemented by partial letter-sound cues (i.e., beginning and ending sounds). Reports that at the end of second grade, children who had received the code-based instruction earned significantly higher mean scores than did children who had received the meaning-based approach on measures of word recognition and spelling. Concludes that five elements are critical to a beginning program for children at risk of reading failure: (1) direct instruction in language analysis; (2) explicit teaching of the alphabetic code; (3) simultaneous teaching of reading and spelling; (4) explicit, systematic reading instruction; and (5) using decodable words and texts to enhance automaticity.

Foorman, B., Francis, D., Beeler, T., Winikates, D., & Fletcher, J. M. (1997). Early interventions for children with reading problems: Study designs and preliminary findings. *Learning Disabilities: A Multi-disciplinary Journal*, 8, 63–71.

Describes a study in which 260 children were randomly assigned to a kindergarten curriculum that focused on the explicit, systematic teaching of phonemic awareness and sound-spelling correspondences (*n*=80) and a standard curriculum (*n*=160) that consisted of developmentally appropriate practices described by the state of Texas's essential elements for kindergarten. Reports that (1) the explicit, systematic instruction in sound-spelling correspondences was more effective in reducing reading disabilities than was instruction in a print-rich environment characterized by reading interesting stories; (2) the children in the explicit-instruction curriculum made significant gains in phonemic awareness over the year; and (3) the greatest gains occurred when explicit instruction involved teaching sound-spelling correspondences along with phonemic awareness. Concludes that explicit, systematic instruction in sound-spelling patterns in first- and second-grade classrooms can prevent reading difficulties in children at risk of reading failure.

Foorman, B., Francis, D., Novy, D., & Liberman, D. (1991). How letter-sound instruction mediates progress in first-grade reading and spelling. *Journal of Educational Psychology*, 83, 456–469.

Describes a study in which 80 first-grade children in classrooms that differed in the amount of sound-letter instruction offered daily were administered tests of phonemic segmentation, reading, and spelling. Reports that although no differences were found on phonemic segmentation tasks in the various classrooms, children in classrooms that provided more letter-sound instruction showed more spelling and reading improvement.

Foorman, B., Francis, D., Fletcher, J., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing reading failure in at-risk children. *Journal of Educational Psychology*, 90, 37–55.

Reports on a study in which first- and second-grade students (*n*=285) received instruction in one of three types of classroom reading programs: (1) direct instruction in sound-spelling correspondences; (2) less direct instruction in sound-spelling correspondences; and (3) implicit instruction in the alphabetic code as part of reading connected text. Results show advantages for reading programs that emphasize explicit instruction in sound-spelling correspondences.

Graves, M. F., Juel, C., & Graves, B. B. (2000). *Teaching reading in the 21st century*. Boston: Allyn & Bacon.

Drawing from what is known from research, theory, and classroom experiences, this book presents a comprehensive plan to increase literacy levels and to assist students in becoming lifelong readers. Chapters titles are (1) Reading and Learning to Read; (2) Reading Instruction; (3) Emergent Literacy; (4) Word Recognition; (5) Vocabulary Development; (6) Scaffolding Students' Comprehension of Text: Teacher-Directed Approaches; (7) Guiding Students toward Independence in Reading; (8) Teaching for Understanding in Content Areas; (9) Writing and Reading; (10) Literacy Instruction for Non-Native Speakers of English; (11) Classroom Assessment; and (12) Classroom Portraits.

Grossen, B. (1997). *A synthesis of research on reading from the National Institute of Child Health and Human Development*. Eugene, OR: University of Oregon.

Examines and synthesizes 30 years of reading research carried out by the National Institute of Child Health and Human Development (NICHD). Presents seven key research-based principles of effective reading instruction: (1) begin teaching phonemic awareness directly at an early age; (2) teach each sound-spelling correspondence explicitly; (3) teach frequent, highly regular sound-spelling relationships systematically; (4) show children exactly how to sound out words; (5) use connected, decodable text for children to practice the sound-spelling relationships they learn; (6) use interesting stories to develop language comprehension; and (7) balance the use of interesting stories with decoding instruction.

Juel, C., & Minden-Cupp, C. (2000). Learning to read words: Linguistic units and strategies. *Reading Research Quarterly*, 35, 458–492.

Analyzes word recognition instruction in four first-grade classrooms. Concludes that (1) differential instruction may be helpful in first grade; (2) children who enter first grade with low literacy levels benefit from early and intense exposure to phonics; and (3) a structured phonics curriculum that includes a focus on onsets and rimes and sounding and blending phonemes within rimes is effective.

Kuhn, M. R., & Stahl, S. A. (2000). *Fluency: A review of developmental and remedial practices*. CIERA-R-2-008. Ann Arbor: Center for the Improvement of Early Reading Achievement, University of Michigan.

Provides findings of a survey that examined theoretical papers and practical studies that related to fluency instruction and reading development. Among the findings reported are (1) teacher-assisted approaches to fluency instruction, such as reading–while–listening, seem to be more effective than non-assisted approaches, such as repeated reading; and (2) effective fluency instruction moves beyond automatic word recognition to include rhythm and expression, or the prosodic features of language.

Lyon, G. R. (1997). *Report on learning disabilities research*. Testimony given before the Committee on Education and the Workforce in the U.S. House of Representatives.

Argues that the development of phonemic awareness, the development of an understanding of the alphabetic principle, and the translation of these skills to the application of phonics in reading and spelling words are nonnegotiable beginning reading skills that all children must master in order to understand what they read and to learn from their reading sessions.

Moats, L. C. (1999). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do*. Washington, DC: American Federation of Teachers.

Argues that well-designed, controlled comparisons of instructional approaches have consistently supported the following components and practices in effective reading instruction: (1) direct teaching of decoding, comprehension, and literature appreciation; (2) phoneme awareness; (3) systematic, explicit instruction in the alphabetic principle; (4) daily exposure to a variety of reading materials, as well as incentives for children to read independently; (5) vocabulary instruction that includes a variety of complementary methods designed to explore the relationships among words and the relationships among word structure, origin, and meaning; (6) comprehension strategies that include predicting,

summarizing, clarifying, questioning, and visualizing; and (7) frequent student writing to enable deeper understanding of what is read.

National Reading Panel. (2000). Teaching children to read: *An evidence-based assessment of scientific research literature on reading and its implications for reading instruction*. Washington DC: National Institute of Child Health and Human Development.

Presents the findings of the National Reading Panel, a group of reading educators and researchers, who were charged by the United States Congress to assess the status of research-based knowledge about reading, including the effectiveness of various approaches to teaching children to read. The panel's conclusions include the following: (1) systematic phonological and phonemic awareness instruction contributes strongly to reading success; (2) systematic instruction in phonics, stressing letter-sound correspondences and their use in spelling and reading, produces significant benefits for students in grades K–6 and for students having difficulty learning to read; (3) teaching students to use a range of reading comprehension techniques is the most effective way to improve comprehension.

Pressley, M., & Symons, S. (1995). Reading comprehension strategies. In M. Pressley & V. Woloshyn (Eds.), *Cognitive strategy instruction that really improves children's academic performance* (2nd ed.). Cambridge, MA: Brookline Books.

Reviews research indicating that specific instruction in reading comprehension strategies is effective in improving comprehension for students at various grade levels, including those with learning disabilities. Identifies the reading strategies used by highly competent readers, including summarization, mental imagery, question asking and answering, and activating prior knowledge.

Stahl, S. A., Duffy-Hester, A. M., & Stahl, K. A. D. (1998). Everything you wanted to know about phonics (but were afraid to ask). *Reading Research Quarterly*, 33, 338–355.

Reviews what research has revealed to be the basic principles underlying word learning and phonics instruction. Concludes that effective phonics instruction (1) develops an understanding of the alphabetic principle; (2) develops phonological/phonemic awareness; (3) provides a grounding in alphabetic knowledge (the names and shapes of letters); (4) does not teach rules, does not dominate instruction, limits the use of worksheets; (5) provides sufficient practice in reading words in isolation and in stories and in writing words; (6) leads to automatic word recognition; and (7) is only one part of reading instruction.

Stanovich, K. E. (1994). Romance and reality. *The Reading Teacher*, 47, 280–291.

Concludes that the role played by direct instruction in the alphabetic principle in facilitating early reading instruction is one of the most well-established conclusions in all of reading-related science, and that, conversely, the idea that learning to read is just like learning to speak is accepted by no responsible linguist, psychologist, or cognitive scientist in the research community.

Tan, A., & Nicholson, T. (1997). Flashcards revisited: Training poor readers to read words faster improves their comprehension of text. *Journal of Educational Psychology*, 89, 276–288.

Describes a study in which second- through third-grade students were placed in two instructional groups. Students in one group received instruction that emphasized word

recognition and fluency, with only brief attention given to the meanings of the words. Students in this group practiced recognizing target words until they could read each word without hesitation. Students in a second group received instruction that was heavily oriented toward developing their understanding of the meanings of the target words, with no attention given to the development of word recognition. Reports that the students in the group that received word recognition and fluency instruction answered correctly more comprehension questions than did students in the group that did not receive such instruction.

Torgesen, J. K., & Mathes, P. (1999). What every teacher should know about phonological awareness. In Consortium on Reading Excellence (CORE), *Reading research anthology: The why? of reading instruction*. Novato, CA: Arena Press.

Based on extensive research findings, concludes that phonological awareness should be a part of reading instruction for every child, and that this instruction should be combined with systematic, explicit instruction in the alphabetic principle and with frequent opportunities to use both oral and written language and to read good literature.

Torgesen, J. K., Wagner, R., Rashotte, C. A., Alexander, A. W., & Conway, T. (1997). Preventive and remedial interventions for children with severe reading disabilities. *Learning Disabilities: A Multi-disciplinary Journal*, 8, 51–61.

Summarizes ongoing research that is designed to generate new knowledge about the relative effectiveness of different approaches to the prevention and remediation of reading disabilities in children, particularly difficulties in acquiring accurate and fluent word reading skills. Subjects, 180 kindergarten children who varied widely in their general verbal ability and home literacy environments, were in one of four instructional conditions, varying in content and level of explicit instruction in phonological/phonemic awareness and sound-spelling correspondences. Results indicate that, at the end of the second grade, children who received the most explicit instruction in the alphabetic principle had much stronger reading skills than did children in all the other instructional groups. In addition, children who received the most explicit instruction showed the lowest need to be held back a grade. Other analyses show that growth in reading skills was mediated by improvements in phonological processing skills.

Tunmer, W. E., Herriman, M. L., & Nesdale, A. R. (1988). Metalinguistic abilities and beginning reading. *Reading Research Quarterly*, 23, 134–158.

Concludes that the performance of children on tests designed to measure their concepts about print predicts their future reading achievement and is related strongly to other, more traditional measures of reading readiness and achievement.

Orton-Gillingham Method

Colorado Springs Charter Academy intends to use an Orton-Gillingham method as part of its reading remediation. The Method defines eight essential instructional elements needed to successfully teach students with dyslexia as outlined in publications of The International Dyslexia Association (formerly The Orton Dyslexia Society). These elements are:

- **Multisensory:** Instruction involves immediate, intensive, and continuous interaction between what the student is seeing, hearing, and feeling in the speech mechanisms and the writing hand. All the language elements taught are reinforced by having the student listen, speak, read and write.
- **Alphabetic/Phonetic:** Sound-symbol associations along with linguistic rules and generalizations are introduced in a linguistically logical, understandable order. The essence of the phonetic approach is to make letter-to-sound correlations as simple and comprehensive as possible.
- **Synthetic/Analytic:** The student is taught how to blend sounds together.
- **Structured:** The student learns one sound association, linguistic rule, or nonphonetic word and practices using it with previously taught material before learning the next language concept.
- **Sequenced:** Linguistic concepts are taught in a sequence which will minimize potentially confusing elements.
- **Cumulative:** The student should be asked to use each newly introduced element while reinforcing others that have been taught.
- **Repetitive:** The concepts are repeated until the student gains mastery.
- **Cognitive:** The student should understand the "linguistic logic" underlying word formations and patterns and be able to demonstrate that understanding while writing words.

The following highlighted conclusions are taken from studies supported by the National Institutes of Child Health and Human Development and documented in a paper entitled "Research in Learning Disabilities at the NICHD."[1] These conclusions conform to the focus of the Orton-Gillingham elements.

- The ability to decode single words accurately and fluently is dependent upon the ability to segment words and syllables into abstract individual sound units (phonemes).
- The best predictor of reading ability/disability from kindergarten and first grade test performance is phoneme segmentation ability.
- Reading disabilities (dyslexia) affect at least 10 million children, or approximately 1 child in 5.

[1] National Institutes of Child Health and Human Development. Learning Disabilities, Cognitive, and Social Development Branch. Bethesda, MD.

- Studies show that of the children who are reading-disabled in the third grade, 74 percent remain disabled in the ninth grade. Reading disability reflects a persistent deficit rather than a developmental lag in linguistic and reading skills.
- Disabled readers do not readily acquire the alphabetic code when learning to read due to deficiencies in the processing of phonological processing. As such, disabled readers must be presented highly structured, explicit, and intensive instruction in phonics rules and the application of the rules to print.
- Systematic structured phonics instruction results in more favorable outcomes in reading than does a context-emphasis (Whole Language) approach.

Memorization

The following article is presented in whole. It was written by Michael Knox Beran and printed in *City Journal*, Summer 2004. Published by The Manhattan Institute in New York, *City Journal* is the nation's premier urban-policy magazine.

In Defense of Memorization

If there's one thing progressive educators don't like it's rote learning. As a result, we now have several generations of Americans who've never memorized much of anything. Even highly educated people in their thirties and forties are often unable to recite half a dozen lines of classic poetry or prose.

Yet it wasn't so long ago that kids in public schools from Boston to San Francisco committed poems like Shelley's "To a Skylark" and Tennyson's "Ulysses" to memory. They declaimed passages from Shakespeare and Wordsworth, the Psalms and the Declaration of Independence. Even in the earliest grades they got by heart snippets of "The Midnight Ride of Paul Revere" or "Abou Ben Adhem." By 1970, however, this tradition was largely dead.

Should we care? Aren't exercises in memorizing and reciting poetry and passages of prose an archaic curiosity, without educative value?

That too-common view is sadly wrong. Kids need both the poetry and the memorization. As educators have known for centuries, these exercises deliver unique cognitive benefits, benefits that are of special importance for kids who come from homes where books are scarce and the level of literacy low. In addition, such exercises etch the ideals of their civilization on children's minds and hearts.

The memorization and recitation of the classic utterances of poets and statesmen form part of a tradition of learning that stretches back to classical antiquity, when the Greeks discovered that words and sounds—and the rhythmic patterns by which they were bound together in poetry—awakened the mind and shaped character. They made poetry the foundation of their pedagogy. Athenian schoolboys learned by heart the poetry of Homer, through which they gained mastery of their language and their culture. They memorized as well, in versified form, the civic pronouncements of Solon, the founder of the Athenian political tradition.

In every epoch of Western history we find educators insisting that their pupils serve an apprenticeship in the work of masters of poetry and rhetoric. Saint Augustine, as a schoolboy in North Africa in the fourth century, studied only a very few Latin classics in school, principally Virgil's *Aeneid*, great chunks of which he learned by heart. But within its "narrow limits," the historian Peter Brown wrote in his life of the saint, the education the young Augustine received was "perfectionist." "Every word, every turn of phrase of these few classics," Brown observed, "was significant and the student saw this." The "aim was to measure up to the timeless perfection of the ancient classic."

Some of the ancient methods, Brown conceded, strike a modern mind as "servile": but the paradoxical result of this early servitude was mental liberation. Augustine, Brown wrote, came "to love what he was learning. He had developed, through this education, a phenomenal memory, a tenacious attention to detail, an art of opening the heart, that still moves us as we read his *Confessions*." In Virgil's epic picture of the multiple passions of human life—paternal, filial, pious, romantic, patriotic, heroic—Augustine found a key to understanding his own heart, and in the rhetorical perfection of the Aeneid's speeches he found a key with which to unlock the hearts of others. Virgil depicts Aeneas using his oratorical skill to steady, in adversity, the nerves of his men and build up what would become the Roman Empire:

> *Durate, et vosmet rebus servate secundis.*
> [Endure, and preserve yourselves for better things.]

Augustine would later use a similar set of rhetorical tools to build up the Roman Catholic Church.

More than a millennium later, in a grammar school in Stratford-upon-Avon, the mind of the young Shakespeare was formed by similar educational methods. In his book on Shakespeare, Michael Wood observed that the poet "was the product of a memorizing culture in which huge chunks of literature were learned by heart." Such "learning by rote," Wood wrote, "offers many rewards, not least a sense of poetry, rhythm and refinement—a heightened feel for language," as well as an abundance of tales and myths, imaginative resources that are among the "most exciting gifts" a young person can receive.

These classic techniques of enveloping kids as young as seven or eight in the works of masters of poetry and rhetoric were transplanted to America, where they were incorporated into the readers and primers used throughout the country in the nineteenth and early twentieth centuries. Well into the 1920s, rhyme-time occupied an important place in New York City public schools. Citing Edgar Allan Poe's dictum that poetry is "the rhythmical creation of beauty," the Board of Education, in its 1927 *Course of Study in Literature for Elementary Schools*, insisted on the importance of memorizing both poetry and prose orations. "The teacher," the Board said, "should emphasize the rhythm, the beauty of diction, and the beauty of imagery [in a poem]…. Teachers should read a group of five poems somewhat similar in style and related in subject matter, so that the pupils may choose their favorite for memorization." A "class may memorize only a part of a longer poem, or one or more selected stanzas, for the whole poem may not be suitable for memorization. Whenever possible, the lullabies and poems of the lower and middle years should be sung or presented by phonograph records. Much of our stirring patriotic verse has been set to music. Records of such songs are available."

The standard of literacy in the 1927 *Course of Study in Literature for Elementary Schools* is astonishingly high. Poems "for reading and memorization" by first-graders include those of Robert Louis Stevenson ("Rain" and "The Land of Nod"), A. A. Milne ("Hoppity"), Christina Rossetti ("Four Pets"), and Charles Kingsley ("The Lost Doll"). Second-graders grappled with poems by Tennyson ("The Bee and the Flower"), Sara Coleridge ("The Garden Year"), and Lewis Carroll ("The Melancholy Pig"). In third grade came Blake's "The Shepherd" and Longfellow's "Hiawatha," while fourth grade brought Elizabeth Barrett Browning, Emily Dickinson, and Kipling. In the grades that followed, students read and recited poems by Arnold,

Browning, Burns, Cowper, Emerson, Keats, Macaulay, Poe, Scott, Shakespeare, Southey, Whitman, and Wordsworth. Eighth-graders tackled Lincoln's Gettysburg Address and Second Inaugural Address.

Observers were impressed by how quickly the kids mastered the material. A visitor to a first-grade classroom in New York in 1912 remarked on how quickly pupils absorbed the verses their teacher had sung to them. "At the end of twenty-five or thirty minutes," the visitor said, "a large majority of the class seemed to know most of the words—a remarkable fact, since there were more than fifty children present and this was only the second week of school." This was at a time when more than 200,000 immigrants were settling in New York each year, and teachers were staggering under the burden of large enrollments.

But the culture of recitation and memorization that prospered for centuries—and that, in New York, survived successive waves of immigration that stretched schools to their limits—declined rapidly after 1940. Even the rationale for such practices was forgotten. "No one seems to remember the reasons for memorizing or orating great poetry or speeches," says education historian Diane Ravitch, who served as an assistant secretary for educational research in the first Bush administration.

But the rationale is clear and compelling. Long before kids start school, parents begin to teach them language with the primitive poetry of the nursery rhyme. Before a two-year-old can understand the meaning of Little Jack Horner's plum or Little Miss Muffet's tuffet—before he knows what it means to hop on pop or why the pobble has no toes—he delights in the rhythm and rhyme of the verse; and by hearing the music of the verse often enough he comes gradually to understand first the sounds and eventually the words of which it is composed. I tried reciting to my three-year-old, over the course of a couple of weeks, Shakespeare's sonnet "That time of year thou mayst in me behold," and Blake's poem "Tyger, tyger, burning bright." She could understand only a very few of the words; but when I recited one of the lines, she soon delighted in reciting the line that follows as nearly as she could. The music of the verse was as entrancing to her as to any grown-up. Without knowing it, a child who has learned a scrap of verse has been drawn into the civilizing interplay of music and language, rhythm and sound, melody and words—just as educational theory as far back as ancient Greece posits, according to Werner Jaeger in his classic account of Greek education, *Paideia*.

From *The Cat in the Hat* on up, verse teaches children something about the patterns and relationships that bind together the words of which it is composed. Poetry sets up an abstract system of order and harmony; the rhythm and the rhyme scheme are logical structures that a child can comprehend even before he understands the words themselves, just as he can grasp the rhythmic and harmonic relations of a piece of music.

What the child discovers, in other words, is not only aesthetically pleasing, but important to cognitive development. Classic verse teaches children an enormous amount about order, measure, proportion, correspondence, balance, symmetry, agreement, temporal relation (tense), and contingent possibility (mood). Mastering these concepts involves the most fundamental kind of learning, for these are the basic categories of thought and the framework in which we organize sensory experience. Kids need to become familiar with them not only through exercises in recitation and memorization, but also, as they proceed to the later grades, by construing,

analyzing, and diagramming particular verses. In *The Idea of a University*, John Henry Newman called this close study of language "a discipline in accuracy of mind," a "first step in intellectual training" that impresses on young minds notions of "method, order, principle, and system; of rule and exception, of richness and harmony." And of course memorization is a kind of exercise that strengthens the powers of the mind, just as physical exercise strengthens those of the body.

No less important, memorizing poetry turns on kids' language capability. It not only teaches them to articulate English words; it heightens their feel for the intricacies and complexities of the English language—an indispensable attainment if they are to go on to speak, write, and read English with ease. Susan Wise Bauer, author of *The Well-Educated Mind: A Guide to the Classical Education You Never Had*, argues that memorization "builds into children's minds an ability to use complex English syntax." The student "who memorizes poetry will internalize" the "rhythmic, beautiful patterns" of the English language. These patterns then become "part of the student's 'language store,' those wells that we all use every day in writing and speaking." Without memorization, the student's "language store," Bauer says, will be limited: memorization stocks "the language store with a whole new set of language patterns."

It also stocks those bins with a generous supply of the English language's rich accumulation of words. Research suggests that the size of a child's vocabulary plays an important part in determining the quality of his language-comprehension skills. "The greater and wider the vocabulary," says education historian Ravitch, "the greater one's comprehension of increasingly difficult material." Bauer points out that if "a student reads a word in a novel, she might or might not remember it for later use. But when she commits it to memory in proper context (as the memorization of lines of poetry requires), she is much more likely to have it at her 'mental fingertips' for use in her own speaking and writing."

All these benefits are especially important for inner-city kids. Bill Cosby recently pointed to the tragedy of the black kids he sees "standing on the corner" who "can't speak English." "I can't even talk the way these people talk," Cosby said: "'Why you ain't. Where you is.'" To kids who have never known anything but demotic English, literary English is bound to seem an alien, all but incomprehensible dialect. Kids who haven't been exposed to the King's English in primary school or at home will have a hard time, if they get to college, with works like *Pride and Prejudice* and *Moby Dick*. In too many cases, they will give up entirely, unable to enter the community of literate citizens—and as a result will live in a world of constricted opportunity.

It is not only the form of poetry—its rhyme and meter—that endows it with unique educative properties. Just as crucial is its content. Poetry's power makes it the ideal medium to introduce kids to their cultural inheritance as members of Western civilization and citizens of a particular nation. The content of the poetry fosters what education reformer E. D. Hirsch, Jr. calls "cultural literacy" in the kids who get it by heart, since great poetry is so often a pithy expression of the culture's accumulated wisdom. Not to have certain works of art in your mental inventory—*Macbeth*, for example, or "Ozymandias" or Psalm 23—is to be shut out, to some degree, from the community of civilized conversation. Peter Brown observed that Saint Augustine's education, with its emphasis on memorization, enabled him to "communicate his meaning to an educated Latin at the other end of the Roman world by quoting half a line of classic poetry." And even today, in the conversation of the educated, a quotation from Shakespeare can speak volumes.

Much of what kids used to learn by heart was an explicit statement of the national creed. The schoolboys of classical Athens memorized the Homeric passages that taught the classical virtues. British pupils learned the great Shakespearean expressions of patriotism and national ideals: John of Gaunt's speech in *Richard II* describing his country as:

> *This royal throne of kings, this sceptred isle,*
> *This earth of majesty, this seat of Mars . . .*
> *This precious stone set in the silver sea . . .*
> *This blessed plot, this earth, this realm, this*
> *England.*

Or Henry V's stirring speech to his troops at Agincourt:

> *And Crispin Crispian shall ne'er go by*
> *From this day to the ending of the world,*
> *But we in it shall be remembered—*
> *We few, we happy few, we band of brothers.*
> *For he today that sheds his blood with me*
> *Shall be my brother. Be he ne'er so vile,*
> *This day shall gentle his condition.*
> *And gentlemen in England now abed*
> *Shall think themselves accurs'd they were not here,*
> *And hold their manhoods cheap whiles any speaks*
> *That fought with us upon Saint Crispin's day.*

American kids learned the Gettysburg Address, as profound a statement of the national ideal as anyone ever uttered; and those who remember as adults Lincoln's affirmation of the nation's dedication to the proposition that all men are created equal—and to government of the people, by the people, for the people—never can lose sight of what makes America exceptional.

The tradition of memorization did not survive the progressive revolution in American schools. A century ago, progressive educators first voiced the arguments that would have such an unfortunate effect in U.S. classrooms. To impose classic poetry and rhetoric on young minds was, these theorists maintained, an oppressive act. Not just the memorization, but the literary culture at the heart of the exercise, was, they claimed, sterile and unfruitful, and promoted a culture of servility harmful to the free creative play of the mind. "We must overcome the fetichism of the alphabet, of the multiplication table, of grammars, of scales, and of bibliolatry," progressive educator G. Stanley Hall said in 1901. "The true center of correlation on the school subjects is not science, nor literature, nor history, nor geography, but the child's own social activities."

The progressives' efforts to discredit the older techniques are not yet finished. The most recent challenge to recitation and memorization exercises comes from a theory known as "constructivism," the latest fad among progressive educators. Based on the work of Swiss developmental psychologist Jean Piaget, constructivism rests on the belief that objective knowledge does not exist; students must therefore "construct knowledge for themselves."

Education professor Linda Darling-Hammond of Stanford calls constructivism the "new paradigm" and argues that because "learners actively construct" their own knowledge, teachers "must construct experiences for" their students to enable them to learn. In the view of constructivist educators, the teacher who gives a kid Portia's speech, "The quality of mercy is not strain'd," or Coleridge's "Kubla Kahn" to memorize, fails to construct an atmosphere in which "dynamic" or "authentic" learning (to use two constructivist buzzwords) can occur. Memorization, one advocate of constructivism asserts, "is not a thinking activity."

The constructivist literature is filled with unintentionally ludicrous jargon. "Constructivist teachers," one educator declares, "must create an open, nonjudgmental environment that permits students to construct, disclose, and expose their constructions to scrutiny." Another maintains that constructivism gives students "ownership of what they learn"—as if memorization doesn't. But fundamentally, writes University of Alabama professor George E. Marsh II, the "impetus for constructivism as an educational movement stems from a reaction to the over-reliance in classrooms on rote memorization"—not just of poetry but of facts and dates, of tables and formulas. Marsh says that "memorizing the knowledge others have created is often not successful because knowledge is not a ready-made, transferable product but rather a product of the learner's thinking." Another educator, Asghar Iran-Nejad, argues that constructivist techniques can serve as "a substitute for memorization in learning." Darling-Hammond echoes this sentiment when she advises teachers to "make sure the emphasis is on powerful learning, not rote memorization."

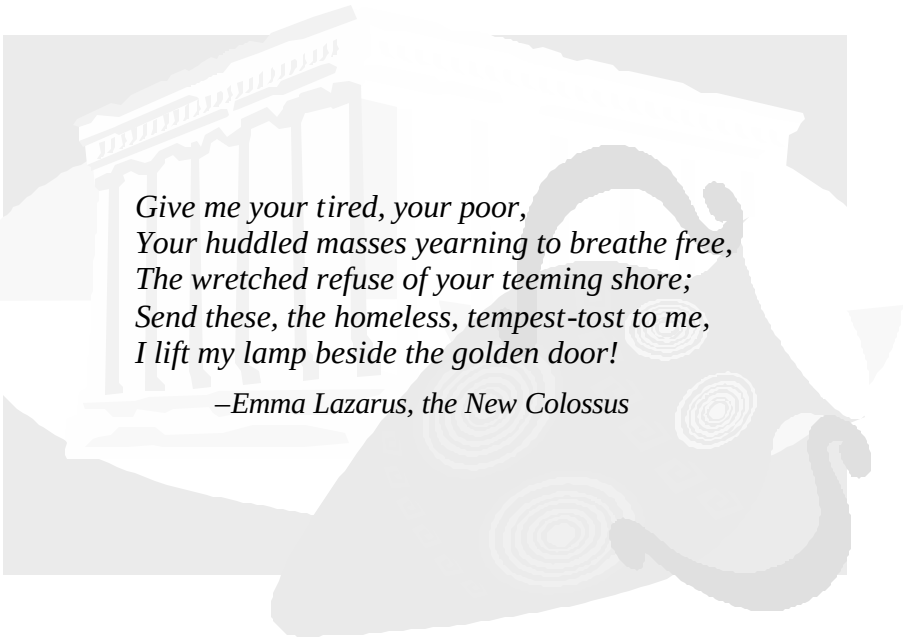
Constructivism is a new name for the old progressive desire to turn kids into little anarchs who—if the progressives' daydreams come true—will grow up to overthrow the oppressive civilization into which they had the misfortune to be born. An education Ph.D. enamored of the constructivist theory argues that because constructivism "de-emphasizes the rote-memorization" of material, it promotes "teaching practices that are rich in conversation. Through these conversations, the teacher comes to understand what the learner wants to learn." Kids, in other words, should be free to do as they please; the teacher, in the role of "guide on the side" rather than "sage on the stage," should cater to their whims; anything else is galley slavery. For progressive educators, to require students to recite "Daffodils" or memorize the Gettysburg Address is a relic of a "drill and kill" culture that inhibits the development of the self and is the educational equivalent of a chain gang.

But the progressives' educational philosophy is only superficially a philosophy of liberty. The progressive exercises in "guided fantasy" and "sensitivity training" that have replaced memorization and recitation do little to free kids' selves. The older techniques, by contrast, are genuinely liberating. They build up in the child a more powerful mental instrument, one that will allow him, in later life, to make good use of his freedom. They cultivate those critical powers that enable an educated adult to question authority intelligently. The older techniques also unlock doors in the interior world of the soul. Classic poetry and rhetoric give kids a language, at once subtle and copious, in which to articulate their own thoughts, perceptions, and inchoate feelings. They help awaken what was previously dormant, actualize what was before only potential, and so enable the young person to fulfill the injunction of Pindar: "Become what you are."

This kind of memorization does not impose upon young minds a single dogma, nor does it exalt, as the Islamic madrassa does, a single text above all others. If anything, it is the progressive

liturgies—with their "diversity" drills and cult of self-esteem—that embody a narrow and intolerant ideology, one that imprisons kids in the banal clichés of the present and puts much of the past off limits, as though the moral and spiritual inheritance of Western civilization were somehow taboo. The literary culture at the heart of these exercises in memorization, by contrast, is a record of how men and women have, in various times and places, struggled to understand themselves and make sense of their natures. Such culture does not repress or enslave: it enlarges and strengthens and frees.

Appendices



Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore;
Send these, the homeless, tempest-tost to me,
I lift my lamp beside the golden door!

–Emma Lazarus, the New Colossus

Appendix A: Glossary

Academy	Colorado Springs Charter Academy	**DIBELS**	Dynamic Indicators of Basic Early Literacy Skills
AYP	Adequate Yearly Progress	**ELL**	English Language Learners
BAAC	Building Accountability and Advisory Committee	**FTE**	Full-Time Equivalent
Board	The Board of Directors of Colorado Springs Charter Academy	**K-8**	Kindergarten through 8th Grade
CBLA	Colorado Basic Literacy Act	**LEP**	Limited English Proficient
CDE	Colorado Department of Education	**NCCSR**	National Clearinghouse for Comprehensive School Reform
CK	Core Knowledge	**NCLB**	No Child Left Behind
Core Knowledge	The trademarked *Core Knowledge® Sequence, K-8*, published by the Core Knowledge Foundation, Charlottesville, VA	**NWREL**	North West Regional Education Laboratory
CRS	Colorado Revised Statute	**PPR**	Per Pupil Revenue
CSAP	Colorado Student Assessment Program	**SAR**	School Accountability Report
DAAC	District Accountability and Advisory Committee	**SMART**	Specific, Measurable, Attainable, Research-Based, Time-Specific

Appendix B: Letters of Support

State Representative
DAVID C. SCHULTHEIS
Colorado State Capitol
200 E. Colfax Ave., Room 271
Denver, CO 80203
Home: 719-532-0546
Capitol: 303-866-2937
Fax: 303-866-2218
E-Mail: dave@daveschultheis.com

COLORADO
HOUSE OF REPRESENTATIVES
STATE CAPITOL
DENVER
80203

Member:
Health, Environment, Welfare & Institutions Committee
State, Veterans & Military Affairs Committee

August 23, 2004

CSCA
PO Box 50093
Colorado Springs, CO 80949-0093

To Whom It May Concern:

I'm pleased to express my support for Colorado Springs Charter Academy, a proposed K-8 school slated to open in the fall of 2005. The inclusion of charter schools in our public education system offers parents and students more educational choices and helps break the impasse of too many students stranded in underperforming schools. The addition of a school that provides a laser focus on achievement would be a great addition; that's exactly what CSCA provides.

The plan for Colorado Springs Charter Academy - to emphasize academic achievement, character, Core Knowledge, use of uniforms, and a longer school year - is one I heartily endorse. I've personally observed how schools with a heart for these issues, including Cheyenne Mountain Charter Academy and The Classical Academy, are effective for our families in Colorado Springs. Those two charter schools of excellence have been at capacity for years, and the families on their waiting lists deserve opportunities to relocate their children to schools where they believe their children have the best opportunity to succeed. Colorado Springs Charter Academy will help provide this additional opportunity, for which many parents will be grateful.

I commend the founders for their efforts to this point, and encourage them to "keep up the good fight." Our children are well served to have these impassioned and knowledgeable founders as their advocates.

Sincerely,

David C. Schultheis
State Representative
House District 14

DCS/lj

MAJORITY LEADER
MARK HILLMAN
State Senator
P.O. Box 245
Burlington, Colorado 80807
Home: (719) 346-7689
Capitol: (303) 866-6360
mark.hillman.senate@state.co.us

Senate Chamber
State of Colorado
Denver

COMMITTEES
Member of:
Agriculture, Natural Resources, and Energy
Legislative Council

August 30, 2004

To Whom it May Concern:

I write today in support of Colorado Springs Charter Academy, a charter school slated to open in the fall of 2005. Its classical focus--content, character, high expectations--offers parents an opportunity to provide more for their children than the prosaic selections now before them.

In the senate, I've been fighting for educational choice through, for example, the Colorado Opportunity Scholarship Pilot Program. Even though this new voucher program was narrowly focused to provide options for struggling students in poorly performing schools, the Colorado Supreme Court struck it down, citing local control issues. I still have hopes of seeing vouchers return, following the roadmap contructed by the court's decision.

Yet even without vouchers, parents still have public school choices, thanks to the stalwart efforts of committed citizens like those behind Colorado Springs Charter Academy. While we craft new voucher funding legislation at the state level, parents at the local level push ahead through the creation of charter schools such as this one, whose K-8 model, with mandated uniforms and parental involvement augur well for our children.

When relentless insistence on student achievement is an alternative, Coloradoans recognize and select it, as I'm sure they will do with Colorado Springs Charter Academy.

Sincerely,

Mark Hillman
Senate Majority Leader

August 2, 2004

To Whom It May Concern:

Please consider this letter of support for the proposed District 11 charter school, Colorado Springs Charter Academy (CSCA). I have met with several of the founding members of Colorado Springs Charter Academy and am impressed with their vision, enthusiasm, commitment, and knowledge.

I understand CSCA plans to be a Core Knowledge, K-8th grade school, where the following values will be emphasized: strong character education, high parental involvement, and development of a passion for learning among students. Community service will compliment the character education program. Additionally, students will wear uniforms to school and will receive foreign language instruction.

Our experience at TCA indicates that there is great demand for a school such as CSCA, and I have confidence that this group of motivated citizens will be successful in its creation and implementation. I see this school as a wonderful and unique choice for parents in District 11 and beyond.

Sincerely,

Mark Hyatt
President, The Classical Academy

TCA CENTRAL OFFICE: 975 STOUT RD., COLORADO SPRINGS, CO 80921 PHONE: 719-484-0091 FAX: 719-484-0087

State Representative
KEITH KING
4715 Bywood Ct.
Colorado Springs, CO 80906
Home: 719-576-6149
Business: 719-597-3500
Capitol: 303-866-2348
Fax: 303-866-2218
E-mail: keith@keithking.org

COLORADO
HOUSE OF REPRESENTATIVES
STATE CAPITOL
DENVER
80203

MAJORITY LEADER

Member:
Executive Committee of Legislative Council
Legislative Council

September 14, 2004

Colorado Springs Charter Academy
PO Box 50093
Colorado Springs, CO 80949

I am writing this letter in support of the establishment of a new charter school. It has long been my belief that the academic achievement of students must be the central focus of public schools. If we follow and track that student achievement over time, I believe that we will see remarkable improvement in their success in school and also upon graduation.

Academic success must be tied to the research-based curriculum that is implemented in the school. The principal must insure the instruction of that curriculum in a scope and sequence that allows every student to grow academically.

I am very impressed with the core knowledge curriculum because of its rigor and definite structure from grade to grade. I believe these charter schools have been some of the most successful in the state.

I endorse and support a charter school that will create that as the basis for academic achievement. I believe the school will have a very strong opportunity for success. I wish you all the best in your education of the students of your school.

Sincerely,

Keith King

2135 Wickes Road
Colorado Springs, CO 80919

August 5, 2004

Colorado Springs Charter Academy
PO Box 50093
Colorado Springs, CO 80949-0093

To Whom It May Concern:

It is with great pleasure that I offer my support for your charter school application in District 11. Your commitment to educational excellence is exactly what the children of Colorado Springs need.

As a college professor who is passionate about education, I am very interested in addressing the problems your school is dedicated to solving. Your commitment to rigorous mathematics, foreign language, a unified K-8 environment, and a Core Knowledge curriculum are right on the money. I only wish CSCA had been here ten years ago when we moved to Colorado Springs. If it had, we would have enrolled our children.

To all district officials, I ask that CSCA's charter application be approved with all due haste. I believe Colorado Springs Charter Academy will make a vital contribution to excellence in public education.

Sincerely,

Barry S. Fagin, PhD

KRAEMER, KENDALL & BENSON
LIMITED LIABILITY COMPANY
ATTORNEYS AND CONSULTANTS

430 NORTH TEJON • SUITE 300
COLORADO SPRINGS, COLORADO 80903-1167
TEL (719) 471-3690 • FAX (719) 471-3696
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JOHN S. BENSON
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(719) 471-3690
PHILLIP A. KENDALL
OF COUNSEL
(719) 471-3693
PEGGY K. GARDNER
(719) 471-3068

July 21, 2004

Lisa Miller
Colorado Springs Charter Academy
P.O. Box 50093
Colorado Springs, CO 80949-0093

Dear Ms. Miller:

Consider this letter a statement of strong support for the Colorado Springs Charter Academy initiative. School District #11 is in critical need of a lead charter school emphasizing academic excellence. We could all recite many reasons including (1) offering more alternative student opportunities (2) creating an institution with a primary focus on academics (3) providing a competitive alternative in School District #11 to out-of-District charter schools.

This letter is backed up by personal educational experiences in School District #11 and beyond including (1) alumni of Garfield, Steele, North Junior and Palmer/Colorado Springs High School [Hall of Fame]; (2) member of the University of Colorado Board of Regents for 12 years, including Chairman of the Board; (3) past president of the Rocky Mountain Stanford University Alumni Association; (4) Honorary Doctor of Humane Letters from the University of Colorado; (5) Founder and President of Intergeneration Foundation.

One of my children, Tyler Kraemer, an alumni of Wasson High School, and Northwestern University undergraduate and law school, returned to Colorado Springs to practice law recently. He prefers to live in School District #11. As his family grows, the deciding factor will be School District #11 school excellence. Colorado Springs Charter Academy could be a welcome alternative.

Very truly yours,

Sandy F. Kraemer

Sandy F. Kraemer
sh

S:\Clients\SFK\Admin\SFK\CSCA ltr.wpd

Linda Carroll – Co-founder
Cheyenne Mountain Charter Academy
1832 S. Wahsatch Avenue Colorado Springs, CO 80906 (719)471-1999

August 16, 2004

To Whom It May Concern:

I am writing this letter to express my full support for the Colorado Springs Charter Academy, founded by Lisa and Glenn Miller, Carla Albers and other parents. As the co-founder of CMCA, I know what it takes to make a successful charter school, and these parents have the fire in their bellies to do just that.

I first met these highly dedicated parents approximately four months ago after they toured Cheyenne Mountain Charter Academy, a school I co-founded in 1995. Since May, I have had countless conversations with them and am very confident that they will have a highly successful charter school in 2005 if given the opportunity. They are truly committed to creating the best school possible, using effective best practices, scientific research-based curriculum, and proven methodologies. These parents agree with me that all children can learn if given the appropriate curriculum.

I urge you to approve their application so the parents in this community can have another excellent choice for educating their children.

Sincerely yours,

Linda Carroll

Linda Carroll
Co-founder
Cheyenne Mountain Charter Academy

18 September 2004

To Whom It May Concern:

Last February, I was scheduled to present a speech at District 11's Math Town Hall. Unfortunately, my father passed away and I was unable to attend. I would like to relate a couple of things I would have said that night, especially as it relates to a charter school which is being proposed in District 11.

My background is in Mathematics and computer science, with practical applications of math and statistics to solve problems relating to logistics (i.e., maintenance and support of all types of systems), but a particular focus on space systems. Indeed, I can say that I am a rocket scientist. I have worked on programs with NASA, and in the last few weeks received an award for a paper I authored on cleaning up Space Debris. I also taught classes in logistics, space systems, and reliability/maintainability at Colorado Technical College.

Had I been able to present at the town hall, I would have brought a message voicing my deep concerns with the quality of education that some of my students have when they reach college. Specifically, I find that many of them do not have the core skills to solve even basic math problems that face us in our everyday lives. For example, I would see these students having a hard time determining the best buy when faced with 20 rolls of toilet paper at $10.86 or 10 rolls of toilet paper at $5.99. The more difficult problems (buying a car or house) would be far beyond their level of ability. Nor do they have the discipline necessary to succeed at the collegiate level because math is not just problem solving, it's establishing a methodology for analyzing the problem, selecting data, formulating it into an answer, and determining the course of action based on those results.

It is my understanding that the Colorado Springs Charter Academy is to be a public K-8 school. They are to follow the Core Knowledge model, which stresses a solid classical education. They will set high standards and hold all accountable to them. Most importantly to me, they will be using a solid, traditional math program, Saxon math.

I won a State Championship in basketball, and it was not without hard work and lots of repetition. Professional athletes don't just sit at home during the off-season. They work hard, with long hours of repetition to hone their skills and keep the competitive edge that makes them winners. I am amazed that people think that we can't do things in class anymore because "it's boring." We need repetition, and we need sharp minds that are encouraged to discover the wonder of mathematics, not listen to Barbie saying, "Math's boring, let's go shopping!"

The results of many years of declining mathematics skills are evident in today's publications and design work. People from India, Pakistan, Japan, China, or

Korea are dominant in the technical papers presented at Symposia and published in our technical journals. People with ethnic backgrounds ***NOT*** from the United States have written fully half of the concepts accepted by NASA for their Advanced Space Exploration program. If we are to compete at an international level with competent mathematicians, engineers and scientists, it is imperative that we arm our elementary school children with the skills necessary to excel in the 21st century. I am excited to think that the Colorado Springs Charter Academy could bring a very much needed educational choice to parents and children in Colorado Springs.

I hope you approve this excellent educational model.

Sincerely,

David P. Martin, C.P.L.
Senior Systems Engineer
SPARTA, Inc.

ED JONES
State Senator
200 E. Colfax
Denver, CO 80203
Capitol: (303) 866-6364
ed.jones.senate@state.co.us

Senate Chamber
State of Colorado
Denver

COMMITTEES
Business Affairs & Labor
Education
Legal Services
Local Government

August 28, 2004

Esteemed Directors of School District 11:

Another public school is trying to open in Colorado Springs, another free school open to all, targeting our at-risk students, giving more choices to parents who didn't have many before. This school is Colorado Springs Charter Academy, and its 'No Excuses' policy that demands achievement for all students regardless of background is one that's been missing in Colorado Springs District Eleven. We can't have equal outcomes without equal opportunities, and the opportunities that students have in neighboring districts (in The Classical Academy and Cheyenne Mountain Charter Academy) aren't available in D-11.

Now a group of dedicated parents is committed to changing all this. They are contructing a K-8 school that uses the Core Knowledge curriculum. This is an equalizer that's been shown to bridge achievement gaps. They are using proven methods like Saxon Math and Open Court Reading to bring our students' achievement levels up to competitive levels. They are asking for uniforms to erase status differences. And they are welcoming parental involvement, treating parents like partners instead of surly nuisances who keep getting in the way of 'professional educators.' This is the kind of school our students need more of.

All that these committed founders need is a nod of approval, so that more students can have more choices. They and their vision deserve it, and I ask that you give it.

Sincerely,

Ed Jones
Colorado State Senator

CASA
Court Appointed Special Advocates
FOR CHILDREN
CASA OF THE PIKES PEAK REGION

A community non-profit organization serving El Paso and Teller Counties

September 22, 2004

To Whom It May Concern:

As the Executive Director of CASA of the Pikes Peak region, Inc., we work with over 600 children annually through our programs. CASA's volunteer advocates and staff are to review every aspect of the child's lives who are victims of child abuse and neglect or severe domestic conflict. Almost every child we represent is behind educationally and developmentally. We work closely with school districts and find many failing to meet achievement scores or to provide appropriate educational services to our child clients, many of whom are ADD or ADHD or dyslexic. The proposed Colorado Springs Charter Academy will be a welcome choice for many of these clients.

The Core Knowledge charter schools in the Pikes Peak Region have proven records of achievement and excellence and yet there are long waiting lists. The establishment of another charter school (in the model of Cheyenne Mountain Charter Academy and The Classical Academy) that can provide excellence in the Core Knowledge curriculum is sorely needed. These charter schools provide a solid education focused on literacy, math, and science skills that assure their students' success.

Charter schools also allow for the specialized attention to children's specific individualized learning needs. The concept of different learning styles and multifaceted teaching methods has been known for years. However, this flexibility in teaching to diverse learning styles seems to manifest itself most often in the charter school concept, possibly the reason for such great success. Colorado Springs Charter Academy's 3-Tier Reading Program is one example of this kind of specialized attention in practice.

Children in School District 11 need the opportunity of a charter school like Colorado Springs Charter Academy. I fully endorse this school's vision and the district's need for it. Our children deserve this level of educational excellence.

Yours sincerely,

Trudy Strewler
Executive Director

701 S. Cascade Ave. • Colorado Springs, CO 80903 • 719-447-9898 • FAX 719-667-1818 • www.casappr.org

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September 12, 2004

To Whom It May Concern:

As a business owner, and an elected representative, I've seen how valuable service is to the community--what a difference the simple act of caring makes. And Lisa Miller cares. She and the other co-founders of Colorado Springs Charter Academy are passionate about bringing a school of excellence to School District 11, especially as a way to serve our at-risk students. CSCA's "no excuses" philosophy won't let them fail. That's service to the community.

CSCA intends to recognize the vital role of parents in their children's education by requiring Parental Compacts. This new charter school understands that education starts and ends with the family and involvement in their children's education. And, that a good school's role--to serve that family's interests. With a focus on character education and teaching a rich body of core knowledge, CSCA will augment the family's solid foundations with the tools a student needs to become an effective "citizen-scholar."

I'm proud of these parents who have worked on behalf of our community, and express my strong support for the ideas and vision behind Colorado Springs Charter Academy. Thank you for your consideration.

With appreciation,

Sallie Clark

Sallie Clark
Owner, Holden House
El Paso County Commissioner Elect

ANDY McELHANY
State Senator
2830 Orion Drive
Colorado Springs, CO 80906-1063
Home: (719) 473-9400
Capitol: (303) 866-4880

Senate Chamber
State of Colorado
Denver

COMMITTEES
Chair of:
Business Affairs & Labor
Member of:
Education
Transportation
Capitol Development

September 21, 2004

RE: Colorado Springs Charter Academy

To Whom It May Concern:

I am writing this letter in support of the proposed charter school, Colorado Springs Charter Academy.

I have long been a champion of school excellence and school choice in Colorado. I believe that it is important for families to have a choice in educational opportunities for their children. For this reason, I am very supportive of the efforts of a group of local parents and community members from Colorado Springs School District 11 to found a charter school based on the Core Knowledge Model.

It is my understanding that the Colorado Springs Charter Academy will be a K-8 school utilizing the traditional, classical education model of Core Knowledge. The school will have a casual uniform requirement, and will have character education included in its curriculum.

It is further my understanding that the Colorado Springs Charter Academy will be modeling itself after successful Core Knowledge charter schools already located in other school districts in the city, such as District 12's Cheyenne Mountain Charter Academy. Having had an opportunity to tour this school many years ago and to see first hand the excellence in education practiced there, it is exciting to think that this opportunity would be available to District 11 families.

I would urge to you approve the charter application for Colorado Springs Charter Academy. Please contact me for any questions.

Sincerely yours,

Andy McElhany

Andy McElhany
Senate District 12

recycled paper

Appendix C: Letter of Intent

This **CONFIDENTIAL** Letter of Intent will be used to demonstrate to School District 11 that there is adequate support for this proposed charter school. Signing this Letter of Intent does not obligate the student to attend the Colorado Springs Charter Academy nor does it guarantee admission.

I, _____, am interested in sending my child(ren) to Colorado Springs Charter Academy, a proposed District 11 charter school to be located in Colorado Springs, scheduled to open in the Fall of 2005, as indicated below. I am aware that this letter serves only as a demonstration of my support to found a new public charter school in School District 11. This letter in no way guarantees my child's enrollment in this school, nor does it legally bind me to enroll my child(ren). I understand that if the school is oversubscribed for any grade, the school will hold a lottery to determine enrollment.

_____ _____

Parent/Guardian Signature **Date**

Please list every child whom you are interested in enrolling in the school.

Full Name of Child	Date of Birth	Desired Year to Enter School	Grade Level Entering in August 2005—school will open with grades K through 6, adding 7 & 8 later	What school would this child attend if not attending CSCA?

Name of Parent/Guardian: _____

Phone (day): _____ **Phone (evening):** _____

Student's Home Address:

_____

City & Zip: _____ **Email Address:**

_____

Name of Home School District: _____

- What is the primary language spoken in the home?
  _____
- Would you be interested in full-day kindergarten? Yes No Maybe (circle one)
- Would you be interested in before and after school programs? Yes No Maybe (circle one)
- If yes, please describe: _____
- If you would consider taking a leadership position in the school (e.g. Board member, committee member, etc.) please explain:

_____

- If you have skills or experience that you would be willing to share that might benefit the school (e.g.

real estate, law, education, finances, etc.) please specify:

_____

Please mail this form to:
Colorado Springs Charter Academy
P.O. Box 50093, Colorado Springs , CO 80949-0093
Questions? Call 719-264-9359 or email info@csca11.org
or visit http://www.csca11.org

Appendix D: Core Knowledge at a Glance

This section provides an overview of major topic headings in the *Core Knowledge Sequence*, showing how the topics on the *Sequence* build from one grade to another.

For example, in fifth grade World History, study of the Renaissance builds on earlier studies of ancient Greece (second grade), ancient Rome (third grade), and the Middle Ages (fourth grade). Or, in Science, the basic concept of the atom, introduced in first grade, leads by fifth grade to an understanding of how atomic properties are organized in the Periodic Table.

Grade-by-grade sequencing of topics is important because it gives teachers some assurance that children will come prepared with a share core of knowledge and skills, and because children learn more effectively when instruction follows the basic psychological principle that we learn new knowledge by building on what we already know. [1]

Core Knowledge at a Glance: Major Topic Headings, K-2

	Kindergarten	First Grade	Second Grade
Language Art/English	I. Reading and Writing II. Poetry III. Fiction IV. Sayings and Phrases	I. Reading and Writing II. Poetry III. Fiction IV. Sayings and Phrases	I. Reading and Writing II. Poetry III. Fiction (Stories; Greek Myths; Greek and Roman Myths) IV. Sayings and Phrases
History and Geography	**World** I. Spatial Sense II. Overview of the Seven Continents **American** I. Geography II. Native Americans III. Early Exploration and Settlement (Columbus, Pilgrims, Independence Day) IV. Presidents, Past and Present V. Symbols and Figures	**World** I. Geography II. Early Civilizations (Mesopotamia, Ancient Egypt, History of World Religions) **American** I. Early People and Civilizations (Maya, Inca, Aztec) II. Early Exploration and Settlement III. American Revolution IV. Early Exploration of the American West V. Symbols and Figures	**World** I. Geography II. Early Civilizations: Asia (India, China) III. Modern Civilization and Culture: Japan IV. Ancient Greece **American** I. American Government: The Constitution II. War of 1812 III. Westward Expansion IV. Civil War V. Immigration and Citizenship VI. Civil Rights VII. Geography of the Americas VIII. Symbols and Figures

[1] Core Knowledge Foundation: http://www.coreknowledge.org/CKproto2/about/overview.htm. Virginia, 2004.

Visual Arts	I. Elements of Art II. Sculpture III. Looking at and Talking About Art	I. Art from Long Ago II. Elements of Art III. Kinds of Pictures: Portrait and Still Life	I. Elements of Art II. Sculpture III. Kinds of Pictures: Landscapes IV. Abstract Art V. Architecture
Music	I. Elements of Music II. Listening and Understanding III. Songs	I. Elements of Music II. Listening and Understanding (Composers; Orchestra; Opera; Ballet; Jazz) III. Songs	I. Elements of Music II. Listening and Understanding (Orchestra; Keyboards; Composers) III. Songs
Mathematics	I. Patterns and Classification II. Numbers and Number Sense III. Money IV. Computation V. Measurement VI. Geometry	I. Patterns and Classification II. Numbers and Number Sense III. Money IV. Computation V. Measurement VI. Geometry	I. Numbers and Number Sense II. Fractions III. Money IV. Computation V. Measurement VI. Geometry
Science	I. Plants and Plant Growth II. Animals and Their Needs III. Human Body (Five Senses) IV. Introduction to Magnetism V. Seasons and Weather VI. Taking Care of the Earth VI. Science Biographies	I. Living Things and Their Environments II. Human Body (Body Systems) III. Matter IV. Properties of Matter: Measurement V. Introduction to Electricity VI. Astronomy VII.The Earth VIII.Science Biographies	I. Cycles in Nature (Seasonal Cycles; Life Cycles; Water Cycles) II. Insects III. Human Body (Cells; Digestive and Excretory Systems) IV. Magnetism V. Seasons and Weather VI. Simple Machines VII. Science Biographies

Core Knowledge at a Glance: Major Topic Headings, 3-5

	Third Grade	Fourth Grade	Fifth Grade
Language Art/English	I. Reading and Writing II. Poetry III. Fiction (Stories; Norse Myths; Greek and Roman Myths) IV. Sayings and Phrases	I. Writing, Grammar, and Usage II. Poetry III. Fiction (Stories; Legends of King Arthur) IV. Sayings and Phrases	I. Writing, Grammar and Usage II. Poetry III. Fiction (Stories; Shakespeare; Myths and Legends) IV. Sayings and Phrases
History and Geography	**World** I. World Geography (Spatial Sense;	**World** I. World Geography (Spatial Sense;	**World** I. World Geography (Spatial Sense; Lakes)

	Canada; Important Rivers) II. Ancient Rome (Geography of Mediterranean Region; Roman Empire, "Decline and Fall") **American** I. The Earliest Americans II. Early Exploration of North America III. The Thirteen Colonies: Life and Times Before the Revolution	Mountains) II. Europe in the Middle Ages III. Spread of Islam and "Holy Wars" IV. Early and Medieval African Kingdoms V. China: Dynasties and Conquerors **American** I. American Revolution II. Making a Constitutional Government III. Early Presidents and Politics IV. Reformers V. Symbols and Figures	II. Meso-American Civilizations III. European Exploration, Trade, and Clash of Cultures IV. Renaissance and Reformation V. England from the Golden Age to the Glorious Revolution VI. Russia: Early Growth and Expansion VII. Feudal Japan **American** I. Westward Expansion II. Civil War III. Native Americans: Cultures and Conflicts IV. U.S. Geography
Visual Arts	I. Elements of Art II. American Indian Art III. Art of Ancient Rome and Byzantine Civilization	I. Art of the Middle Ages II. Islamic Art and Architecture III. Art of Africa IV. Art of China V. Art of a New Nation: The United States	I. Art of the Renaissance II. American Art: Nineteenth-Century United States III. Art of Japan
Music	I. Elements of Music II. Listening and Understanding (Orchestra; Composers) III. Songs	I. Elements of Music II. Listening and Understanding (Orchestra; Vocal Ranges; Composers) III. Songs	I. Elements of Music II. Listening and Understanding (Composers; Connections) III. American Musical Traditions (Spirituals) IV. Songs
Mathematics	I. Numbers and Number Sense II. Fractions and Decimals III. Money IV. Computation V. Measurement VI. Geometry	I. Numbers and Number Sense II. Fractions and Decimals III. Money IV. Computation V. Measurement VI. Geometry	I. Numbers and Number Sense II. Ratio and Percent III. Fractions and Decimals IV. Computation V. Measurement VI. Geometry VII. Probability and Statistics VIII. Pre-Algebra
Science	I. Introduction to Classification of Animals II. Human Body (Muscular, Skeletal, and Nervous Systems; Vision and Hearing)	I. Human Body (Circulatory and Respiratory Systems) II. Chemistry (Atoms; Matter; Elements; Solutions III. Electricity IV. Geology: Earth and Its	I. Classifying Living Things II. Cells: Structures and Processes III. Plant Structures and Processes IV. Life Cycles and Reproduction V. Human Body (Endocrine

	III. Light and Optics IV. Sound V. Ecology VI. Astronomy VII. Science Biographies	Changes V. Meteorology VI. Science Biographies	and Reproductive Systems) VI. Chemistry: Matter and Change VII. Science Biographies

Core Knowledge at a Glance: Major Topic Headings, 6-8

	Sixth Grade	Seventh Grade	Eighth Grade
Language Art/English	I. Writing, Grammar, and Usage II. Poetry III. Fiction and Drama (Stories; Shakespeare; Classical Myths) IV. Sayings and Phrases	I. Writing, Grammar, and Usage II. Poetry III. Fiction, Nonfiction, and Drama IV. Foreign Phrases Commonly Used in English	I. Writing, Grammar and Usage II. Poetry III. Fiction, Nonfiction, and Drama IV. Foreign Phrases Commonly Used in English
History and Geography	**World** I. World Geography (Spatial Sense; Deserts) II. Lasting Ideas from Ancient Civilizations (Judaism, Christianity; Greece and Rome) III. Enlightenment IV. French Revolution V. Romanticism VI. Industrialism, Capitalism, and Socialism VI. Latin American Independence Movements **American** I. Immigration, Industrialization, and Urbanization II. Reform	**World** I. America Becomes a World Power II. World War I, "The Great War" III. Russian Revolution IV. America from the Twenties to the New Deal V. World War II VI. Geography of the United States	**World** I. Decline of European Colonialism II. Cold War III. Civil Rights Movement IV. Vietnam War and the Rose of Social Activism V. Middle East and Oil Politics VI. End of the Cold War: Expansion of Democracy and Continuing Challenges VII. Civics: The Constitution – Principles and Structure of American Democracy VIII. Geography of Canada and Mexico
Visual Arts	I. Art History: Periods and Schools (Classical; Gothic; Renaissance; Baroque; Rococo; Neoclassical; Romantic; Realism)	I. Art History: Periods and Schools (Impressionism; Post-Impressionism; Expressionism and Abstraction; Modern American Painting)	I. Art History: Periods and Schools (Painting Since World War II; Photography; 20th-Century Sculpture) II. Architecture Since the Industrial Revolution
Music	I. Elements of Music	I. Elements of Music	I. Elements of Music

	II. Classical Music: From Baroque to Romantic (Bach, Handel, Haydn, Mozart, Beethoven, Schubert, Chopin, Schumann)	II. Classical Music (Romantics and Nationalists (Brahms, Berlioz, Liszt, Wagner, Dvorak, Grieg, Tchaikovsky) III. American Musical Traditions (Blues and Jazz)	II. Non-Western Music III. Classical Music: Nationalists and Moderns (Sibelius, Bartok, Rodrigo, Copland, Debussy, Stravinsky) IV. Vocal Music (Opera; American Musical Theater)
Mathematics	I. Numbers and Number Sense II. Ratio and Percent III. Computation IV. Measurement V. Geometry VI. Probability and Statistics VII. Pre-Algebra	I. Pre-Algebra (Properties of the Real Numbers; Polynomial Arithmetic; Equivalent Equations and Inequalities; Integer Exponents) II. Geometry (Three-Dimensional Objects; Angle Pairs; Triangles; Measurement) III. Probability and Statistics	I. Algebra (Properties of the Real Numbers; Relations, Functions, and Graphs; Linear Equations and Functions; Arithmetic of Rational Expression; Quadratic Equations and Functions) II. Geometry (Analytic Geometry; Introduction to Trigonometry; Triangles and Proofs)
Science	I. Plate Tectonic, Oceans III. Astronomy: Gravity, Stars, and Galaxies IV. Energy, Heat, and Energy Transfer V. Human Body (Lymphatic an Immune Systems) VI. Science Biographies	I. Atomic Structure, Chemical Bonds and Reactions III. Cell Division and Genetics IV. History of the Earth and Life Forms V. Evolution VI. Science Biographies	I. Physics II. Electricity and Magnetism III. Electromagnetic Radiation and Light IV. Sound Waves V. Chemistry of Food and Respiration VI. Science Biographies

Appendix E: Educational Compact

We believe that by taking shared responsibility for learning, we can insure that the children enrolled at Colorado Springs Charter Academy (CSCA) will be successful learners and members of our community. To that end, we pledge to work together to support the school's mission of:

- Providing academically rigorous, proven, content rich educational programs;
- Developing incisive analytical skills and well-stocked minds;
- Fostering self-advocacy, passion, citizenship, and exemplary character;
- Holding individualized high expectations;
- Involving and welcoming parents and community members.

Teacher's Commitment

I fully commit to CSCA in the following ways:

- I will be at CSCA every day one half hour prior to school start, and one half hour after school close.
- I will always teach in the best way I know how, and we will do whatever it takes for my students to learn.
- I will always make myself available to students, parents, and any concerns they might have.
- I will always protect the safety, interests, and rights of all individuals in the classroom.

_____

Signature Date

Parents'/ Guardians' Commitment

We fully commit to CSCA in the following ways:

- We will make sure our child arrives at CSCA every day by 7:55 A.M.
- We will ensure that our child is in school every day, except for illness or other legitimate reasons. We agree to make every attempt to schedule appointments after school whenever possible. If our child is going to miss school, we will notify the teacher as soon as possible, and we will read carefully all the papers the school sends home to us.
- We will always help our child in the best way we know how, and we will do whatever it takes for him/her to learn. We will provide a time and place for homework to be completed, and we will help our child develop good time management skills.
- We will monitor our child's homework every night, let him/her call the teacher if there is a problem with the homework, and try to read with him/her every night.
- We will always make ourselves available to our children, the school and any concerns they may have.
- We will attend all parent-teacher conferences each year.
- We will allow our child to go on CSCA fieldtrips.

- We will make sure our child follows CSCA's dress code.
- We understand that our child must follow all CSCA rules to protect the safety, interests and rights of all individuals in the classroom. We, not the school, are responsible for the behavior and actions of our child.
- We will support the school's programs by volunteering at least 40 hours per year (or 15 hours per year for single parent families.)
- We will support the rigorous Core Knowledge curriculum by regularly asking our child about their activities at school.

_____

Signature Date

Student's Commitment

I understand that the following is expected of me:

- I will arrive at CSCA every day by 7:55 A.M.
- I will always work, think, and behave in the best way I know how, and I will respect the rights of other students in the school and their right to learn.
- I will complete my homework every night, call my teacher if I have a problem with homework and I will raise my hand and ask questions in class if I do not understand something.
- I will always make myself available to parents, teachers, and any concerns they might have. If I make a mistake, this means I will tell the truth to my teachers and accept responsibility for my actions.
- I will follow CSCA's dress code.
- I am responsible for my own behavior, and I will follow the teachers' directions.

_____

Signature Date

Appendix F: Real Estate Letter

Bach Commercial Brokerage Company
Kissing Camels Office Park
2950 Professional Place • Suite 207 • Colorado Springs, CO 80904-8106
719.442.2000 • Fax 719.442.0649 • bok@rmi.net • www.bachcommercial.com

July 30, 2004

Colorado Springs Charter School
PO Box 50093
Colorado Springs, CO 80919

RE: YOUR PROSPECTIVE SITE SEARCH

Ladies and Gentlemen:

This follows up our meeting earlier this week in my office to discuss options for your charter school site.

As background, we recently represented James Irwin Charter Schools in acquiring a new campus in Southeast Colorado Springs. That experience in addition to our 32 years in commercial real estate brokerage here enables us to advise you on this matter.

We are confident, based upon our knowledge of the local real estate market, that there will be adequate locations for Colorado Springs Charter Academy. We understand your requirements are for a building that is between 14,000 and 30,000 square feet, and which is centrally located. An added bonus would be a location fairly close to I-25 or other major thoroughfares.

There are currently at least 15 locations that meet your general requirements. Some are available for lease and others for sale. The per building square foot per year rental rate currently ranges from $5.00 to $9.00, while the current sales price per building square foot ranges from $40 to $72.

Best wishes to you in accomplishing your goals. Please understand that this is not an Appraisal, that we are not licensed appraisers, and let me know if we can help further.

Sincerely,

BACH COMMERCIAL BROKERAGE COMPANY

Stephen G. Bach
President

Enclosure: (SGB Biography)

Appendix G: Proposed Policy Manual

Following is the ***proposed*** Table of Contents for CSCA's Personnel and Policy Procedures Manual. Details for each topic will be developed by the Board in conjunction with legal counsel and, as appropriate, the initial Academy administrator.

Introduction

- Introductory Statement
- Employee Expectations
- General Philosophy
- Equal Employment Opportunity

Employment Practices

- Employment At Will
- Pre-Employment Interviews
- Recruiting, Selection, and Hiring
- Employee Moving Expenses
- Orientation Program
- Orientation Period
- Job Descriptions
- Job Expectations
- Performance Evaluation
- Employment Categories and Classifications
- Employees as Subcontractors
- Personnel Records
- Employee Recognition Program
- Work-Related Injury or Illness
- Medical/Health Issues
- Teacher Work Days

Leave of Absence/Time away from Work

Communications

- Communications
- Employee Problems and Concerns
- Conflict Resolution
- Compensation
- Domestic Travel Policy
- Overtime Pay
- Payroll Deductions/Paydays
- Timekeeping
- Wage and Salary Administration

School Rules

- Attendance
- Breaks
- Lunch Periods
- Security
- Information Privacy
- Conflict of Interest
- Disciplinary Procedures
- Standards of Conduct
- Virtuous Character
- Dress Code
- Harassment
- School Property

Bereavement Leave

Civic Duties

Leave of Absence

Sick Leave

Holidays

Vacation

Employee Benefits

Insurance

Employee Retirement Plan (PERA)

Termination of Employment

Termination of Employment

Parking

Solicitations

Garnishments

Approval of Contracts

Supervisory Guidelines

Safety and Accident Prevention

Accident Prevention and Risk Management

Safety Plan

Parental Involvement

PTO

Building Accountability

Classroom Assistance

Fund Raising

Appendix H: Core Knowledge Standards Alignment

This appendiz exists to make known a 100-page table showing the alignment between the *Core Knowledge Sequence* and the Colorado Grade Level Expectations.[1] It was completed by the National Core Knowledge Coordinator of Colorado. The alignment is structured with the Core Knowledge content on the left hand side, as it is listed in the *Core Knowledge Sequence*. The major content headings are listed and below them are the bullets as they appear in the Sequence. Each standard is aligned to the exact bullet item and piece of content, not just the major topic heading. Any standards that align with the Core Knowledge content are listed to the right side of the document, directly across from the specific bullet with which it aligns. At the end of each subject are in each grade level, any standards not directly covered in that grade level are listed and where they might be covered elsewhere in the *Core Knowledge Sequence*.

Where topics do not align with Grade Level Expectations, the typical practice in Core Knowledge schools is to introduce the topic where it is first referenced and review with the intent to teach more in-depth where it is referenced the second time. The review helps to deepen the level of understanding and provides an opportunity for "rehearsal" when it is an item that is tested on a particular grade level.

All of the Grade Level Expectations are included for Reading and Writing, History, Geography, Civics, Music, Visual Arts, Mathematics, and Science.

We did not include the 100-page table in order to save paper, but wanted to bring existence of the document to your attention.

[1] The National Core Knowledge Coordinator of Colorado, http://www.ckcolorado.org/standards.asp, 2004.

Appendix I: Articles of Incorporation

FILED
DONETTA DAVIDSON
COLORADO SECRETARY OF STATE
20041205591 C
$ 100.00
SECRETARY OF STATE
06-08-2004 09:11:06

ARTICLES OF INCORPORATION FOR A NONPROFIT CORPORATION
Form 300 ***NOT VALID AFTER JUNE 30, 2004***
Read about new Forms at www.sos.state.co.us
Filing fee: **$50.00**
Deliver to: Colorado Secretary of State
Business Division, 1560 Broadway, Suite 200
Denver, CO 80202-5169
This document must be typed or machine printed.
Copies of filed documents may be obtained at www.sos.state.co.us

ABOVE SPACE FOR OFFICE USE ONLY

Pursuant to § 7-122-102 and part 3 of article 90 of title 7, Colorado Revised Statutes (C.R.S.), these Articles of Incorporation are delivered to the Colorado Secretary of State for filing.

1. The entity name of the nonprofit corporation is: Colorado Springs Charter Academy

The entity name of a nonprofit corporation may, but need not, contain the term "corporation", "incorporated", "company", or "limited" or any abbreviation of these terms. §7-90-601(3)(b), C.R.S.

2. The address of the initial principal office of the nonprofit corporation is: 5265 Lanagan Street, Colorado Springs, CO 80919

3. The name, and the business address, of the initial registered agent for service of process on the nonprofit corporation are: Name Elisabeth Miller
Business Address *(must be a street or other physical address in Colorado)* 5265 Lanagan Street
Colorado Springs, CO 80919
If mail is undeliverable to this address, ALSO include a post office box address: _____

4. The nonprofit corporation (√ check appropriate box)
☐ will have voting members ☑ will **not** have voting members

5. The provisions not inconsistent with law regarding the distribution of assets on dissolution are as follows: Upon dissolution, assets will be distributed by Colorado Springs School District 11

6. The name(s) and address(es) of the incorporator(s) is(are):
Name(s) Elisabeth Miller
Address(es) 5265 Lanagan Street
Colorado Springs, CO 80919

7. The (a) name or names, and (b) mailing address or addresses, of any one or more of the individuals who cause this document to be delivered for filing, and to whom the Secretary of State may deliver notice if filing of this document is refused, are: Elisabeth Miller,
5265 Lanagan Street, Colorado Springs, CO 80919

Please refer to § 7-90-301 (8), C.R.S

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE

I, Donetta Davidson, as the Secretary of State of the State of Colorado, hereby certify that, according to the records of this office,

COLORADO SPRINGS CHARTER ACADEMY

is a
Nonprofit Corporation

formed or registered on 06/08/2004 under the law of Colorado, has complied with all applicable requirements of this office, and is in good standing with this office. This entity has been assigned entity identification number 20041205591 .

This certificate reflects facts established or disclosed by documents delivered to this office on paper through 01/18/2005 that have been posted, and by documents delivered to this office electronically through 01/25/2005 @ 11:45:59 .

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, authenticated, issued, delivered and communicated this official certificate at Denver, Colorado on 01/25/2005 @ 11:45:59 pursuant to and in accordance with applicable law. This certificate is assigned Confirmation Number 6134768 .

Donetta Davidson

Secretary of State of the State of Colorado

**********End of Certificate**********

Appendix J: Waivers

Pursuant to the Charter Schools Act, CSCA requests waivers of certain statutes. Each statute for which a waiver is being requested is listed below and the reason for each request is given. CSCA believes that these waivers will enable the school to better meet its mission, goals and objectives, and implement its educational program.

22-7-106/107	**School Advisory Councils—creation—qualifications—election**
	Requires schools to create Advisory Councils to make recommendations in the realm of expenditures and student achievement.

The Colorado Springs Charter Academy Board will fulfill the duties as described in statute, rendering these Advisory Councils redundant.

22-9-106	**Local Boards Duties Concerning Performance Evaluations**
	Requires school districts to have a written system and related procedures to evaluate the performance of school district certified personnel.

CSCA will be responsible for its own personnel matters, including the supervision and evaluation of personnel and the method for conducting such evaluations.

22-9-107	**Local Boards Duties Concerning Performance Evaluations Councils**
	Require school districts to have personnel performance evaluation councils.

CSCA will be responsible for its own personnel matters, including the supervision and evaluation of personnel and the method for conducting such evaluations.

22-32-109(1)(b)	**Local Board Duties Concerning Competitive Bidding**
	Authorizes the board to adopt policies necessary for the proper and efficient administration of district affairs, including procedures related to competitive bidding.

Colorado Springs Charter Academy will determine its own policies and procedures necessary to the proper and efficient administration of district affairs and will establish all necessary procedures to ensure competitive bidding.

22-32-109(1)(f)	**Local Board Duties Concerning Selection of Staff and Pay**
	Gives authority to the board to hire, and determine compensation for, all personnel necessary to carry out the educational program of the district.

Colorado Springs Charter Academy will establish a comprehensive personnel policy for the hiring and compensation of its employees.

22-32-109(1)(n)(I)	Local Board Duties Concerning School Calendar
	Authorizes the board to set the school calendar within certain minimum standards regarding instructional time as established by the state.

Colorado Springs Charter Academy will establish its own school calendar and will meet or exceed state requirements.

22-32-109(1)(n)(II)	Local Board Duties Concerning Teacher-Pupil Contact Hours
	Authorizes the board to set the number of hours of teacher-pupil contact subject to certain minimum hours as established by the state.

Colorado Springs Charter Academy will establish its own requirement for teacher-pupil instructional hours which will meet or exceed state requirements.

22-32-109(1)(t)	Local Board Duties Concerning Textbooks and Curriculum
	Establishes requirements regarding the authority to prescribe textbooks by school districts.

CSCA will be responsible for the selection of textbooks to be used in its school.

22-32-109.7	Board of Education—Specific Duties—Selection of Personnel
	Requires the district, prior to the hiring of staff, to conduct background checks as to prior criminal conduct, and grants certain immunity to school districts regarding criminal conduct of employees to the extent the district relies, in good faith, on information discovered during the background check.

Colorado Springs Charter Academy will establish its own policies and procedures relative to background checks of prospective employees, and will establish the same with the goal of providing a safe and secure environment for its students.

22-32-109.8	Fingerprinting
	Requires board to make certain inquiries and background checks prior to hiring applicants; provides for district to require certified personnel to submit fingerprints in certain instances.

Colorado Springs Charter Academy Board will take responsibility for these requirements.

22-32-109.9	Fingerprinting
	Requires board to make certain inquiries and background checks prior to hiring applicants; provides for district to require certified personnel to submit fingerprints in certain instances.

The Colorado Springs Charter Academy Board will take responsibility for these requirements.

22-32-110(1)(h)	Local Board Powers—Terminate Employment of Personnel
	Establishes requirements regarding the termination of employment of personnel employed by school districts.

The Institute will not be the employer of licensed personnel working for the charter school, and the school will terminate its employees according to its own criteria.

22-32-110(1)(i)	Local Board Powers—Reimburse Employees for Expenses
	Authorizes the board to reimburse employees for expenses incurred in the performance of their duties.

Colorado Springs Charter Academy will establish its own policies and procedures for the reimbursement of employees for employment-related expenditures.

22-32-110(1)(j)	Local Board Powers—Procure Life, Health, or Accident Insurance
	Grants power to board to procure group life, health, or accident insurance for employees.

CSCA will be responsible for procuring its own insurance packages.

22-32-110(1)(k)	Local Board Powers—Policies Relating to In-Service Training and Official Conduct
	Grants board power to adopt written policies, rules, and regulations.

CSCA will have the authority to adopt its own written policies affecting its employees.

22-32-110(1)(ee)	Local Board Powers—Employ Teachers Aides and Other Non-Certificated Personnel
	This section establishes requirements regarding the employment on a voluntary or paid basis of teacher's aids and other auxiliary nonlicensed personnel by school districts.

The Institute will not be the employer of such personnel working for the charter school, and the school will employ its employees according to its own criteria.

22-32-119	Kindergarten
	Permits board to establish and maintain kindergartens. Said board may prescribe coursed of training, study, and discipline and rules and regulations governing such kindergarten programs.

Colorado Springs Charter Academy will establish own its kindergarten programs and rules governing them.

22-32-126	Employment and Authority of Principals
	Authorizes the board to employ principals.

CSCA will be responsible for its own personnel matters including hiring an administrator. CSCA believes that the success of the school will depend in large part on its ability to select and employ its own staff.

22-33-104(4)	Compulsory School Attendance—Attendance Policies and Excused Absences
	Local board of education shall adopt attendance policies.

Colorado Springs Charter Academy will develop its own attendance policy commensurate with its academic programs.

22-33-105	Suspensions, Expulsion, and Denial of Admission
	Authorizes board to suspend, expel, and deny admission to students.

CSCA will develop its own policy regarding suspensions, expulsion, and denial of admission.

22-33-107	Enforcement of Compulsory School Attendance
	Local school board has power to enforce compulsory school attendance.

Colorado Springs Charter Academy will enforce its own school attendance policy.

22-33-108	Judicial Proceedings
	Requires the Board of Education to adopt a written policy setting forth the district's attendance requirements and to appoint an attendance officer.

CSCA will develop its own polices to handle judicial proceedings of this kind.

22-63-*et seq.*	Teacher Employment Act
	Describes employment contracts, compensation, dismissals, licensure, etc.

CSCA requests a waiver of all subsections of C.R.S. 22-63. CSCA should be granted the authority to hire teachers and administrators who will further the mission, goals and objectives of the school. The school seeks to attract administrators and teachers from a wide variety of backgrounds, including, but not limited to, teachers residing out-of-state, teachers seeking alternative certification, and persons with a background of successful teaching in a setting not requiring a license. CSCA will comply with the provisions on teacher quality set forth in No Child Left Behind. For these issues CSCA will be responsible for its own personnel matters, and should be granted the authority to develop its own employment contracts and terms and conditions of employment, including such topics as job security, dismissal, compensation, and so forth.

Colorado Springs Charter Academy reserves the right to identify, during its implementation period, those Colorado Revised Statutes which are impediments to effective operation and to request waivers of those statutes, as specified in D.R.S. 22-2-117(1) and (2).