

### ***3. Research-Based Educational Program/Comprehensive Design Aligned to Standards***

#### **A. Educational Program**

The primary components of CSCA's educational program are listed in the Academic Cornerstones table on page 1.

***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.<sup>1</sup>

We agree, and have chosen Core Knowledge (CK) 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. The CK 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 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 CK schools.<sup>2</sup> These studies generally indicate that CK has a positive effect both on overall student performance and on narrowing the equity gap.<sup>3</sup> The CK series will be complemented by additional curricula as described in the following sections.

***Language Arts: Reading*** A strong reading program will be one of CSCA's cornerstones. 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, by ability, not age. Ongoing assessment will ensure that children 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.<sup>4</sup> Further studies suggest that approximately 75 percent of students identified with reading problems in the third grade are still reading-disabled in the 9<sup>th</sup> grade.<sup>5</sup>

At CSCA, 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.

***Reading Program: Tier 1*** For our general, non-reading-disabled population, CSCA has chosen *Open Court Reading* as its core reading program, to be supplemented with other programs as needed. Phonics-based *Open Court* was chosen primarily because of its research-

based effectiveness. 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.<sup>6</sup>

Equally important for the students of CSCA, *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, those that need reteaching, and those that are working above grade level.

**Reading Program: Tier 2** Through the use of DIBELS and other indicators, we will 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 Foundations 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, in conformance with conclusions of 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.”<sup>7</sup>

**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.

**Language Arts: Writing** At CSCA we believe that students must 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 Grammar*, *Step Up to Writing*, and *6+1 Trait Writing*.

**Shurley Grammar** Through *Shurley Grammar*, 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 Grammar* 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.

**Step Up to Writing** *Step Up to Writing* is a collection of multi-sensory, logically organized strategies that improve the writing skills of kindergarten through post-secondary-grade students. We have chosen *Step Up to Writing* primarily because it is organized in a way that is consistent with the CSCA’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. 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.”<sup>8</sup> As well, the program is effective for different types of learners, as it offers a multi-sensory approach to teaching writing.

**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 (D-11) 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 by providing a framework within which students will learn how to organize and effectively present their writing. It is also flexible enough that teachers will be able to make adaptations to their writing instruction so as to meet the different needs of their students. Finally, once teachers are trained in scoring criteria (as shown in the Professional Development plan and budget), the students will experience a consistent, school-wide set of expectations regarding their writing.

**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. 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.

**Saxon Math** For students to succeed, they must master basic arithmetic skills on which to build. To make this happen, we have chosen Saxon Math.

Saxon Math provides incremental development, continual practice, building off prior knowledge, and frequent, cumulative assessment. For example, topics are never dropped but are instead increased in complexity and practiced every day, providing the time required for concepts to become totally familiar. Saxon textbooks divide concepts into small, 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 is a cumulative review of all material covered up to that point. These features of Saxon Math track closely with the philosophy of CSCA in that the curriculum provides incremental development, continual practice, building off prior knowledge, and frequent, cumulative assessment.

Research shows not only that Saxon Math increases student achievement, but that it also helps close the achievement gap.<sup>9</sup>

## **B. Supplemental Curriculum and Policies**

**World Language** 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.<sup>10</sup> 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.<sup>11</sup> 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.<sup>12</sup>

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.<sup>13</sup>

At CSCA, students will begin the study of Spanish in kindergarten, and start Latin study in 6<sup>th</sup> grade.

**Uniforms** At CSCA, our focus is to create the most effective learning environment: safe, serious, and free from external distractions. While not a curricular component, 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 status differences, promote unity, and reduce absenteeism, tardiness, and crime.<sup>14</sup>

**Longer School Year** 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 D-11 elementary schools. Our calendar represents a 19% increase in classroom time for students in grades one through five, and a 13% increase in the higher grades. This equates to more than an *entire additional instructional year* should a student attend CSCA from grades one through eight. More time on task in class, from longer school days and a longer school year, is one of the common traits of successful charter schools in Colorado. It is a practice proven effective for our students.

**Character Education** 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.<sup>15</sup> As students progress through public school, it is important that their education provide opportunities, explicit and implicit, that help them develop their beliefs about what is right and good. Therefore, character education will be infused into the climate and daily routine of CSCA. The founders, administration, teachers, staff, and students of the Academy will model character traits that will support our school's vision, mission, and goals.

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.<sup>16</sup>

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."<sup>17</sup> Exactly these ideas will permeate CSCA's choice of a character education program. Evaluations of different curricula, such as the Giraffe Heroes Program, are currently underway by the Board.

### **C. Support for Standards**

CSCA, 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 CK Sequence to the Colorado Model Content Standards for Grade Level Expectations.<sup>18</sup> The complete alignment of these standards (over 150 pages) is available online.<sup>19</sup> Saxon Math, additionally, has been shown to align with the Colorado Model Content Standards for Mathematics.<sup>20</sup>

Additionally, one of our assessment methods, as described in the following section, is from the NWEA Learning Continuum. These computerized tests identify skills and concepts that students should be learning next if they are to be challenged and continue to grow academically. Of special note is that these tests specifically score how students are performing relative to state standards. Since NWEA aligns its scale to state proficiency standards, including Colorado's, our teachers can their students' scores as indications of their likely performance on state assessments.

<sup>1</sup> E. D. Hirsch, Jr., *The Schools We Need and Why We Don't Have Them*, an Anchor Book: Doubleday, New York, 1999.

<sup>2</sup> *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.

<sup>3</sup> *The Newsletter of the Core Knowledge® Foundation*. [Volume 17, Number 1](#), January/February 2004.

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- <sup>4</sup> 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]. Available: <http://www.nichd.nih.gov/publications/nrp/smallbook.htm>.
- <sup>5</sup> 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, 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.
- <sup>6</sup> The Business Roundtable Education Institute and the National Association of Elementary School Principals: *Results with Open Court Reading*, [http://www.mheducation.com/news\\_room/MHE\\_results/MHE\\_results.htm](http://www.mheducation.com/news_room/MHE_results/MHE_results.htm), McGraw Hill Education, 2004.
- <sup>7</sup> National Institutes of Child Health and Human Development. Learning Disabilities, Cognitive, and Social Development Branch. Bethesda, MD.
- <sup>8</sup> Auman, Maureen. *Step Up To Writing*, Sopris West, Longmont, CO, 1999.
- <sup>9</sup> Hansen, E., & Greene, K. (2000). *A recipe for math: What's cooking in the classroom?* Retrieved March 3, 2001, from <http://www.secondaryenglish.com/recipeformath.html> and Patterson, C. (2001), *Math resources for parents and teachers in Texas and the nation*. San Antonio, TX: Texas Public Policy Foundation.
- <sup>10</sup> Ginsburg, H. and I. McCoy (1981). An Empirical Rationale for Foreign Language in Elementary Schools. *Modern Language Journal*, 65, 36-42.
- <sup>11</sup> Saxe, G.B. (1983). *Linking language with mathematics achievement: Problems and prospects*. Washington D.C.: National Institute of Education.
- <sup>12</sup> *A Resolution: Concerning Proclaiming a Year of World Languages*, Colorado State Board of Education, adopted July 8, 2004.
- <sup>13</sup> Masciantonio, R. (1977). Tangible Benefits of the Study of Latin: A Review of Research. *Foreign Language Annals*, 10;4.
- <sup>14</sup> *Manual on School Uniforms*, U.S Department of Education, 1996.
- <sup>15</sup> Lickona, Thomas. *Educating for Character, How Our Schools Can Teach Respect and Responsibility*. New York: Bantam Books, 1991.
- <sup>16</sup> 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.
- <sup>17</sup> Lickona, Thomas. "The Return of Character Education." *Educational Leadership* 51 (November 1993): 6-11.
- <sup>18</sup> *Colorado K-12 Academic Standards & Suggested Grade Level Expectations*, Colorado Department of Education, [http://www.cde.state.co.us/index\\_std.htm](http://www.cde.state.co.us/index_std.htm), Colorado, 2004.
- <sup>19</sup> *Core Knowledge Standards Alignment*, National Core Knowledge Coordinator of Colorado, [http://www.ckcolorado.org/stalignment/Align\\_complete.pdf](http://www.ckcolorado.org/stalignment/Align_complete.pdf), Colorado, 2004.
- <sup>20</sup> Correlations for Colorado: Colorado Model Content Standards for Mathematics, Saxon Publishers, Norman, OK, <http://www.saxonpublishers.com/correlations/correlations.do?pk=16&state=CO&country=US>, 2004.