A.3 Program of Instruction

Curriculum Framework

The Curriculum Framework at Scottsdale Country Day School is the first step, defining clear, high standards which will be achieved by all SCDS students. The curriculum is then aligned to the standards (Arizona State and Common Core), and students are assessed against the standards. As compared with traditional education which is concerned only about delivering content, a standards based education reform system promises that all will succeed if all are held to high expectations. The curriculum at SCDS will be infused with technology to assist students in succeeding. Using technology, students develop learning skills, such as thinking and problem-solving skills, information and communication skills, and interpersonal and self-directional skills.

The curriculum framework is structured around three interrelated questions.

- What do we want to learn? *The written curriculum.*
- How best will we learn? *The taught curriculum.*
- How will we know what we have learned? *The assessed curriculum.*

SCDS students will engage in academic opportunities in the classroom, and outside the core curriculum during enrichment programs, to instill intellectual curiosity and equip them with the knowledge and skills necessary to be resilient, independent thinkers. Grounded by a solid core foundation, this balance of rigor and possibility is what makes SCDS unique. By the end of each academic unit, students will be expected to show mastery at a level of 80% achievement or higher when assessed against the Common Core and Arizona Standards in each subject area.

Regular homework assignments will be assigned for each core subject area, which will assist students in cultivating their independent thinking skills. Homework time will be per core subject area with the minutes listed in table 1 below:

Table 1: Homework Minutes Per Night (Monday through Thursday)

Grade	Math	Language Arts Reading/Writing	Social Studies/Science	Language Arts Spelling
KG	10	10	10	10
1st & 2nd	10	15	10	15
3rd & 4th	15	15	15	15
5th & 6th	20	20	20	20

The program developed at SCDS embodies our core mission to expand the boundaries of individual potential through a technology infused educational program. Technology at SCDS will offer unprecedented opportunities to enhance the learning process of our students. Our program, grounded in integrity, promotes character development and collaboration. Mental challenges in a team context offer SCDS students the opportunity to develop leadership skills and self confidence that will inspire them to lead productive and active lives. By the end of their time at SCDS, students will have a wealth of learning and exceptional technology skills on which to build for middle school success, high school success, and beyond.

Key Factors Linked to the Curricula Framework

- Infused technology across all subject areas
- Integrated thematic instruction
- Mastery of standards adopted by teachers, students, and parents
- Excellent student to teacher ratio (20:1)
- Kindergarten through 6th grade
- Lesson plans to the Arizona State Standards.

Technology and the Program of Instruction at SCDS
Technology at SCDS is instrumental in the success of its students. The goal at SCDS is to have a computer/laptop ratio of 1 to every 3 students, which translates to 60 laptops/computers in its first year of operation. With a donation of 40 already being established from the private SCDS, an additional 20 will be purchased which is reflected in the 3 year operational budget. Moving technology into the nation's classrooms has the capability of significantly reshaping education in America (Whitehead et al, 2003). At SCDS, we are committed to reshaping education in Arizona to the highest level.

As well as having a technology lab for students to go to as a class, SCDS also has four to five computers in each classroom to ensure technology opportunities are afforded to students through their lessons. A bank of four to six computers in a classroom is one of the most pedagogically sound ways to create connections between the curriculum and technology (Whitehead et al,2003). There will also be a laptop cart with 20 laptops which can be used in each classroom during instruction to infuse the curriculum with technology.

Program of Instruction
Math (Saxon), English Language Arts, Social Studies and Science Fusion (all Houghton Mifflin), form the core curriculum and are programs carefully selected by the SCDS staff to inspire our students. In addition to the core program, SCDS students will also receive educational programs in Spanish, Mandarin, technology, physical education, drama, and economics. The educational program at SCDS fits the needs of the target population who have experienced a very similar program during the past 6 years at the charter schools that were in operation at the campus SCDS will occupy.

Serving Special Education Students
Arizona law requires a charter school to comply with all federal laws prohibiting discrimination based on disability. SCDS is accountable for complying with special education laws and its administrative unit is responsible for ensuring that all students eligible for special education in its school receive a free and appropriate public education (FAPE). SCDS will ensure compliance with these laws and has identified the need for hiring 1 full-time special education teacher for the first 3 years of operation, and 1 part-time special education assistant for year 3. It is the philosophy of SCDS staff to mainstream SPED students wherever possible and provide resource time for specific areas of weakness outside the classroom per the student's written needs.

The No Child Left Behind Act (2001) requires schools to help all students learn and achieve. Technology will help SCDS create effective, individualized learning environments for all its students, making education more inclusive in reaching students with special needs.

The provisions of NCLB and the Individuals with Disabilities Education Act require that schools must help students with special needs to access, participate, and progress in the general curriculum. Technology will help SCDS fulfill these requirements and help all students succeed. An increasing array of technologies can help personalize instruction for students with special needs and improve learning in the general student population as well. Many new assistive technologies available today will yield results for all SCDS students, making it possible for education to be a more inclusive endeavor than ever before. "The laptops were credited with improving the engagement of students with disabilities with their school work; increasing their motivation and ability to work independently; and improving their class participation, interaction with other students, interaction with teachers, and class preparation. Special education teachers and parents indicated that the laptops also increased students' personal organization. Another important finding of this study was that special education teachers perceived their special education students to have increased the quality and quantity of their writing. For many of these students,

the laptops removed the motor coordination challenge of writing with pen and pencil and allowed them to produce work that was easily edited and looked as good as the work of their non-disabled peers." (Harris & Smith, 2004).

The full-time Special Education teacher and Principal are responsible to ensure all special education laws are adhered to and students are serviced according to their individual needs.

Servicing of ELL students
SCDS shall follow Arizona Department of Education policy for the identification and assessment of students identified as English Language Learners (ELL). SCDS shall timely assess the student's English language proficiency with Arizona's English proficiency assessment – Arizona English Language Learner Assessment (AZELLA). Any student identified as not proficient on the English proficiency assessment is entitled to ELL services, which SCDS shall provide.

Methods of Instruction
Instructional methods are ways that information is presented to students. SCDS teachers will use various instructional methods to deliver lessons and the Arizona State Standards to its students. SCDS will use various teaching styles to best align the vision of expanding the boundaries of individual potential to our students' educational development.

It is important to begin building foundations of knowledge in the early grades when children are most receptive. Academic deficiencies in the first six grades can permanently impair the quality of later schooling and the programs and the methods of instruction to be used at SCDS will prevent any deficiencies for our students

The variety of instructional methods used at SCDS will allow for differentiated instruction to meet the needs of all of its students. By recognizing that each student learns in a unique way, the instructional methods used must be flexible and varied to account for these differing learning styles. Below are descriptions of the instructional methods by Bannon (2002) and will be used at SCDS:

Cooperative Learning
Cooperative Learning involves small heterogeneous student groups working together to solve a problem or complete a task. All students in the group must actively participate with each student maintaining some independence. The success of the group depends on the input of each individual. This teaching method promotes active participation, individual accountability, students' ability to work cooperatively and improvement of social skills.

Discovery Learning
Discovery learning is an inquiry-based learning method in which learners use prior knowledge and experience to discover new information that they use to construct learning. This method is the most successful if the student has some prerequisite knowledge and the experience is structured (Roblyer, Edwards, and Havriluk, 1997). The internet is a very useful tool for the teacher in this type of instruction.

Scaffolding
Scaffolding involves the teacher modeling the skill and thinking for the student. As the student increases understanding, the teacher withdraws the assistance allowing the student to take on more responsibility for the learning.

Lecture-Discussions
Lecture-discussion is a combination of lecture and teacher questioning of students.

Direct Instruction

Direct Instruction is used to help students learn concepts and skills and can be divided into 4 sections:

1) Introduction and review
2) Presentation of new information
3) Guided practice
4) Independent practice

Demonstration

Demonstration involves the teacher showing students a process or procedure such a science process, a cooking procedure or a computer procedure. Involving students in demonstrations allow this method to be less passive. This method can incorporate web based lessons to show the students how to do something.

Problem-Based Learning & Inquiry

Problem-Based Learning & Inquiry involves teacher giving the student a problem where inquiry must be utilized to solve the problem. There are commonly four steps in this model:

1) Student receives the problem
2) Student gathers data
3) Student organizes data and attempts an explanation to the problem
4) Students analyze the strategies they used to solve the problem**.**

Rationale

The SCDS Governing Board of Directors appreciates diversity and recognizes that children learn in different ways. For all students to be successful, the instructional methods used must account for the differences in children. If a teacher stands at the front of the classroom all day every day and lectures in a command style display, most students will miss the material being presented and an opportunity for learning has been lost. SCDS teacher's will be given professional development and training on different methods of instruction and how to utilize them.

These programs of study will serve the target population of students very well as they are all able to be infused with technology. The technology infused program of instruction at SCDS and the way in which materials will be presented will present students with optimal opportunities in which to achieve mastery in the academic and enrichment areas of the program. Students will be inspired by their teachers and the educational field trips in which they will embark upon. SCDS students will be stimulated to discover more facts and information about the subject areas they are working on and will be motivated to discover new knowledge through research and inquiry beyond the classroom.

Assessment

SCDS views assessment as a process, rather than a single, snapshot event. The methods of assessment are consistent with the educational philosophy and methods of instruction at SCDS.

We will use this assessment information to monitor academic achievement and to guide curricular and instructional decisions in the classroom on an ongoing basis and also to inform intervention and remediation on a student by student needs so that we meet the needs of each individual learner.

We will utilize a variety of assessment measures to measure and quantify our students' academic progress and provide effective intervention and remediation. Assessments will be frequent and varied to ensure that we are providing our students with an education that meets their individual needs and long-term goals. A variety of formative and summative assessments will be implemented to provide teachers with the data to tailor their educational plan for each student.

Placement (entry) assessment

All incoming kindergarten students and new students in grades **1-6** will be screened before the beginning of the school year to identify areas of proficiency or deficiency of individual students as well as any overall challenges for the entering class. The major purpose of this screening is to ensure that these students will be correctly placed according to their age and previous academic performance at their prior school. An in-depth meeting with parents regarding their perspectives and goals for their child will provide additional input in providing each student with a positive school and learning experience at SCDS.

Formative Assessments

Formative assessments that will take place daily and will include:

- Ongoing classroom assessment such as daily class-work, teacher observation, student dialogues, digital portfolios, presentations, self and peer assessments, student participation and discussions, rubrics and curriculum-based measures;
- Interim and benchmark assessments through DIBELS-6 (Dynamic Indicators of Basic Early Literacy Skills-6th Edition);
- Technology based assessments such as IXLmath, and easyCMB, a literacy and math monitoring program using the Item Response Theory (IRT)
- Regular homework assignments will be assigned for each core subject area, which will assist students in cultivating their independent thinking skills.

Summative Assessments

Summative Assessments, aligned with the methods of instruction, will be an essential part of meeting academic performance objectives. They will be administered at the completion of a unit of study in order to assess the academic progress of students in mastering standards and performance objectives in core subjects of the Common Core and Arizona State Standards. Summative Assessments will include regular curriculum-based and standards-aligned teacher assessments, teacher insight and feedback, and student portfolios

Benchmark Assessments

Benchmark testing will be used to gain knowledge of where our students are. Results from benchmark assessments will enable teachers to determine progress and plan for students to reach the AIMS goals. Benchmark assessments will be administered through DIBELS-6 and easyCMB will be administered. Benchmark tests as outlined in the Performance Management Plans for Reading and Math.

State Mandated Assessments

SCDS will administer all state mandated testing: AIMS: All 3rd-6th grade students will take the AIMS test in the spring: 2nd grade students will be tested on the Stanford 10 assessment. These tests will be used to give a snapshot of how our students are performing compared to a variety of benchmarks – both criterion-referenced and norm-referenced. This information will also enable us to measure student, class, and school growth by these benchmarks. Data from the annual AIMS 3-6 and Stanford 10 assessment will be analyzed in professional development meetings in late-summer to give teachers information when designing learning activities for next school year.

Progress Monitoring

SCDS will use regular curriculum-based teacher assessments, teacher insight and feedback, student portfolios, and accepted standardized testing such as the (SAT-10) Stanford Achievement Test-10th Edition, as well as Criterion-referenced assessment tools such as DIBELS-6 (Dynamic Indicators of Basic Early Literacy Skills-6th Edition). Technology based assessments such as IXLmath, and easyCMB, a literacy and math monitoring program using the Item Response Theory (IRT). Combined use of these tools will increase accuracy in monitoring student growth, tracking of student progress, and identification of academic areas needing more emphasis. Our goal is to achieve on-going proficiency in Arizona State Academic Standards and Arizona testing requirements in order to best serve the academic success of our students.

The successful monitoring of academic proficiency takes into consideration the divergent learning and

communication styles of students in the testing and evaluation process at SCDS. High academic testing scores are the result of not only teaching the content ("what") of a specific curriculum, but in teaching students to have the skills to locate the information they seek ("how"), and to successfully analyze the information they find ("why"). Many teachers and schools believe that tests do not always accurately reflect the true abilities of students and cannot replace professional assessments and insights; however, the current standard of using standardized and criterion-referenced testing will be the predominant measuring sticks for assessing student achievement results at SCDS.

Feedback is the critical component in assessing students' growth in learning and performance and will provide:

- Students with increased awareness of achievement and the enthusiasm to make learning a lifelong process
- Teachers with the needed support to determine what to teach and the most effective way to reach students
- Schools with the knowledge to make necessary revisions and improvements as required in the curriculum in order to ensure on-going academic excellence
- Parents with an accurate sense of their child's development and the opportunity and encouragement for their maximum involvement

School administrators increasingly rely on technology to accomplish their work, capture and make sense of data, and focus their efforts on measurable results in student achievement. In New York City and Chicago, more than 90 percent of school leaders use Web-based reports of results from end-of-year and interim assessments on standards-based tests for school planning and professional development. New York City administrators say these reports help them to identify class, grade, and school-wide strengths and weaknesses; frame conversations about student learning with teachers, parents, and other administrators; and address school or district challenges. Further, New York City's 30,000 teachers use these reports to understand individual students' strengths and weaknesses in English language arts and math assessments, and access standards-based curriculum and instructional resources online to focus on specific needs. (Light et al., 2005).

Progress Report Evaluation. Students at SCDS are formally assessed four times each year, at the end of each quarter. SCDS staff will discuss the information about assessment methods for specific subjects with parents and students at the start of the school year. A progress report will be provided to parents 20 days prior to the end of each academic quarter (four times per year). These progress reports are in addition to the formal report cards provided for the academic quarters and at the end of the school year. These progress reports will be accessible to parents on-line and will contain the following information: the student's cumulative grade in previous and current periods in each subject; and specific comments if needed regarding academic achievements, suggestions for additional school support or parent involvement if needed, or any discipline or attendance issues.

The Principal will review all test results for students at the end of each semester and for the school as a whole at the end of each year. Results will reflect changes in curriculum as needed. The Principal will work with teachers to make these changes to improve the learning process for students. Collaboration and peer input between SCDS staff will be invaluable for this.

Test results from previous years will be useful to review frequently and to draw comparisons on the progress of SCDS students both internally and as a framework to measure our school against comparable schools in Arizona.

Citation of Sources

1) Bannon, B. O. (2002). *What are Instructional Methods?* Retrieved May 28, 2011, from The Office of Informational Technology, University of Tennessee website: http://itc.utk.edu/~bobannon/in_strategies.html

2) Roblyer, Edwards, and Havriluk, M.D., Edwards, Jack, & Havriluk, Mary Anne (1997) Integrating Educational Technology into Teaching, Merrill, Upper Saddle river, NJ.