A.3 Program of Instruction

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 receive educational programs in Spanish, Mandarin, technology, art, physical education, drama, and music. The educational program at SCDS fits the needs of the target population as these programs align well with the emerging Common Core Standards. This is due to the rigorous program SCDS will teach which is necessary to achieve the excelling status of the surrounding public schools where students will be drawn from.

The Program of Instruction selected at SCDS is consistent with some of the schools within the targeted population. For example, there are many schools which use the Saxon math program which is part of the curricular framework at SCDS. For students starting a new school, it is important to be able to teach from day one without students having to necessarily learn different programs for the different academic subject areas.

The targeted population for SCDS is an affluent area with an above average median household income. Students from these homes, and who are in the targeted population, need an educational program which incorporates technology into its teaching. This is done at SCDS through infusing curriculum with technology where possible.

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 mainly about delivering content, a standards based education reform system is designed so that all will succeed if all are held to high expectations. The curriculum at SCDS will be rigorous and infused with technology to assist students in succeeding. Delivering content by t using technology, students develop learning skills, such as thinking and problem-solving skills, information and communication skills, and interpersonal and self-directional skills. The teaching of critical thinking skills is an essential factor in the overall success of the curriculum framework at SCDS.

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	5	5	5	5
1st & 2nd	7.5	7.5	7.5	7.5
3rd & 4th	10	10	10	10
5th & 6th	15	15	15	15

The program developed at SCDS embodies our core mission to *educate and empower its students every single day through engaging and rigorous* programs. 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 for life!

Key Factors Linked to the Curricula Framework

- Technology supports all subject areas
- Mastery of standards adopted by teachers, students, and parents
- Excellent student to teacher ratio (20:1 maximum)
- Kindergarten through 6th grade
- Lesson plans to the Arizona State and Common Core Standards.

Technology and the Program of Instruction at SCDS

Technology at SCDS enhances the success of its students and helps to provide data for analysis and accountability purposes. SCDS will purchase 20 new Ipads 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.

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).

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 which are aligned to the Arizona State and Common Core 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. 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) which 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**.**

How these Methods of Instruction Support the Curriculum

There are multiple methods of instruction outlined above and which the teachers at SCDS will receive training in. The numerous instructional methods support the chosen curriculum at SCDS by empowering the teacher to bring the lessons taught to life. Demonstrational and Problem-Based Learning & Inquiry instructional methods will provide hands on opportunities for students to learn and thoroughly understand the curriculum being taught.

How these Methods of Instruction Support the Educational Philosophy
The Educational Philosophy of SCDS is supported through these instructional methods as teachers will have maximum class sizes of 20 students. Having a maximum of 20 students in the classroom will provide plentiful opportunities for the teacher to differentiate instruction. Cooperative learning, scaffolding, and lecture based discussions are all easier to utilize with smaller class sizes, which is an intricate part of the SCDS educational philosophy and model.

Rationale
The SCDS Governing Board 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 the instructional methods are one-dimensional, then so too will the learning outcomes. SCDS teachers 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 well as they are all able to be supported with technology. The technology supported programs of instruction at SCDS and the way in which materials will be presented will deliver to students optimal opportunities in which to achieve mastery in the academic and enrichment areas of the program.

Framework for Assessments & Data Analysis at SCDS

Component 1: Baseline Assessment and Data
Baseline assessment provides all stakeholders with the information needed to identify students' strengths and weaknesses, to effectively target instruction, and to set school-level, classroom level, and individual student-level goals.

Component 2: Data Driven Instruction
Data Driven Instruction along with school leaders, analyze baseline data from assessments and report cards, and then provide targeted professional development to support teachers' knowledge base of the best instructional strategies to employ, that best meet the needs of each student. Teachers then have the information needed to effectively adjust instructional focus, and employ regrouping and other differentiation strategies, to ensure that each student is making progress towards mastery of specific skills and content. Using data-driven instruction and ongoing teacher support, ensures a culture of continuous improvement and increased student achievement.

Component 3: Assessment
After data-driven instruction, formative assessments will be given to determine areas of growth, and will be used to continue to identify instructional priorities. Assessments ensure instructional effectiveness and student achievement, and are an integral part of the Educational Model. Formative assessments, in particular, provide a systematic and regular measurement of students' progress in the classroom, and are the processes used to drive instructional practice.

Component 4: Grading
As the data is collected, it will be analyzed. The data is then reviewed at the specific standard to target individual student needs on specific skill expectations.

Component 5: Reporting
Student achievement data will be included in each student's file and will make year-to-year evaluation and tracking of benchmarks more efficient. It will also provide students, parents, teachers and administrators, information to make decisions about differentiating instruction for each student.

Component 6: Decision
Teachers and administrators, based on the data, will make the decision to either move on to a new standard and begin with a baseline assessment, or revisit the same standard through data-driven instruction, reaching students who need remediation or acceleration through differentiated instruction. Student achievement data will be included in each student's file and will make year-to-year evaluation and tracking of benchmarks more efficient. It will also provide students, parents, teachers and administrators, information to make decisions about differentiating instruction for each student.

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.

SCDS 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 need so that we meet the needs of each individual learner.

Placement (entry) assessment

All incoming kindergarten students and new students in grades 1-6 will be screened before or at the very beginning of the school year to identify areas of proficiency or deficiency 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 will be given to determine areas of growth, and will be used to continue to identify instructional priorities. Assessments measure instructional effectiveness and student achievement, and are an integral part of the Educational Model. Formative assessments, in particular, provide a systematic and regular measurement of students' progress in the classroom, and are the processes used to drive instructional practice.

- 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. Examples of these summative assessments can be found in section A.6 for all of the curriculum samples submitted.

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, as outlined in the Performance Management Plans for Reading and Math, will be administered through DIBELS-6 and easyCMB.,

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 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 data needed to design learning activities for the 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").

Feedback to students and parents is a 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).