A.1 Educational Philosophy

Introduction

Scottsdale Country Day School (SCDS) is a proposed charter school for students in grades kindergarten through 6th grade for the 2012/2013 school year and beyond. SCDS will expand the boundaries of individual potential through presenting a broad and balanced curriculum infused with technology in small class sizes. Whitehead, Jenson, & Boschee (2003) highlight the importance of technology in the classroom by arguing that technology in the nation's classrooms has the capability of significantly reshaping education in America. SCDS teachers will interject some form of technology into 90% of the lessons taught. Examples of this technology are:

- Web-based lessons. Example www.khanacademy.com
- Lessons taught using projector, displaying visuals on a overhead screen
- Internet research
- Writing papers and reports on the computer
- Using PowerPoint presentations for demonstration of mastery
- Using webcams for interfacing with partner schools
- Recording electronic journals
- Utilizing foreign and English language programs

The latest educational technology will be integrated into each classroom and area of study in order to enhance the creativity and innovation of its teachers and students alike. Wiles & Bondi (2007) suggest that with thousands of learning websites on any topic, these websites through technology within the classroom represent an incredible resource for reaching students and meeting their individual needs. Technology is a powerful tool that gives students access to vast amounts of information—and helps students acquire the learning skills they need to transform this information into useful knowledge. Technology is an essential component of a 21st century education because it helps students develop essential learning skills and become life-long learners.

There are two major approaches to using media and technology in schools: Regardless of the approach, media and technology have been introduced into schools because it is believed that they can have positive effects on teaching and learning.

With respect to education at Scottsdale Country Day School, technologies are the tools that allow teachers to share their knowledge representations with students. Students at SCDS will learn "from" technology based teaching, and learn "with" technology (Jonassen & Reeves, 1996). Learning "from" technology is referred to in terms such as computer-based instruction, or integrated learning systems (Hannafin, Hannafin, Hooper, Rieber, & Kini, 1996; Seels, Berry,

Fullerton, & Horn, 1996). Learning "with" technology, is referred to in terms such as cognitive tools (Jonassen & Reeves, 1996) and constructivist learning environments (Wilson, 1996). "The computer" is in fact a "multifaceted invention" of many uses, a symbolic tool for making, exploring, and thinking in various domains. It is used to represent and manipulate symbol systems – language, mathematics, music – and tocreate symbolic products – poems, mathematical proofs, compositions. (Salomon, 1992, p. 892)

The SCDS program, based on a solid core foundation and grounded in integrity, will promote character development and collaboration. Tailored courses will provide opportunities for the achievement of excellence in the academic, aesthetic, cultural, technological, and sporting spheres. SCDS will provide a friendly and caring school environment in which pupils thrive and are valued for their individual contribution to the school community. Students will be given every assistance and encouragement to reach their potential, discover talents through participation and contribution, and take responsibility for their progress. Teaching will be class based with each subject taught by a highly qualified specialist and with each subject area being infused with technology.

The program at SCDS will incorporate all the fundamentals required for students to excel and be successful in school and beyond. SCDS's philosophy, teaching methods, and lessons infused with technology will prepare our students for an ever-changing global society.

Scottsdale Country Day School's Mission Statement:
"Scottsdale Country Day School is dedicated to providing a program which exceeds the State of Arizona Public School Standards. With a partnership of parents, staff, students, and community members, SCDS is committed in providing a school with a strong math, science, and language arts program fused with educational technology. SCDS affords students a hands-on program to acquire a full range of skills, whilst surrounded by a culture of respect, curiosity, responsibility, and compassion. SCDS recognizes each student as an integral member of the school community and all students are empowered to achieve success."

Key Principles
There are several key principles which help highlight the educational philosophy:

- **Educational Technology**
  Technology is a powerful tool by providing students and teachers with access to high quality educational resources that extends beyond the limitations of physical space. SCDS strongly supports the use of educational technology throughout the grade levels served.

- **Student Recognition and Development**
  SCDS is committed to a rich and challenging tradition of excellence, where every decision is made with the students' best interest in mind. SCDS recognizes the value of recognizing differences in students and learning styles.
- **Partnerships with Families**
  Parents and family members are an integral part of the success that a child will encounter in life and school. SCDS embodies this by building relationships with students, parents, and family members that allows students to not only reach their educational and social potentials, but to exceed them.
- **Program of Study**:
  SCDS has developed a multi-media curriculum which is strong for the core subject areas in math, language arts, science, and social studies, and rich for the additional areas of study including Spanish, Mandarin, drama, physical education, and economics. Each area of study is infused with technology where possible.
- **The Educational Team**
  From the Board of Directors and Governing Boards to the teaching staff at SCDS, each individual has a passion for nurturing and developing students to ensure individual boundaries are expanded and individual potentials are surpassed. Ongoing professional development for SCDS personnel will ensure students are presented with optimal opportunities for achieving their individual successes.

Overview of Instructional Methods

SCDS will use various instructional methods to deliver lessons and the Arizona State Standards to its students. Instructional methods are ways that information is presented to students. The variety of teaching 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) that will be used at SCDS, but are by no means exclusive:

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). Discovery learning is "an approach to instruction through which students interact with their environment-by exploring and manipulating objects, wrestling with questions and controversies, or performing experiments" (Ormrod, 1995, p. 442) The idea is that students are more likely to remember concepts they discover on their own. Teachers have found that discovery learning is most successful when students have prerequisite knowledge and undergo some structured experiences. (Roblyer, Edwards, and Havriluk, 1997, p 68).

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 can be done by the SCDS teacher or through viewing an online video for example.

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 for Proposed Approach

The SCDS Board of Directors appreciates diversity and recognizes that no two children learn in the same way. 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 will be been lost.

The program of study infused with technology at SCDS and the way in which materials will be presented will be interesting and exciting for students, and also cutting edge. SCDS wants its students to be excited, amazed, and interested in what they are doing! 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. SCDS students will be presented with many opportunities to expand their knowledge including online resources for expanding and building on their learned material. Utilizing the latest technology within the classroom will afford more opportunities for students to learn at their individual level and area of interest.

As schools strive to meet Adequate Yearly Progress (AYP) under the No Child Left Behind (NCLB) Act of 2001, technology makes a difference in improving test scores and helping students reach performance goals. Technology also engages students in learning; improves attendance, decreases dropout rates, increases graduation rates and facilitates parent involvement. Technology at SCDS will be a major factor in the successes which the students will achieve.

Performance on standardized assessments in reading, writing, mathematics, and other subjects improves when technology is part of the learning process. Integrating technology into academic subjects results in gains on high-stakes tests and will enable to meet AYP and performance benchmarks under NCLB. A 2004 report by Market Data Research found that schools that fail to meet the AYP requirements are below average in technology use.

In states, school districts and schools across the country, there is substantial evidence that technology has become a vital component for the success of the entire educational enterprise by:

- Improving learning and achievement among urban, suburban and rural students of all ages and abilities and aids all students to meet high standards
- Helping new and aspiring teachers to become “highly qualified” and experts in their subject area
- Providing administrators with better data that can improve decision-making and policy implementation

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) Ormrod, J. (1995). Educational psychology: Principles and applications. Englewood Cliffs, NJ:Prentice-Hall.

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

4) Whitehead, B.M., Jensen, D.F.N., & Boschee, F. (2003). *Planning for technology: A guide for school administrators, technology coordinators, and curriculum leaders.* Thousand Oaks, California: Corwin Press, Inc.

5) Wiles, J and Bondi, J. (2007). *Curriculum development: A guide to practice*. Upper Saddle River, New Jersey: Pearson – Merrill Prentice Hall.