

**SALT LAKE CITY SCHOOL DISTRICT**  
**Charter School Application**

Name of Proposed Charter School: **Salt Lake Center for Science Education: A Partnership Between Salt Lake City School District and University of Utah**

Address of Proposed Charter School: 1400 West Goodwin Avenue  
Salt Lake City, Utah 84116

Date Application Submitted to District: April 1, 2007

**Applicant**

Name: Salt Lake City School District (Larry Madden, Ken O'Brien, Dorothy Cosgrove)

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**Description of Group or Organization**

Name: **Salt Lake Center for Science Education: A Partnership Between Salt Lake City School District and University of Utah**

Address: 1400 West Goodwin Avenue

City: Salt Lake City

State: UT

Zip: 84116

Phone: N/A

Fax: N/A

Website Address: N/A

School District: Salt Lake City School District

Date School Will Begin: Fall 2008

Grade Levels or Student Ages to be Served: 6-9 grades

Number of Students to be Served: 240

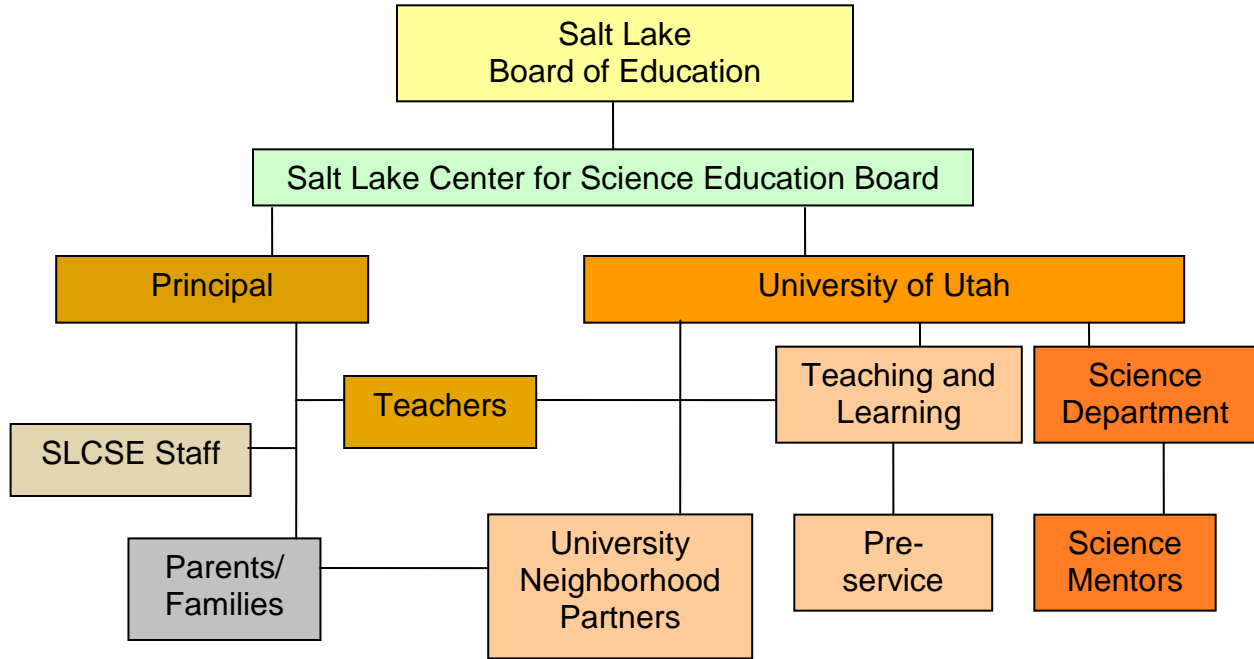
**SCHOOL GOVERNANCE**

**1. Administrative Structure:**

The Salt Lake Center for Science Education (SLCSE) will operate within the Salt Lake City School District. It will be governed by all the rules, policies, and contracts that apply to any other Salt Lake City School District school. SLCSE will maintain a School Improvement Council and a School Community Council, as outlined in the District's Shared Governance Guide.

The Salt Lake Center for Science Education will be directed through a SLCSE Board that includes staff, University of Utah partners, parents/families, and business representatives as further described below. A quorum of the membership of the SLCSE Board must be present to make a decision, and decisions are made through the process of consensus. When consensus cannot be reached, decisions are made using parity procedures consistent with the concepts outlined in the District's Shared Governance Guide. If a decision still cannot be made, the Review and Adjudication procedures specified in the District's Shared Governance Guide will be used.

The structure of the school will be as follows:



**2. Governing Board:**

The SLCSE Board will consist of:

One member of the SLCSD Board of Education, one faculty member from the University of Utah Teaching and Learning Department, one university scientist, one member of the business community, one additional scientist or community member, and a minimum of two parents of students attending the Salt Lake Center for Science Education. At least one of the parent representatives on the board will be elected. The SLCSE administrator will serve as a non-voting advisor to the board. Additional members may be determined by the SLCSE board as deemed necessary; with the condition that at least twenty-five percent of the SLCSE governing board consists of parents of students attending the school.

Each SLCSE Board Member will serve a two year term, with three members initially serving a three year term so as to stagger the Board terms. SLCSE Board Members may be removed from the Board by a majority vote of the Board. Upon term expiration, resignation, dismissal, or death of a Board Member, the remaining Board Members shall appoint a replacement for the vacant board slot, with a tie vote being broken by the President (or Vice President if the President is dismissed). The SLCSD Board of Education member will be chosen by the SLCSD Board of Education.

The members of the Board will select one member each to serve as President, Vice President, Treasurer and Secretary. No board member may hold more than one of these offices. The director/principal may not serve as a Board Officer.

The Board will have shared authority for running the school with the following responsibilities:

- Promote the mission of the SLCSE.
- Oversee the school fundraising.
- Assure financial responsibility and accountability.
  - Approving budget and overseeing adherence.
  - Contracting for and approving independent audit.

The Board will meet monthly to:

- Fulfill primary responsibilities.
- Discuss logistics of school operations.
- Consider and approve new or amended policies or procedures.

- Hear Board members reports or concerns.
- Consider concerns and/or questions from parents/families, teachers, students and community through an advisory council.
- Address any other school issues.

Parent participants on the board will be identified during the first year of operation. Founding members of SLCSE are Larry Madden (SLCSD), Ken O'Brien (SLCSD), and Mary D. Burbank (U of U).

### **3. Chief Administrative Officer:**

The principal will be the chief administrative officer, and will be responsible for the day-to-day operation of the school. That person will be selected early in 2007. The selection and supervision of the director/principal will be the responsibility of the Salt Lake City School District Board of Education. The director/principal will be responsible for the day-to-day management of the school. The director/principal will be responsible for financial expenditures, hold regular faculty meetings, supervise teachers and other staff, ensure school curriculum meets curriculum required by the State of Utah, implement SLCSE Board decisions and promote the school's mission, philosophy and goals. The principal will hire necessary administrative staff as needed and approved by the SLCSE Board. All administrative, university liaisons, facility and teacher staffs report to the director/principal.

#### *Overarching Duties:*

- Demonstrates commitment to SLCSE's vision and mission and communicates that vision and mission to school personnel, the students and parents/families, and the community.
- Models school values for students, parents and the Board.
- Functions as a visible leader maintaining frequent contact with students, staff, and university partners.
- Exercises a participatory management style with staff.
- Communicates effectively by written and oral methods.
- Fosters a climate of innovation and collegiality.
- Facilitates activities for families, staff, and partners to encourage community and shared purpose.

#### *Specific Educational Leadership Duties:*

- Participates in the hiring and evaluation of staff.
- Oversees planning and evaluation of programs and sets priorities for programs.
- Coordinates design of curriculum with SLCSE Board, staff, and volunteers.
- Administrates all school-based programs.
- Administers services of resource personnel.
- Assists staff in evaluating their methods and instructional materials.
- Coordinates the design of schedules.
- Develops cooperation and teamwork within staff.
- Assists staff in accommodating individual student needs and abilities.
- Monitors student progress, discipline, health and safety.
- Provides perspective on educational issues with the school's Board on a regular basis.
- Recommends plans for improvement of instruction, school philosophy, and school policies.
- Assists the board in evaluating the school's progress on established priorities.

#### *Community Relations Duties:*

- Promotes and develops a professional relationship with the school's Board, staff, parents and university partners.
- Seeks and considers opinions of others in a timely fashion.
- Provides information to community, media, and interested parties about the school, its programs, and progress towards goals.
- Develops all printed materials needed for the operation of the school.
- Serves in a liaison capacity with requisite State entities on administrative and/or educational matters.
- Assists with the recruiting, scheduling, and training of volunteers within the school.

#### *Managerial Duties:*

- Approves and authorizes: building usage, budget items, permanent record maintenance, building maintenance, all school-based activities and schedules, purchase and utilization of material resources, equipment, textbooks and supplies.
- Plans and implements the staff development program in conjunction with university partners.
- Delineates all responsibilities and authority, establishing lines of communication and supervision.
- Develops enthusiasm and promotes positive morale among staff, parents/families, and university partners.
- Actively leads and participates in the development of the master budget.

#### **4. Parent Involvement:**

Parental involvement is crucial to the success of SLCSE. We value and invite parental/family input and feedback. Parents/families will be encouraged to be active participants in the school through volunteering, serving on the Salt Lake Center for Science Education Board, working in collaboration with University Neighborhood Partners Projects, and participating in school related activities. Opportunities to participate will be communicated to parents/families through a newsletter, outreach activities through The University Neighborhood Partners and school website.

The school will provide parents/families the opportunity for hands-on involvement in the education of their children. Parents/families who may not be available to volunteer during school hours may volunteer by participating that may be done at home, in the evenings, or on weekends. The University Neighborhood Partners, United for Kids Project will provide support for Family Advocacy Programs.

Parents/families will be encouraged to volunteer in a number of ways that may include committees, fundraising, office help, field trips, classroom help, tutors, assemblies, and others. A volunteer coordinator will be recruited to oversee volunteerism. The coordinator will organize and plan volunteer schedules, track volunteer hours, and disperse volunteer schedules. The United for Kids Project will assist in the training of families as participants in the school community and operations.

All parents/families will be encouraged to provide constructive criticism and offer alternatives and/or solutions. Parents/families may be asked to participate in a research committee to study the issue and offer alternatives/solutions to the SLCSE Board for consideration.

Communication with parents/families is key to the school's success. The SLCSE will be subject to all State and Federal laws regarding this issue. Parents/families will be welcome to visit the school or classroom any time as long as they do not cause a disturbance to classroom instruction. SLCSE will follow Policy KC. Parent and Community Involvement from the Salt Lake City School District Board of Education policies.

#### **5. Communication with Parents:**

As parents/families become members of the SLCSE community they will meet with a staff member that will provide initial information, outline opportunities at the school, and discuss any special needs that may apply to their individual student. A school website will inform parents/families of opportunities to volunteer at the school, upcoming events, and their individual student's progress. Parents/families will be able to view their student's online portfolio. For parents/families that do not have internet access at home, there will be a computer at SLCSE that can be utilized to access information (parent must have an AUP on file with the school). Family Community Advocacy through the United for Kids Project will provide liaison support.

Parents/families will receive a copy of the Salt Lake Center for Science Education Handbook at the beginning of each school year. Periodic information will also be sent to parents/families in print form to assure that all parents/families are informed on school related opportunities and issues.

Parents/families of the students attending SLCSE are vital to the success and operation of the school. Part of this vital involvement will be taking part in the many opportunities to help establish new and varied ways of improving the school. Parents/families will be asked to provide feedback and suggestions through periodic surveys.

Parents/families that have complaints will be invited to present them in writing to the Principal and/or the SLCSE Board. Parents/families will be encouraged to provide alternatives and suggestions, and may be asked to lead a special committee to research and present options.

#### **6. Complaints:**

Parent/family complaints will be taken seriously by SLCSE. Specific complaints will be addressed according to the following guidelines:

- Individuals with complaints should initially attempt to resolve the problem by addressing the parties directly involved.
- If disagreements cannot be resolved individually, the Principal may serve as mediator to resolve concerns and facilitate understanding.
- Problems that cannot be resolved with the Principal may be presented to the SLCSE Board for consideration. The issue should be stated in writing and should specify the prior attempts at resolution both individually and with the Principal. The SLCSE Board will investigate the complaint and make a decision according to the student's best interest.

In regards to complaints related to curriculum the school will follow Salt Lake City School District Board of Education Policy KLB: Public Complaints about the Curriculum or Instructional Materials.

### **STUDENTS**

#### **1. Notification:**

Families will be notified in late November of their opportunity to attend the Salt Lake Center for Science Education in multiple ways. SLCSE will build and maintain a website that describes the opportunities for students to attend the school. We will also participate in the Salt Lake City School District Choice Fair, conduct informational meetings in various locations around the district, and send print material to all families of incoming 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> grade students. Translations will be available for all print material and online application information.

SLCSE will hold after school informational meetings for students and parents at each individual school in Salt Lake City School District. These events will be publicized through flyers sent to parents and schools.

SLCSE will work with the University Neighborhood Partnership to assure that underserved groups of students all fully aware of the opportunity to be a part of the school community.

In notifying students for the first year of operation we will target 7<sup>th</sup> grade MESA (Math, Science and Engineering Achievement) students.

#### **2. Selection:**

Applicants for the Salt Lake Center for Science Education must fill out an application form, available online or in hard copy. Applications to SLCSE will be due at the end of the open enrollment period for Salt Lake City School District in mid February. Applications may be sent electronically, via mail, or hand delivered. Within two weeks of receiving an application, the board will notify applicant of receipt. An application will not be considered complete until such notice has been received. In the event that the school does not meet enrollment goals the period for accepting applications may be extended.

Students that are enrolled in SLCSE will be automatically enrolled for subsequent years unless written notification is received by the school indicating their desire to withdraw.

After acceptance to the school the new student and his or her parents/families will meet with a teacher or administrator from SLCSE. The purpose of the meeting will be to meet the family prior to the beginning of school and assure that the school staff is poised to meet the needs of the individual student. The meeting will ensure an efficient and productive start to attendance at SLCSE.

All resident students of Utah qualify for admission.

- All eligible students who submit a timely application will be admitted, unless the number of applications exceeds the capacity of the specific grade level.
- If the number of applications exceeds the capacity of the specific grade level, then students shall be selected, by lottery, on a random basis except that the school will give preference to:
  1. siblings of students already admitted to or attending the school;
  2. a student of an SLCSE teacher or founder

### **3. Standards:**

SLCSE will assemble a student handbook including clear behavioral expectations and consequences for acceptable and unacceptable behavior. Parents/families and students will be provided with this handbook and will be expected to sign a behavioral contract agreeing to abide by these guidelines. The student handbook will also be posted on the school website. Generally our behavioral policy will be guided by the following ideals:

- Every student at Salt Lake Center for Science Education is expected to conduct themselves in a responsible, mature and respectful manner at school and at school sponsored activities.
- All students are expected to attend classes on time everyday.
- All students are expected to comply with the Salt Lake Center for Science Education Dress Code at all times.
- All students are expected to follow directions of the faculty and staff in an appropriate manner.
- All students are expected to comply with the Salt Lake Center for Science Education Discipline Policy.
- All students are expected to respect one another and to refrain from using foul, profane, or vulgar language.
- All students are expected to put forth their maximum effort in classes in order to achieve academic excellence.

SLCSE will implement a school dress code policy for its students in accordance with state and federal law. SLCSE student conduct code will conform to Salt Lake City School District Student Discipline Policies (JGD; JFCR; JGF; JHCE). The purpose of policies JGD (Student Suspension/Expulsion), JFCH (Alcohol and Illegal Substance Use By Students), JGF (Safe School: Student Violence/Criminal/Disruptive Behavior) and JHCE (Student Anti-Harassment) and other related discipline policies is to foster a safe, positive environment for learning. Please refer to specific policies for detailed student discipline information.

### **4. Dismissal:**

SLCSE will follow the district guidelines and behavior policies to insure the appropriate handling of any situation that would place students, staff or patrons in danger. (See SLCS Student Discipline Policies Summary, Appendix E.) Any student removed from school for a reason or condition that threatens his or her welfare or the welfare of others shall be released to the parent, the parent's representative, or other proper authority, including, but not limited to, law enforcement officers and medical personnel. The school shall make reasonable efforts to notify the parent prior to removing a student from school premises. If the parent cannot be notified prior to the removal, the parent shall be notified as soon as possible after the removal and informed of the reasons for it.

Disciplinary records shall be made available to parents/families or the student; whichever is appropriate, pursuant to the district's student records policy. Suspension and expulsion records are part of the student's record and shall be transferred with student records when the student transfers within or outside the school district.

## **Prohibited Conduct & Related Discipline**

Prohibited conduct is forbidden at school, on school property, including school vehicles and at any school activity. A serious violation that threatens or harms a school, school property, a person connected with school or property associated with a person connected with school is forbidden regardless of where it occurs.

A. You **WILL** be removed from school for:

1. possession, control, actual or threatened use of a real, look alike or pretend weapon, explosive or noxious or flammable material;
2. possession, control, sale, or use of an alcoholic beverage, drugs, or controlled substance;
3. using or threatening to use serious force; or
4. a serious violation of Section II.B affecting a student or staff member.

Depending on the nature of the violation, you may be removed for up to one year. You may be required to attend a Safe School Hearing as a result of your violation.

B. You **MAY** be removed from school for:

1. willful disobedience or violating a school or district rule;
2. defying authority;
3. disruptive behavior;
4. foul, profane, vulgar or abusive language;
5. defacing or vandalizing school property;
6. truancy;
7. theft;
8. posing a significant threat to the welfare or safety of a student, school personnel or the operation of the school;
9. possessing or using tobacco;
10. hazing, demeaning, intimidating or assaulting someone or forcing someone to ingest a substance;
11. inappropriate exposure of body parts;
12. sexual or other harassment; or
13. gang-related attire or activity.

C. The decision to remove or to discipline in some other way is made by your school administrator based on all the circumstance of the situation. .

D. The type and length of discipline is based on factors such as previous violation, severity of conduct and other relevant educational concerns.

E. When appropriate, students will be placed on remedial discipline plans/contracts.

F. School personnel will use reasonable physical restraint if necessary to protect a person or property from physical injury or to remove a violent or disruptive student.

## **Searches**

A. School personnel can search your personal property based on reasonable suspicion.

B. School personnel can also conduct searches that might include all lockers and other school property. C. You have no expectation of privacy in your locker or in your vehicle when parked on school property. The school can search those with or without reason.

## **Suspension and Expulsion Defined**

A. Suspension is removal from school for a defined period of time not to exceed one year. A procedure will be established for returning to school after the defined period of time.

B. Expulsion is removal from school for one year or more or permanently without the offer of educational services.

C. Assignment to another school, including an alternative school, is not a suspension or expulsion.

## **Readmission and Admission**

A. If you are removed from school under A above, readmission depends upon satisfactory evidence that you will not be a danger to yourself, others, or school property.

B. If you are removed from school under B above, you can be readmitted after your parents/families/guardian meets with school officials after you complete your days of suspension.

C. The district may deny admission to a student who has been expelled from any school in the last twelve months.

### **Record of Suspension**

A. Your suspension or expulsion becomes a part of your cumulative student record.

### **Due Process**

A. If you are removed from school or otherwise disciplined, you can meet with your school administrator to tell your side of the story.

B. If your school administrator recommends removal for more than 10 school days, a hearing will be scheduled at the district office with you and your parent or guardian.

C. If you are removed from school for more than 10 school days, you can appeal the decision by writing to Student and Family Services Department within 10 days of the decision. Your parent or guardian is responsible to plan for your education during suspension and to pay for any services not provided by the district.

### **Students with Disabilities**

Students with a qualified disability under the Individuals with Disabilities Education Improvement Act (IDEIA) or Section 504 of the Rehabilitation Act will not be discriminated against in the selection process. The applicant child and his or her parents will follow the selection process described above including deadlines and meeting with a teacher from SLCSE.

If selected for enrollment in SLCSE, the services and accommodations on a student's Individual Education Plan (IEP) or 504 Plan will be provided through SLCSE.

## **STAFF**

### **1. Screening and Selection:**

The school will select its personnel directly and in compliance with all Federal and State rules and regulations. The Board and director/principal will be responsible for the hiring, supervision, and evaluation of the school's teaching staff. All teaching staff will be evaluated on a yearly basis. The Board will be responsible for evaluating the performance of the principal on an annual basis. The director/principal and the Board will review all contracts periodically.

The Board or director/principal must perform background checks and/or drug testing on prospective or current employees. Volunteers, who in any form come in unsupervised contact with the student body, will also be required to submit to a background check.

### **2. Qualifications:**

All staff with teaching assignments of science, mathematics, language arts, social studies, or special education will be highly qualified as defined by NCLB standards. SLCSE will hire teachers in accordance with Utah State requirements for public school teachers. This includes certification and/or alternative certification as required by Utah law per Utah Charter School law 53A-1a-512.4. Ongoing employment at SLCSE is contingent upon meeting and maintaining these requirements. SLCSE also intends to hire part-time employees that are not certified. Such employees will meet minimum skill requirements for teaching at the school.

In addition, SLCSE will seek teachers with the following skills and experience:

- A demonstrated understanding of inquiry/ science process skills
- An interest in becoming teachers leaders in SLCSD for district-wide professional development within the context of science
- A demonstrated interest and ability to work with students of diverse backgrounds
- An interest in creating an environment where all students are challenged to achieve at their maximum potential
- Teaching and adapting instruction to various development levels
- A demonstrated commitment to learn and develop new curricula, as well as to propose improvements
- A demonstrated ability to treat colleagues, parents/families and students with respect



- A demonstrated willingness to collaborate with teachers, faculty and parents/families to creatively problems and make innovative decisions that will benefit the school
- Demonstrated ability to use technology effectively as a learning tool
- Comfortable with integrating scientists, volunteers, mentors, university and business partners

### **3. Staffing Patterns:**

SLCSE will be composed of 240 students in grades 6 through 9, or 60 students per grade level. Students at the 6<sup>th</sup> grade level will spend the majority of their time in self-contained classrooms. Students in grades 7 through 9 will be rotated among different teachers.

SLCSE will also house the Salt Lake City School District science professional development department. Teachers will participate in district-wide science professional as part of their SLCSE duties.

### **4. Teaching Schedule:**

Teaching schedules will be set when the staff is identified and their individual endorsements and strengths are determined.

## **CURRICULUM AND INSTRUCTION**

### **1. Purpose:**

Salt Lake Center for Science Education, a 6-9 lab school, is a partnership between Salt Lake City School District and University of Utah. This partnership creates a unique learning environment that enhances the experiences of students, teachers, pre-service teachers, educational researchers and scientists. District-wide science professional development will be conducted by SLCSE staff in an effort to provide a model of best practices in science teaching. SLCSE will organize science outreach from university science departments, science related businesses, and informal science educators for schools district-wide.

Salt Lake Center for Science Education is devoted to creating an environment where a diverse group of students engage in reflective experiences with expert guidance resulting in real-life application of science skills and knowledge. The focal point of this vision is the formation of collegial relationships through mentoring of students by professional scientists, educators, and other community experts. This mentorship is based on the clear understanding of student diversity, ability, special needs, and mutual respect. Through the efforts and expertise of the partners, a network will be developed that provides support for students, and teachers.

Students will be challenged to utilize science skills and knowledge in a cumulative and integrative way, with mathematics, literacy, the arts and social sciences. The consistent application of scientific knowledge and process throughout the curriculum will enhance the development of critical thinking ability of the students. A relevant curriculum coupled with instructional practices that align with the diverse needs of learners will be features of all classrooms. As a result, these problem-solvers will ask researchable and relevant questions, design logical and feasible plans, and publicly present conclusions and recommendations.

Students will work in a safe learning environment that encompasses high level thinking and processing skills, collaboration and reflection. Teachers, staff, and community partners will utilize research based practices in inquiry and content application. Students will consistently use the tools of mathematics and technology as they solve problems, conduct experiments, and create projects, and in doing so will develop scientific skills including questioning, verification of results, and applicability to real life. Through this authentic learning process, which results in tangible evidence, students will also develop an understanding of the value of rational thinking, patience, historical contributions, accuracy and persistence. Students will gain an appreciation of the subtle beauty and universal application that underlies science.

District-wide professional development will take place on site utilizing partnerships between the school, science departments and the Department of Teaching and Learning with a goal of developing science teachers who are dedicated, professional, and committed to student success through purposeful motivation and facilitation of student learning. The continuous development of teachers district-wide will be explicitly guided through coursework and research, coupled with outcome based partnerships with the University of Utah science and

education communities. Teacher practices will be evaluated by peers and educational researchers through lesson study, collaborative learning communities and action research. The culmination of these focused efforts will result in a culture of knowledgeable, reflective, educational practitioners.

Salt Lake Academy of Science will provide a site for pre-service teachers to experience research-based practices in action. Lab classrooms will provide settings that integrate knowledge and experience from accomplished in-service teachers, university scientists and educational researchers.

## **2. Curriculum:**

Students will meet all Salt Lake City School District and Utah State Core Curriculum requirements within a curriculum that places a special emphasis on science. Master teachers will facilitate inquiry approaches to problem solving and the use of scientific methods. At all grade levels, students will be involved in projects that take place over longer periods of time and culminate in presentations to larger groups of students, parents/families, scientists, and interested members of the community. Students will work with mentors from the University of Utah and local science related agencies and businesses. The focus of projects will be on conducting research that is authentic in nature. Creating a culture of inquiry that will permeate and utilize all content areas in authentic ways will culminate in regular science fair like opportunities for all students.

Sixth grade students will engage in an enhanced science focused curriculum that will promote integration of subjects and development of skills needed to conduct thorough scientific explorations. Long-term projects will be integrated throughout the 6<sup>th</sup> grade year. For example, students could study the use of microorganisms as indicators of water quality. Students would start by exploring water quality in the neighborhood of the school, including the Jordan River and local wells. After analysis of the initial data students would gather samples from various locations throughout the watershed and track the change in water quality back to the source in the Wasatch Mountains. This project would lead to student presentations to other students, faculty members, community members, and scientists.

Science skills related to scientific observation, the use of scientific probes, data gathering, graphing, and measurement will be emphasized. Acquisition of mathematics and language arts skills that will be necessary to excel in middle and high school will be integrated throughout the 6<sup>th</sup> grade curriculum. Special emphasis will be placed on reading strategies for informational texts and writing to report observations and clarify thinking. Students will explore how the cumulative nature of science has impacted history. Students will acquire computer skills needed to collect and evaluate scientific data, present findings, and to build and maintain online portfolios.

Seventh grade students will take a full year of Integrated Science and an introductory environmental science course in addition to all other district and state requirements. Environmental science emphasizes relevance to student lives and how they impact the world around them. Students will develop an awareness of social and historical aspects of science by engaging in examples of how science affects life. An example of a project could be to investigate the effect of pesticides on lady bugs and the impacts on larger systems. Students will build on skills attained in 6<sup>th</sup> grade as they refine their ability to plan and conduct an experiment while focusing on identifying variables, analyzing data, and drawing warranted conclusions. Integration of reading for main idea and writing to summarize findings will be emphasized in 7<sup>th</sup> grade.

Eighth grade students will take a full year of Integrated Science and Science and Society in addition to all other district and state requirements. Students will continue with a project-based approach as they focus on current issues in science and develop greater understanding of career opportunities. Possible areas of study could include neuroscience, genetic engineering, DNA technology, cloning, greenhouse gases, biomagnifications, and developmental biology as students look at questions like: Can I get brain cancer from talking on my cell phone? Is it safe to eat genetically modified foods? How is DNA evidence used to solve crimes? Can I clone my dog? Is it safe to eat Utah trout? What are stem cells and why are they controversial? and Is global warming caused by humans? Integration of language arts will include accessing text, reading informational text, expressing ideas orally and in writing, and engaging in persuasive argument. Relevant math integration will include statistical analysis, organizing data, representing data, and application of mathematical ideas and relationships.

Ninth grade students will meet all of the district and state requirements as well as one additional science credit. All students will take Biology and Environmental Biotechnology. Biology is a Utah state science core curriculum course and the biotechnology course is an approved science elective. Both courses count towards the state required three years of science for graduation. Though the 9<sup>th</sup> grade biology will cover the entire Utah state core curriculum it will be adapted to address newer understandings in this field. With help from Westminster Biology Professor Bonnie Baxter and University of Utah Director of the Genetics Science Learning Center Louisa Stark we will make needed updates to the existing biology course. All of the updates will be available to all SLCSD biology teachers.

Ninth grade students will use all of the skills from previous grades as they engage in independent research and explore relevant issues. Effective communication, understanding how technological advances have influenced the progress of science, and understanding how science has influenced advances in technology will be key focal points of integrated language arts and social studies skills.

Students will take a math placement test upon acceptance to SLCSE and will be placed in a math class that is appropriate for their skill level. Mathematics is the language of science. The design of the mathematics program will view mathematics as a toolbox of skills and problem solving strategies. Each student will come to the school with various tools already in their toolbox. It will be important to determine what tools students possess and what they may be missing. Courses that will be offered are Math Essentials, Pre-Algebra, Algebra, and Geometry. With the addition of 9<sup>th</sup> grade in 2009/10, Intermediate Algebra will be offered. Students will be placed in math courses based on their skills and needs.

“Explore” classes will include other curriculum including fine arts, PE, computer skills, and engineering. Every student will select from two “Explore” classes each term.

All students will maintain online portfolios that will be accessible through the school web page. This on-line portfolio system will allow students to demonstrate their mastery of scientific processes and content acquisition. While traditional assessment methodologies will also be utilized, parents will have constant access to this authentic assessment tool.

The following graphic outlines a continuum of growth showing coordination between curricular areas and across grade levels. While listed skills will be emphasized in particular grades it is expected that skills will be utilized in greater depth as students advance through the levels. Dashed lines between grade levels indicate that crossover of skills between grades will be routine. Overlap of mathematics levels indicates that students will be placed in an appropriate level of math regardless of their specific grade level.

6th grade	7th grade	8th grade	9th grade
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**A Continuum of Growth as a Scientist**

(aligns with Bloom's taxonomy of higher-order thinking skills, aligns with developmental stages of a student)  
(concrete thinker to abstract thinker, aligns with sequence of math instruction)

<b>Language Arts Integration</b>	<ul style="list-style-type: none"> <li>• Measure</li> <li>• Collect data</li> <li>• Graph data</li> <li>• Classify</li> <li>• Make observations</li> <li>• Predict</li> <li>• Use field guides</li> </ul>	<ul style="list-style-type: none"> <li>• Plan and conduct experiments</li> <li>• Identify variables</li> <li>• Analyze data</li> <li>• Draw conclusions</li> <li>• Solve problems</li> </ul>	<ul style="list-style-type: none"> <li>• Formulate research questions</li> <li>• Be aware of the social and historical aspects of science</li> <li>• Evaluate sources of information</li> <li>• Make judgments of controversial issues based on scientific reasoning</li> </ul>	<ul style="list-style-type: none"> <li>• Independent research</li> <li>• Identify new and relevant issues in 21st century</li> </ul>
	1. 6 <sup>th</sup> Grade core	1. Integrated Science core 2. Introduction to Environmental Science	1. Integrated Science core 2. Science and Society	1. Biology core (updated) 2. Biotechnology
	Use precise scientific language in oral and written communication. Read informational texts for understanding.			
	<ul style="list-style-type: none"> <li>• Reading strategies for informational texts</li> <li>• Write to report observations</li> <li>• Write to clarify thinking</li> </ul>	<ul style="list-style-type: none"> <li>• Read for main idea and supporting details</li> <li>• Write to summarize findings</li> </ul>	<ul style="list-style-type: none"> <li>• Write to establish a purpose for inquiry</li> <li>• Communicate ideas through oral and written communication</li> <li>• Use debate to support and persuade</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate effectively using science language and reasoning</li> </ul>
<b>Mathematics Integration</b>	Each level of mathematics will integrate the National Council of Teachers of Mathematics focal points in contexts that promote problem solving, reasoning, communication, making connections, and designing and analyzing representations.			
<b>Social Studies Integration</b>	Each level will focus on the integrated study of the social sciences and humanities to promote “civic competence” as outlined by the National Council for the Social Studies.			
	<u>Ancient World Civilizations and European Influence:</u> Examples of how science affects human life. Cumulative nature of scientific knowledge.	<u>Utah Studies:</u> The Great Salt Lake (density) Local environmental issues associated with Utah's geography	<u>US History:</u> Recognize contributions to science knowledge that have been made by both American men and women Current events and issues related to science topics	<u>World History:</u> Give instances of how technological advances have influenced the progress of science and how science has influenced advances in technology.

### 3. Calendar:

Salt Lake Center for Science Education will follow the same academic calendar as other traditional calendar schools in Salt Lake City School District.

Class Schedule									
	8:30	9:30	10:30	11:30	12:30	1:00	2:00	3:00	
6 <sup>th</sup> grade	Science 6		Math 6	Explore 6	Social Studies & Language Arts 6				
	Social Studies & Language Arts 6		Explore 6	Math 6	Science 6				
7 <sup>th</sup> grade	Science 7		Language Arts 7	PreAlgebra 6/7	Social Studies 7				
	Explore 7	Social Studies 7	Science 7		Explore 7				
8 <sup>th</sup> grade	Algebra 7/8	Explore 8	Social Studies 8	Language Arts 8	Social Studies 7				
	Language Arts 8	Algebra 8	Science 8		Explore 8				
						Science 8		Social Studies 8	

Class periods will be 55 minutes each, with science classes of 115 minutes. Each student will have a period of math, language arts, social studies, and a double period of science. The base schedule is designed for maximize flexibility both vertically and horizontally. Schedules can be adapted on any given day. Examples: All students at a grade level may spend an entire day in the field collecting data. One of the 7<sup>th</sup> grade classes might trade schedules with the other 7<sup>th</sup> grade class so that their schedule would align with one of the 6<sup>th</sup> grade classes for a collaborative project.

Each student will also have an exploratory period. During this “Explore” class, activities will be designed based on student interest, course requirements, and individual student needs. Because the Explore classes are spread out throughout the day, a specialist (such as an artist in residence) could regularly spend the day working with various groups on projects. This class can be flexible to meet the needs of students throughout the year.

The following are possible activities:

- Physical activity to fulfill P.E. requirements
- Math or Reading Lab
- Music
- Art
- Technology & Computers

In order to maximize lab use, only two science classes are scheduled at a time. During each of the double science periods, mixed aged groups could be used for peer teaching/tutoring.

To meet the various levels of math proficiency, PreAlgebra 6/7 is scheduled opposite Math 6 for those 6<sup>th</sup> graders who are ready for PreAlgebra. Algebra 7/8 is scheduled opposite Explore 7 for those 7<sup>th</sup> graders who are ready for Algebra.

6<sup>th</sup> grade teachers have flexibility in their schedule to move the Science block and the LA/SS block to do activities with all 6<sup>th</sup> graders.

## Teaching Schedule

6 <sup>th</sup> grade teacher	Science 6	Math 6	Prep	Social Studies & Language Arts 6
6 <sup>th</sup> grade teacher	Social Studies & Language Arts 6	Prep	Math 6	Science 6
7 <sup>th</sup> grade Science teacher	Science 7	Science 7		Prep Professional Development
8 <sup>th</sup> grade Science teacher	Prep Professional Development		Science 8	Science 8
7 <sup>th</sup> / <sub>8</sub> <sup>th</sup> grade Mathematics teacher	Algebra 7/8	Algebra 8	Prep	PreAlgebra 6/7
7 <sup>th</sup> / <sub>8</sub> <sup>th</sup> grade Language Arts teacher	Language Arts 8	Prep	Language Arts 7	Language Arts 8
7 <sup>th</sup> / <sub>8</sub> <sup>th</sup> grade Social Studies teacher	Prep	Social Studies 7	Social Studies 8	Explore 6
Contracted Teacher	Explore 7	Explore 8	Explore 6	Social Studies 7    Social Studies 8

Making the best use of teacher time is critical. Each teacher has a 55 minute planning period. In order to facilitate the essential work that the science teachers will be doing for professional development in Salt Lake School District, they are scheduled for a two-period block of planning time. These times are at the beginning and the end of the day to facilitate working with other teachers in the district and professionals from the larger community. These planning times are also scheduled opposite the 6<sup>th</sup> grade Science classes so that the 7<sup>th</sup> and 8<sup>th</sup> grade teachers could team with the 6<sup>th</sup> grade classes or cover those classes so that the 6<sup>th</sup> grade teachers could also participate in professional development activities.

### 1. Extracurricular Activities

The school will provide whatever extracurricular activities within the context of science that is feasible. For example, Science fair support, mentor activities at the U of U. Intramurals will also play an important roll in the community of the school.

### 2. Waivers

SLCSE is not requesting any waivers.

### 3. Replicability/Sustainability

There are no current plans to replicate this charter school. Marketing and recruitment will be ongoing processes to maintain a stable enrollment at levels sufficient to generate necessary funds and serve students in a high quality program. It should be noted that all Salt Lake City School District science professional development will take place at SLSC and be facilitated by SLSC teachers and administrators. The district science website will also be maintained by SLSC employees. The University of Utah will also be a sustainable factor in the viability of SLSC. Professional Development Opportunities for Teachers and administrators will also be supported by U of U faculty. All teachers will be given adjunct status opportunities at the U of U. Student teaching and field site for licensure and pre licensure students will occur at SLSC. SLCS will serve as an on-site location for secondary and elementary science methods

courses where we will invite cross-campus participation of the methods course to be located at SLCS.

## **STUDENT ASSESSMENT**

### **1. Instruments and Procedures:**

All students will maintain online portfolios that will be accessible through the school web page. This on-line portfolio system will allow students to demonstrate their mastery of scientific processes and content acquisition. While traditional assessment methodologies will be utilized, parents/families will have constant access to this authentic assessment tool.

### **2. Reporting and Use:**

While traditional assessment methodologies will be utilized, parents/families will have constant access to the online portfolio authentic assessment tool.

## **FINANCES AND REPORTING**

### **1. Start-Up Funds:**

SLCSE will submit an application for federal charter school start-up funds. The estimated amount of funding is roughly \$100,000 per year for three years. Applications are due in August of 2007 to fund start up of schools scheduled to open in fall of 2008. SLCSE will also pursue funds from private entities and grants.

### **2. Revenues and Expenditures:**

Expected revenues, are based on the USOE Charter School Worksheet (see attachments for details). In the first year of operation when the school will serve 180 students the estimated revenue is about \$860,000 per year. In subsequent years, when the school is at capacity with 240 students the estimated revenue is \$1,200,000 per year.

Expenditures are estimated to be about \$860,000 for the initial year of operation (180 students) and \$1,140,000 for subsequent years (See attachments for details). These estimates, prepared by the Salt Lake City School District business administrator, include all salaries, benefits, facilities, utilities, materials.

### **3. Accounting Policies and Procedures:**

SLCSE requests that the Salt Lake City School District provide all accounting services.

All grants, gifts, donations, endowments, and bequests to the school in excess of \$500.00 will be reported to the Salt Lake City School District business administrator and managed through the Salt Lake Education Foundation.

### **4. Insurance:**

Insurance costs and all the other benefits for the employees are included in the overall expenditures.

### **5. Fees:**

Students will pay a science lab fee of \$50 per year. This fee will be collected at registration each year. All students/parents will be notified of this fee upon registration to SLCSE. SLCSE will follow Salt Lake City School District policies in regards to fee waivers

### **6. Responsibility:**

For monies provided to SLCSE by the Salt Lake City School District, the responsibility for preparing financial and other reports will be borne by the District just as it is currently for a neighborhood school. The school's administration will also be responsible for submitting any financial information associated with grants, gifts, donations, endowments, and bequests, to the extent that information is not reported or otherwise available through the Salt Lake Education Foundation.

## **SUPPORT SERVICES**

### **1. Transportation:**

As it is described in this application SLCSE will not provide transportation for students. There is currently an effort underway in SLCS to obtain grant funding to provide transportation for school choice options.

## 2. **Food Services:**

School meals will be available for SLCSE students at the district rate (estimated \$2.50/lunch and \$1.50/breakfast). For students that are paying for meals the cost will be the total cost minus the amount that can be received through federal reimbursement. The estimated reimbursement for students on free lunch is more than covers the cost of the meal.

## 3. **Health and Safety:**

Salt Lake Center for Science Education will comply with District Policy EBB. As described in that policy, the Principal and head custodian are responsible for continuous monitoring of the condition of the building and grounds to maintain them as free from accident hazards as possible. Under District Policy EC, the District will make the SLCSE facility subject to a Building and Ground Management Program for the purpose of providing a physical environment that is safe, clean, sanitary and conducive to learning.

## 4. **Contracted Services:**

Salt Lake Center for Science Education is requesting that the Salt Lake City School District provide all services that it provides to a neighborhood school.

## 5. **Emergencies:**

### **Emergency drills**

Fire, earthquake and other emergency drills are held at regular intervals as required by law. Instruction in safety procedures will be given in all classrooms at the beginning of the school year and reviewed periodically.

### **Closing of School**

SLCSE will follow the Salt Lake City School District in determining school. If school is closed due to storms, road conditions, etc., information will be broadcast over radio and television stations.

### **Family Plan**

It is advisable for each family to have a predetermined plan that children can follow should it be necessary for school to be dismissed early for emergency reasons.

### **Emergency Preparedness Plan**

In case of a major school or city emergency, students will be kept at school until they can be picked up by a parent or guardian. Emergency contact persons, other than parent/guardian, will be kept on file at SLCSE, with current phone and address information. Students will only be released to persons so designated on their registration card.

Students will be given the following instructions for each of the specified emergencies:

**Bomb Threat:** Search by personnel for suspicious packages, evacuation if deemed necessary by person in charge.

**Earthquake:** Drop, cover and hold; evacuate when instructed; out-of-doors move to open space away from power lines; drop, cover neck and head.

**Fire:** Students are to exit orderly via assigned routes and remain at school boundary awaiting further instructions.

**Flood:** Students take refuge on roof when instructed.

**Hazardous Material/Chemical Spills:** Close windows, await instructions.

**Inclement Weather:** This is a superintendent's decision; parents should listen to the radio if they are concerned. Instructions related to specific chemicals used in classroom laboratory activities will be given immediately prior to the activity

**Nuclear:** Drop behind best heat shield and then go to gym or auditorium as assigned.

**Evacuation:** If a block caption evacuation plan is not in effect, parents are responsible to claim their children according to check out procedures established at the school, as soon as possible.

## **FACILITY PLAN**

### **1. Facilities:**

We are requesting that the Salt Lake City School District provide a facility. This application does not propose a specific facility. The Salt Lake Center for Science Education is requesting that the District provide facilities



that will meet the needs of both the school and the Salt Lake City School District science professional development center.

**2. Provide playground space or the equivalent open space for physical education.**

To be determined by the Salt Lake City School District.

**EVALUATION**

Self-evaluation will be an on-going and integral part of SLCSE. Continuous collaboration among staff, partners, and parents will assure that SLCSE remains flexible and adaptable. Each year the SLCSE board will set goals and create a School Improvement Plan to ensure the needs of students, parents, partners, and faculty are met. SLCSE will value constructive feedback and will encourage teachers, partners and parents to offer suggestions for improvements in school policy, procedure, curriculum and programs.

All students will maintain online portfolios that will be accessible through the school web page. This on-line portfolio system will allow students to demonstrate their mastery of scientific processes and content acquisition. While traditional assessment methodologies will be utilized, parents will have constant access to this authentic assessment tool. Students will learn to assess their own progress and accept responsibility for their learning.

**Charter School Assurances**

Carefully review each of the assurance items and then have the chief administrative officer of the proposed charter school sign this document.

**The applicant charter school hereby assures and certifies to the Salt Lake City School District Board of Education that:**

- A. The charter school will make provisions for such fiscal control and fund accounting procedures as may be necessary to assure proper disbursement and accounting of all funds, including a monthly submission of a financial report of revenue, expenditures, and student enrollment.
- B. The charter school will maintain a clear, written procedure and process for auditing school finances as per the requirements of the Salt Lake City School District.
- C. The charter school gives the Salt Lake City School District, the Utah State Office of Education, or the U.S. Comptroller General, through any authorized representative, the access to, and the right to examine, all records, appears, or other documents related to all funds, including the submission of reports as may be required.
- D. The charter school will provide written evidence of liability and other appropriate insurance coverages, including a description of the levels of coverage and the relationship of these coverages to local and state agency obligations.
- E. The charter school will make such reports, including reports of evaluations, in such form and containing such information as the Salt Lake City School District Board of Education or the State Superintendent of Public Instruction may reasonably require to carry out their legislative functions and to determine the extent to which funds have been effective in carrying out legislative purposes and project objectives.
- F. The charter school will comply with appropriate rules, regulations, and state guidelines except as specifically waived by the Salt Lake City School District Board of Education and the Utah State Board of Education, and effective control will be maintained over, and accountability provided for all funds, property, and other assets. The charter school will also adequately safeguard all public property and shall assure that it is used solely for authorized purposes.
- G. All physical assets purchased with public funds become the property of the Salt Lake City School District Board of Education at the termination of the charter school.
- H. The charter school will comply with the requirements of the Family Educational Rights and Privacy Act of 1974.
- I. The charter school will comply with Title VI of the Civil Rights Act of 1964 prohibiting discrimination in program benefits, participation, employment, or treatment on the basis of race, color, or national origin, and in compliance with the provisions of Title IX of the Education Amendments of 1972 prohibiting discrimination on the basis of sex.
- J. The charter school assures that no otherwise qualified person shall, on the basis of a disability, be excluded from participation in , be denied the benefits of, or otherwise be subjected to discrimination under any program or activity that receives or benefits from local, state, or federal financial assistance.

- K. The charter school will not expend program funds for any education program, activity, or service related to sectarian instruction or religious worship.
- L. The charter school will function under an open admission policy on the same basis as other public schools. If the number of students applying to enroll exceeds the capacity of the school or of programs, classes, or grade levels within the school, then those to be admitted shall be chosen at random from among the applicants, within the allowable mandatory and optional preferences specified in Section 53A-1a-506, Utah Code Annotated.
- M. The charter school assures that it will not conduct a program of instruction until such time as:
- (1) The requisite health and safety standards for the school building have been met according to the local fire and health department inspectors;
  - (2) Adequate equipment, materials, and guidance and counseling services are available; and,
  - (3) Conditions are adequate to provide for the economical operation of the school with an adequate learning environment.
- N. The charter school will comply with all applicable federal and state laws, rules, and regulations regarding the recruitment, screening, selection, and evaluation of all school employees.
- O. The charter school will employ the use of the Utah State Core Curriculum as the foundation for the instructional program for the school.
- P. The charter school will employ the use of the Stanford Achievement Test Ninth Edition and the Utah State Core Curriculum End-of-Level Tests as a fundamental part of the overall assessment program for the school.
- Q. The charter school assures that resources will be available and a process established to develop a Student Education Plan/Student Education Occupation Plan (SEP/SEOP) for each student.
- R. The charter school will operate with a written procedure for student's suspension and dismissal, including appeal procedures.
- S. The charter school will maintain an active parent/guardian involvement process including some formal mechanism for meaningful involvement in site-based decision making.
- T. The charter school will function under the stipulations of a clear, written agreement with the districts of student residence regarding the involvement of students in extracurricular activities and/or interscholastic activities governed by the Utah High School Activities Association, if such programs are offered.
- U. The charter school will not charge tuition or fees, except those fees normally charged by other public schools.
- V. The charter school will operate under the provision of the Utah Open meeting Law.
- W. A copy of the signed charter will be supplied to interested individuals or groups on request.
- X. The charter school will submit an appropriately amended application prior to any material change affecting the purpose, administration, organization, or cooperation of the school.
- Y. The filing of this application for charter schools status has been authorized by the governing body acting through its authorized representative, identified on the application as the chief administrative officer.

**The chief administrative officer of the applicant charter school certifies that, to the best of his/her knowledge and belief, the data in this application is true and accurate, and that the applicant will comply with the assurances noted above if this application is approved. Therefore, this application for charter school status and funding is hereby submitted with the full approval and support of the governing body and chief administrative officer of the proposed charter school.**

**Name (type):**  
**Title (type):**  
**Signature:**  
**Date:**