

CHARTER SCHOOL PROGRAM (CSP) GRANTS FOR THE  
REPLICATION AND EXPANSION OF HIGH-QUALITY CHARTER SCHOOLS

CFDA 84.282E

PROPOSAL FROM: UTAH COUNTY ACADEMY OF SCIENCES

EARLY COLLEGE HIGH SCHOOL

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UTAH COUNTY ACADEMY OF SCIENCES – EARLY COLLEGE HIGH SCHOOL  
EXPANSION PROJECT

**Absolute priority: Supporting High-Need Students [Students Living in Poverty]**

The Utah County Academy of Sciences (UCAS), was one of Utah's first charter schools. UCAS was chartered by the Utah State Board of Education in 2004 with a mission to provide a quality early-college education to a diverse student population emphasizing science, technology, engineering, and mathematics (STEM) with the opportunity to earn both a high school diploma and up to two years of college credit in a safe, supportive, dual-campus environment. UCAS opened its doors to 180 sophomore and junior students in August 2005. UCAS grew to serve 400 students in its third year of operation and has maintained a waiting list of over 300 students annually since that time. UCAS admits students through a random lottery, guided by federal and state policies and procedures, and is open to any student in Utah.

This grant is critical to UCAS's ability to provide expansion funding for our successful program as we seek to provide the hundreds of student we have not been able to serve access to this early college education program. UCAS is geographically located in Utah County on the Utah Valley University (UVU) campus. According to the Salt Lake City Tribune, the 2017 Census reported that Utah County has seen a population growth of over 40% between 2000 and 2010. With that growth has come a demand for the expansion of educational opportunities for students. While Utah has one of the Nation's lowest poverty rates at 10.2% - the national average being 14% (SLC Tribune, 2017) - UCAS currently has a free/reduced lunch (FRL) rate of 20%, nearly double the local poverty rate (this rate is also determined by students who self-select to fill out the forms for free and reduced lunch, we believe if all students were to apply for free and reduced

lunch our economically impacted rate would climb beyond our current percentage). Utah County covers a large geographical area of over 2300 square miles, however, transportation to UCAS is provided to students through UVU in the form of a free rapid transit pass which allows students from the high-poverty and racially and ethnically diverse areas to access the program. We also have students that travel to UCAS from two adjacent counties using public transportation as their primary method of getting to school.

Additional information with respect to the Absolute Priority will be addressed throughout the Project Narrative.

**Competitive Preference Priority 1: Supporting High-Need Students [Rural Students, Students with Disabilities, English Learners]**

Utah County Academy of Sciences student population contains a number of high-need students. As determined by a random lottery admissions process, UCAS students have a special education population rate of 1%, lower than the State's average of 10%, and a 504 population of 10%, higher than the State's average of 5% and UCAS has an ELL rate of 1%, with the State's average being 5% (USBEL, 2018). Students come to UCAS from several towns in a 2,300- square mile area, much of it rural. According to US Census Population and Housing Data, 2010, 3% percent of the Utah County communities UCAS serves students from are considered rural areas. UCAS connects rural students to STEM opportunities and an early college learning model in the state largest and most culturally diverse urban center of Utah County, the Provo-Orem area.

The Provo-Orem area has abundant learning opportunities and a large population that is extremely varied. World Population Report, 2018, indicated the Provo-Orem area among the top 5 population areas in Utah with a population of over 300,000. The Greater Provo-Orem area houses many of the State's innovative technology businesses with the term "Silicon Slopes" being

dubbed as one of the fastest growing technology business areas in the Nation with Adobe, Vivent Solar, Purple, Cariloha, Orange Soda, Intermountain HealthCare, and Domo – just to name a few. The institutions of higher education include Utah Valley University, Brigham Young University, and Mountainland Applied Technology College as well as a host of private specialty colleges such as Ameri-Tech with a campus located within 100 feet of the new UCAS location.

In order to serve all students, prior to startup in 2005, UCAS successfully created mandatory special education policies and procedures, as certified by the Utah State Board of Education, which includes compliance with all state and federal regulations (see section (j) below with regard to compliance with applicable state and federal laws and regulations) and with 504 students. UCAS has a population of 10% of students who are high functioning autistic students. Our unique placement on the UVU campus allows our students with disabilities to access the university courses and also have contact with programs that have been developed to specialize in “autism studies” with academic experts willing to serve our students and parents. UCAS also has plans for English Language Learning (ELL) students that are implemented for students with limited English proficiency and to provide support for learning in all academic areas. ELL students are assessed annually for English proficiency in the domains of speaking, listening, reading and writing, using the World-Class Instructional Design and Assessment (WIDA) standards based assessment for students. While our population of special education and ELL students are low, ELL students who choose to attend UCAS are highly successful and have a 100% high school graduation rate – most leaving UCAS with at least 30 college credits. UCAS is also actively seeking Spanish speakers to assist ELL parents of our students and we are excited to

see an influx of parents reaching out to UCAS for their students despite their not being fluent in the English Language.

The U.S Census, 2010 estimated that over 500,000 Hispanic individuals reside in Utah, this equates to 21% of the state's population of 3 million indicating that one in every seven residence is Latino. Many of the Hispanic residence of Utah are English Language Learners. "The real Latino impact on Utah", Perlich, 2017 stated, "is just emerging because it is a very young population. A lot of this population is kids born to immigrants. The real impact politically and economically is yet to be seen when these young folks grow up and come of age." Furthermore data analysis by Perlich at the Gardner Institute shows that Utah County, has the second largest Hispanic population in the State of Utah.

Because of the STEM, academic-college based, and student-centered, small campus, high teacher interaction format at UCAS, students who have struggled in other settings begin to thrive. Attendance trends reverse. Students with disabilities and language barriers are integrated into teams of students who represent all abilities and their perspectives become significant in the value of seeking solutions to the scenarios presented in the problem based lessons of UCAS courses. Their participation leads to their special needs often become invisible as students work together to achieve mutually important outcomes. UCAS allows learners with different abilities and diverse socioeconomic backgrounds to work together in teams and to overcome previously existing gaps. All students at UCAS are mainstreamed into classes and activities and expected to perform to the best of their individual abilities. Ninety-five percent of instructors at UCAS have advanced degrees, and training, and professional development experiences are guided by the special education director and educational leadership coordinator (see section (b) below). This

instructional interaction promotes best teaching practices for students of all learning abilities. Additional information with regard to Competitive Preference Priority 1 will be addressed throughout the narrative.

**Competitive Preference Priority 2: Supporting High-need students (federally recognized Indian Tribes)**

Utah County Academy of Sciences is located in Utah, named after the Ute Indian Tribe. Utah has a State Authorization Reciprocity Agreement (SARA) that is an agreement among member states, districts and territories that establishes comparable national standards for interstate offering of postsecondary distance education courses and programs (higher.utah.org, 2011). Utah State Board of Regents recognizes there are a diverse population of federally recognize Indian Tribes in Utah which include: Ute, Goshute, Shoshone-Bannock, Shoshoni, Paiute, Hopi, Navajo, and Zuni tribes. There are .5% of students who are of Native American descent in the Utah County area according to the 2017 Census. UCAS serves the same percentage as those in the local school districts. The UVU campus, where UCAS is located, has a Native American Initiative, in which they actively seek students who are of Native American descent to attend the UVU program. UCAS and UVU are a great fit for Native Americans interested in continuing their education as there is a degree offered in Native American Studies and a Native American student club which has opportunities in leadership, tutoring, multicultural student council, performance, and dance groups. The resources offered at UVU to the UCAS student include Native American advisors who assist with admissions, registration, scholarships, and financial aid. UVU has an inner network of Native American mentors and staff to help in the success of Native American students.

**Competitive Preference Priority 3: Improving Early Learning and Development Outcomes**

N/A. Utah County Academy of Sciences will not be addressing this priority.

**Invitational Priority—Promoting Diversity**

As stated earlier, our mission is to provide a quality early-college education to a diverse student population. Diversity in STEM includes first generation graduates, females and minority populations. UCAS has a unique partnership with the three local school districts in Utah County – Alpine, Nebo and Provo, and with UVU. This partnership provides UCAS with the unique opportunity to work with school counselors in these districts who are in touch with a large student population. UCAS school counselors work with the local school district and charter school counselors to share information with diverse populations about our unique Early College High School (ECHS) Program. As UCAS is the only ECHS in Utah County, many of the local school counselors recommend students that they have in their schools to attend UCAS.

In addition to school counselors we have also worked with the Latino’s In Action (LIA) program in all three school districts. In the LIA program, Latino youth lead and strengthen their communities through college and career readiness ([latinosinaction.org](http://latinosinaction.org)). In the past three years, UCAS has worked closely with the LIA groups in the county and have increased our Latino population from 14% to 27% - the local district average for Hispanic students is 25%. In addition, with our UCAS expansion project, the LIA corporate offices have asked to relocate in our ECHS. UCAS will have an extremely close partnership with the LIA program located on our campus. This will assist us in reaching a more diverse student population.

UCAS has been able to maintain a population of male and female students that is fairly equal with 47% of our students being female and 53% of our students’ male. This is important to UCAS

as there is a great need for more female students to enter the STEM fields. Furthermore, because of our location on the UVU campus, UCAS has access to the multicultural clubs, women's center and other organizations that look to further the diversity of the campus. UVU and UCAS work well together as we promote programs that UVU has for their diverse student population and UVU permits UCAS students to attend the age appropriate activities of the multicultural groups, clubs, and activities they hold. This makes for an excellent promotion of diversity in our ECHS.

### **Application Requirements**

#### **(a) Educational Program**

UCAS is an ECHS that is a rigorous public charter 10-12 grade program that promotes student learning through a curriculum focused specifically on science, technology, engineering, and math (STEM). The school's educational approach is guided by the Early College models of the Bill & Melinda Gates Foundation that began in 2002 (AIR, 2003). This model shares a goal of enrolling students underrepresented in higher education, and helping the students graduate from high school with up to two years of college credit. Through partnerships with local colleges and universities, ECHS offer students exposure to college coursework and rigorous academics combined with a supportive environment to help students make a successful transition to college.

The UCAS program includes a variety of educational techniques. The reason for this is because UCAS hires instructors who have Master's level or high degrees – each instructor having mastered techniques that work for them and their students in their classrooms. UCAS uses multiple teaching methods and works with its instructors in order to give them additional instructional techniques that the instructors feel are the most appropriate for the particular

situations in their classrooms and with individual students. Issues such as the developmental level of the students, the instructional venue, and the subject matter to be presented must be considered as instructors use varied techniques to help them teach their students. However, when planning for educational experiences, teachers need to identify the level of cognitive processing they want to engage and select the technique that best encourages that level of thinking (Lasley, Matczynski, & Rowley, 2002). The list of techniques that UCAS instructors typically use parallels Bloom's Taxonomy, the *Taxonomy of Educational Objectives Handbook I: Cognitive Domain* (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956). The taxonomy begins with the least sophisticated level of processing, that being the recall of knowledge and facts, and progresses to the highest level, thinking that involves evaluative processes.

*The Taxonomy of Educational Objectives: Cognitive Domain*

<b>Cognitive Skill</b>	<b>Verbs that characterize the skill</b>
Knowledge	Label, list, match, recall, select, state, underline
Comprehension	Describe, explain, interpret, summarize, paraphrase
Application	Complete, organize, solve, calculate, compute, use
Analysis	Categorize, classify, find patterns and relationships, compare
Synthesis	Compose, create, formulate, hypothesize, write
Evaluation	Judge based on criteria, support, conclude

The Taxonomy of Instructional Techniques - *Teacher Focused*

- Direct Instruction: Teacher explains or demonstrates
- Drill and Practice: Repetition to hone a skill or memorize information
- Lecture: Teacher provides information to students
- Question and Answer: Requires reflection as information is exchanged
- Discussion: An exchange of opinions and perspectives

The Taxonomy of Instructional Techniques - *Student Focused*

- Mental Modeling: Assists students in managing learning by modeling problem-solving
- Discovery Learning: Uses students' experiences as the foundation for building concepts
- Inquiry: Allows students to generate the questions that they will then investigate and answer

An instructor may use combinations of all of the techniques presented above in the course of a single lesson. A lesson plan may begin with a question-and-answer session that stimulates student interest and thinking and then proceed to a discovery-learning experience that will be followed by a discussion of what was learned. It is important to understand that teaching is a task that requires considerable instructional flexibility, that is one reason why UCAS hires Master level instructors. The teacher who uses all levels of the taxonomy with an eye toward leading students to these highest levels and allowing them to develop their critical and creative thinking abilities will be the teacher whose students develop that love of learning that we all wish to impart.

### **How the UCAS Model Works**

While UCAS has served 10-12 grade students over the past 13 years, in the 2018 -2019 school year, in order to fill a need in the local community, UCAS has expanded to 9<sup>th</sup> grade students. The 9<sup>th</sup> grade student will take high school required classes that include: English, Math, Social Studies, Science\*, Computers or Speech\* and Student Success\*. \*The Science, Speech and Student Success courses are concurrent enrollment courses that will allow students to earn 6 - 9 college credits during their 9<sup>th</sup> grade year.

In 10<sup>th</sup> grade, students again take the required high school courses that include: English, Math, Physical Education, Computers or Speech\*, Art\*, U.S. History\*, and Science\*. \*The Science, Speech, Art and US History courses are concurrent enrollment courses that will allow students to earn 9 - 12 college credits during their 10<sup>th</sup> grade year.

In the 11<sup>th</sup> grade, students complete their high school required courses: English, Math, Science\*, CTE\* and U.S. Gov\*, PE\*\* and elective\*\*. \*The Science, CTE and US Gov. courses are concurrent enrollment courses that will allow students to earn 9 credits. \*\*PE and one semester elective course being offered on the University campus for an additional 5 credits for a total of 14 credits during the students 11<sup>th</sup> grade year. The majority of students have reached their high school graduation status at the end of this year.

In the 12<sup>th</sup> grade year, all of the high school required courses that may remain are taken. The typical UCAS student has only one course taken at UCAS which is a Major and Career Exploration course for 3 credits. Students take an additional 9 credits of courses on the campus of UVU or at the MTech campus each semester. This gives students the 60 total credits that are needed for their associate degree, or if student elects to attend MTech their senior year, they will have 45 university credits and be able to go to MTech for a college certificate program.

UCAS uses a curriculum that has been developed and vetted by the college and university for concurrent enrollment and on campus courses. In addition, UCAS allows high school instructors to develop their own curriculum to meet the core curricular standards that are outlined by the Utah State Board of Education. By using a mixed method of curriculum, this allows the overall mission and vision and structure of the school to be successful. Courses offered and their descriptions are listed here below.

## UTAH COUNTY ACADEMY OF SCIENCES COURSE DESCRIPTIONS

*Note: (CE) indicates Concurrent Enrollment class for college credit.*

### Art Courses

ART 1010: INTRODUCTION TO VISUAL ART (CE) Semester course. **3 UVU credits/1**

**UCAS credit.** Develops an appreciation of art. Studies elements and principles of art.

Includes identification of major art forms, surveys art history, art criticism, and media.

ART 1100: DRAWING I (CE) Semester course. 3 UVU credits/1 UCAS credit. Introduces

fundamental drawing concepts and media. Emphasizes mastery of basic drawing principles and integration of these principles into a personal drawing style through exposure to a variety of structured drawing experiences.

### Career and Technology Education

ART 1120: 2-D Design (CE) Semester course. **3 UVU Credits, 1 UCAS credit.** Core course for

all AVC majors. Introduces the elements and principles of design. Studies two and three dimensional formats as they relate to a series of different design problems. Uses principles such as line, shape, rhythm, contour, value and contrast in creative assignments. (This course can also substitute for a high school art credit.)

INFO 2420 Web Application Design (CE) Semester course. **3 UVU Credits, 1 UCAS**

**credit.** *Prerequisite: Computer Knowledge.* Focuses on the design and construction of www home pages and maintenance of web sites in a multi-media platform environment. Teaches current (HTML5) standards and exposes students to the latest enhancements. Covers design concepts, page layout, legal issues, basic client side and server-side security, and commercial use

of the Web. You will learn how to use Graphics Software, Use an HTML Editor, Microsoft Expression Web, FTP and much more.

MECHATRONICS 1010 (CE) Semester course; **3 UVU Credits; 1 UCAS credit.** \*Pre-requisite: Principles of Electronics (may also be taken concurrently). This class is a hybrid discipline that utilizes the principles of Computer Science, Electrical Engineering, and Mechanical Engineering to design and produce complex computer controlled electro-mechanical systems.

### **English**

ENGLISH 9 Honors Full year course. **1 UCAS credit.** This course includes work in reading, writing, speaking, technical writing, and presentations. Students will read literary and informative texts and write several different kinds of papers.

ENGLISH 10 Honors Full year course. **1 UCAS credit.** This course includes continues to develop student work in reading, writing, speaking, technical writing, and presentations. Students will read literary and informative texts and write several different kinds of papers.

ENGLISH 11 Honors Full year course. **1 UCAS credit.** Students will continue to develop skills in reading, writing, speaking, technical writing and presentation. Students will study literary texts as well as informative texts and will write several different kinds of papers.

*English courses beyond ENGLISH 11 are offered at UVU. Students must pass pre-requisite classes and/or test into the English courses at UVU. Please visit UVU's web-site or course catalog for class descriptions.*

### **Financial Literacy**

FIN 1060: PERSONAL FINANCE (CE) Semester course. **3 UVU credits / 1 UCAS credit.** The General Financial Literacy core is designed to represent those standards of learning that are

essential and necessary for all students. The implementation of the ideas, concepts, knowledge, and skills contained in the General Financial Literacy Core will enable students to implement those decision-making skills they must apply and use to become wise and knowledgeable consumers, savers, investors, users of credit, money managers, citizens, and members of a global workforce and society. The General Financial Literacy core will incorporate concepts and skills from mathematics, language arts, social studies, applied technology, character education, and applied service learning.

### **Math**

SECONDARY MATH 1 Honors Full year course. **1 UCAS credit.** Students in Secondary Mathematics I Honors curriculum will deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomenon, and in part by applying linear models to data that exhibit a linear trend. Students will use properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge. In addition, students will have be expected to demonstrate a deeper understanding of models and vectors. Algebraic and geometric ideas are tied together. Students will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations

SECONDARY MATH 2 Honors Full year course. **1 UCAS credit.** *Pre-requisite – Secondary Math 1.* Students in Secondary Mathematics II will focus on quadratic expressions, equations, and functions, extend the set of rational numbers to the set of complex numbers, link probability and data through conditional probability and counting methods, study similarity and right triangle trigonometry, and study circles with their quadratic algebraic representations.

SECONDARY MATH 3 Honors Semester course. **1 UCAS credit.** *Pre-requisite – Secondary Math 2.* Students in Secondary Mathematics III will focus on pulling together and applying the accumulation of learning that they have from their previous courses. They will apply methods from probability and statistics, expand their repertoire of functions to include polynomial, rational, and radical functions, they will expand their study of right triangle trigonometry and will bring together all of their experience with functions and geometry to create models and solve contextual problems. (At the end of Secondary Math III students should be on-pace to test into 1050; 1010 is not required.)

MATH 1010 (CE): INTERMEDIATE ALGEBRA Semester Course. **4 UVU credits / 1.25**

**UCAS credit.** *Prerequisite: One of the following: Secondary Math I, II, III with a C or better.*

Expands and covers in more depth basic algebra concepts introduced in Beginning Algebra.

Topics of study include linear and quadratic equations and inequalities, polynomials and rational expressions, radical and exponential expressions and equations, complex numbers, systems of linear and nonlinear equations, functions, conic sections, and real world applications of algebra.

MATH 1050 (CE): COLLEGE ALGEBRA Semester Course. **4 UVU credits / 1.25 UCAS**

**credit.** *Prerequisite: One of the following: Secondary Math I, II, III with a C or better AND*

*Accuplacer score of 60+, or MATH 1010 with a grade of C or better.* Includes inequalities,

functions and their graphs, polynomial and rational functions, exponential and logarithmic

functions, conic sections, systems of linear and nonlinear equations, matrices and determinants,

arithmetic and geometric sequences, mathematical induction, the Binomial Theorem,

permutations and combinations, and an introduction to probability.

*Math courses beyond Math 1050 are offered at UVU. Students must pass pre-requisite classes and/or test into the appropriate math level. Please visit UVU's web-site or course catalog for class descriptions.*

## **Health**

**HEALTH** Semester course. **0.5 UCAS credit.** *This course is required for high school graduation.*

This class is designed to inform students about themselves and their surroundings. It covers hygiene, mental health, circulatory system, first aid (CPR), substance abuse, physical fitness, and other related areas.

## **Physical Education**

**PHYSICAL EDUCATION SKILLS** Semester course. **0.5 UCAS credits.** This class is designed to develop a level of proficiency and expertise in physical education activities. May be taken at UCAS or online.

**PES 1097: FITNESS FOR LIFE** Semester course. **0.5 UCAS credits. 2 UVU credits.** Taken on UVU campus from a UVU instructor. This class is designed to for *Junior and Senior* students in order to give them information, tools, and skills to aid students in engaging in an active, healthy lifestyle throughout life. Offers the opportunity to learn about exercise program design, physiological adaptations that underlie fitness, and strategies to maintain an active lifestyle across the lifespan. Features access to high quality exercise facilities. Requires participation in exercise 2 days per week outside of the scheduled class activities. Stresses comprehensive principles in health, wellness, physical activity, and fitness assessment.

## **Science**

**ASTR 1040 (CE)** Full Year Course. **1 UCAS credit. 3 UVU credits.** *Freshman students.*

Introduces astronomy and cosmology. Provides a physics-based overview of the solar system, the lives and deaths of stars, galaxies, and the evolution of the Universe. Explores the basic principles of physics and light, the tools of astronomy, and interesting concepts such as the Big Bang Theory and black holes. Canvas Course Mats \$60/Pearson applies

**PHYSICS 1010 (CE)** Full Year Course. **1 UCAS credit. 3 UVU credits.** *Sophomore/Junior students.* Covers the fundamentals of classical and modern physics. Includes mechanics, fluids, heat, waves and sound, electricity and magnetism, light, optical, relativity, atomic and nuclear physics. Includes lectures, classroom interaction, demonstration and problem solving.

**BIO 1010 & 1015: GENERAL BIOLOGY (CE)** Full Year course. **4 UVU credits / 1.25 UCAS credit.** *Sophomore/Junior only.* Addresses the history of biological discovery, our current understanding of the science, and inquires about where our research may lead us. A general education course introducing cellular and molecular biology, genetics, diversity, evolution, and ecology. May be used as prerequisite for some departmental courses.

**BIO 1610 & 1615: COLLEGE BIOLOGY (CE)** Full Year course. **5 UVU credits / 1.25 UCAS credit.** *Junior and Senior Students only.* Designed to give biology majors a broad exposure to many aspects of the life sciences. Covers topics of biochemistry, energetics, cell structure and function, genetics, and evolution.

*Additional science courses beyond those listed are available at UVU after a student passes prerequisite courses and all high school level sciences. Please visit UVU's web-site or course catalog for class descriptions.*

## Social Studies

WORLD GEOGRAPHY Semester course. **0.5 UCAS credit.** *This course is required for high school graduation.* This course covers the five themes of geography. Students will study the various cultures of the world, including the way they live, political and social trends, and advancing technology. They will utilize geographic skills to understand the practical application of geography to everyday life through the use and study of maps.

WORLD CIVILIZATIONS Semester course. **0.5 UCAS credit.** *This course is required for high school graduation.* This course will examine and analyze the commonalties and differences of human experiences in at least six spheres of human activity: social, scientific/ technological, economic, religions/philosophical, geographic, and political. A minimum of three regions, one being Western Europe, will be covered. Attention will be focused on the periods since 1500 AD and the development of the current societies of the world.

HIST 1700: AMERICAN CIVILIZATION (CE) Semester course. **3 UVU credits / 1 UCAS credit.** Stresses movements and developing institutions that are important for an appreciation of American History from the Pre-Colombian period to the present. Discussions include analysis of developing political, economic, and social institutions and their interrelationships with, and impact upon, the geographical features of the land. Includes book reports, oral response, research papers, media presentations and applications to current events.

POLS 1100: AMERICAN GOVERNMENT (CE) Semester course. **3 UVU credits / 1 UCAS credit.** Studies history and structure of American National Government, rights and responsibilities of citizens, political institutions, political processes, and governmental policies.

SLSS 1000: STUDENT SUCCESS (CE) **REQUIRED** Semester course. **3 UVU Credits; 1**

**UCAS credit.** (*Semester class for ALL New Students to UCAS – Mainly freshmen and & sophomores* and required for incoming junior students). Helps students develop a learning system for attaining maximum success in college, in work and in life. Presents effective techniques for dealing with time management, reading, writing, and critical thinking. Covers topics such as memory, note taking, test taking, and relationships. Develops an awareness of campus resources and assists students in exploring and establishing personal, academic, and career goals. Includes lectures, group interaction, exercises, and projects which apply learning to real life situations.

SLSS 2100: CAREER AND MAJOR EXPLORATION Full Year course. **3 UVU Credits; 1**

**UCAS credit.** (*REQUIRED full-year class for ALL Seniors*) This class is a year-long course that meets twice a week, two hours each week. Senior students will be engaged in the process of gaining information on scholarship, college applications, and occupations. Classroom time will focus on lecture, individual work, and feedback from the instructor in the selection of majors and careers. Assesses and clarifies interests, skills, values, and personal characteristics. Explores college majors, careers, and the world of work. Integrates the knowledge of self with career options. Teaches decision making skills to help make well-informed career decisions and goals.

### **Electives**

COMM1020: PUBLIC SPEAKING (CE) Semester course. **3 UVU Credits; 1 UCAS**

**credit.** May be used for UVU Humanities credit. Covers speech research, preparation, outlining and delivery. Provides students with practical experience and evaluation. May be used for fourth high school required English credit.

YEARBOOK Full Year course, during advisory. **0.5 UCAS credit.** Students will produce a school yearbook on computer. Students should be self-motivated and willing to work extra hours

to meet deadlines and due dates. They will develop and use skills in writing, editing, art, layout, design, photography, and leadership.

JOURNALISM Full Year course during advisory. **0.5 UCAS credit.** Students will produce a school newspaper on computer. Students should be self-motivated and willing to work extra hours to meet deadlines and due dates. They will develop and use skills in writing, editing, art, layout, design, photography, and leadership.

STUDENT GOVERNMENT MGMT 1250 Principles of Leadership (CE) Full Year course. **3 UVU Credits; 1 UCAS credit.** Overview of principles of leadership. Provides students with information on successful leadership styles. Includes lectures, videos, cases, group activities, and class discussion. This class is taught at noon daily throughout the year. Student Government provides *elected* officials the opportunity to learn how to operate student school government. Students must be elected to an office to participate in the Principles of Leadership course.

DIRECTED STUDIES or Study Hall Semester course. **0.5 UCAS credits.** This course is designed to give students extra time and help during school hours to work on homework. Students will receive a pass or fail grade for this course. Counselor/Teacher approval required.

*Once Students have completed their high school requirements, they are then able to access courses from both MTCECH and UVU. UCAS encourages students to explore careers in the STEM fields.*

Mountainland Technology College (MTECH) courses. Descriptions can be located at <https://mtec.edu/programs/>

UTAH VALLEY UNIVERSITY (UVU) courses. Descriptions can be found at <https://www.uvu.edu/catalog/current/>

**Career Education**

UCAS assists students as they identify post-secondary options through MTech, UVU and local business partners. Counselors begin helping students with their Career and College Readiness plan as soon as students begin at UCAS in the 9<sup>th</sup> grade. There are yearly career fairs, educational programs, and business partner activities that provide opportunities for assisting students in transitions to the workplace or continued education. Furthermore, activities such as experiential education, cooperative education, internships, apprenticeships, job shadowing, and job placement will be provided as a means of the student's education.

UCAS provides free before and after school tutoring by Master's level instructors each and every day to all students. Students who may need to go at a slower pace due to learning disabilities or ELL have the option of taking a study hall class during the day for additional time with an instructor. In addition, students with special needs are all able to graduate from high school, thus our 100% high school graduation rate. There are also some students who wish to attend MTech's college program for technology certification rather than the A.S. degree track – which indicates the 80% of UCAS students having their associate degree.

**Four-Year College and/or University Affiliation:**

UCAS currently has an excellent partnership with Utah Valley University. UCAS is located on the UVU campus and provides the opportunity for its students to attend courses on campus as student progress towards their associate degree. This fall 2018, UCAS students are also able to partner with Mountainland Technology College in order provide additional college and career connections for their highly successful, motivated, hard-working students.

The mission of UCAS is to provide a quality public education option for motivated Utah County high school students which will emphasize the study of the STEM fields. UCAS students receive a rigorous education, academic assistance, tutoring, career guidance and counseling, as needed, in a positive, safe professional educational environment. Students will be given the opportunity to earn their high school diploma while earning approximately two years of college and university credit at either UVU or MTech.

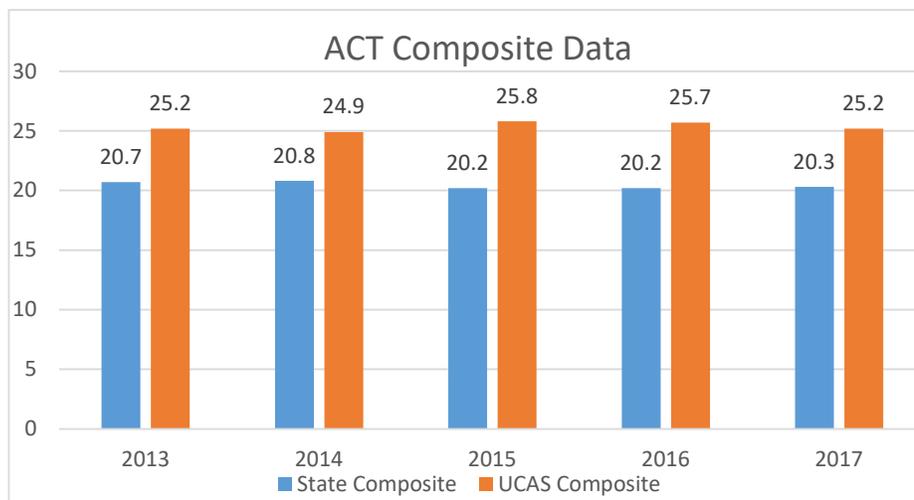
For the past thirteen years, UCAS has had an excellent relationship and partnership with UVU, we plan to continue that relationship while developing our partnership with MTech. UCAS has hired Career Technical Education (CTE) instructors and administrators who have had a vast experience in CTE and with MTech. MTech and UCAS have a Memo of Understanding (MOU) that allows MTech to share UCAS equipment and have programs taught during the day, in classrooms that are not occupied in our Provo campus. And, in the evening, MTech will be able to use all classrooms for all students in high school and beyond. UCAS will also have a culinary space that will be able for their beginning level culinary students.

### **Assessment of Students at UCAS Early College High School**

The following chart indicates how UCAS is comparing academically on assessment data with the two nearest comprehensive high schools and the state average. UCAS does not teach to the test, nor emphasize rote memorization. Even so, on the end of level assessments and ACT, students exceeded state and national averages (for full academic performance data, including the complete PACE report, can be found at: USBE <https://datagabeway.schools.utah.gov>)

SY 2017 Assessment Data	ELA Proficiency	Math Proficiency	Science Proficiency	2017 School Grade
State	44%	50%	48%	
Mtn. View High	60%	52%	64%	B

Provo High	39%	28%	33%	D
UCS	79%	73%	79%	A



**(b)Management of the charter school**

As a public charter school in Utah, UCAS is a nonprofit 501(c)3 organization governed by an all-volunteer seven-member Board of Trustees and managed by three administrators and four support staff and 14 faculty members. The oversight is divided between two positions where the Chief Executive Officer (CEO) is responsible for the day-to-day operations as well as federal and state compliance. The principals of each of the schools is responsible for oversight and implementation of the academic components, attendance and behavioral issues of students. Other staff include: student services director, business manager, and two school counselors. Compliance and operation duties are shared among these positions and overseen by the CEO.

Management for the activities outlined in this grant proposal will be the responsibility of the three administrators and support staff led by Anna Trevino, Ph.D. (CEO, Educational Leader and project manager for this grant), an experienced UCAS administrator (originally from a standards-

based school district), Jared Ferguson, and Jennilyn Derbidge (Administrator and Special Education Director), Dane Hanvey and Lorraine Rupper (Guidance Counselors) and Tara Merryweather (Business Manager).

The 14 members of the UCAS faculty teach core courses, STEM courses and electives ranging from computer programming to commercial art. UCAS partners within the community STEM organizations for internships and joint project work. Key partners include Intermountain Health Care, Latinos in Action, US Synthetics, IM Flash Technologies, UVU and MTech. Many faculty serve in various roles. A steering committee, or community council, of faculty and parents lead committee work and advises the principals on community connections, extra-curricular school needs and other initiatives.

Parent and student involvement is important at UCAS as both groups play an important role in many aspects of the school and are detailed in sections (e) and (i) below.

The Board of Trustees at UCAS is part of the continued success of UCAS. The governing body of UCAS is responsible for the overall governance of the school including: managing finances, establishing policies and programming, overseeing the school's performance, and providing input to, and review of the CEO. UCAS has a seven member board made up of three parents, one business leader, and three educators (one appointed from a local school district partner and two appointed by UVU). The names and positions of all board members (officers, members, directors) of the school, and their positions are listed here: Chislaine Caussat – Board President, parent member; Landen Garner - Board Vice-President, Business leader; Kim Haws, Serene Bean – parent members; Theron Murphy – Alpine School District partner member; and

Abraham Teng, Ph.D. and Trevor Warburton appointed from UVU. Board members have a depth and breadth of experience lending critical perspectives to the school.

**(c) Objectives of the charter school**

When UCAS began, our objective and mission was to fulfil our mission to provide a quality early-college education to a diverse student population with the opportunity to earn both a high school diploma and up to two years of college credit. UCAS set a goal for at least 50% of its student population to obtain an associate degree each year. This goal has been overreached ever since the first graduating class where 80% of students received their associate degree. In an American Institute of Research study, 2013 it was indicated that ECHS students were more likely to graduate from high school, enroll in college, and earn a postsecondary degree than they would have been had they attended other high schools. Complete study findings are available in the ECHS Initiative Impact Study's final report available at [www.air.org/earlycollegeimpact](http://www.air.org/earlycollegeimpact).

UCAS was included in the AIR study as it was one of ten early college high schools in the nation that met all of the following criteria: 1. Enrolled students in grades 9 - 12 and had high school graduates in the study years (2005 to 2011; for UCAS, students were enrolled in grades 10-12); 2. Used a lottery as part of the admission processes in at least one of the study cohorts (students who entered ninth grade in 2005 - 06, 2006 - 07, or 2007 - 08; for UCAS, students entered 10th grade in 2008 - 09); and 3. Retained lottery records.

The ECHS report indicates that ECHS schools benefit all types of students. The ECHS impact on high school graduation and college enrollment were similar regardless of students' gender, race/ethnicity, family income, achievement before high school, and whether they were the first in their family to attend college. ECHS were particularly effective at helping female, minority, and

lower income students earn college degrees. In addition, ECHS students had more positive high school experiences than comparison students. ECHS student gave higher ratings than the comparison student to the following: The rigor of their high school experiences, their high school's college-going culture, the level of instructor support and the quality of support for completing college and financial aid applications.

Additionally, for the past four years that grades have been given to schools in Utah, UCAS is one of six high schools in the State to have received an "A" grade for the past four years. This grade is given based on student graduation rate, proficiency, and ACT scores.

**(d) Relationship between the charter school and the authorized public chartering agency**

In accordance with the Utah Charter School Statute, UCAS was authorized by the Utah State Board of Education's (USBE) State Charter School Board (SCSB). The charter agreement was approved in a meeting open to the public and was executed by a designated representative of the school's governing board in 2004. Annual performance targets that the USBE establishes address the following indicators: academic proficiency; student academic growth; achievement gaps; attendance and enrollment. In addition, UCAS keeps data on post-secondary readiness; financial performance and sustainability; governance board performance and stewardship; adequacy of facilities maintenance in support of program; transportation and food service; school social and academic climate; and, parent and community engagement that we share with the USBE and SCSB as they perform periodic reviews.

Charter schools in Utah must adhere to applicable federal and state accountability requirements. Charter school terms are not set for a specific amount of time, but the charter agreement may be amended, as needed and approved by the USBE, after the public school is

operating, and is pursuant to adequate performance per contract. As a part of the oversight process, the SCSB reviews year-end data that includes compliance, and student performance. UCAS has always been ranked as one of the top three high schools in the state since 2005 when students began attending. The school has received strong positive reviews each and every year. UCAS and the SCSB have an outstanding relationship that is based on timely reporting from the school to the SCSB as well as solid communication. The SCSB has recognized and awarded UCAS as an outstanding charter school. The CEO has been awarded the State Charter School Leader of the year and UCAS is often called on to present to the USBE in regards to our success with our students assessment and attendance scores.

**(e) Parent and community involvement**

UCAS is in its thirteenth year as one of Utah's best charter schools and is open to any Utah student through a random lottery. Students, parents, the administrative team, teachers, and the Board have together contributed thousands of hours of volunteer time: troubleshooting challenges, seeking and building partnerships.

**Parent Involvement.** Family members play a very important role as partners in building the school community culture. UCAS students' parents have been included in decision-making from the beginning. From the early planning stages, parents were invited to participate in the Board of Trustees and our Community Council. The board chair is a parent, the CEO was a parent of a UCAS student, and many of the teachers and staff members have had children who attended UCAS. The parents' group remain active in serving on focus groups for new initiatives, gathering for problem-solving work sessions around operational needs, and providing help in many ways. A Parent Teacher Organization, Community Council and participation on the Board, are formal

structures for families to be involved. This allows parents involvement with many aspects of the school, such as advising the CEO and principals on current issues, providing feedback, and promoting communication within the community. Parents have also been crucial in making it possible for students to participate in UCAS robotics team, Science Olympiad, and math competitions. A bi-annual parent survey provides additional input opportunities for all UCAS families, and the data is used to make academic and organizational improvements. One way we know our parents love our school is because they often send multiple children to participate in our program.

**Student Involvement.** Since its inception, a student leadership council has been part of UCAS. The student council is composed of elected representatives from each grade, a total of fifteen students. Other elements of student voice include participation on community council, help developing weekly student activities to unite the student body, and monthly school dances or activities. UCAS student often assist with open houses, new student orientations, and UVU leadership positions as well.

**(f) Continued operation of the charter school**

In Utah, if a charter school is graded as a “failing” school or is not doing well financially, they are placed on an improvement plan. Schools have a three year period of time to respond to the performance report and make any recommended changes. Renewal is contingent on the school’s ability to meet objectives, comply with the charter contract, and make sufficient progress toward performance expectations. Charter school status may be revoked if a school fails to meet accepted performance standards, including fiscal management, or if it violates any laws. Over the past 13 years, UCAS has been the gold standard among Utah charter schools. UCAS not only is doing

well with our student body, but financially we are one of the best in the state. UCAS currently has over 330 days of cash on hand. Every year we have an outside financial audit and no unsatisfactory findings have been reported. Funding for charter schools in Utah is accomplished through state allocation of education funds.

**State Funding.** This coming school year, the average weighted pupil unit (WPU) from the State of Utah will be \$3,600.00 per student. Charter schools do not receive additional funding to support initial implementation and continued operations of the school and expansion. As there is no funding for facilities or capital projects, and UCAS teachers are more expensive because they have higher degrees of education, and UCAS pays university tuition for each and every credit a student takes on the UVU campus, UCAS is seeking additional expansion assistance through this grant.

**Fiscal Monitoring.** As a nonprofit 501(c)3 organization, the school is dedicated to maintaining financial strength by creating and maintaining a dynamic team of individuals with the knowledge, skills and experience needed to manage finances. UCAS has its own full time business manager who oversees the annual budget process, monthly financial reporting, compliance reporting, along with grants and contract compliance. The business manager is also responsible for state mandated reporting, financials, and budgeting.

**(g) Waivers**

N/A no waivers are being sought.

**(h) How grant funds will be used**

UCAS has been seeking additional property or space to build for the past 6 years. One of the secrets to the success of the UCAS program has been the location of the school near our UVU

partner. However, the Provo-Orem area is a rapidly growing area, where real estate prices are often going for two to three times the fair market value. In January, 2018, UCAS found a 50,000 square foot building within 4 miles of our current campus. In addition, it is located on the bus rapid transit (BRT) line. This will give our students easy access to the building. In February, 2018, UCAS made an offer on the building because of price, location and the set-up of the building. UCAS has entered into a 30 year bond agreement for \$10,500,000.00 for the building and the tenant improvements that will need to be made in order to bring the building up to the building code for an educational entity.

With this grant support, UCAS will be able to expand its highly successful Early College High School program to additional students through two key ways: 1) educational leadership; and 2) create opportunities for student around anywhere, anytime learning.

First: An educational leader is essential to building a strong culture as they hire exceptional teachers, assist in creating a positive climate, and working with the local community through outreach to educational entities, parents, and local businesses. In addition, a school counselor and registrar are critical to the student success, especially first generation and low income students who may not know how to navigate the difficult college and university systems and financial aid requirements. UCAS plans to use grant funds to provide \$100,000 each year for five years towards an administrator salary and benefits. In years four and five of this grant, personnel expenses for an additional school counselor (\$60,000 for salary and benefits) and registrar (\$40,000 for salary and benefits) to total an additional \$100,000 each of years four and five of the grant. The cost for educational leadership salaries and benefits over the five years of the grant would be \$700,000 total.

Second: In order to maintain the integrity of the financial support, this grant requires a two day training each year. Therefore \$2,000 is being asked to cover expenses related to travel for the CEO for the next five years – totaling \$10,000 over the five years of the grant.

Third: In order to create an opportunity around anywhere, anytime learning, \$48,000 each year for five years for equipment for students at the school which will include: computers for one hard wired lab, chrome-books and chromebook carts for each classroom, robotics equipment, audio enhancement equipment for each classroom, and projectors for each classroom. Over the five years of the grant, the total being \$248,000 for anywhere, anytime learning.

Fourth: In addition to create opportunities around anywhere, anytime learning \$100,000 each year for the first three years will be used for other expenses related to accessing technology and kitchen space. The technology infrastructure needed for the building includes wiring for computer access and wireless hub spaces throughout the building. This is extremely important to the student’s ability to access information on the internet for their course work. Furthermore, construction costs related to the improvement of the building is being sought for a full-prep kitchen in which to make breakfasts and lunch for our students (especially important for our low income students). Total of \$300,000 over the three years.

Budget Categories	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Personnel	\$100,000	\$100,000	\$100,000	\$200,000	\$200,000	\$700,000
Travel	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$10,000
Equipment	\$48,000	\$48,000	\$48,000	\$48,000	\$48,000	\$240,000
Construction	\$100,000	\$100,000	\$100,000	\$0	\$0	\$300,000
Total	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000

Over all, UCAS is asking for \$250,000 each year for five years to assist in the success of the expansion project. A total of \$1,250,000 over the full five years of the grant.

**(i) How students are informed & given equal opportunity to attend the school**

**Outreach.** Multiple strategies are used to inform prospective students about UCAS. Students have been and continue to be informed about the school through newspaper ads, post cards sent to each house with a child who is at least 14 years old in three district partner enrollment area, the school's website, UVU multicultural programs, LIA, and most effectively word of mouth from our current students. Open houses are held four times per year in order to let those interested in finding out about our program, and to make an informed decision as to if UCAS is the school they want to attend. All UCAS students receive a free public transit pass for the entire year. This allows students to access bus, frontrunner, and Trax for access to the UCAS campuses.

**Admissions/Lottery Process.** If more students apply than there are spaces available, a random lottery is conducted in accordance with federal and state statutes. A lottery has been necessary all but the first and second years of the school. There are very few admission preferences allowed by Utah Charter School law, they are: 1) siblings of current students or students who have graduated from UCAS in the past; and, 2) the children of employees and board members, 3) children or grandchildren of the founding members.

**(j) Dissemination activities**

N/A. No funds are being requested for dissemination activities at this time.

**Additional Application Requirements for Expansion of High-Quality Charter Schools****(a) Charter management organizations**

N/A. UCAS does not work with a charter management organization.

**(b) Public chartering agency**

The Utah State Board of Education and State Charter School Board use school performance in the State's accountability system and look at the impact that UCAS has on student achievement (which may include academic growth). Charter schools in Utah that do not meet performance standards are placed on probation and their charters can be revoked if improvements are not made.

The USBE assessment department has a mission to serve the public by providing measurable information about Utah students' core knowledge, skills, and abilities; acquired through high quality valid and reliable assessments. They provide training in order to assist all schools to strive toward:

- Positively impact student learning through quality assessment;
- Provide meaningful assessment that is essential to student progress toward proficiency;
- Provide accurate, understandable reporting that is essential to making effective decisions concerning school policies, programs and curricula; and
- Provide knowledge about accountability measures, resources/tools to support best assessment practices.

The UCAS School Federal Accountability Report (SFAR) here shows how the State uses the scores of the school and can be accessed <https://datagateway.schools.utah.gov/Accountability>

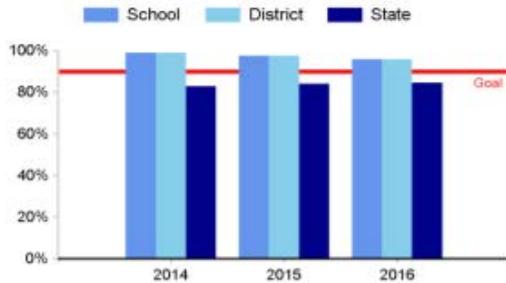
Utah Education PACE\* **REPORT CARD**

**UTAH COUNTY ACADEMY OF SCIENCE (UCAS)**

UTAH COUNTY ACADEMY OF SCIENCE (UCAS)

Grades 10-12 School Year 2016-2017

**Graduation Rate**



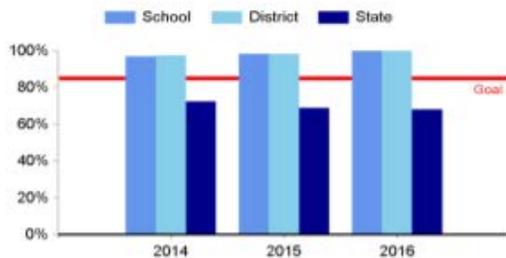
**College Credit Earned**

Percent of students enrolled in a minimum of 1.0 credit for grades 11 or 12

Concurrent Enrollment	100%
Advanced Placement	6%
CTE Courses	87%
International Baccalaureate	0%

100% of 11th and 12th grade students earned at least three credits in the college and career ready courses above.

**ACT Scores**



Percentage of students with ACT composite of 18 or higher  
Prior to 2014, full participation in the ACT was elective in portions of the state

**School Demographics**

Enrollment	395
Race/Ethnic Minority	23%
English Learners	n<10
Low Socio-Economic	16%
Students With Disabilities	n<10
Chronic Absenteeism	n<10
Mobility	<10%

**Academic Performance**

Grade Span Tested: 10-12

**Percent Proficient**

SAGE Language Arts (ELA)	82%
SAGE Math	69%
SAGE Science	65%

**Student Group Percent Proficient**

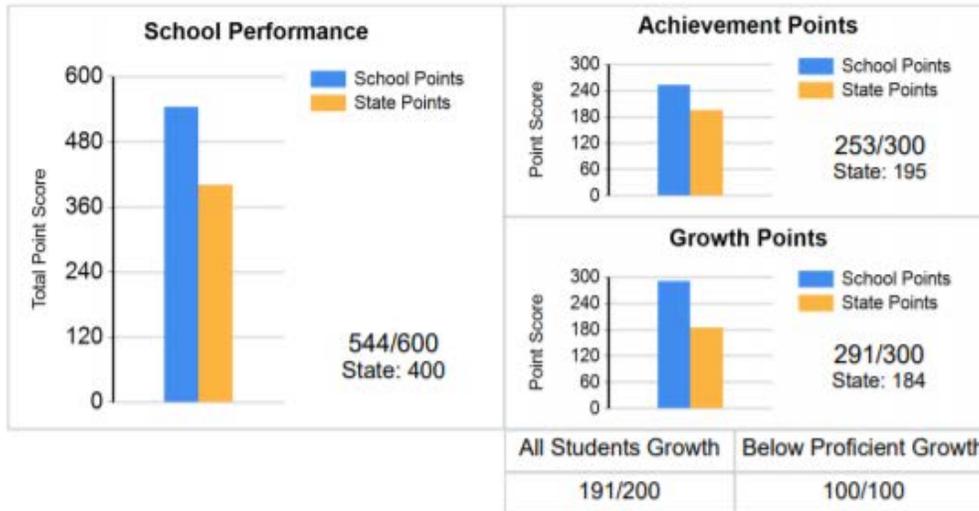
	ELA	Math	Science
Race/Ethnic Minority	64%	44%	30%
English Learners	n<10	n<10	n<10
Low Socio-Economic	75%	67%	57%
Students With Disabilities	n<10	n<10	n<10

**School Snapshot**

High School

School Federal Accountability Report

**UTAH COUNTY ACADEMY OF SCIENCE (UCAS)**



Participation Rate		College and Career Readiness	
All Students	Below Proficient	Graduation Rate	Graduation Points
96%	100%	96%	144/150

	All Students Growth			Below Proficient Growth			Proficiency			
	MGP	# of Tests	Points	MGP	# of Tests	Points	Prof Rate	# of Tests	Points	Points Possible
English Language Arts	83.00	103	200	85.00	41	100	81.67 %	120	41	50
Math	67.00	94	189	72.00	33	100	69.09 %	110	35	50
Science	66.00	71	185	74.50	16	100	65.00 %	120	33	50
	Average		191	Average		100		Sum		109

\* Of the tests that were expected to be taken, 4% were not taken due to parental exclusion. These expected tests were included in participation rates but excluded from proficiency rates.

	All Students MGP			Below Proficient MGP			Proficiency		
	School	LEA	State	School	LEA	State	School	LEA	State
10th Grade Language Arts	83.00	83.00	50.00	85.00	85.00	50.00	82%	82%	42%
Secondary Math II	66.00	66.00	51.00	71.50	71.50	51.00	60%	60%	40%
Secondary Math III	68.00	68.00	49.00			39.00	100%	100%	69%
Physics	66.00	66.00	50.00	74.50	74.50	51.00	65%	65%	44%

**(c) Stakeholder solicitation and input**

As indicated in Application Requirements section e above, UCAS is in its thirteenth year as one of Utah’s best charter schools and is open to any Utah student through a random lottery. Students, parents, the administrative team, teachers, and the Board have together contributed thousands of hours of volunteer time: troubleshooting challenges, seeking and building

partnerships. UCAS has a strong relationship with its parents and students. UCAS counselors send out a “Needs Assessment” every other year to gain information as to what the students and their families see as areas that UCAS should work to improve. Additionally, when issues come up during the school year – such as voting for member of the Board of Trustees or Community Council, electronic and paper surveys are sent to families for their input.

UCAS began in partnership with the Alpine, Provo and Nebo School Districts along with UVU in 2004. Since the summer of 2005, UCAS has presented an annual “Report to the Partnership”. This report includes inviting all UCAS Board members, UVU Administration, School District Administration, and local community leaders (such as the mayors of cities in the Utah County area who are also stakeholders in the UCAS program). We have established a format that involves asking for input and soliciting suggestions from our local partnerships. In addition, UCAS CEO Anna Trevino, sits on the K-16 alliance as the Utah County Charter School representative. This involves attending monthly meetings in order to gain information about the local K-16 educational system. This allows her to listen and learn as well as contribute to the larger educational agencies in Utah County.

**(d) Activities, expenditures and sustainability**

A description of UCAS planned expenditures of funds to support the expansion program were described in Application Requirements section h on page 18. Funds will be used in two main areas; One, to support Educational leadership; and Two, to create an opportunity around anywhere, anytime learning for UCAS students. It is anticipated that within three to five years, UCAS will have grown its student population from the 400 students that it has now to 1,000 students. UCAS anticipates 500 students at each of its two locations. With this additional student

base, there will be additional state funding that will allow UCAS to maintain and sustain the financial needs of the program after the grant money has ended. The chart below shows an aggressive student number expansion plan, but one that is also realistic as the growth in Utah County is increasing at a very dramatic rate.

	Grades and Specific Number of Students Served by Grade				Max Enrollment
	9	10	11	12	
Year 1	9	10	11	12	
<b>SY 2018</b>	150	150	150	150	600
Year 2	9	10	11	12	
<b>SY 2019</b>	300	300	150	150	900
Year 3	9	10	11	12	
<b>SY 2020</b>	300	300	300	150	1050
Year 4	9	10	11	12	
<b>SY 2021</b>	300	300	300	300	1200

#### (e) Engagement strategies

As indicated on page 16, there is a strong engagement with students and their parents. As we expand our program to offer the educational opportunities to 9<sup>th</sup> grade students, we anticipate additional parent meetings, open houses, and outreach programs. One such outreach program we have already received a local grant for is for a program called “Why Try”. This program teaches student and their parents about resiliency and how they can be motivated to be successful in their studies, in their jobs, and as parents. The Why Try organization is a local group that has also requested space in our new expansion building where they can hold training and workshops for students and their parents. Engaging parents early in the student education at UCAS helps the parents understand the importance and opportunities that UCAS offers their students.

Additionally, MTech would like to use our kitchen facilities to teach their beginning culinary arts courses. This partnership between UCAS and MTech will not only allow our high school

students, but others in the community to come to the UCAS building – after school hours – and see what programs we have to offer, not only for our high school students, but for students of all ages in our community. Furthermore, UVU’s community outreach program uses the UCAS building for classes on technology, dance, and business. UCAS enjoys sharing our space after school hours to those in the community, which again provides for effective parent, family, and community engagement strategies.

**(f) Transportation needs of students**

Because UCAS students are also UVU concurrent enrollment students – beginning in the 9<sup>th</sup> grade, all UVU students receive a free public transportation pass. This pass allows all students to use the bus, front runner and Trax system for the entire time that the student is enrolled at UVU. UCAS is located on the BRT line which connects all of Utah County. Students are literally dropped off at the door of each of the UCAS buildings in which they will attend during their high school program. The location of the new UCAS building was intentionally sought after as UCAS administration and staff recognized the large geographical area that students travel from each day to receive their education.

**(g) School autonomy**

UCAS has a unique student population. Students enter a lottery and feel that they have literally won the lottery to attend UCAS. UCAS students have their full college tuition paid for by the UCAS program, based on three student success practices.

One – students need an excellent attendance record. UCAS Board Policy indicates that students need to attend school at least 90% of the time. UCAS students who don’t meet this standard can still attend and take concurrent enrollment courses, but may need to work on

improving their attendance before UCAS pays tuition for on campus courses. However, UCAS has maintained a very high 97% attendance rate as students are excited to attend and learn from their teachers each and every day.

Two – students need to have excellent behavior. Students who may need to be disciplined are talked WITH (not to) as a school counselor and administrator work with the student. On average, UCAS has 5 students each year who receive an at home suspension for a day. Once again, our unique student population and their motivation to have their college classes paid for has been an excellent incentive for our students. UCAS uses the time when we do need to discipline a student as an opportunity to talk with them about their actions, why their actions might impede their educational progress, and then help the student make a plan for their success.

Three – students need to have a good grade point average. Over 60% of the students who attend UCAS graduate with a GPA of between 3.5 and 4.0. UCAS students are motivated to do well in high school and in college, and to earn scholarships for their continued educational progress. Each week, counselors and administration pull a low progress report of students who have a D or F grade. The students are then kindly targeted throughout the week by both the administrator and counselor as we work with the student to involve them in tutoring or provide additional teaching opportunities for the student.

This three prong approach for students to have their college and university classes paid for by UCAS has been very motivating for students. Each year, UCAS spends nearly \$500,000 on UVU tuition for the UCAS student tuition. As the number of students doubles with our expansion, we are also planning on having the cost of tuition nearly double as well.

It is important to note that while there have been a few students who are not able to progress due to mental illness, physical health limitations, etc. The students who have substantial limitations have still been able to graduate from the ECHS portion of the UCAS program with several college credits and some with a skills certification.

**(h) Autonomy**

UCAS only has one physical location at this time. The second location where the expansion will occur will be part of the UCAS system and have the same Board of Trustees. The expansion school will also have the same Business Manager and CEO who will ensure the new UCAS expansion facility will have full autonomy over the budgeting of the funds from this grant. Operations and personnel decisions will be left to the building level principal.

**(i) Recruitment and enrollment of students**

Because of the success of the UCAS program, there has been a waiting list for 11 of the 13 years that the school has been in operation. The majority of the students hear about UCAS from current and former UCAS students and their families. Additionally, the Utah County area is one of the fastest growing areas in the nation, with a population increase of 40% in the last ten years. As mentioned in Required Section i on page 20, multiple strategies are used to inform prospective students about UCAS which included: postcards, newspaper ads, website, UVU programs, LIA, and open houses.

As required by federal and state statute, if more students apply than there are spaces available, a random lottery is conducted. A lottery has been necessary all but the first and second years of the school. There are very few admission preferences allowed by Utah Charter School law, they are: 1) siblings of current students or students who have graduated from UCAS in the past; and, 2)

the children of employees and board members, 3) children or grandchildren of the founding members.

**(j) Children with disabilities**

Utah charter regulations provide that all approved charter schools in Utah exist as separate and distinct LEA's. With established policies/procedures and management systems, a staff and faculty skilled in helping students with a variety of challenges, including learning disabilities, and its highly individualized and project-based/collaborative learning philosophy, UCAS has the elements in place to ensure compliance with the Individuals with Disabilities Education Act (IDEA).

**Policies/Procedures & Management Systems.** The Special Education Program Approval for Charter Schools is a part of a comprehensive approval process required by the USBE to set up and operate a public school in Utah. As public schools, all charters schools must successfully complete this process in order to open their doors. Other steps are required to ensure ongoing compliance with federal and state laws and regulations specific to special education, including: 1) Individuals with Disabilities Education Act, 20 USCA (IDEA); 2) Title 34 CFR (federal regulations); and the 3) Family Education Rights and Privacy Act (FERPA). UCAS has established policy in regards to students with special needs not limited to only special education but to 504 disabilities and an English Language Learning (ELL) plan, to help identify students and help them receive support for learning in all academic areas. These comprehensive policies and procedures help guide staff in implementing processes to ensure all students receive appropriate services in a timely fashion to promote positive growth and development. Parents of all students with special needs are provided procedural safeguards and are an integral part of their

students' special education processes. Staff meet with the Special Education Director and 504 Coordinator to ensure all appropriate steps are taken. UCAS also conducts child find activities for the full student population so that students who may need special education services and/or accommodations are appropriately identified and, if necessary, referred for evaluation, as required by federal and state laws.

All classrooms are full inclusion classrooms. In addition to the regular classroom instructional personnel, there is a Special Education Licensed teacher with a SPED classroom support system for students who need these services. The SPED teacher helps the classroom instructor implement appropriate instruction and accommodations and write the IEPs for exceptional education students as needed. The resource teacher(s) may teach classes and/or work with individual students or groups of students, and/or refer to services outside the school, should they be needed as identified via the assessment, evaluation and planning process. Since these exceptional education students remain with the same class as regular education students, they have the same opportunities that all other class members have to feel part of the group. Being a member of a school with a wide range of abilities increases the likelihood of academic and social success. UCAS believes that early identification of needs leads to better educational outcomes for each individual. The child find process includes obtaining data on each student, through direct assessment and observation, or by indirect means of an examination of the student's academic performance, gross and fine motor skills, receptive and expressive language skills, vision, hearing and cognitive skills.

School staff, parents/caregivers, or representatives outside the school may refer students to the resource teacher if they believe that the student, because of a disability, may be in need of

special education and supportive services in order to benefit from regular education. UCAS ensures that an appropriately certified school psychologist participates in the initial evaluation and all subsequent re-evaluations of the student. Final identification of students with disabilities and programming for such students occurs only after an appropriate evaluation is conducted and a determination has been made by the multidisciplinary team. This team includes, at a minimum, a licensed clinician, resource teacher, a regular education teacher, parents, and others, as appropriate. If it is determined that the child requires special education and supportive services in order to benefit from regular education, an Individual Education Plan (IEP) is developed for the student in accordance with federal law. UCAS ensures the confidentiality of the activities and procedures used to evaluate students with.

**RTI and 504.** UCAS provides a tiered system of support that addresses students who are not demonstrating mastery of standards. At the lowest level, or Tier 1, teachers use varied instructional supports and strategies to differentiate instruction to meet the needs of struggling learners. If students continue to demonstrate low achievement levels, parent meetings are held and academic and behavior plans used to track data. Tier 2, which includes before and after school support, during the day UCAS advisory classes facilitate Tier 2 instruction. If progress is still not being made, then a teacher, administrator, or parent can refer a student to be evaluated by special education, or in the case of a medical or some other concern, a 504 meeting takes place. Students with a 504 are referred by self, parents, or teachers, and evaluated according to IDEA by the 504 administrator and team.

**Existing Special Needs Students.** Students who enter UCAS with an existing Individualized Education Plan (IEP) from another school which is in compliance with the State of Utah statutes

and rules are automatically scheduled for a conference to review the student's existing IEP and appropriate services and procedures which need to be implemented are reviewed. For students with developmental disabilities, as a result of evaluation completed as part of the pre-referral process and/or the IEP process, students with a defined disability have, as appropriate, either a 504 Plan or an IEP written and monitored in accordance with state and federal guidelines. For students with physical disabilities, all buildings are accessible. When indicated on IEPs, speech, occupational and/or physical therapies are provided by licensed professionals contracted by UCAS, such as assistive technology.

**English Language Learners Can Excel.** The educational philosophy of UCAS supports all students through hands-on, real-world problem solving. A cooperative social environment forms the foundation of UCAS's learning approach which is important for all students, including meeting the educational needs of ELL students. The positive nature of the classrooms at UCAS promote excitement and acceptance of diversity, developmentally appropriate practices, and encouragement to take risks without punishment for failure while providing an environment in which all students, including the exceptional education and limited English proficiency students.

**(k) Free appropriate public education**

All students at UCAS receive a free appropriate public education as described above in section i and in accordance to part B of the IDEA.

**(l) Statement on single sex charter school**

N/A. Utah County Academy of Sciences will not be addressing this priority.

**(m) Waiver justification**

N/A. Utah County Academy of Sciences will not be addressing this priority.

**(n) Logic model**

N/A. Utah County Academy of Sciences will not be addressing this priority.

**(o) Audit findings**

HIGHER PERSPECTIVE

Independent Auditor's Report on Compliance  
and Report on Internal Control over  
Compliance Required by the  
*State Compliance Audit Guide*

Board of Trustees Utah County Academy of Sciences;

**Report on Compliance**

We have audited the compliance of Utah County Academy of Sciences (the School) with the following applicable state compliance requirements described in the *State Compliance Audit Guide*, issued by the Office of the Utah State Auditor, for the year ended June 30, 2017.

- Minimum School Program
- Budgetary Compliance
- Utah Retirement Systems
- Open and Public Meetings Act
- Public Treasurer's Bond
- Cash Management

***Management's Responsibility***

Management is responsible for compliance with the state compliance requirements referred to above.

***Auditor's Responsibility***

Our responsibility is to express an opinion on the School's compliance based on our audit of the state compliance requirements referred to above.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *State Compliance Audit Guide*, issued by the Office of the Utah State Auditor. Those standards and the *State Compliance Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the state compliance requirements referred to above that could have a direct and material effect on a state compliance requirement occurred. An audit includes examining, on a test basis, evidence about the School's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each state compliance requirement referred to above. However, our audit does not provide a legal determination of the School's compliance with those requirements.

***Opinion on Each State Compliance Requirement Tested***

In our opinion, Utah County Academy of Sciences complied, in all material respects, with the state compliance requirements referred to above for the year ended June 30, 2017.

**Report on Internal Control over Compliance**

Management of the School is responsible for establishing and maintaining effective internal control over compliance with the state compliance requirements referred to above. In planning and performing our audit of compliance, we considered the School's internal control over compliance with the state compliance requirements referred to above to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on compliance with those state compliance requirements and to test and report on internal control over compliance in accordance with the *State Compliance Audit Guide*, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the School's internal control over compliance.

*A deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a state compliance requirement on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a state compliance requirement will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a state compliance requirement that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the *State Compliance Audit Guide*. Accordingly, this report is not suitable for any other purpose.

*Squire & Company, PC*

Orem, Utah

October 11, 2017

## Further Additional Requirements for Expansion of High-Quality Charter Schools

### (1) Information on school management

UCAS is expanding its program to an additional number of students and will operate under the same LEA number as assigned to UCAS. UCAS is an independent LEA that operates independently of the SCSB and the USBE for the purposes of accountability and reporting under Title 1, Part A of the ESEA.

### (2) Student assessment results

**SAGE Results for Utah County Academy of Science by Demographic Group**

Demographic Categories	Language Arts % Prof	Mathematics % Prof	Science % Prof
All Students	79.4%	72.9%	78.9%
Asian	N<10	N<10	N<10
Caucasian	83.5%	79.7%	85.7%
Hispanic	70.2%	54.5%	50.0%
Multiple Races	N<10	N<10	N<10
Pacific Islander	N<10	N<10	N<10
Female	81.4%	67.6%	69.0%
Male	77.7%	78.4%	87.6%
Economically Disadvantaged	70.7%	60%-69%	69.0%
Limited English Proficiency	N<10	N<10	N<10
Students with Disabilities	N<10	N<10	N<10
Mobile	N<10	N<10	N<10

**(3) Attendance, retention and graduation rates**

UCAS has a very high attendance rate at 97%.

UCAS retention is also among the highest in the state at 94%.

UCAS high school graduation rate is 100%.

**(4) Compliance and management issues**

UCAS has no compliance or management issues.

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