

U.S. Department of Education
2018 National Blue Ribbon Schools Program

[X] Public or [] Non-public

For Public Schools only: (Check all that apply) [] Title I [] Charter [] Magnet [X] Choice

Name of Principal Mr. Dale Moore

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name Riverside STEM Academy

(As it should appear in the official records)

School Mailing Address 4466 Mount Vernon Avenue

(If address is P.O. Box, also include street address.)

Riverside CA 92507-4864
City State Zip Code+4 (9 digits total)

County__

Telephone (951) 788-7308

Fax

Web site/URL

http://www.riversidestemacademy.c

om

E-mail dmoore@rusd.k12.ca.us

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

Date _____

(Principal's Signature)

Name of Superintendent*Dr. David C. Hansen

(Specify: Ms., Miss, Mrs., Dr., Mr., Other) E-mail DChansen@rusd.k12.ca.us

District Name Riverside Unified School Distrcit Tel. (951) 788-7135

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

Date _____

(Superintendent's Signature)

Name of School Board

President/Chairperson Mrs Patricia Lock-Dawson

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

Date _____

(School Board President's/Chairperson's Signature)

The original signed cover sheet only should be converted to a PDF file and uploaded via the online portal.

**Non-public Schools: If the information requested is not applicable, write N/A in the space.*

Part I – Eligibility Certification

The signatures on the first page of this application (cover page) certify that each of the statements below, concerning the school's eligibility and compliance with U.S. Department of Education and National Blue Ribbon Schools requirements, are true and correct.

1. The school configuration includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. All nominated public schools must meet the state's performance targets in reading (or English language arts) and mathematics and other academic indicators (i.e., attendance rate and graduation rate), for the all students group and all subgroups, including having participation rates of at least 95 percent using the most recent accountability results available for nomination.
3. To meet final eligibility, all nominated public schools must be certified by states prior to September 2018 in order to meet all eligibility requirements. Any status appeals must be resolved at least two weeks before the awards ceremony for the school to receive the award.
4. If the school includes grades 7 or higher, the school must have foreign language as a part of its curriculum.
5. The school has been in existence for five full years, that is, from at least September 2012 and each tested grade must have been part of the school for the past three years.
6. The nominated school has not received the National Blue Ribbon Schools award in the past five years: 2013, 2014, 2015, 2016, or 2017.
7. The nominated school has no history of testing irregularities, nor have charges of irregularities been brought against the school at the time of nomination. The U.S. Department of Education reserves the right to disqualify a school's application and/or rescind a school's award if irregularities are later discovered and proven by the state.
8. The nominated school has not been identified by the state as "persistently dangerous" within the last two years.
9. The nominated school or district is not refusing Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.
10. The OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan from the district to remedy the violation.
11. The U.S. Department of Justice does not have a pending suit alleging that the nominated school or the school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
12. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

PART II - DEMOGRAPHIC DATA

Data should be provided for the most recent school year (2017-2018) unless otherwise stated.

DISTRICT

1. Number of schools in the district (per district designation):
- 30 Elementary schools (includes K-8)
 - 8 Middle/Junior high schools
 - 8 High schools
 - 0 K-12 schools
- 46 TOTAL

SCHOOL (To be completed by all schools)

2. Category that best describes the area where the school is located:
- Urban or large central city
 - Suburban
 - Rural or small city/town
3. Number of students as of October 1, 2017 enrolled at each grade level or its equivalent in applying school:

Grade	# of Males	# of Females	Grade Total
PreK	0	0	0
K	0	0	0
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	58	50	108
6	56	51	107
7	67	40	107
8	64	44	108
9	40	34	74
10	35	22	57
11	28	29	57
12 or higher	24	20	44
Total Students	372	290	662

4. Racial/ethnic composition of the school:
- 1 % American Indian or Alaska Native
 - 20 % Asian
 - 8 % Black or African American
 - 24 % Hispanic or Latino
 - 4 % Native Hawaiian or Other Pacific Islander
 - 38 % White
 - 5 % Two or more races
 - 100 % Total**

(Only these seven standard categories should be used to report the racial/ethnic composition of your school. The Final Guidance on Maintaining, Collecting, and Reporting Racial and Ethnic Data to the U.S. Department of Education published in the October 19, 2007 *Federal Register* provides definitions for each of the seven categories.)

5. Student turnover, or mobility rate, during the 2016 – 2017 school year: 5%

If the mobility rate is above 15%, please explain.

This rate should be calculated using the grid below. The answer to (6) is the mobility rate.

Steps For Determining Mobility Rate	Answer
(1) Number of students who transferred <i>to</i> the school after October 1, 2016 until the end of the 2016-2017 school year	8
(2) Number of students who transferred <i>from</i> the school after October 1, 2016 until the end of the 2016-2017 school year	24
(3) Total of all transferred students [sum of rows (1) and (2)]	32
(4) Total number of students in the school as of October 1, 2016	642
(5) Total transferred students in row (3) divided by total students in row (4)	0.05
(6) Amount in row (5) multiplied by 100	5

6. English Language Learners (ELL) in the school: 0 %
2 Total number ELL

Specify each non-English language represented in the school (separate languages by commas):

7. Students eligible for free/reduced-priced meals: 31 %
Total number students who qualify: 207

8. Students receiving special education services: 2 %
11 Total number of students served

Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act. Do not add additional conditions. It is possible that students may be classified in more than one condition.

- | | |
|----------------------------------|--|
| <u>1</u> Autism | <u>0</u> Multiple Disabilities |
| <u>1</u> Deafness | <u>1</u> Orthopedic Impairment |
| <u>0</u> Deaf-Blindness | <u>0</u> Other Health Impaired |
| <u>0</u> Developmentally Delayed | <u>0</u> Specific Learning Disability |
| <u>0</u> Emotional Disturbance | <u>6</u> Speech or Language Impairment |
| <u>3</u> Hearing Impairment | <u>0</u> Traumatic Brain Injury |
| <u>0</u> Intellectual Disability | <u>0</u> Visual Impairment Including Blindness |

9. Number of years the principal has been in her/his position at this school: 6
10. Use Full-Time Equivalents (FTEs), rounded to nearest whole numeral, to indicate the number of school staff in each of the categories below:

	Number of Staff
Administrators	2
Classroom teachers including those teaching high school specialty subjects, e.g., third grade teacher, history teacher, algebra teacher.	23
Resource teachers/specialists/coaches e.g., reading specialist, science coach, special education teacher, technology specialist, art teacher, etc.	2
Paraprofessionals under the supervision of a professional supporting single, group, or classroom students.	2
Student support personnel e.g., guidance counselors, behavior interventionists, mental/physical health service providers, psychologists, family engagement liaisons, career/college attainment coaches, etc.	3

11. Average student-classroom teacher ratio, that is, the number of students in the school divided by the FTE of classroom teachers, e.g., 22:1 29:1

12. Show daily student attendance rates. Only high schools need to supply yearly graduation rates.

Required Information	2016-2017	2015-2016	2014-2015	2013-2014	2012-2013
Daily student attendance	97%	98%	97%	98%	97%
High school graduation rate	100%	0%	0%	0%	0%

13. **For high schools only, that is, schools ending in grade 12 or higher.**

Show percentages to indicate the post-secondary status of students who graduated in Spring 2017.

Post-Secondary Status	
Graduating class size	41
Enrolled in a 4-year college or university	68%
Enrolled in a community college	29%
Enrolled in career/technical training program	0%
Found employment	0%
Joined the military or other public service	0%
Other	3%

14. Indicate whether your school has previously received a National Blue Ribbon Schools award.

Yes No

If yes, select the year in which your school received the award.

15. In a couple of sentences, provide the school's mission or vision statement.

Riverside STEM Academy's mission is to provide students a rigorous, interdisciplinary learning environment focused on science, technology, engineering and mathematics, to foster the joy of discovery, and to promote a collaborative culture of ethical and innovative problem-solving.

16. **For public schools only**, if the school is a magnet, charter, or choice school, explain how students are chosen to attend.

Students entering the 5th grade are chosen through a high school service area, weighted lottery system. A cap is placed on students entering the program from out-of-district. An entrance requirement of "nearly meets" performance on their prior year Smarter Balanced Assessment Consortium (SBAC) scores in either ELA or Mathematics is applied. Students entering the high school program must complete an application and successfully complete an accelerated 8th-grade math program with proficiency. Priority is given to students who have completed the STEM Academy middle school program, while an at-large lottery is conducted for students applying to high school from outside of the school.

PART III – SUMMARY

The Riverside Unified School District established the Riverside STEM Academy (RSA) in the 2011-12 school year to increase and improve the preparation of students for careers in science, technology, engineering and mathematics (STEM). In its first year, the school served students in fifth through seventh grades, with a program designed entirely by an original team of six teachers. RSA has continued to add a new grade level each year as the program has grown. Currently in its seventh year, the school now serves students in fifth through 12th grades as one school with a middle school program and a high school program. It provides a local option for students interested in studying in a STEM-focused, accelerated learning environment with the goal of successfully completing a STEM major in college. RSA serves the city of Riverside and surrounding cities as the only STEM-focused program of its kind.

The school currently has 662 students, 38 percent of whom are white, 24 percent of whom are Hispanic or Latino, 20 percent of whom are Asian, eight percent of whom are Black or African American, four percent of whom are Native Hawaiian or Pacific Islander, five percent of whom are of mixed race, and one percent of whom are American Indian or Alaska Native. More than 31 percent of our students qualify for free- and reduced-price meals according to federal guidelines.

RSA uses its location near the campus of the University of California, Riverside (UCR), to partner with the university to offer guest speakers, workshops, field trips, research mentorships, academic tutoring, and dual enrollment options.

When the high school program opened in 2013, the majority of eighth-grade students that year opted to continue in the new program. Those students formed our first graduating class in 2017, 97 percent of whom went on to enroll in a post-secondary educational institution. Our first graduates earned a 76 percent acceptance rate at University of California schools, compared to a district acceptance rate of 59 percent. This year, we have graduates studying at MIT, Cal-Tech, UC Berkeley, Davidson, and Cal Poly Pomona, among others.

Each year, RSA performs remarkably on state standardized testing. In 2016, the middle school's California Assessment of Student Performance and Progress (CAASPP) scores ranked it first among more than 10,000 schools statewide. As a combined middle- and high-school program, RSA ranked eighth in the state that year. Our students are accelerated in math and science, and elementary and middle school students spend almost 40 percent more instructional time in those disciplines as compared to district average. High school students follow a rigorous course of study that includes Advanced Placement (AP) and Honors classes. During their sophomore through senior years, all students take two AP courses; with most juniors and seniors typically taking a total of four.

Every student at RSA uses technology to access the curriculum. Teachers use a variety of technologies in their curricula, including Google Classroom, Pear Deck, Screencastify, Kahoot, Poll Anywhere, and Wordle. Grades are reported online (on Aeries), and students manage their coursework and assignments online using PowerSchool Learning. Parents have access to both platforms and can access assignments and grades at their convenience.

One of the keys to RSA's success is constant innovation and ability for teachers to collaborate freely and frequently. Every Wednesday, students are released early so that teachers have collaboration time. Both high school and middle school staffs meet weekly to plan, compare notes and develop curricula to connect traditional silo-based content areas. Middle school teachers have common team planning time by grade level every day during their conference periods.

Junior/Senior teachers have developed the ThinkTank, a close collaboration between teachers of AP English Language and Literature, AP US History and Government and Engineering. The goal of the two-year course is to gain a better understanding of the world's needs and of our role in meeting those needs, incorporating ideas from history, philosophy, literature, ethics, design and engineering. Students apply design thinking concepts to create projects intended to address or solve real-world problems. Teachers team-teach, invite

guest lecturers and mentors, hold small group discussions, host studio and lab time, and individually guide the presentation of final projects. Students may present a capstone project at the end of their senior year.

An important element of ThinkTank is outreach. Working in teams, STEM students go to underserved local elementary schools to present interactive science lessons to students in third and fourth grades. In September, ThinkTank students completed projects on empathy and then held an exhibition at the Riverside Municipal Museum, where they served as docents to explain and interpret their projects for visitors.

In the middle school, sixth-graders recently completed a beautification project, installing an irrigation system and water-wise plants, which they will use to study photosynthesis and general botany.

Both programs have initiated a schedule called STEMWorks. In the high school, students have two 45-minute periods each afternoon where they can choose to attend a variety of sessions, including teacher office hours, tutoring, labs, special presentations, and class extensions. They sign up via an online registration system. In the middle school, STEMWorks offers enrichment classes every Wednesday. Students can choose among clubs such as American Sign Language, digital puzzles, creative writing, Science Olympiad, choir, computer programming and robotics, design challenges, art studio, chess, Speech and Debate, Wellness and Mindfulness, dance, and physical education.

Our small size lends itself to deep student/teacher relationships over time, as many of the staff teach students for two or more years. In addition, our active student government helps students feel connected to the school by planning school dances, activities, mentorships and team-building.

RSA's rigorous coursework has prompted teachers to begin an intervention program to help students keep up and maintain good grades. Teachers provide support before, during and after school and at lunch, offer cooperative grouping and study groups, and give opportunities for test repairs.

Last year, RSA was named a Gold Ribbon School by the California Department of Education, and last year's Western Association of Schools and Colleges accreditation process (RSA's first) earned RSA a six-year accreditation, with no mid-cycle visit required.

PART IV – CURRICULUM AND INSTRUCTION

1. Core Curriculum:

RSA teachers designed the curriculum to meet our mission statement: “to provide students a rigorous, interdisciplinary learning environment focused on science, technology, engineering and mathematics, to foster the joy of discovery, and to promote a collaborative culture of ethical and innovative problem solving.” Underpinning our mission statement (and therefore our curriculum) are our Core Beliefs: that students can succeed best in a learning community where academic disciplines are integrated; that critical thinking and problem solving skills are essential for students to understand the complex scientific, social and ethical issues facing humanity; and that collaborative learning and extracurricular activities are essential in developing leadership and interpersonal skills. The teachers have researched and implemented a mastery learning program to ensure that students are achieving in each of the curricular areas.

The RSA program of study is designed to build a solid foundation in STEM content areas to prepare students for college and for success in a STEM field. All middle school students are enrolled in a program of study that is articulated across each grade level. Students in grades five through eight attend three foundational courses (math, humanities and science, 85 minutes each) daily, with a 50-minute physical education period. Each student also participates in STEMWorks on Wednesdays.

All science courses beginning in grade five are designed as lab courses with embedded research skills. We also use the comprehensive, research-based elementary science program called Full Option Science System (FOSS) that includes daily, hands-on, inquiry science beginning in the 5th grade. Additionally, sixth-through eighth-grade science instructors have integrated Project Lead the Way (PLTW) engineering curricula into their programs to allow students opportunities to scaffold their knowledge and to meet the Next Generation Science Standards (NGSS). Students produce a science or engineering research product by the end of grade 6. Middle school coursework is designed to prepare students for success in Honors Chemistry in ninth grade. The middle school’s solid science foundation equips students for success in our high school’s rigorous and accelerated courses.

High school courses prepare students for college and career, and fulfill all coursework required for admission to University of California schools (“a-g readiness”). Every sophomore, junior and senior takes at least two AP courses per year, though most upperclassmen take at least four. In addition, some high school students take Riverside Virtual School classes online, and some are concurrently enrolled in college courses.

At the high school level, students enroll in many AP courses. We currently offer AP Chemistry, AP Environmental Science, AP English Literature and Language, AP U.S. History, AP Biology, AP Calculus AB, AP Microeconomics, AP Physics C, AP Statistics, and AP European History. This year, we are also offering AP tests in Chinese, Music Theory, Spanish Language, Computer Science A, and Macroeconomics, all of which the students study off-site or online. Our high school AP teachers attend summer institutes designed to deepen their content knowledge and instructional practices. In addition, teachers attend professional development workshops such as the BioChem conference, to keep abreast of the latest scientific and educational research in their fields.

RSA’s math classes are accelerated. In general, students are a year ahead of their peers in traditional settings across the district. Students in our middle school spend almost 40 percent more time on math and science, as compared to students in traditional elementary and middle schools in our district.

Teachers work to integrate science into their curricula. In the middle school, teachers initiated C-STEM, which incorporates computing and coding skills into their math classes. High school students take honors math courses for their first two years, and AP courses in their junior and senior years. AP Math instructors attend AP summer institutes to develop a curriculum with strategies that best meet the College Board scope and sequence.

To accommodate the extra time spent on science and math, English language arts and history are blended at

grades five through seven into a single course called humanities. The humanities teachers work to design curricula that ensure that students will be strong communicators both in writing and speech, are exposed to a wide variety of literature reflecting historical and cultural influences, and engage in research methodologies. History instruction focuses on primary source analysis. Lessons are designed to be interdisciplinary, provide students a choice of subject, material, and assessment method, and are project based. In high school English language arts and history, students connect their subject areas through inquiry-based research projects that directly link to 11th and 12th grade ThinkTank. As seniors, students focus on a one-year-long project that represents learnings from multiple courses over the four years of study at STEM. High School history students take AP European and AP American history, as well as AP Government and Microeconomics.

Engagement is important in the planning of lessons in all curricular areas. Teachers are implementing backwards design, design thinking, a variety of modalities and media in the implementation of lessons, and student choice in the demonstration of the learning. Staff attend professional development to learn new ways to engage students (which they share in collaboration time with colleagues), and are adding components of personalized learning to their individual curricula.

RSA's program strives to produce students who are motivated and inspired to pursue further STEM study, have the capacity to gain entrance into four-year schools as STEM majors, and are able to successfully graduate and enter a STEM career. To this end, courses align with University of California requirements.

2. Other Curriculum Areas:

A core component of RSA is the development of well-rounded individuals. To that end, visual and performing arts, music, and physical education are offered in addition to our rigorous academic program.

At the high school level, students take a theater class, which provides students with the opportunity to develop critical thinking and evaluation skills as well as performance opportunities. Students study theater history, technical theater, and musical theater, film, and television. Productions during the year allow them to showcase their skills in front of a variety of audiences. The collaborative nature of our school allows the high school theater program to work with the 7th and 8th graders to put on a middle school play. The high schoolers take on directing roles as well as coordinate backstage technical duties. The mentoring inherent in the process creates deep connections across the different age groups. During STEMWorks time, students also have a chance to practice, hone and showcase their artistic talents by participating in an arts club called Muse. Guest artists visit bimonthly to teach and inspire, and students show and sell their works monthly at Riverside's downtown ArtsWalk.

In addition to the performing arts at the high school level, the STEMWorks program gives middle school students an opportunity to choose arts programs that meet their personal needs. Students can participate in both choir and visual arts during these sessions, which develop students' knowledge and fundamental skills in the arts and increase their appreciation of a wide variety of genres. This helps us foster the joy of learning (part of our mission statement), and creates lifetime appreciators of the arts. Students in the visual arts classes participate in the PTSA sponsored "Reflections" contest and showcase their art at the Riverside Art Museum, as well as around the school campus.

At the core of our music education program is a band program open to all students, grade 5-12. The 5th and 6th grade Band meets two days per week. A separate 7th and 8th grade group meets four days a week, and a high school group meets three days a week.

RSA has two credentialed Physical Education teachers. They meet daily with 5th-8th graders, providing a structured PE program that follows district and state standards. At the high school level, students participate in PE through our district's virtual school, with one of the PE teachers serving as their online teacher. Virtual PE allows students to work with the teacher to design a personalized program. Students select and track their own personal fitness activities under the direction of the teacher. Students participating in a sports PE program at a district high school are concurrently enrolled in that school's PE department.

In order for students to be prepared to enter global STEM careers, students at the high school level take up

to three years of Spanish. The third year is Honors weighted. Students are encouraged to continue language studies in college and to pursue study abroad opportunities. In addition, each year, a teacher takes small groups on private study tours abroad so that students can use their acquired language in real-life settings. Previous groups have traveled to France, Costa Rica, Italy, and next year, Spain. Second-language acquisition provides long-term benefits for students, and can make graduates more competitive in the increasingly globally-connected world of work.

One important aspect of RSA's innovative STEM program is that all students have personal technology that they access in school and at home, on a 1:1 ratio. Students each have their own (or a school-provided) laptop allowing them to conduct research, and design and innovate individual and collaborative projects. Since students are immersed in technology, it is critical that all students have a good understanding of both digital literacy and citizenship. Teachers at all grade levels use a district-provided curriculum as base for providing dedicated specific instruction in these areas.

Several clubs on our campus also support student skills and knowledge. One of the most active clubs is Speech and Debate. RSA has both high school and middle school teams. Each team competes very successfully at the regional and state level. Science Olympiad is another key component of our extracurricular program. Students who are invited to be on the school team work for several months preparing for competitions and excel at all levels.

RSA high school offers an innovative engineering class known as ThinkTank. The goal of this class is to engage students and apply prior knowledge and skills through interdisciplinary real-world projects. Recently RSA was awarded a grant to build a "tiny house" as a part of the city of Riverside's homeless initiative.

3. Instructional Methods, Interventions, and Assessments:

Teachers research and employ a variety of instructional, intervention, and assessment methods to ensure that RSA students are achieving at a high level. Instructional methods include direct instruction, design thinking, mastery learning, project-based learning, cooperative learning, and student choice. A core belief is that students will succeed best when the academic disciplines are integrated.

Teachers meet for Professional Learning Community (PLC) meetings to research and share effective strategies to develop interdisciplinary learning opportunities with one another. Interdisciplinary projects are planned and executed through the core curriculum or STEMWorks in the middle school. ThinkTank in high school takes the interdisciplinary approach to its highest level by exposing the students to the integral relationship between humans (with their motivations, needs, wants, and desires) and the environment. Pursuing projects of choice exposes students to the work of engineers and designers as they use their growing knowledge to address real-world problems. In addition, students are required to incorporate learning from their other coursework into their projects.

Another strategy that teachers have been researching and increasingly incorporating is Mastery Learning. The academic acceleration at RSA makes it imperative that students master course material before moving on to the next level. Monitoring and assessing students and having them relearn and prove their mastery has helped ensure that students are meeting teaching objectives.

Additionally, teachers make sure students are hitting learning targets by offering a variety of intervention strategies. Individual teachers use classroom assessment to design intervention on core curriculum, and grade level teams meet weekly to identify students who are at risk in any class or skill. Intervention also happens in small group instruction during the 30-minute enrichment/intervention block four days a week in middle school, in focus group instruction within the class block, and before and after school tutoring provided by individual teachers or by UCR Science and Math Initiative students. Moby Max and Ten Marks are adaptive online programs used at the middle school level. These programs are designed to find and fix gaps in learning. Teachers use these both as formative assessment and as a tool for remediation. High school students are given a period of time each day to self-select an area of enrichment or intervention/support as needed. Teachers offer office hours, labs, class extension activities, study groups and quiet study periods. The academic counselor and grade-level staff leaders also monitor students and provide support as needed.

A Student Success Team and 504 Plan facilitator is available to work with teachers and parents of students with needs that require stronger intervention or accommodation.

Intervention cannot occur without ongoing assessment. This begins even prior to entering fifth grade at RSA through the proactive Summer Bridge program offered to all incoming students. Students are assessed in academic and technology skills, and instructional plans are created to address any possible weaknesses through the summer and during the upcoming school year.

Because the course design is so unique to RSA, the assessments must also be teacher-designed to accurately measure the objectives of specific lessons. The best assessments are performance-based and are scored with predetermined rubrics. These types of assessments are used across the curriculum. Assessment data is used to drive the next instructional unit.

Teachers also administer district and state assessments to ensure that our students are meeting the grade level standards and expectations required. State testing results put RSA among the top-achieving schools in the state. State assessments have shown an achievement gap among the subgroup of African-Americans in math and language arts, which we have addressed in our school action plan. This calls for a variety of strategies, including tutoring and focused intervention, use of software programs for differentiation of core content, and personalized and blended learning opportunities for highest-need students.

RSA is a high-performing school with a consistent focus on maintaining a rigorous program. Students are rewarded and recognized for their achievements in award ceremonies and student-of-the-month programs. Teachers help students take responsibility and ownership of their own learning, which motivates them to continue to achieve.

PART V – SCHOOL SUPPORTS

1. School Climate/Culture:

Riverside STEM Academy teachers are empowered and are committed to the overall success of the school's mission. Administration gives a high level of trust and freedom to the teachers. RSA was designed by teachers from the beginning and teacher innovation is a big part of our school's success. RSA administrators allow for a great deal of pedagogical freedom, which supports teachers to take risks and go outside traditional curricular boundaries. This is especially appreciated for ThinkTank and AP classes, and for cross-curricular co-taught projects that go beyond district scope and sequence. Teachers also have the power to use STEMWorks time to extend and enhance their own classroom curriculum to support their instruction. Administrators give the green light to projects that connect student learning across disciplines, and encourage any curricular ideas that allow for innovation and creativity from teachers and/or students. Teachers know that RSA staff are viewed as professionals and are supported and encouraged while 'coloring outside the lines.'

The school enjoys a cooperative, supportive, safe environment that nurtures learning. School culture is characterized by trust, professionalism, high expectations for all students, and a focus on continuous school improvement. The middle school staff encourages students through award ceremonies, spirit days, student of the month nominations, and DroidBucks given to students when they go above and beyond expectations. Staff members genuinely feel like a family and often connect before, between and after classes. Campus supervisors engage personally with students. Our small size allows adults to know kids' stories, to listen, to encourage and to support. Staff members, from the principal to the custodian, cultivate relationships with students. There are many opportunities, before classes, after school, and during the day, particularly because we have four different bell schedules and four separate lunch sessions.

We have a Student Assistance Program counselor who works with students on campus in both individual and group sessions. The SAP counselor helps students deal with personal issues and fosters positive social and group dynamics between peers.

RSA has a strong environment of leadership opportunities for teachers and for students. Both the middle and high school have Associated Student Body (ASB) organizations. The high school, with the guidance of ASB, has attended and hosted multiple "Synergy Days." The focus of these conferences is to gather students from within our school, within our district, or between districts to participate in activities that connect students, push them to forge relationships beyond "cliques" and share stories that stimulate empathy. Sessions also address issues such as stress management, traumatic life events, and bullying. In addition, we have an active Link Crew program, established by our ASB to recruit and train upperclassmen to ease the transition of new students to our campus and the high school experience. Link Crew members "adopt" freshmen, whom they shadow and guide through their first year at RSA.

RSA is also an active place for clubs and extracurriculars. We are currently running 23 active clubs, each started by students, in a variety of interest areas, including chess, video, Muse (to inspire the arts), California Scholarship Federation, Red Cross, Community Service, Nature Club, Speech and Debate, Japanese Culture, Future Business Leaders of America, Yearbook, Closet Thespians, Magic the Gathering, and Robotics. Students know that if they have a club idea to pursue, people with whom to pursue it, and an advisor willing to host them, they have the opportunity to explore and enjoy.

Several parents, staff and community members formed a STEM Foundation (a non-profit fundraising board) to provide funding sources for big projects. Proceeds from fundraising events directly benefit school programs, materials and facility needs. The Board is made up of parents, school staff, and members of the local business community, including Bourns Engineering, a large multinational corporation headquartered in Riverside. The Foundation also serves as a platform to highlight the importance of the STEM program in the community.

2. Engaging Families and Community:

RSA regularly involves families, businesses, and the community. The formation of the Academy was only made possible by strong community and parent advocates that put in time and effort to first initiate and to provide continual support to the school.

Strategies that have been most successful in involving and engaging families include our Parent/Teacher/Student Association, middle- and high-school level ASB programs, the use of designated middle and high school websites, and other social media such as Twitter, Facebook, and Instagram, as well as the interactive site PowerSchool Learning (PSL). Parents, industry leaders, community leaders, and partners including staff and professors from UCR are invited to be involved in various capacities. An RSA Foundation has also been developed to further involve community and business partners with our school.

All parents are trained by our Tech Specialist to access and use PSL to stay current with their students' coursework and grades. Teachers link syllabi, videos, slides, calendars, rubrics and other resources on PSL and input grades online. Special activities are announced through PSL, the RSA website, Facebook, emails and the PTSA newsletter. Grade level teams meet regularly to evaluate student progress and to involve parents in conferencing to meet, maintain, or celebrate that progress. Achievements are also celebrated with award ceremonies, ASB led Spirit Days, and daily announcements.

Parents and community members are encouraged to be involved with student success and school improvement by serving on the PTSA, the School Site Council, special evaluations groups such as WASC (Western Association of Schools and Colleges), and by becoming coaches and mentors for Science Olympiad and in our Speech and Debate program. The UCR Faculty is particularly involved in supporting the school goals. Faculty members write National Science Foundation grants, provide classwork through the Fellowships and Internships in Extremely Large Data Sets (FIELDS) scholarship funded by National Aeronautics and Space Administration and the Jet Propulsion Laboratory, facilitate mentorships, enroll students in the UCR Summer Academy, serve as mentors for research, and speak in our symposiums.

3. Professional Development:

The needs of students drive professional development at RSA. Teachers meet in groups to identify ways in which they can learn to meet the goals and needs of students more effectively. Training takes place at our school site, at the district level, or sometimes in conferences on a national scale. Although there is professional development that all staff members attend, most training varies by individual. This individualized program of professional development reflects the individualized program and choice we emphasize with our students. Staff development goals are written into the School Action Plan.

Professional development is provided through the leadership team, our weekly Professional Learning Communities meetings, and through the district professional development department which allows teachers to sign up for courses offered in a variety of disciplines. RSA teachers participate in our district Professional Development days at the beginning of each school year. Additionally, teachers have used the district Professional Development Hub to take classes on topics such as addressing needs of Autism Spectrum Students in the regular classroom, curricular technologies, Google Expeditions, and Close Reading and Math strategies. At the weekly PLC meetings, teachers rotate in providing trainings on instructional methods, technology applications, or new standards. In addition, our teacher leaders have arranged for district professional developers to come and provide targeted inservices in addressing needs of second language learners and more advanced technology applications. Individually, teachers have received professional development FOSS science instruction, CSTEM programming, Backwards Design, Career and Technical Training and Project Lead the Way among other topics. Counselors and supervisors all receive training in working with students. Principals and other administrative leaders attend district, state, and national conferences to build and strengthen their capacity for teaching and leading.

4. School Leadership:

The leadership philosophy at STEM is one of shared leadership. One thing that makes our school unique is the degree to which the staff plays an active role in curriculum development, master schedule creation, and budget prioritization. Our school administrative structure is traditional, but the interaction between administration and school leaders is not. Both at the middle school and the high school, each grade level team has a Team Leader. Team Leaders meet biweekly with the Principal, Assistant Principal, and Program Coordinator. While these meetings are a place to take care of “nuts and bolts” agenda items, their main purpose is on building leadership capacity. Over the years, the principal has led the leadership team through a variety of book studies focusing on leadership strategies. These have included Good to Great by Jim Collins and Strengths Based Leadership by Tom Rath and Barry Conchie. Our principal firmly believes in hiring great people and giving them the freedom to perform.

Student achievement has and will continue to be the focus for the leadership at RSA. Leaders frequently facilitate opportunities for teacher growth. Teachers mentor each other by monitoring and modeling classroom instructional practices (such as flipped instruction and Socratic seminar), spearheading teams and research projects, and providing or organizing ongoing professional development in areas identified by teachers. Team leaders also enable discussions on individual student achievement and help develop academic and behavioral plans to help students build on current skills.

Students are encouraged to take the lead in their own learning through student choice in projects and student voice in PTSA and ASB. The students at RSA have been successful using the shared leadership method. Students have excelled in academics by earning college scholarships and awards in competition, in the arts by participating in District Honor Band, Theater Groups and District Art competitions, in society and community by leading Red Cross Projects and participating in Think Tank activities to better the world.

Part VI – STRATEGIES FOR ACADEMIC SUCCESS

The one practice that sets our school apart and is most instrumental in our success is having the freedom, flexibility and opportunity to create. Because we are a unique educational entity, we can devise schedules, programs, curricula, activities, groupings, materials, timings, and placements. All of us are involved in the process: administration, teachers, support staff, and students alike. We are an evolving laboratory where students see and are inspired by the freedom to create and innovate.

Since the inception of RSA, our administration has set the tone for shared leadership. Building a motivated and skilled staff dedicated to our STEM focused mission has always been a priority. A school community based on mutual respect and trust among all stakeholders gives us the freedom to innovate, create, and inspire.

Everything about our school is designed by teachers to meet the needs of students. Our bell schedule, block scheduling in the high school, STEMWorks elective classes and other inventions, all have been created to reflect our mission. Our STEMWorks program in the middle school was born out of the knowledge that our rigorous academic schedule needed to include time for wonder and creativity. STEMWorks gives students choice and voice to personalize their own learning. We also have the opportunity to offer some unique classes, such as ThinkTank in the high school, which gives students opportunities to use their acquired knowledge to solve real-world problems.

For RSA, the freedom to create an inspiring educational environment has resulted in engaged and successful students. Their test scores and college admittance rate are only a part of the story. We can also point to meaningful relationships built over many years, through trust and respect within our school and in our community. The goal of our freedom, flexibility and opportunities will continue to be to prepare students for STEM majors while always encouraging their sense of wonder and fostering their joy of learning.