MONTWOOD H S

T-STEM Renewal Application

2020-2021

Contents

Background

District Affiliation

SOCORRO ISD

CD #: 071909
Region: 19
Mailing Address (Line 1):12440 ROJAS DR
Mailing Address (Line 2):
City, State, Zip: EL PASO, TX 79928

School Affiliation

MONTWOOD H S

CDC #: 071-909-002
Region:
Mailing Address (Line 1): 12000 MONTWOOD
Mailing Address (Line 2):
City, State, Zip: EL PASO, TX 79936

MONTWOOD MIDDLE

CDC #: 071-909-045
Region:
Mailing Address (Line 1): 11710 PEBBLE HILLS
Mailing Address (Line 2):
City, State, Zip: EL PASO, TX 79936

WILLIAM D SLIDER MIDDLE

CDC #: 071-909-043
Region:
Mailing Address (Line 1): 11700 SCHOOL LN
Mailing Address (Line 2):
City, State, Zip: EL PASO, TX 79936

Academy Information

What is the academy name?

Montwood Synergi4 T-STEM Academy

Which model does the district intend to implement at this time? Within these models, there are variations.

School-Within-School: Multiple Campuses - A subset of students in grades 6-12 are enrolled in the academy. This model typically spans a middle school and high school. This may also be applicable if 9th grade is on a separate campus due to physical space issues.

Grade Levels Served

What grade level(s) will your academy plan to serve in the 2020-2021 school year?

6
7
8
9
10
11
12

Enter the number of students that you plan to serve in 6th grade.

78

Enter the number of students that you plan to serve in 7th grade.

58

Enter the number of students that you plan to serve in 8th grade.

41

Enter the number of students that you plan to serve in 9th grade.

98

Enter the number of students that you plan to serve in 10th grade.

89

Enter the number of students that you plan to serve in 11th grade.

82

Enter the number of students that you plan to serve in 12th grade.

67

Contacts

Applicant

Applicant 1

Job Title

Assistant Principal/T-STEM Administrator

Name Prefix

Mr.

First Name

Orlando

Last Name

Hairston

Email

ohairs@sisd.net

Phone

915-937-2701

Principal

Principal 1

Name Prefix

Mr.

First Name

Carlos

Last Name

Guerra

Email

CGUERR08@SISD.NET

Phone

915-937-2400

Superintendent

Superintendent 1

Name Prefix

Dr.

First Name

Jose

Last Name

Espinoza

Email

jespin01@sisd.net

Phone

915-937-0000

Narratives

Current Designations at SOCORRO ISD:

- SOCORRO H S - ECHS - 1516
- MONTWOOD H S - ECHS - 1617
- MONTWOOD H S - T-STEM - 1415
- AMERICAS H S - ECHS - 1718
- EL DORADO H S - ECHS - 1819
- MISSION EARLY COLLEGE H S - ECHS - 0607
- EASTLAKE H S - ECHS - 1819
- EASTLAKE H S - T-STEM - 1819
- PEBBLE HILLS H S - ECHS - 1819

Previous Planning Year Applications at SOCORRO ISD:

Narratives

The majority of the following questions will be narrative response. Narrative responses are limited to a maximum of 250 words. We recommend writing your responses in a text-editing software such as Microsoft Word and then pasting your responses into the website when they are complete. Progress to the next section when you are ready.

Narratives: Degrees and Credentials

Degrees and Credentials

Select the Career Cluster(s) that your academy plans to offer in 2021-2022.

Health Science
Information Technology
Manufacturing
STEM

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Bio-Medical Science

Select the Program(s) of Study your academy plans to offer in 2021-2022.

Programming and Software Development

Select the Career Cluster(s) that your academy plans to offer in 2021-2022.

Engineering

Select the Career Cluster(s) that your academy plans to offer in 2021-2022.

Biomedical Science

Which of the following credential(s) does the academy plan to offer students in 2021-2022 school year?

IC

What industry certifications does the academy plan to offer?

Item

Autodesk Certified Professional or User in AutoCAD

Medical Laboratory Technician

Certified SolidWorks Associate (CSWA)

Does the IHE partner currently have an articulation agreement with a four-year IHE detailing how a student's associate degree and accrued credits could lead to a baccalaureate degree?

Yes

Provide the university name that your IHE partner has an articulation agreement with and the bachelor degree that students could earn using their associate degree and accrued credits. Each row represents a degree.

2-Year Degree	University	4-Year Degree
AA Criminal Justice	University of Texas at El Paso	BA Criminal Justice
AS Biological Science	University of Texas at El Paso	BS Biology
AA Psychology	University of Texas at El Paso	BA Psychology

Narratives: Strategic Partnerships: IHE, Strategic Partnerships: Business Partner

Strategic Partnerships: IHE

IHE Partner 1

Affiliation

El Paso Community College

Name Prefix

Ms.

First Name

Tonie

Last Name

Badillo

Email

mbadill4@epcc.edu

Phone

915-831-6755

Job Title

Dean of Dual Credit and Early College High Schools

The T-STEM academy shall have strategic partnerships with business and industry partners and Institutions of Higher Education (IHEs) that are formally articulated in writing and clearly define a variety of STEM careers.

Describe how the IHE articulation agreement addresses the following IHE Blueprint Requirement: Curriculum alignment and courses of study, which enables a student to combine high school courses and college-level courses to earn either an associate degree, postsecondary certificate provided by an IHE, or industry certification.

The articulation agreement between Socorro Independent School District and El Paso Community College (EPCC) outlines the eligible courses Synergi students can take in Section 2 Eligible Courses. Synergy students have access to courses identified as College-level academic courses in the current edition of the EPCC Catalog or as a College-level workforce education course in the current edition of the Workforce Education Course Manual (WECM). WECM courses lead to a postsecondary certificate provided by El Paso Community College. All courses that are approved for dual credit must be applicable to a College or University certificate or degree. Every College course a student takes for dual credit is paired with an equivalent high school course. Equivalency is determined by matching the College learning objectives to the TEKS. In cases where the courses have a significant overlap or match, the College course may count as dual credit. Any TEKS not covered by they College course will be taught by the high school and accounted for separately from the required content of the College course.

Describe how the IHE articulation agreement addresses the following IHE Blueprint Requirements: Policies for: 1) advising students on the transferability of all college credit offered and earned, 2) ensuring the IHE transcripts college credit earned through dual credit in the same semester that credit is earned, 3) advising students as to the transferability and applicability to baccalaureate degree plans for all college credit offered and earned (college credits earned during high school should allow students to progress from an associate degree to a bachelor's degree and beyond in their chosen field), 4) students accessing the IHE facilities, services and resources

All Montwood's Synergi4 students have access to EPCC Student Services including EPCC counseling services. Montwood's Synergi4 student's dual credit courses are transcribed onto the highschool transcript as outlined in Section 10 of the articulation agreement. When students take college courses at EPCC, the Montwood's Synergi4 Counselor and administrator are responsible for transcribing student grades following policy EIC(LOCAL). Students who take college classes at Montwood High School with a credentialed SISD teacher have their grades transcribed automatically through the student information system. All grades adhere to the requirements outlined in the IHE syllabus as well the appropriate grade conversion for the high school grade as stated in policy EIC(LOCAL). All Montwood's Synergi4 students have full access to El Paso Community College Student services as outlined in Section 9 of the agreement. Student services provided by EPCC include the issuance of an EPCC ID, access to EPCC's online library databases, materials, and resources, on-campus tutoring centers, Academic Computer Services labs and libraries, access to participation in student government and clubs.

Describe how the IHE articulation agreement addresses the following IHE Blueprint Requirements: Transportation costs and fees including provisions for discontinuing operation while ensuring students previously enrolled will have opportunity to complete their course of study.

Transportation costs are covered by SISD's Career and Technical Education Department on an as needed basis. Fees for face to face dual credit students are waived and for those classes taught by an EPCC instructor online with an SISD facilitator, a $100 fee is assessed per student. The current agreement between SISD and EPCC runs on a three-year cycle and is revised on an as needed basis.

Describe how the IHE articulation agreement addresses the following IHE Blueprint Requirements: Data sharing agreement that includes provisions for teacher data such as qualifications and student level data such as credit hours taken and earned, GPA, formative data to assess if student is on track for college readiness

Data is shared and collected for required reporting purposes and for internal purposes to include student level data. The school district, the IHE, and other regional education partners agree to share any data required for the successful completion of the Montwood's Synergi4 High School students' graduation plans and with the hiring of qualified staff members for dual credit teaching assignments. When sharing teacher data for qualifications, El Paso Community College discipline faculty will serve on the Montwood's Synergi4 teacher hiring committees The school district and El Paso Community College will collect and review the following disaggregated data: number of credit hours taken and earned; GPAs; End of Course results; SAT/ACT/PSAT; TSI readiness by grade level; qualifications of early college staff; and the location(s) where courses are taught. Any program improvements are based on the collection, review, and sharing of the following data: EPCC data; SISD data; articulation of high school students in four-year colleges/universities and level of entry and enrollment/retention rates; and leaver codes and attrition rates by grade level. Additionally, Montwood's Synergi4 will participate in instruction success and facility satisfaction surveys. Survey data is shared by EPCC the semester following the evaluations and may be used in program improvements.

Strategic Partnerships: Business Partner

Business/Industry Partner 1

Affiliation/Company

The Libre Initiative

Job Title

Senior Field Director

Name Prefix

Mrs.

First Name

Karla

Last Name

Sierra

Email

ksierra@belibre.org

Phone

915-218-4692

Describe how the Business/Industry articulation agreement addresses the following Business/Industry Blueprint Requirements: Clear roles and responsibilities for work site supervisors, mentors, teachers, support personnel, and other partners.

Synergi4 has a business/industry articulation agreement with The Libre Initiative the clearly meets the expectation of the blueprint. Through this agreement, The Libre Initiative provides mentors for our students as well as financial literacy workshops for students and parents. Guest speakers from various STEM fields and other career fields are scheduled by the Libre Initiative to present to our students. The Libre Initiative provides apprenticeships for our teachers during the summer. These apprenticeships allow our teachers to receive real world experiences to better prepare our students upon entering the workforce. The Libre Initiative also provides internships for our students in different career fields from engineering to business marketing during the summer before their senior year as well as during their senior year. Students who complete the financial literracy program and/or the internship program are recognized by The Libre Initiative at our end of the year banquet.

Describe how the Business/Industry articulation agreement addresses the following Business/Industry Blueprint Requirements: Support for students' activities, such a clubs, Career and Technical Student Organizations, competitions, and special invitations.

The Libre Initiative provides guidance and support in all Synergi4 T-STEM Academy student activities and events. Our students participate in many co-curricular and extra-curricular STEM related events such as FIRST Robotics competition; VEX Robotics competitions, HOSA-Future Health Professionals, Skills USA and TSA Technology Student Association. Students are expected to participate in these clubs and organizations to improve their communication skills, critical thinking skills, collaboration skills, presentation skills, engineering and biomedical skills. Throughout these competition and leading up to them The Libre Initiative is there providing input and feedback to our academy students by conducting workshops for all and by meeting with students one on one to assist them with competition strategies.

Describe how the Business/Industry articulation agreement addresses the following Business/Industry Blueprint Requirements: Student access to business and industry partners and work-based learning facilities, services, and resources.

The libre Initiative along with the Engineering Department at the University of Texas at El Paso provides opportunities work-based learning facilities during the summer through their ExciTES program. Students are introduce to electrical, material, mechanical and civil engineering inquiry base and team-oriented projects. Students conduct these experiments in UTEP laboratories and work with UTEP faculty on these projects. The libre Initiative also works with other business partners that open their doors for our students to gain work-related experiences by job shadowing their employees for a day. The El Paso Electric and Gas Company are two partners through the Libre Initiative that supports this initiative.

Describe how the Business/Industry articulation agreement addresses the following Business/Industry Blueprint Requirements: Transportation fees and costs.

Most Transportation costs are covered by SISD's Career and Technical Education Department on an as needed basis. The Libre Initiative provides transportation and covers the cost of some of the events that they provide.

Narratives: Regional Workforce Alignment, Work-Based Learning

Regional Workforce Alignment

List the regional high-demand occupations your academy intends to address through selected program(s) of study and work-based learning.

Regional High-Demand Occupation
Computer Systems Analysts
Medical and Clinical Laboratory Technologists
Mechanical Engineers

Work-Based Learning

Complete the activity tables below illustrating the work-based learning activities that your academy plans to offer students at each grade level. Please ensure the activities are STEM focused.

Add up to three activities offered to 6th grade students.

6th Grade Activities
Crime lab visit
Technology Student Assoication Competition
First Robotics and VEX Competition

Add up to three activities offered to 7th grade students.

7th Grade Activities

H2O Center visit

Technology Student Assoication Competition

First Robotics and VEX Competition

Add up to three activities offered to 8th grade students.

8th Grade Activities

High School Visit to view STEM programs opportunities

Technology Student Assoication Competition

First Robotics and VEX Competition

Add up to three activities offered to 9th grade students.

9th Grade Activities

College visit to The University of Texas at El Paso

College visit to New Mexico State University

Add up to three activities offered to 10th grade students.

10th Grade Activities

College visit to Universities in East Texas.

Summer Engineering Camp with UTEP and Summer Biomedical Camp with Texas Tech

Add up to three activities offered to 11th grade students.

11th Grade Activities

Internship with a local business partner

College visit to universities in Arizona

Add up to three activities offered to 12th grade students.

12th Grade Activities

Engineering and Biomedical Capstone

12th Grade Activities

Narratives: Advanced Academics

Advanced Academics

Select the type of advanced courses (dual credit/AP/IB) your campus plans to offer students in 2021-2022.

DC
AP

What type of dual credit courses does your campus plan to offer?

AGCM

Describe any challenges in ensuring your academy has educators with qualification to teach dual credit. What steps did your academy take to address the need?

Recruiting and retaining educators who are credentialed through the Southern Association of Colleges and School Commission on Colleges (SACSCOC) is on of the greatest challenges facing Montwood's Synergi4. When a credentialed teacher leaves, it is very difficult to find teachers who have the correct SBEC certificate and SACSCOC credentialing. To address these challenges, the district has implemented a dual credit teacher scholarship. Through a partnership with the University of Texas at El Paso (UTEP), SISD has implemented a Dual Credit Scholarship where interested teachers apply for and take graduate level coursework that leads to credentialing in areas of high demand such as biology and economics. To address retention of credentialed staff, teachers who go receive the Dual Credit Scholarship must commit to three years with the district upon credentialing and receive a stipend for each dual credit section they teach. At the campus level, the Montwood's Synergi4 assistant principal supports the dual credit scholarship by identifying future courses based on students to recruit teachers to apply for the scholarship. To support current staff, EPCC hosts faculty and online facilitator workshops at the beginning of each college term as well required discipline meetings that include learning objective and syllabus updates. The Montwood's Synergi4 assistant principal also provides specific professional development for the faculty to enhance classroom instruction and provide TSI workshops. With the combined efforts of the campus, district and IHE, the district continues to recruit, educate and place credentialed teachers in the early college.

Is the academy a TSIA testing site?

Yes

Narratives: STEM-Focused Extracurriculars, Student Support

Student Support

Provide examples of how the campus plans to provide students with academic services. List activities and brief descriptions of the activities. Add a new row for each provided service.

Activity	Description
Morning, Lunch and After School Tutoring	College tutors are hired to provide Montwood Synergi4 students with academic support at Montwood High School.
Intersession Boot Camps	Week long TSIA boot camps are help in October, March and June to assist students with TSIA preparation.
Advisory Period	Montwood Synergi4 students are enrolled in an advisory period once a day all year long. This course is design to be used as a intervention period to assist students with their studies

Provide examples of how the campus plans to provide students with wrap-around services. List activities and brief descriptions of the activities. Add a new row for each wrap-around service.

Activity	Description
Monthly Leadership Socials	Montwood Synergi4 officers are invited to participate in monthly leadership socials hosted by varies organization at Montwood High School.
Middle School Presentation	During recruitment months presentation are scheduled at the middle schools to present to parents and students and answer any questions.
Parent Universities	Parent meetings are scheduled to inform parents of important items taking place during this time. Guest speakers come in to present to parents. During this time we also have sessions for parents and students that address social and emotional learning.

How does your academy use the access, achievement, and attainment data for program improvement?

Montwood's Synergi4 uses the access, achievement, and attainment data as guides toward our program improvement plan. All stakeholders are aware of the blueprint and the OBM associated with each of these areas. Campus personnel are consistently reviewing the data and implementing different

interventions and strategies to obtain them.

STEM-Focused Extracurriculars

Describe the STEM-focused extracurricular activities (field experiences, clubs, and competitions) offered to students.

Montwood's Synergi4 students have many co-curricular and extra-curricular STEM related opportunities to participate in through the program. Our Robotics team participates in the FIRST Robotics competition, VEX Robotics competition, NM Best competition and in other local robotics events. Students are also provided the opportunity to participate in HOSA-Future Health Professionals, Skills USA and Technology Student Association (TSA). These Career Technology Student Organizations (CTSOs) provide our students with opportunities to compete in STEM related and health science related competitions. Our Career and Technology department supports these organizations and students are encourage to become members of at least one these organizations. Montwood Synergi 4 students are also required to participate in internships throughout the program and present a capstone project to a panel of industry professionals through their senior PLTW course of Engineering Design and Development and Biomedical Innovation. Other clubs and competition available with a STEM focus that students are encourage to participate in are Destination Imagination, UIL Math and Science, and Science Fair.

Narratives: Leadership Team

Leadership Team

List the Leadership Team's three priorities for the next year and describe how the selected priority contributes to the academy's success. Each priority should be a benchmark from the ECHS/T-STEM/P-TECH Blueprint.

Benchmark	Description
Benchmark 2	Ensuring we target the correct population demographic to meet our OBM
Benchmark 3	Improving our relationships with current alliances and establishing more business and industy partnerships
Benchmark 5	Improving our work base learning opportunities

Narratives: Benchmark 1 Products, Benchmark 2 Products, Benchmark 3 Products, Benchmark 4 Products, Benchmark 5 Products, Benchmark 6 Products, Benchmark Products

Benchmark Products

Benchmark 1 Products

Provide a link to the academy's mentor/induction program plans.

https://www.sisd.net/Page/60363

Provide a link to the academy's annual training or professional development plan with the academy and IHE faculty

https://www.sisd.net/Page/60363

Provide a link to the academy's leadership meeting agendas and notes.

https://www.sisd.net/Page/60363

Benchmark 2 Products

Provide a link to the academy's written admission policy and enrollment application

https://www.sisd.net/Page/60363

Provide a link to the academy's written recruitment plan including a timeline of recruitment and enrollment events, and recruitment materials for distribution at feeder schools and other

appropriate locations in the community.

https://www.sisd.net/Page/60363

Provide a link to the academy's brochures and marketing in Spanish, English, and/or other relevant languages.

https://www.sisd.net/Page/60363

Provide a link to the academy's written recruitment plan including a timeline of recruitment and enrollment events, and recruitment materials for distribution at feeder schools and other appropriate locations in the community.

https://www.sisd.net/Page/60363

Benchmark 3 Products

Provide a link to the academy's meeting agendas and minutes, with action items and decision logs.

https://www.sisd.net/Page/60363

Provide a link to the academy's final, signed, and executed MOU with their industry partner/business.

https://www.sisd.net/Page/60363

Provide a link to the academy's final, signed, and executed MOU with their IHE

https://www.sisd.net/Page/60363

Provide a link to the academy's list of strategic partners with each member's organization, title and role in providing work-based learning for students by grade level.

https://www.sisd.net/Page/60363

Benchmark 4 Products

Provide a link to the academy's four-year crosswalk document

https://www.sisd.net/Page/60363

Provide a link to the academy's master schedule.

https://www.sisd.net/Page/60363

Provide a link to the academy's curriculum alignment documents.

https://www.sisd.net/Page/60363

Provide a link to the academy's testing calendar and schedule for TSI, ACT, SAT or other assessments.

https://www.sisd.net/Page/60363

Provide a link to the academy's documentation detailing a minimum of three course of study examples that outline student pathways from high school, to associate degrees, to work credential and beyond.

https://www.sisd.net/Page/60363

Benchmark 5 Products

Provide a link to the academy's documentation of appropriate work-based learning expereinces for students at all grade levels.

https://www.sisd.net/Page/60363

Provide a link to the academy's current dated regional high demand occupation list.

https://www.sisd.net/Page/60363

Provide a link to the academy's aggregate data describing student participation in work-based learning experiences as well as percentage of students earning industry certification and credentials by type.

https://www.sisd.net/Page/60363

Provide a link to the academy's samples of student artifacts such as writing, portfolios, presentations, or links to digital content.

https://www.sisd.net/Page/60363

Benchmark 6 Products

Provide a link to the academy's bridge program calendar and curricula.

https://www.sisd.net/Page/60363

Provide a link the academy's tutoring and other intervention/remediation program schedules,

https://www.sisd.net/Page/60363

Provide a link to the academy's calendar of family outreach events.

https://www.sisd.net/Page/60363