Application for T-STEM Designation - New/Provisional

2017-2018

Contents

Texas Education Agency
Application for T-STEM Designation
Statutory Authority: Texas Education Code §39.235

Overview of Designation

In order to operate as a Texas Education Agency (TEA)-approved Texas - Science, Technology, Engineering, and Math (T-STEM) Academy, a district must seek and receive T-STEM designation from TEA. In order to receive the T-STEM designation, a school must exhibit key traits from the T-STEM Academy Design Blueprint included in this application. The intent of this designation is to ensure that districts operating T-STEM Academies: integrate all the key characteristics of well-researched and well-designed STEM education while serving students who may not have otherwise considered the fields of science, technology, engineering, and math.

Benefits of Designation

Recognition as an Approved T-STEM Academy:
Schools designated by TEA as state-approved T-STEM Academies will receive various forms of media recognition including, but not limited to: identification on TEA's website as a state-approved T-STEM Academy and recognition in press releases.

Participation in T-STEM Convenings:
Special events hosted by TEA for T-STEM Academy administrators and principals to provide input on policies and procedures that impact T-STEM Academies.

Membership in the T-STEM Network:
Frequently opportunities are provided for principals, teachers, and students in designated T-STEM Academies through the T-STEM network to share best practices through conferences and technical assistance sessions. Membership in the T-STEM Network allows T-STEM Academies to access online exemplars, professional development, and webinars.

Access to Professional Development and Technical Assistance:
Designated T-STEM academies will have access to high-quality technical assistance which includes advice and information from a Leadership Coach who has successfully facilitated the design and implementation of the majority of T-STEM Academies operating in Texas.

Strength of T-STEM Model:

- Through the designation process, TEA will recognize those T-STEM Academies that effectively incorporate T-STEM Design Blueprint elements. The designation process will enable districts and their partners to engage in the research and planning necessary to ensure that their T-STEM Academies are set up in the most effective way possible.
- The T-STEM Blueprint provides a framework for T-STEM Academies to access college and career opportunities that support post-secondary success.

Questions about Completing the Application

Who can fill out a T-STEM Academy designation application?

Any district or charter school campus may apply to be designated as a T-STEM Academy. Potential applicants are encouraged to carefully review the T-STEM Design Blueprint to determine readiness for implementation of the model.

Any district or charter school campus that is utilizing 2016-2017 as a planning year, and if designated will beginning implementation at the beginning of the 2017-2018 school year.

Will have to fill out the same application each year?

No. New designation applicants and those T-STEM Academies that are provisionally designated will complete the comprehensive form. T-STEM Academies that are fully designated must complete the abbreviated T-STEM designation application yearly. The abbreviated renewal application will require a designated T-STEM Academy to provide updates regarding changes in the design and operation of the Academy. However, the primary focus of the annual renewal will be to gather evidence on the Academy's progress along the T-STEM Academy Design Blueprint continuum.

Will this application be required for T-STEM Academy grantees in the future?

Yes. In future funding cycles, completion of this application will be a program requirement for T-STEM Academy grant recipients.

Who can I contact for help filling out this application?

- **New applicants** may contact the T-STEM Program Manager at tstem@tea.state.tx.us.
- **2016-2017 designated T-STEM Academies** may contact their current T-STEM coach.

Application Information

General Information:

- A district or charter must submit a separate application with the required attachments on behalf of each proposed T-STEM Academy.
- The application must be submitted via the online system by **5:00pm, March 31st, 2017**
- A campus must be designated prior to the beginning of the school year in order to operate as a T-STEM Academy for that year. T-STEM Academy approval is valid for a maximum of one year. T-STEM Academy designated must be applied for each year via the TEA T-STEM designation process.

Timeline & Process:

- March 31st, 2017: Applications are due to TEA in order to open a campus as a designated T-STEM Academy during the 2017-2018 school year.
- June 2017: Districts submitting applications by March 31st, 2017 will be notified of the selection or non-selection of the campus as a designated T-STEM Academy on or about June 2017. Applications submitted prior to the March 31st, 2017 deadline may be approved prior to June 2017.
- The district will receive a notification letter of selection or non-selection for each campus it proposes to operate as a T-STEM Academy.

Required Attachments:

- **Official signature:** Official signature of a district or charter official authorized by the local board to bind the applicant organization in a legally binding contractual agreement.

Required Supporting Documents:

- The Academy must have current versions of the following documents on file.
- Each applicant is required to provide an assurance that each of the supporting documents is current for the 2017-2018 school year, signed by all parties, and provides detailed information regarding the specific assurance.
  - **Dual Credit MOU**
  - **Professional Development Plan**
  - **Business/Industry Agreement**
  - **2017-2018 Master Schedule**

Questions:

T-STEM Program Manager
tstem@tea.state.tx.us

Required T-STEM Academy Design Program Elements

The following design elements are the minimum required components that must be demonstrated through this application in order to be designated as a T-STEM Academy:

- A campus must be designated prior to the beginning of the school year to operate as a TEA designated T-STEM Academy for that year. T-STEM Academy designation is valid for a maximum of one year school year. Any campus wishing to be a designated T-STEM Academy must apply each year via the TEA T-STEM designation process.
- The T-STEM Academy must serve grades 9 through 12 and may serve grades 6, 7, and 8.
  - If an academy implements a 9-12 model, it must at least serve students in 9th grade.
  - If an academy implements a 6-12 model, it must, at a minimum, serve students in 9th grade and a middle school grade.
- A campus will select their campus model from one of the options below:
  - Stand-Alone Academy Single Campus: All students are enrolled in the T-STEM Academy.
  - Stand-Alone Academy Multiple campuses: All students on each campus are enrolled in the T-STEM Academy. This model typically spans a middle school and a high school for those academies that are serving students in grades 6-12.
  - School-within-School: A subset of student enrolled in grades 9-12 are enrolled in the T-STEM Academy.
  - School-within-School Multiple Campuses: a subset of students in grades 6-12 are enrolled in the T-STEM Academy; this model typically spans a middle school and a high school
  - School-within-School Other Grade Levels: all students enrolled in grades 6-12 or 9-12 are enrolled in the T-STEM Academy but other grade levels exist on the campus (such as grades K-5).
  - Other: Applicant must describe their model in detail.
- All designated T-STEM Academies are required to report student enrollment on the PEIMS Indicator during submission 1 (Fall Snapshot), 3, and 4. Submission data must be in alignment with the model selected above.
- A campus must implement during the initial designation year. Campuses that intend to enter a planning year should not apply for designation until they are ready to begin implementation.

I. Mission Driven Leadership:

- The Academy's mission statement and planned advisory board must reflect the mission and vision of the T STEM Initiative.
- The Academy must use program review and formative evaluation to achieve its mission and goals.
- The Academy must promote leadership development and collaboration within the Academy and T-STEM Network.
- For Academies that include 6th, 7th, and 8th grades, leadership teams from the middle school and high school must collaborate on a regular basis.

II. Academy Culture and Design:

- The T-STEM culture must foster positive student identities through meaningful adult and peer relationships.
- All students graduating from the Academy must be prepared for postsecondary coursework and careers in the STEM fields through the integration of the Governor's economic workforce clusters and AchieveTexas STEM cluster into the curriculum.
- The Academy must support all students to graduate high school with four years of math, four years of science, four years of STEM electives, an Endorsement (with a primary focus on STEM endorsements), and a Performance Acknowledgement for a Distinguished Level of Achievement.

III. Student Access, Success, and Persistence:

- The Academy must have a clear plan for student support and success to achieve persistence rates above 70%.
- The Academy must instill the expectation that students expand their participation and leadership in STEM activities outside the classroom and provide the opportunity to do so.

IV. Teacher Selection, Development, and Retention:

- The Academy faculty must possess extensive subject knowledge and integrate project based learning (PBL) and STEM pedagogy into the classroom.
- The Academy must adopt and implement a plan for sustained professional development.

V. Curriculum, Instruction, and Assessment:

- The Academy must align curriculum, instruction, and assessment to provide students with rigorous STEM focused instruction.
- The Academy must deliver Innovative STEM programs that are well-defined, embed critical thinking and problem solving, foster innovation and invention, and are aligned to state and/or national standards, and industry expectations.
- The Academy must integrate science, technology, engineering, and mathematics throughout the curriculum.
- The Academy must continually monitor student progress through assessments and data collection.
- The Academy must promote STEM literacy and prepare students with 21st Century skills.
- The Academy must support three years of STEM electives at middle school and four years of STEM electives at high school.

VI. Strategic Alliances:

- The Academy must promote family involvement in student success.
- The Academy must integrate business partnerships into the curriculum and student learning experience.
- The Academy must partner with IHEs and college/career-preparation entities to ensure that students graduate with college credits and prepared for postsecondary success.

VII. Sustainability and Advancement:

- The Academy must have a plan for continuous improvement and growth.
- The Academy must adopt and implement a plan for sustained professional development.

Scoring of the Application

- Each applicant will be reviewed by T-STEM subject-matter experts from across the state.
- New applicants will be reviewed based on the proposed plan and a follow up with the applicant, if necessary.
- Each applicant will receive a notification letter from TEA indicating which designation category it has been assigned: Designated, Provisionally Designated, or Denied.
- The T-STEM Academy Design Blueprint has been consolidated in the application to highlight priorities for the planning period of designation. Applicants should focus on the benchmarks presented in answering the questions.

CONTACTS

1.1 T-STEM Academy

T-STEM Academy Name	Tekoa Academy of Accelerated Studies STEM School
Mailing Address - Line 1	326 THOMAS BLVD
Mailing Address - Line 2	
Mailing City	PORT ARTHUR
Mailing Zip Code	77640

1.2 School District

School District name	TEKOA ACADEMY OF ACCELERATED STUDIES STEM SCHOOL
Mailing Address - Line 1	326 THOMAS BLVD
Mailing Address - Line 2	
Mailing City	Port Arthur
Mailing Zip Code	77640

1.3 Education Service Center Region

05

1.4 Person Completing this Application

Name Prefix	Ms.
First Name	HALIMA
Last Name	TAYLOR
Job Title	TSTEM ACADEMY DIRECTOR
Phone	(409) 982-5400
Email	HTAYLOR@TEKOACHARTERSCHOOL.ORG

1.5 Academy Principal/Director

Name Prefix	Dr.
First Name	PAULA
Last Name	RICHARDSON
Job Title	PRINCIPAL
Phone	(409) 982-5400
Email	PRICHARDSON@TEKOACHARTERSCHOOL.ORG

1.6 Superintendent

Name Prefix	Dr.

First Name	PAULA
Last Name	RICHARDSON
Phone	(409) 982-5400
Email	PRICHARDSON@TEKOACHARTERSCHOOL.ORG

1.7 T-STEM Academy Partner Information

Institute of Higher Education Partner (dual credit provider)	Lamar State College
STEM Business Community Industry Partner	Melvin White

1.8 Authorized School District or Charter Official

Name Prefix	Dr.
First Name	PAULA
Last Name	RICHARDSON
Job Title	CEO/PRINCIPAL
Phone	(409) 982-5400
Email	prichardson@TEKOACHARTERSCHOOL.ORG
Uploaded Signature	View Uploaded Document

Provisions and Assurances Agreement

If designated, the T-STEM Academy assures the following the minimum required components will be implemented in the2017 school year.

- A campus must be designated prior to the beginning of the school year to operate as a TEA designated T-STEM Academy for that year. T-STEM Academy designation is valid for a maximum of one year school year. Any campus wishing to be a designated T-STEM Academy must apply each year via the TEA T-STEM designation process.
- The T-STEM Academy must serve grades 9 through 12 and may serve grades 6, 7, and 8.
  - If an academy implements a 9-12 model, it must at least serve students in 9th grade.
  - If an academy implements a 6-12 model, it must, at a minimum, serve students in 9th grade and a middle school grade.
- A campus will select their campus model from one of the options below:
  - Stand-Alone Academy Single Campus: All students are enrolled in the T-STEM Academy.
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  - Other: Applicant must describe their model in detail.
- All designated T-STEM Academies are required to report student enrollment on the PEIMS Indicator during submission 1 (Fall Snapshot), 3, and 4. Submission data must be in alignment with the model selected above.
- A campus must implement during the initial designation year. Campuses that intend to enter a planning year should not apply for designation until they are ready to begin implementation.

1. Mission Driven Leadership:
   - The Academy's mission statement and planned advisory board must reflect the mission and vision of the T STEM Initiative.
   - The Academy must use program review and formative evaluation to achieve its mission and goals.
   - The Academy must promote leadership development and collaboration within the Academy and T-STEM Network.
   - For Academies that include 6th, 7th, and 8th grades, leadership teams from the middle school and high school must collaborate on a regular basis.
3. Academy Culture and Design:
   - The T-STEM culture must foster positive student identities through meaningful adult and peer relationships.
   - All students graduating from the Academy must be prepared for postsecondary coursework and careers in the STEM fields through the integration of the Governor’s economic workforce clusters and AchieveTexas STEM cluster into the curriculum.
   - The Academy must support all students to graduate high school with four years of math, four years of science, four years of STEM electives, an Endorsement (with a primary focus on STEM endorsements), and a Performance Acknowledgement for a Distinguished Level of Achievement.
   - The T-STEM Academy must cohort T-STEM students in core classes.
5. Student Access, Success, and Persistence:
   - The Academy must have a clear plan for student support and success to achieve persistence rates above 70%.
   - The Academy must instill the expectation that students expand their participation and leadership in STEM activities outside the classroom and provide the opportunity to do so.
7. Teacher Selection, Development, and Retention:
   - The Academy faculty must possess extensive subject knowledge and integrate project based learning (PBL) and STEM pedagogy into the classroom.
   - The Academy must adopt and implement a plan for sustained professional development.

☑ the applicant assures that the above minimum required T-STEM Designation components will be implemented in the 2017-2018 school year.

BACKGROUND

2.0 Is your campus currently designated as an Early College High School (ECHS) through the TEA ECHS designation process?	No
2.1 First year of T-STEM Academy Operation	2016

2.2 Academy Model: What is the design of the T-STEM Academy requesting designation?	Stand-Alone Academy Multiple campuses: All students on each campus are enrolled in the T-STEM Academy. This model typically spans a middle school and a high school for those academies that are serving students in grades 6-12.

2.3 Target Population

What is the grade level range of students your academy will serve?	6th-12th

The T-STEM academy must serve grades 9-12 and may serve grades 6,7, and 8.
If an academy implements a 9-12 model, it must serve at a minimum grade 9 during the initial designation school year.
If an academy implements a 6-12 model, it must serve at a minimum grade 9 and one middle school grade during the initial designation school year.

Current (if applicable) and projected student enrollment:								
Grades of students to be served	**6th**	**7th**	**8th**	**9th**	**10th**	**11th**	**12th**	**Total Enrollment**
2017-2018 projected enrollment	30	30	30	30	30	20	15	185
2016-2017 enrollment (if designated in the 2016-2017 school year)	25	19	16	16	10	7	15	108

County-District-Campus numbers where students from each grade level are enrolled:							
Grades of students to be served	**6th**	**7th**	**8th**	**9th**	**10th**	**11th**	**12th**
9-Digit CDC #:	123803041	123803041	123803041	123803001	123803001	123803001	123803001

BENCHMARKS

T-STEM Blueprint Instructions

The T-STEM Academy Design Blueprint consists of seven benchmarks that drive the success of an Academy. Each benchmark highlights program requirements and offers a rubric score of developing, implementing, mature, or role model. T-STEM Academies use this tool to measure growth and progress along the continuum.

All seven benchmarks are included in the application. However, applicants may notice the program requirements are not numbered sequentially. This is because not all program requirements are included in the Designation Application. Applicants are not expected to meet or even consider all program requirements at this stage in the process. Instead, those program requirements that form the building blocks of a successful designated Academy are included in the Designation Application. Focused consideration of those particular program requirements will mean a successful applicant will have a strong foundation as a designated T-STEM Academy. The technical assistance that comes as a result of designation will allow the designated Academy to implement the Blueprint Benchmarks' full program requirements over time.

Benchmarks 1-4, 6 & 7
Applicants should first review the program requirements for each benchmark presented in the body of the application. The questions that follow pertain to those specific requirements (i.e. Benchmark 1 questions pertain to Benchmark 1 program requirements). Applicant responses should reflect a close consideration of the highlighted rubric areas in the context of what the campus has in place currently and could feasibly implement during the first designated year. Applications will be scored on the response's evident understanding of the continuum of growth along the rubric, evidence of existing programs, and feasible plan to move forward for each requirement.

Benchmark 5: Curriculum, Instruction, and Assessment
Applicants should review the program requirements presented in each section and rate the campus's existing system in the rubric's check boxes. Applicants are then asked to justify the ratings with evidence, reflection, and a plan to move forward, bearing in mind that with designation comes the tools and assistance necessary to progress along the continuum. Successful applicants will reflect an understanding of Benchmark 5 and are not necessarily expected to have all elements in place before designation.

Benchmark 1: Mission-Driven Leadership

Program Requirements

1.2.C.	Develops and demonstrates support from an advisory board (AB) consisting of representatives from the Academy, school board, district, community, higher education, and STEM businesses to support and guide facility requirements, resource acquisition, curriculum development, internship, externships, and student/community outreach to ensure a successful 6-20 STEM academic and career pipeline.
1.3.A.	Integrates and assesses the level of mission-driven and data-driven decision making evident in the daily work of the Academy.
1.4.A.	For 6-12 campuses, middle school and high school leadership teams regularly collaborate to advance 6-12 alignment and student retention in STEM.

Key Elements for Success

- Job descriptions and roles for design team, leadership team, and advisory board
- Mission is posted and can be articulated by teachers, staff, students, key stakeholders, etc.
- MOUs with T-STEM Centers

	Developing	Implementing	Mature	Role Model
1.2.C.	Advisory Board (AB) established.	AB positions and subcommittees are identified.	AB develops innovative and creative approaches to support Academy mission and vision.	AB addresses major shifts in STEM, educational standards, industry expectations, and analyzes SWOT of Academy, resulting in measurable action items.
1.3.A.	Little or no evidence of data-driven and mission-driven decision making.	Data is used to design student interventions, Annual Action Plan (AAP), and to inform teaching and learning aligned to the mission.	Teachers work interdependently as teams to review data across content areas, develop targeted interventions, and develop common formative assessments.	The Academy's continual analysis of results for improvement is critical to the school's system of interventions and culture of celebration.
1.4.A.	Academy leadership occasionally collaborates with each other (6th - 12th), with T-STEM centers, and T-STEM Coaches.	Academy leaders and staff collaborate with each other (6th - 12th), and with T-STEM Centers and Coaches to integrate STEM teacher preparation, teaching, and learning. *And meets criteria from Developing*	Academy plans with regional T-STEM Center, vertical alignment teams 6th - 12th (at least quarterly), and meets with their T-STEM Coach, virtually or Face-to-Face (at least monthly). *And meets criteria from Developing and Implementing*	Academy dialogues on a regular, ongoing basis in vertical alignment teams (6th - 12th), with T-STEM Centers and Coaches, and utilizes available T-STEM resources to improve student achievement and teacher preparation. *And meets criteria from Developing, Implementing, and Mature*

Benchmark 1: Mission-Driven Leadership

- Program Requirement 1.3.A. addresses the use of data to drive design, decision making, and program review in a T-STEM Academy.
- Designated campuses will be expected to meet or exceed “Implementing” on the rubric above (Data is used to design student interventions, Annual Action Plan, and to inform teaching and learning aligned to the mission) by the end of the first designated year.

Describe below how the campus will meet or exceed this expectation.

The TSTEM Academy mission “places students in global leadership environments of Science, Technology, Engineering, and Mathematics innovation, creativity, and culture”. The mission coupled with the TSTEM Academy Vision “To engage students with rigorous Science, Technology, Engineering and Mathematics skills that will lead to innovated global pathways” support the Annual Action Plan. The Annual Action Plan (AAP), based on STAAR / EOC data, benchmark data and survey data is used to drive the development of instructional strategies, common assessments and cross curricular collaboration to inform targeted interventions, grade level preparedness and to establish a team approach to student success.

The academic structure committee was established to focus attention to the Annual Action Plan. The AAP will continue to implement pedagogy methods available through the T-STEM Centers, Educate Texas Coach and the National Science Foundation to guide the professional development for the Academy leaders, and instructional staff. This subcommittee quarterly review of the AAP to determine the program strengths, weaknesses, opportunities and threats to develop and oversee milestone achievements, measurable action items, outreach opportunities, the use of parent and student survey data, college and career data, and interventions for alignment with the mission of the Academy has enabled the campus staff to maintain and implement changes necessary for program success.

The Curriculum Standards Implementation (CSI) subcommittee is purposed to ensure effective data driven decision making based on reports from the data management system (Eduphoria) and student data portfolios. The CSI will continue to ensure the use of student data to inform instruction by teachers during weekly data talks, collaborative planning sessions and content specific professional development sessions. Quarterly collaborative sessions will provide discussion of data trends to guide the implementation of career pathway related capstone projects and internship / externship opportunities for students. The Academy data will guide the AAP updates.

- Program Requirement 1.2.C. details the requirements for an Academy's advisory board (AB).

List the planned AB members and their job title (example: John Smith, School Board Member; Jan Smith, STEM Business Leader, etc.). Detail how this board will support the Academy work.

Academy: Dr. Paula Richardson, CEO / Principal
Academy: Halima Taylor, Curriculum and Instruction / TSTEM Academy Director
Academy: Breona King, Science Educator
Community: Harold Doucet, Community Support, Port Arthur, TX
Higher Education: Byron Price, Medger Evers college of the City University of New York
Higher Education: Gary Stretcher, Vice President for Academic Affairs, Lamar State College Port Arthur
School Board: Rodney Whitney Jr., Tekoa Board Assistant Secretary
STEM Business Leader: John Etgen, Project Wet
STEM Business Leader: Melvin White, Golden Triangle Empowerment Center Founder
STEM Business Leader: Charles White, Charity Productions
Student Council Representative grades 6-12 per grade level

The Advisory Board will guide and support the T-STEM Academy through active engagement regarding resources for the STEM curriculum, student / community outreach (internships / externships) and the career pipeline.

Program Requirement 1.1.A: Provide the Academy mission statement below.

Mission: Places students in global leadership environments of Science, Technology, Engineering, and Mathematics innovation, creativity, and culture.

- Program Requirement 1.4.A details the requirements for 6th-12th campuses to collaborate on a regular basis to advance 6th-12th alignment and student retention in STEM.

Describe below how the campus will meet or exceed this expectation. If Academy is 9th-12th write, "Not Applicable".

The TSTEM Academy director will facilitate the collaboration between all Academy stakeholders, T-STEM Coaches and university partners through a calendar of monthly and bi-monthly meetings and site visits. The Academy will continue to visit mature TSTEM campuses to include professional development for the Academy instructional staff. The Academy will continue effective vertical alignment of curriculum and courses through specific and detailed disaggregation of data such as common assessment data, cross-curricular data, targeted intervention analysis data and teacher observation and feedback data. Student surveys will be used to gain insight into student views on Academy projects, university onsite visits, and Academy development.

The student committee (Scholar Accountability Team) will continue to collect data specific to students. This SAT committee is the platform for the student voice recognizing students as critical stakeholders to the Academy and to providing a vast array of activities specific to student choice as a means to promote student retention.

These student-centered, data-driven processes of collaborating within the Academy and throughout partnerships provide a continuous network for career focused curricular advancement aligned with the Academy’s Mission.

Benchmark 2: T-STEM Academy Culture and Design - Blueprint

Texas Science, Technology Engineering and Mathematics

Benchmark 2: T-STEM Academy Culture and Design
Program Requirement: 2.1 Personalization

2.1.A Addresses in AAP and strategic plan the details for remaining small, allowing for personalization and maintaining collaborative learning communities of students.
2.1.B Plans and implements a non-graded student advisory program that is regularly scheduled, noted in the master calendar/schedule, and focuses on personalizing the student experience, (builds relationships with students and parents, develops character, and fosters global literacy).
2.1.C Develops a process for hearing and responding to student voice.

Key Elements for Success	Example Artifacts
• Student IGPs w/ CCRS, Endorsements, and Performance Acknowledgement plans • Master schedule for advisory • Student enrollment	• Opportunities for orientation sharing and team building activities both on- and off-site • Advisory class curriculum • Student goal setting and reflection logs • Teacher mentors assigned to students • Pre- and post-assessments of advisory class goal • Students sit on advisory board and/or have voice in student work products, clubs, competitions, governance, and course offerings • School wide activities to build/share culture • Student ambassadors serving as classroom greeters and/or guide tour groups • Teacher/student ratios, actual class sizes • Surveys documenting students' elective requests

Developing	Implementing	Mature	Role Model
1. District and Academy resources are allocated to ensure teaching staff and facilities remain small.	1. Annual Action Plan and Academy handbook address plan for maintaining personalized, small, learning communities.	1. Students are regularly afforded multiple opportunities to build relationships with staff and peers such as working in academic and/or competitive teams horizontally and vertically.	1. Protocols are developed to ensure students have a clear and documented voice in the Academy (student council, advisory committee to the director, suggestion box, etc.
2. Student advisory is regularly scheduled and focuses on relationships, building school capital, developing and fostering global literacy.	2. Advisory class has written curriculum with goals, expectations, scope, sequence, and pacing guides.	2. Teachers work in teams to develop systemic advisory programs with horizontally and vertically aligned student outcomes.	2. Annual resources are allocated to develop, revise, and sustain advisory program with input from students, teachers, parents, and external partners.
	And meets criteria from Developing	*And meets criteria from Developing and Implementing*	*And meets criteria from Developing, Implementing, and Mature*

Benchmark 2: T-STEM Academy Culture and Design

Program Requirement: 2.1 Personalization

2.1.D Arranges for a flexible school day with blocks of time that support student learning (tutorials, collaboration, meetings).

2.1.E Celebrates high quality student work through student exhibits on-site, web-based, and/or in state and national forums.

2.1.F Provides every 6th – 12th student with an individualized STEM-focused high school graduation plan that addresses: four years of math and science; an Endorsement in STEM, Business and Industry, Public Service, or Arts and Humanities; identifies target areas for Performance Acknowledgements; and is at least annually reviewed and revised with the counselor, student, and family.

Example Artifacts

- Honor roll, grade level/school-wide celebrations
- Classroom and building displays
- Number of students participating in student exhibits
- Agendas/signatures for IGP meetings with students and family
- IGP, record folder/portfolio, 6th -16th course plan
- Master schedule, tutoring schedule
- Minutes/action items from site based committees, etc.
- Website showcasing student work
- Documentation of at least annual 6th – 12th IGP meetings with parents and students

Developing	Implementing	Mature	Role Model
1. Academy develops a flexible schedule that supports student success.	1. Schedule is developed with input from teachers, counselors, content coaches, extracurricular and internship/capstone requirements.	1. Teachers work in teams to adjust daily schedule to facilitate interdisciplinary PBL.	1. Schedule is adjusted to meet student needs according to data, student, teacher, and parent voice; intervention and extension plans.
2. Academy regularly schedules for students to share their knowledge and work products.	2. Students participate in panel presentations, debates, academic fairs, webinars, online challenges, competitions, design challenges, etc.	2. Resources are allocated to provide students with opportunities to participate in state and national forums, conferences, and competitions (financial, facilities, staffing, transportation, etc.).	2. Academy establishes protocols with input from key stakeholders to gauge the effectiveness of student participation in competitions, challenges, etc. towards promoting college and career readiness as well as Academy goals.
3. Academy develops IGP for each 6th – 12th student that addresses STEM pathways, THECB College and Career Readiness Standards.	3. Student, counselor, and family regularly review and revise the IGP to address student goals for courses, grades, Endorsements, Performance Acknowledgements, college entrance exams, PSAT/ACT/SAT, career aspirations, etc. *And meets criteria from Developing*	3. Annually reviews and revises IGP according to previously established protocols and timelines. *And meets criteria from Developing and Implementing*	3. Mentors are assigned to students to develop intervention contracts to address deficiencies or acceleration opportunities in IGP. *And meets criteria from Developing, Implementing, and Mature*

Benchmark 2: T-STEM Academy Culture and Design
Program Requirement: 2.2 Culture

2.2.A Collaborates with stakeholders to develop a new handbook or modify the existing handbook with clear procedures, policies, and consequences that support the development of a strong T-STEM culture.

2.2.B Involves all stakeholders in developing a culture of respect, responsibility, trust, and meaningful adult and peer relationships throughout the Academy in order to foster positive student identities.

2.2.C Creates a professional learning community environment of collaboration, teaming, and high expectations among administrators, teachers, and stakeholders, with a focus on and a commitment to the learning of each student.

Example Artifacts

- Handbook, attendance/discipline goals/data
- Customs and celebrations, modeling lessons for respect, responsibility, trust
- Student, teacher, parent surveys address culture
- Sharing of ideas and strategies and joint problem-solving are widespread.
- School developed common vocabulary for evidence of "good teaching"
- PLC protocols and expectations (meeting times, book studies, goals, results based on interventions, reflections on results – new actions, etc.)
- Collaborative planning of learning and teaching activities
- Widespread teamwork involving teachers and support staff
- Peer walkthroughs, lesson evaluations, and critical friends reflections

Developing	Implementing	Mature	Role Model
1. Handbook is developed to address student, parent expectations and a culture of respect, responsibility and trust.	1. Handbook addresses key tenets of cultural beliefs of Academy (student ability and achievement, efficacy and effort, power, distributed leadership, cultural sensitivity, proactive and reflective practice, etc.).	1. Handbook is developed with input from key stakeholders with clear policies, procedures, and consequences (attendance, discipline, student contracts, teacher extended days, etc.).	1. There is a high degree of commitment to school-wide professional values and a strong sense of cohesion and consistency of approach, with protocols to analyze, build, and assess effectiveness of culture.
2. Professional Learning Community (PLC) is developed which supports staff devoting effort, energy, time, and resources into incorporating valuable new strategies into their practice.	2. An inquiry-based continuous improvement orientation to practice is pervasive, with data informing practice and learning widely shared.	2. Staff regularly and consistently plans together, collaborates and shares ideas through meetings, website resources, teaming, team teaching etc., and garners input from external experts.	2. A desire to do the best for *all* students pervades the school as evidenced by protocols for regular and deep school-wide dialogue about good teaching, assessment, learning, projects, and successes of individual students.
	And meets criteria from Developing	*And meets criteria from Developing and Implementing*	*And meets criteria from Developing, Implementing, and Mature*

Benchmark 2: T-STEM Academy Culture and Design - Responses

- Applicants should consider the program requirements listed above as they pertain to a student's individualized learning experience.

Describe the campus's efforts to support students to reach this goal. This description should include plans for: an advisory period, a positive school culture, enhanced relationships with parents, and responding to student voice.

The Academy's Design focuses on the individual student guided by input from all stakeholders within the learning community. The Academy will continue to develop the learning experience for all students to promote a positive school culture, where the student voice is expectantly audible through surveys, student input forums, showcase opportunities and other feedback opportunities.

The Academy will continue with the bi-annual completion of personalized surveyed responses specific to college and career readiness, student selected endorsements and performance acknowledgements used in the development of the STEM focused Individual Graduation Plans (IGP). The IGP will continue to be used as a tool to periodically review student goals for courses, grades, endorsements, performance acknowledgements, college readiness requirements, and career ambitions. The IGP meeting record includes revised / updated student plans signed by the student and parent, and agendas / minutes of the meeting.

The Academy will continue with student teacher ratios conducive to a personalized learning environment through effective master schedule development. The advisory class period, within the master schedule will be implemented to allow students a daily opportunity to establish and review personal academic goals with the support of a bi-monthly forum of student leaders with similar interests and bi-monthly professionals from their field of study. Student advisory period will rotate the following topics: college readiness, character education, global literacy, career preparation, service learning projects, and other topics to ensure student interest. During the advisory period, the SAT (Scholar Accountability Team) will collaborate with the Academy Director to develop student study groups, service and experiential learning activities, and student showcase events; all of which are designed to cultivate the positive culture of the Academy. Parents will be invited to specific advisory period sessions to allow opportunities for involvement and input. All feedback will be used to promote success of the Academy.

The Academy will continue the distribution of the student written quarterly newsletter to inform all Academy stakeholders of current topics and Academy events.

Our first Academy Summer Bridge program has been planned and scheduled for the summer of 2017. Summer bridge will include intervention sessions based on summative assessment data, guided instruction for college entrance / dual credit coursework for fall 2017 (TSI Prep), and project based learning activities.

Applicants should consider the program requirements listed in the "Benchmark 2 Program Requirements" link above as they pertain to postsecondary college and career success.

- 6th-12th STEM-focused high school graduation plan: IGP with Endorsement, Performance Acknowledgement, and Distinguished Achievement.
- 6th-12th STEM career and college exploration, and college readiness preparation with students and parents to include college transition plan.
- Collaboration with IHE.
- All students should graduate with 12-30 hours college credit and be prepared for postsecondary coursework in STEM fields.

The Academy will continue to host course selection meetings with parents and students to discuss the individual graduation plans, performance acknowledgements, current trends regarding career pathways, STEM course pathways and college and career opportunities. The Academy promotes college and career readiness through the analysis of student interest surveys, college and industry tours, and through grade-level specific open forums for guided discussions about future goals of students. The Academy offers at no cost to the students, opportunities for dual credit enrollment during the Summer Bridge program and at the beginning of the fall and spring semesters. The Academy provides test prep and academic intervention to ensure college readiness for all students. Dual enrollment will continue to be offered to students in high school. The dual credit program ensures that students graduate with 12-30 college credit hours. Dual enrollment is at no cost to the students and transportation is provided to the partner college.

All Academy students experience an introduction to project based learning during the summer bridge program and engage in STEM focused project based learning activities throughout the school year. The Academy hosts showcases that highlight STEM focused career and college exploration 2-4 times per year. Parents and other stakeholders are invited to the STEM showcases and provide feedback through project judging, survey responses and suggestion submission.

- Program requirement 2.2.C. highlights the importance of a strong Professional Learning Community for the success of all students.
- Review at the rubric continuum and tools in Example Artifacts from a successful Academy.

Describe how the campus will use these tools to progress into a "Mature" campus over time. "Staff regularly and consistently plans together, collaborates and shares ideas through meetings, website resources, teaming, team teaching, etc., and garners input from external experts." This description may include inquiry-based approaches, data informed decision making, Professional Learning Communities, collaboration, and integration of technology.

The Academy's Professional Learning Community (PLC) will continue to establish campus protocols related to the culture and expectations of the learning communities through modeling lessons for respect, responsibility, and trust during departmentalized meetings to enhance idea sharing and to promote joint problem-solving across the Academy. The PLC will continue to develop a system of common language used during data analysis talks and instructional strategy discussions. The PLC meets as often as necessary based on student data results and on every other Friday. During the PLC's, Academy staff receive accolades for accomplishments and outstanding Academy efforts.

The PLC will continue to review data generated from parent, teacher, and student surveys to guide the decision making process of the PLC as it pertains to student engagement, project-based learning, instructional practice, and assessment. The Academy will continue with sessions to enhance educator implementation of technological resources. The PLC uses an open forum of feedback and suggestions to ensure an environment whereby stakeholders establish intrinsically high expectations for student learning and promote a high-degree of commitment to the success of the Academy. Mentorship opportunities will be incorporated for instructional staff new to the Academy.

The TSTEM Academy Program Guide (a PLC handbook) will continue to be used as a guide to support TSTEM Academy culture: Tenacity, Expectation, Knowledge, Opportunity, and Accountability. The guide includes the academy mission, vision, goals, STEM design process, project based learning model, STEM competitions and provides guidelines for the day to day classroom operations. The guide defines the STEM program, outlines the instructional model used (engineer or scientific design model); includes the project based learning sequence of initiation and PLC calendar; and provides examples of active questioning and exit tickets.

Book studies will be implemented targeting ideas and strategies to promote problem solving and professional development specific to Academy needs.

Benchmark 3: Student Outreach, Recruitment, and Retention

Program Requirement: 3.1 Recruitment and 3.2 Open Access

3.1.A Develops structures and processes for marketing and recruitment to encourage participation from underserved students and families (transportation or plans for transportation to the school, child care for family events, and translation of all recruitment and marketing materials).

3.1.B Actively partners with feeder middle and/or elementary schools to develop student interest in STEM education and to increase advancement rates from middle school STEM to high school STEM.

3.1.C Develops a systemic recruitment plan that includes students, parents, counselors, teachers, district, and community.

3.2.A Develops an admission policy to include an open access, lottery-based selection process that encourages applications from all students. The application will not be based on state assessment scores, discipline history, teacher recommendation, minimum GPA, or other requirements that would be used to limit selection.

3.2.B Consists of a population that is 50% or greater economically disadvantaged and underrepresented students.

Key Elements for Success	Example Artifacts
• Written admission policy and application with lottery explained	• Recruitment schedule and locations (schools, churches, community centers, etc.) • Brochures and marketing items in English, Spanish, and/or relevant second language • Survey data (community input, enrollment trends, etc.) • STEM feeder school crosswalk recruiting curriculum • Plan to recruit with feeder schools • Documented support efforts (transportation, child care, etc.) • Needs assessment • Number and percentage of students matriculating from middle school STEM to high school STEM

Developing	Implementing	Mature	Role Model
1. Academy details a plan and process for marketing to and recruiting from appropriate communities and feeder schools to reach high need and underrepresented students.	1. Marketing and recruitment plan developed with input from key stakeholders, and targets feeder pattern, community needs, and cultural relevance.	1. Marketing plan highlights Academy's STEM pathways and Endorsements; and industry and higher education partners. Recruitment efforts include Academy staff, students, and parents. At least 80% of 8th grade MS STEM students matriculate to HS STEM Academy.	1. Students and staff from Academy collaborate with feeder schools to develop, deliver, and monitor recruitment results from STEM crosswalk engagement lessons conducted at the feeder middle schools. At least 90% of 8th grade MS STEM students matriculate to HS STEM Academy.
2. Academy has at least 50% economically disadvantaged and underrepresented students, via an open, lottery based admission policy, where the application *does not* include requirements that might deter students such as STAAR, grades, teacher recommendation, discipline, or attendance.	2. Clearly communicated admission policy that indicates target enrollment goals and implements support processes structures such as transportation, child care, etc. to meet goals. *And meets criteria from Developing*	2. Academy tracks enrollment data and indicates some increases in recruitment/enrollment rates. *And meets criteria from Developing and Implementing*	2. Academy employs a needs assessment to analyze demographic trends to ensure equitable access and recruitment of greater than 50% economically disadvantaged and underrepresented students and sustains a full complement of students at each grade level. *And meets criteria from Developing, Implementing, and Mature*

Benchmark 3: Student Outreach, Recruitment, and Retention

Program Requirement: 3.3 Student Support and Retention

3.3.A Develops and implements systemic, tiered strategies for student support and retention (outreach, early intervention strategies, mentoring, tutoring, counseling, and other supports for academic and socio-emotional growth).

3.3.B Hosts 5th – 6th and 8th – 9th orientation session(s) and summer bridge program(s) to facilitate successful student transitions and retention into a STEM-focused, college preparatory, project-based learning environment.

3.3.C Provides all students with opportunities and the expectation to assume roles of responsibility within the classroom, Academy, and community.

3.3.D Supports and monitors 6th – 12th student participation in STEM activities both within and outside the classroom to ensure that all students engage in STEM clubs, STEM competitions, and STEM field experiences.

3.3.E Hosts parent seminars to develop deep understanding and commitment to the rigor of college readiness and the high expectations of a STEM Academy.

Example Artifacts

- Student, parent, staff contracts
- Student retention and persistence plan
- Orientation and bridge agendas
- Exit interviews
- IGPs Minutes from persistence meetings, retention/attrition data
- Program adjustments due to student and community voice
- Copies of trainings and participation of parents/community
- Satisfaction/interest surveys from students, parents, community, staff, etc.
- Lists of clubs, service learning projects, STEM activities, STEM field experiences, and planned competitions

Developing	Implementing	Mature	Role Model
1. Academy develops a strategic plan for student retention and persistence, and maintains persistence rates above 70%.	1. Student persistence rates range between between 70-80% and the strategic plan addresses research-based supports such as annual IGP review, parental involvement, tiered interventions, and cultural relevance.	1. Student persistence rates range between 81-90%, and the strategic plan includes yearly metrics, analysis of why students leave, and a plan to identify and prevent at-risk students from leaving.	1. Campus engages in ongoing dialogue to address persistence data (lack of course credit, leaving the Academy) and uses data to ensure persistence rates above 90%.
2. Academy develops student orientation/summer bridge program(s), student clubs, and plans for external STEM activities and competitions.	2. The orientation/summer bridge program sets priorities and includes a timeline with skills, tools, and resources for students to successfully transition to a STEM environment.	2. The orientation/summer bridge program is implemented as planned and continually refined annually, with a complete scope and sequence and supporting materials.	2. The orientation/summer bridge program monitors initial student success, identifies struggling students early on, and ensures those students have additional support.
3. Students can select from a small number of leadership opportunities available.	3. The staff encourages students to select leadership opportunities.	3. The staff monitors student involvement in leadership and STEM activities, clubs, and competitions; and develops interventions for students who have minimally participated.	3. Student leadership is evidenced in nearly every non-classroom related initiative or event and at least 90% of students participate in leadership and/or STEM activities, clubs and competitions.
4. Academy creates STEM Academy orientation for parents and stakeholders.	4. Opportunities exist for parents and stakeholders to participate in service learning, and/or attend student presentations.	4. At least bi-annual opportunities exist for parents and stakeholders to participate in STEM activities.	4. Annual parent and stakeholder participation goals are developed and monitored for continued improvement.
	And meets criteria from Developing	*And meets criteria from Developing and Implementing*	*And meets criteria from Developing, Implementing, and Mature*

Benchmark 3: Student Outreach, Recruitment, and Retention

- Review Program Requirement 3.1.A/B/C and 3.2.A/B.

Describe the Academy's open-access admission policy, the marketing, and recruitment plan to parents, students, and the community; and partnering with feeder schools to increase advancement rates in STEM from elementary to middle to high school.

Admission to Tekoa Academy of Accelerated Studies STEM School T-STEM Academy (the “Academy”) is open to all students who reside within the geographic boundaries stated in the open-enrollment charter of the school and who are eligible for admission in accordance with applicable law.

When making admissions decisions, the Academy does not discriminate against students on the basis of sex; national origin; ethnicity; religion; disability; academic, artistic, or athletic ability; or the district the child would otherwise attend under state law.

Submission of Application Deadline
The Academy requires applicants to submit a completed application form admission consideration. The Academy’s admission application period is April 1st to June 15th (if the 1st or the 15th is on the weekend, the admission period will begin or end on the following Monday if it is a holiday it will be the day afterward). The submission deadline for the next school year is June 15th (if the 15th is on the weekend, the admission deadline ends the following Monday, if it is a holiday it will be the day afterward.

Admissions Lottery
A random admissions lottery will be conducted if the total number of applicants exceeds the number of open enrollment spaces. Each applicant will be assigned a number, and all numbers will be placed in a container and randomly drawn one number at a time by the Registrar or designee. Each applicant whose number is drawn will be offered admission. Notification will be made by mail and phone. Failure of an applicant to respond within 72 hours of the date of the telephone call or within 3 business days of a post-marked letter will result in withdrawal of his or her position from the application process. Parents notified by mail should call the Registrar immediately upon receipt of the notice in order to preserve their child’s position in the lottery.

Once all spaces have been filled by the lottery, the remaining numbers will be drawn and the applicants assigned to these numbers will be placed on a waiting list in the order in which they were drawn. If a vacancy arises before the commencement of the school year, the individual on the waiting list with the lowest number assignment will be offered admission and then removed from the waiting list.

If an application is received after the application period has passed, the applicant’s name will be added to the waiting list behind the names of the applicants who timely applied.

Recruitment efforts include but are not limited to:
• Notifications posted to schools website, social media and in local newspapers
• STEM informational sessions will be held at local churches and community centers
• STEM interest surveys will be used to collect data from community; data will be used to calculate the matriculation
• Brochures will be used to inform of STEM academy
• Academy administrators will collaborate with neighboring school districts and charter school administrators to schedule informational sessions for students and parents from schools within the geographic boundary of the Academy

- STEM Academies host orientation, summer bridge, and college preparatory seminars for parent and students; encourage student leadership, monitor student participation in STEM activities, clubs, competitions and field experiences; and develop intervention plans for students who minimally participate.
- STEM Academies maintain persistence rates above 70%, with a goal of at least 90%

Describe the campus plan to progress to "Mature" on the continuum for Program Requirement 3.3 Student Support and Retention (review the "Benchmark 3 Program Requirements" link at the top of this page).

The Academy will continue the strategy for student support and retention toward the empowerment of teachers, parents, and students with the ability to address academic and socio-emotional growth, mentoring and/or other concerns that interfere with the student's ability to obtain an appropriate education.

The Academy performs the following duties:
• Provide annual training to Academy staff on student support and retention principles, roles, and referral processes.
• Provide student-centered training to parents and school staff; student, parent and staff contracts specific to principles and roles also provided
• Recommend transition services for students on an individual basis
• Provide parents linkage to local community resources and/or outside services and resources
• Develop and/or manage solution-focused, student-centered intervention or Academy-based intervention programs.
• Provide student-facilitated mentor activities to support Academy students
• Entrance / Exit interviews with students and parents to discuss Academy expectations and in the event of exit from the Academy to record data of why students leave the Academy

Students will continue leadership opportunities through Scholar Accountability Team (SAT), National Honor Society, National Junior Honor Society, robotics competition participation at different levels, and through service learning activities.

The Academy will continue participation in the following activities related to student support and retention so that the Academy will reach persistence rates ranging between 81 – 90% which is also included in the strategic plan:

• Tutorials for all students within the master schedule as an additional math, science, or technology class each day
• Saturday tutorials with specific focus on content areas throughout the year
• C-STEM competitions and Urban STEM competitions
• Project Wet (national and international collaboration) activity implementation
• Academy sponsored spring and fall project-based programs to build student interest in STEM
• Host biannual seminars to inform parents of student academic standards (college and career readiness standards, expectations of Academy)
• Academy summer and fall orientation and Summer Bridge.

The Academy will initiate memberships with STEM focused organizations for students.

Tiered structure of student support:
• Initial tier: support provided by Academy teachers and peer leaders – group activities
• Mid-level tier: support provided by Academy teachers, peer leaders and outreach (parental contacts included) and industry representatives – group activities, small group activities and one on one activities
• Tertiary level tier - support provided by Academy teachers, peer leaders and outreach and industry representatives – group activities, small group activities and one on one activities; additional support provided specific to students desired outcomes according to grade level, and career / course interest.

Benchmark 4: Teacher Selection, Development, and Retention

4.1.E.	Provides opportunities for ongoing professional development to improve teachers' content knowledge, technology embedded instruction, integrative STEM pedagogy, college and career readiness standards, instructional strategies for ensuring a successful P-20 pipeline, and leadership capacity.
4.2.A.	Develops a Professional Development (PD) plan for a sustained professional development model of continuous learning based on student results, teacher development, and the short- and long-term goals of the Academy.
4.2.B.	Adopts a systemic professional development model of continuous learning that addresses prioritized needs as informed and evaluated by multiple sets of quantitative and qualitative data (student assessment data, instructional/classroom evaluations, technological developments, workforce demands, demographic changes, and community/societal expectations and needs).
4.2.C.	Sustains a PLC by instituting job-embedded ongoing opportunities for continuous learning, peer coaching/mentoring, STEM externships, and participation in STEM teacher and leader cadres for teachers and administrators (research-based practices, content competence, new instructional strategies, technology integration, reflective inquiry, and student artifact analysis).
4.3.C.	Adopts and implements a plan for new teachers to include orientation, induction, acculturation, mentoring, professional development, and administrative support.
4.3.D.	Designs or employs innovative programs to support the recruitment and selection of highly qualified STEM teachers.

Key Elements for Success

- Master schedule with common planning time
- Teacher turnover rate
- Teacher mentoring program
- Written recruitment plan

	Developing	Implementing	Mature	Role Model
4.1.E	Academy has authority to hire "best" qualified for goals of the Academy and STEM blueprint requirements.	Develops a written plan for creative recruiting to ensure high qualified, effective teachers.	Develops annual needs assessment and actively implements a teacher recruitment and placement program.	Resources are allocated for recruitment of best qualified candidates, with the Academy partnering with teacher preparation programs such as UTeach, to recruit highly qualified teachers for Academy needs.
4.2.A. 4.2.B.	Develops PD plan with clear pedagogy expectations, aligned with mission goals, teacher needs, and student needs	Academy regularly uses diverse assessment tools/processes, enhanced media, adult learning theories, professional reflection time, problem-solving protocols, and self-paced learning with computer and human interaction for support, coaching, mentoring, and collegial interaction.	Needs assessment and PD plan address teacher and student retention to include teacher, student, and parent voice in decision-making process.	Meaningful partnerships with external organizations ensure progressive expectations for educators' application of content knowledge, curriculum design, and delivery.
4.2.C.	Develops a PLC plan that identifies ways in which teachers will work in collaborative teams to build shared knowledge and formative/summative data.	Teachers collaboratively develop 6th - 12th common essential student outcomes which reflect their efforts to build shared knowledge regarding best practice, (STEM integration, college and career readiness, 21st century skills,).	Teachers collaboratively clarify the criteria they use to judge quality of student work and criteria is consistently applied horizontally and vertically.	Teachers participate in externships and mentorships with higher education and industry. PLC plan is annually monitored, evaluated, and revised for effective practice.
4.3.C	Develops an Orientation plan aligned to Academy mission and vision, and teacher enculturation.	Induction plan addresses Academy expectations for instructional skills; interactions with students, parents, and community; classroom management; assessment of learning; technology; professional development; and mentoring.	Induction process is clearly enunciated, consistently practiced, and evaluated and revised for effectiveness.	Each new teacher participates in the induction process, is assigned a mentor teacher, understands the strategic goals of the Academy, and completes a Needs Assessment that identifies areas for individual professional development.
4.3.D.	Common planning time within the school day focuses on PLC collaboration.	Teams develop team-time norms, set goals, and evaluate effective use of team-time for curriculum development, student artifact reflection, parental involvement, etc. *And meets criteria from Developing*	Teams develop common metrics to measure and inform, in order to identify strengths and weakness in their individual practice, and to collaboratively improve their individual and collective efforts to help all students learn. *And meets criteria from Developing and Implementing*	Collaborative school-level planning is judged effective as evidenced by student learning outcomes. *And meets criteria from Developing, Implementing and Mature*

Benchmark 4: Teacher Selection, Development, and Retention

- Review program requirements for benchmark 4 in the link above.

Describe how the Academy will recruit, support, and retain highly qualified teachers. This should include plans for:

- Teacher recruitment and retention plan
- Sustained professional development (PD) plan which incorporates project-based learning and an integrated STEM curriculum into instructional practices based on qualitative and quantitative student data. (A timeline of planned PD will be uploaded in Benchmark 7.)
- A job-embedded Professional Learning Community with common planning times for collaboration.
- New teacher support (new to Academy and/or teaching profession).

The Academy will utilize the charter districts Teachers' Institute to ensure effective teacher placement, development and retention. The Academy will continue to use educational consultants and regional service centers for professional development. The Academy assigns mentors to the teachers in the program and will pair each educator with an Academy partner to ensure ongoing support for STEM pedagogy and content delivery. The Academy will complete quarterly needs assessment to determine the professional development needs of the teachers and to ensure alignment to the Mission of the Academy. The needs assessment, parent and student surveys and professional development plan will be used to address teacher and student retention to include teacher, student and parent voice in the decision making process.

The Academy professional development program (Tekoa Teachers Institute) will integrate project-based sessions infused with researched-based STEM pedagogy, instructional content based strategies, and technology embedded instruction. The PLC will continue to use qualitative data (workforce demands, community expectations and needs, technological developments and observation / feedback sessions) and quantitative data (demographic changes, and student assessment data) to drive the instructional program. The Academy teachers will be given opportunities to evaluate the roles of their mentors to determine the sustainability of the mentor match.

The first phase includes prior year training provided by the Academy leadership, consultants and mature STEM Academies. The orientation process begins with review of the TSTEM Academy Program Guide and addresses the Academy expectations for academic growth; interactions with students, parents, teachers,Academy partners and community; classroom management; professional development program (PLC) and mentoring. The needs assessment is completed by stakeholders (teachers and Academy partners) to determine a reflective view of development needs.

The Academy leaders will continue to visit mature academies.

The second phase includes the continuation of sessions facilitated by the T-STEM Academies, Academy leaders and consultants to ensure the integrative STEM pedagogy and instructional strategies required to ensure a successful P-20 pipeline. The second phase includes the data analysis component to review student data and survey results to address the workforce demands, community expectations and needs and the technology needs of the Academy for development of the course catalog.

The Academy has committed to hiring a counselor.

Thirdly, the counselor, Academy leadership and the TSTEM Coach will continue monitoring campus implementation of STEM components and continue data talks to include critical conversations, qualitative and quantitative data reviews and SMART goals analysis. The Academy will continue to provide opportunities for reflection of practices to ensure assimilation of the new learning concepts into pedagogical practices. The Academy leadership will continue to provide periodic and timely surveys to instructional staff to determine the impact of teacher practice and student learning outcomes. Survey results, feedback, and student learning outcomes will continue to guide the professional development.

This professional development model offers a series of pedagogical professional learning opportunities throughout the school year to include evenings and Saturdays. The continuous mentor support, ongoing professional development activities and tiered administrative support will ensure teacher retention and professional growth.

Benchmark 5: Curriculum, Instruction, and Assessment

Example Artifacts: 5.1

- Course syllabi, lesson plans, unit lessons, PBL, scope, sequence, pacing guides
- Lessons include STEM standards, state standards, national standards, college and career readiness standards, 21st century skills
- Benchmark schedule, course passing rates, retention rates
- Student portfolios, IGPs, counseling, advising, college crosswalk, and feedback loop
- Plans for PSAT, Accuplacer, TSI, CTE, interventions, etc.
- Horizontal and vertical alignment of curriculum
- Students graduate with Endorsements & Performance Acknowledgements

In Benchmark 5, all program requirements are scored individually. There are no separate metrics. Assess the level of implementation for the program requirements below according to the standards to the right.		**Developing** Investigate, Research, and Create	**Implementing** Formalize, Revise, and Publish	**Mature** Data-driven evaluation of effectiveness of program requirements	**Role Model** Continually assesses to document successes and challenges with action plans implemented to correct deficiencies in performance
5.1.A.	Aligns curriculum, instruction, and assessment (such as, but not limited to, Texas CCRS, national and state standards, content, context, culture, cognitive level, competencies, skills, processes, 21st century skills, and STEM synthesis).		*Implementing*		
5.1.B.	Develops a scope, sequence, and pacing guide for a vertically and horizontally aligned curriculum centered on state standards, career and college readiness standards, STEM integration, and industry expectations.		*Implementing*		
5.1.C.	Develops an assessment and intervention plan to address gaps in student achievement and areas for extension.		*Mature*		
5.1.D.	Supports and encourages all students to successfully complete four years of mathematics, four years of science, four years of STEM electives, and at least one Endorsement in STEM, Business and Industry, Public Services, or Arts and Humanities, with a primary focus on a STEM Endorsement; and earn a Distinguished Level of Achievement as well as a Performance Acknowledgement in order to graduate college ready.		*Mature*		
5.1.E.	Offers dual credit, articulated concurrent enrollment, AP or IB courses that all students will graduate with 12-30 college credit hours.		*Implementing*		
5.1.F.	Establishes curriculum expectations, monitoring, and accountability mechanisms that are reflectively revised to ensure a constancy of mission purpose (aligned resource allocation, integrated STEM curriculum development, teacher professional growth, and student results).		*Implementing*		

5.1 Rigor

- Review the program requirements for Benchmark 5.1 Rigor on the previous page.

Describe how the Academy will progress along the continuum. This should include plans for:

- Alignment of curriculum and instruction as supported by assessment
- Assessment/intervention or acceleration plans for students
- Plan for four tears of math, science, and 12-30 college credit hours (dual credit/AP/IB)
- HS Endorsements available to Academy students

The curriculum will continue its vertically and horizontally aligned conduit that ensures student completion of four years of math, four years of science, four years of STEM and at least one endorsement in STEM, Business and Industry or Arts and Humanities; undecided students select Multidisciplinary Studies endorsement. The processes of data analysis and intervention will continue to address gaps in student achievement and will enhance student acceleration targets. Resources are integrated in the development of the Academy STEM pathways, including collaboration with Academy partners, college / university partners and workforce development specialists. The pathways offer dual credit and advanced placement courses to Academy students to ensure the completion of 12-30 college credit hours prior to graduation. The Academy is planning the implementation of industry certifications by year 2018.

Student assessments are performance-based, project-based and are aligned to innovative STEM programs such as those supported by the Texas STEM Coalition and the Buck Institute for Education. The T-STEM Center and Academy leadership will provide opportunities for continuous and ongoing coaching and mentoring activities to include critical thinking and problem solving and will support lessons that include expert practitioners; learning expeditions related to STEM coursework; research of current issues; intervention and acceleration plans for college entrance preparation; and opportunities for student voice recognition. The curriculum program requires all high school students to complete an internship and or capstone project prior to graduation that is specific to the annual goals of the Academy and student interest. The curriculum also designates student participation in academic clubs and or organizations.

The assessment data will continue to be used to enhance all students' academic performance levels and will also include capstone projects presented to a panel of judges at the end of the year.

The Summer Bridge program will be used to ensure Algebra I readiness by 8th grade and to prepare students for dual credit enrollment and advanced credit coursework.

Identify the endorsement areas that the T-STEM Academy will be offering to students in the 2017-2018 school year by checking each individual endorsement area.

☑ STEM (All designated T-STEM academies are required to offer the STEM endorsement)
☑ Business and Industry
✖ Public Service
☑ Arts and Humanities
☑ Multidisciplinary Studies

Benchmark 5: Curriculum, Instruction, and Assessment

Example Artifacts: 5.2

- Defined engineering coursework (Infinity Project, Project Lead the Way)
- Student journals, student presentations, peer performance assessment rubrics, and peer mentors
- Self-paced learning, student contracts, progress reports, exit interviews, parent/teacher/student conferences
- Lessons include work force clusters, expert practitioners, field-based learning, research of current issues, PBLs, guest speakers, differentiation, intervention and acceleration plans, student choice
- Number of offerings and number of students participating in co-curricular activities, clubs, academic teams, and competitions (UIL, Brain Bowl, Science Olympiad, Model UN, FIRST, BEST, Vex etc.)
- Design conceptual internships, identify STEM opportunities, business partners, scientific organizations, and universities
- IGP w/capstone project (research, annual review, and analysis)

In Benchmark 5, all program requirements are scored individually. There are no separate metrics. Assess the level of implementation for the program requirements below according to the standards to the right.		**Developing** Investigate, Research, and Create	**Implementing** Formalize, Revise, and Publish	**Mature** Data-driven evaluation of effectiveness of program requirements	**Role Model** Continually assesses to document successes and challenges with action plans implemented to correct deficiencies in performance
5.2.A.	Delivers innovative STEM programs that are well-defined, embed critical thinking and problem solving, innovation and invention, and are aligned to state and/or national standards and industry expectations.		*Implementing*		
5.2.B.	Supports and encourages students to complete three years of STEM electives at middle school and four years of STEM electives at high school.		*Developing*		
5.2.C.	Develops performance-based and project-based assessments aligned to these innovative programs and state/national/industry standards.		*Implementing*		
5.2.D.	Develops and implements a plan for supporting accelerated student achievement for students with demonstrated deficiencies or proficiencies in mathematics and science, to promote all students graduating ready for enrollment in credit-bearing postsecondary courses (e.g. Algebra I enrollment by 8th grade).		*Implementing*		
5.2.E.	Incorporates into the curriculum work-based contextual learning with a global perspective.		*Implementing*		
5.2.F.	Participates in extra-curricular academic activities centered on science, technology, engineering, and mathematics; i.e. STEM field experiences, clubs, and competitions.		*Implementing*		
5.2.G.	Develops 6th-12th students' portfolios of interest in: STEM capstone projects, STEM internship opportunities, and global STEM college, degree, and career explorations. Requires all high school students to complete an internship, and/or a STEM-related capstone project, presentation, and defense; primarily focused in the state's STEM-related economic development clusters (information and computer technology, energy, petroleum refining and chemical products, advanced technologies and manufacturing, aerospace and defense, biotechnology and life sciences.).		*Developing*		

5.2 STEM-Focused Curriculum

- Review program requirements for Benchmark 5.2 STEM-Focused Curriculum on the previous page.

Describe how the Academy will progress along the continuum. This should include plans for:

- Well-defined STEM programs that are aligned with state, college and career readiness, and industry standards and embed critical thinking and problem solving, and foster innovation and invention
- Three years of STEM electives at middle school and four years of STEM electives at high school. For high schools, list the CATE elective pathways and courses that support each Endorsement offered by the Academy
- Performance and project-based assessments aligned to state, college and career readiness, and industry standards
- Work-based and contextual learning in the curriculum
- STEM-focused extracurricular activities (field experiences, clubs, and competitions)
- STEM-related internships and/or senior capstone projects, presentation, and defense
- Plan for 6th-12th student STEM portfolios

The Academy offers courses specific to STEM pathways beginning in grade 6. The STEM pathways (engineering, environmental scientist and chemistry) allow the students to develop a sense of involvement in the local and global community through the application of real-world math, science and technology related concepts (problems).The curriculum courses are grade level specific, promote college and career readiness, and encourage critical thinking and problem solving as students are guided toward solutions to real-world problems. The curriculum provides guest lectures from industry, STEM related learning expeditions and internships / externships specific to student interest through the collaborative efforts of the Academy, partners and community members. The experiences and STEM courses in middle school lay the foundation for completion of the students' Individual Graduation Plan and are a resource for the development of the secondary course catalog. All Academy students take STEM pathway courses that include Touch System Data Entry and or, Digital and Interactive Media, Research and Technical Writing, and Business Information Management I, based on their chosen career pathway. Other CATE elective courses include Audio / Video Production (Arts and Humanities Endorsement), Engineering Design and Problem Solving (STEM endorsement) and Scientific Research and Design (STEM), Principles of Business, Marketing and Finance (Business and Industry Endorsement) and Graphic Design and Illustration I (Arts & Humanities) . All STEM pathway courses consist of 2-4 projects per year to include current research related to the topic and a performance based rubric design. The Academy participates in campus based STEM competitions as well as regional competitions where the students present and defend their work in the classroom, during showcase events and to experts in the field. STEM portfolio rubrics will be implemented for fall 2017.

Describe the current STEM pathways available at the academy and list all industry certifications that students have the opportunity to earn by graduation.

The STEM pathways available at the Academy are engineering, environmental scientist and chemistry. The Academy is planning the implementation of industry certifications by the year 2018.

Benchmark 5: Curriculum, Instruction, and Assessment

Example Artifacts: 5.3

- Peer observations, mentors, cross-curricular teams
- Walkthroughs, observations, model lessons
- Data informs scaffolding, re-teaching, and extension
- Team planning that defines student products, assessments, rubrics, and standards for cross-curricular and other PBLs, teacher research on STEM field expectations, current issues, and technology.
- Student presentations include digital materials, peer and internal/external expert evaluation
- Academy teachers have mentors at university and industry level that provide input to curriculum development
- Year-at-a-glance checklist documenting course coverage of state standards, 21st century skills, college readiness standards throughout grading period

In Benchmark 5, all program requirements are scored individually. There are no separate metrics. Assess the level of implementation for the program requirements below according to the standards to the right.		**Developing** Investigate, Research, and Create	**Implementing** Formalize, Revise, and Publish	**Mature** Data-driven evaluation of effectiveness of program requirements	**Role Model** Continually assesses to document successes and challenges with action plans implemented to correct deficiencies in performance
5.3.A.	Incorporates data-driven instruction.	*Mature*			
5.3.B.	Creates an environment for shared teacher responsibility and accountability for student learning across programs, content areas, and classrooms.	*Implementing*			
5.3.C.	Organizes instructional expectations around problem-based and project-based learning with clearly defined learning outcomes for students and teachers that address state and national performance standards, college and career readiness standards, and industry expectations.	*Implementing*			
5.3.D.	Ensures teachers' use of the aligned scope and sequence and integration across the disciplines.	*Implementing*			
5.3.E.	Ensures teachers' use of high-quality curricular materials aligned with state and national standards, college and career readiness standards, and industry standards.	*Implementing*			
5.3.F.	Provides opportunities for students to exercise choice and voice within a relevant and rigorous context.	*Implementing*			

5.3 Instructional Practices

- Review the program requirements for Benchmark 5.3 Instructional Practices on the previous page.

Describe how the academy will progress along the continuum. This should include plans for:

- Data driven instruction
- Shared teacher responsibility and accountability (PLC)
- Project Based Learning (PBL)
- Alignment of scope and sequence with state, CCRS, and industry standards
- Students exercise choice/voice within relevant and rigorous curriculum

The Academy PLCs will plan for vertical and horizontal expectations, per grade level, of STEM integrated curriculum training to include language-rich environments of technical language journals, articles and periodicals, webinars, podcasts, distance learning, and virtual learning labs. The PLCs will incorporate STEM-focused strategies and activities to enhance literacy for academic decathlons, literature circles, global literacy club and student lead clubs. The PLCs will continue to collaborate with all stakeholders to identify the resources, knowledge and skills to propel the students' academic growth to align with 21st century expectations.

Mentor partnerships for educators and students; peer to peer data talks; observation / feedback opportunities; surveys to gauge program sustainability; opportunities for process review and revision; and clear and concise guidelines for program execution for alignment to the standards of the Academy Mission will continue as a check and balance system.

Benchmark 5: Curriculum, Instruction, and Assessment

Example Artifacts: 5.4

- Project Based Learning (PBL)
- Systemic expectations for number of presentations per class, documentation of students presenting to internal and external panels
- Design teams, group projects, multiage projects, simulations, robotics teams, green teams
- Project scenarios based on real-world issues (Future City, FIRST, Odyssey of the Mind, etc.)

In Benchmark 5, all program requirements are scored individually. There are no separate metrics. Assess the level of implementation for the program requirements below according to the standards to the right.		**Developing** Investigate, Research, and Create	**Implementing** Formalize, Revise, and Publish	**Mature** Data-driven evaluation of effectiveness of program requirements	**Role Model** Continually assesses to document successes and challenges with action plans implemented to correct deficiencies in performance
5.4.A.	Promotes instructional strategies that challenge students to think critically, innovate and invent to solve real-world, contextual problems.	*Implementing*			
5.4.B.	Exposes students to critical readings in STEM-related fields and requires students to demonstrate their understanding of STEM disciplines in a work-based, contextual environment.	*Implementing*			
5.4.C.	Offers standards-based STEM programs that incorporate integrative STEM literacy and innovative instructional tools.	*Implementing*			
5.4.D.	Promotes applied and collaborative learning, and provides students with opportunities to present/defend their work to peers, community, industry, and university leaders.	*Implementing*			
5.4.E.	Promotes a rich culture that incorporates a natural use of current technologies to enhance instruction, curriculum, teaching, and learning, and STEM literacy.	*Implementing*			

5.4. STEM Education Integration

- Review the program requirements for Benchmark 5.4. STEM Integration on the previous page.

Describe how the Academy will progress along the continuum. This should include plans for:

- Students apply critical thinking, innovation and invention, to problem-solve real-world scenarios.
- Student exposure to STEM related fields and understanding of STEM disciplines in a work-based, contextual environment
- Students present/defend their learning (PBLs and capstone projects) to external experts
- Use of current technologies to enhance instruction, curriculum, teaching and learning, and STEM literacy

The Academy will continue to incorporate opportunities for students to solve real-world science and technology challenges through project based learning scenarios and through the analysis of researched based topics. Academy students will present / defend their results in the classroom, during the STEM showcase events and to experts from the field.

Rubrics will determine the criteria for solutions, research and presentations.

Google classroom and other technology will be required for all STEM courses. Students will continue the use of Chromebooks for all STEM courses.

Benchmark 5: Curriculum, Instruction, and Assessment

Example Artifacts: 5.5

- Academy-developed process in place to identify STEM and content relevant vocabulary and just-in-time literature
- Plan for vertical and horizontal expectations, per grade level, of STEM vocabulary and relevant literature
- Literature- and language-rich environment which includes technical language journals, articles, periodicals, current events newspapers, online resources, webinars, and texts
- STEM-focused strategies and activities such as word walls, student journals, literature circles, mock trials, student forums, debates
- Stakeholder input into selection of STEM instructional materials student goals and reflections (literacy in STEM, 21st century skills, technology, etc.)
- Integrative instruction and instructional materials

In Benchmark 5, all program requirements are scored individually. There are no separate metrics. Assess the level of implementation for the program requirements below according to the standards to the right.		**Developing** Investigate, Research, and Create	**Implementing** Formalize, Revise, and Publish	**Mature** Data-driven evaluation of effectiveness of program requirements	**Role Model** Continually assesses to document successes and challenges with action plans implemented to correct deficiencies in performance
5.5.A.	Promotes technologically proficient and scientifically literate students with highly developed academic vocabulary and STEM technical vocabulary.	*Implementing*			
5.5.B.	Graduates 21st century literate students proficient in: English, reading, speaking, writing, numeracy, arts, health, sciences, and world languages; government, civics, history, and geography; environmental science; global awareness; information, communications, and media technology; and financial, economic, business, and entrepreneurship.	*Implementing*			
5.5.C.	Selects appropriate STEM curriculum and culturally relevant instructional materials that foster widespread use of literacy strategies within the STEM curriculum.	*Implementing*			
5.5.D.	Provides opportunities for students to demonstrate the relevancy of the content through reading, writing, speaking, and presenting.	*Implementing*			

5.5. Literacy

- Review the program requirements for Benchmark 5.5 Literacy on the previous page.

Describe how the Academy will progress along the continuum. This should include plans for:

- Technologically and scientifically literate students
- 21st Century skills-literate students
- STEM curriculum and culturally relevant instructional materials
- Academy literacy plan

The district technology plan will be updated to incorporate the Academy criteria.

The National Science Foundation goals and the Framework for 21st Century Learning (P21) will continue to drive the Academy culture of developing 21st Century skills-literate students. The Workforce center will provide guidance regarding the workforce preparation experiences required for industry certifications.

The Academy literacy plan will include components that are grade level specific and that target college and career readiness standards aligned with the Academy Mission.

Benchmark 5: Curriculum, Instruction, and Assessment

Example Artifacts: 5.6

- Data informs instruction, plan for gaps and extension
- Curriculum aligned with standards, STEM, industry, and higher education
- Formative, diagnostic, and summative assessments, lesson redesign
- Student artifact reflection is used to inform diagnostic tools and processes
- Pre/post tests, cumulative folders, parent conferences, parent portal, student learning logs
- Pre-assessments/ post-assessments, course offerings for interventions, grades, end of course exams, student presentations, narrative assessments, oral assessments, product based assessment
- IGPs, progress reports, student information sheets, home visits, parent conferences, PEIMS info, call logs, counseling schedule/visits
- Student designed projects, project rubrics, peer reviews, panel reviews, adult/expert reviews
- Project lists knowledge and skills, 21st century skills and levels of skill mastery; course syllabus provides list of performance-based assessments; PD for teachers on developing PBLs

In Benchmark 5, all program requirements are scored individually. There are no separate metrics. Assess the level of implementation for the program requirements below according to the standards to the right.		**Developing** Investigate, Research, and Create	**Implementing** Formalize, Revise, and Publish	**Mature** Data-driven evaluation of effectiveness of program requirements	**Role Model** Continually assesses to document successes and challenges with action plans implemented to correct deficiencies in performance
5.6.A.	Uses diagnostic, ongoing, and vertically and horizontally aligned formative and summative assessments for all students to drive instructional decisions.	*Implementing*			
5.6.B.	Uses state and national standards, college and career readiness standards, industry standards, and STEM program requirements to develop common benchmark assessments.	*Implementing*			
5.6.C.	Employs student readiness assessments or diagnostics to identify and address gaps in learning.	*Implementing*			
5.6.D.	Tracks and reports student progress using student information systems.	*Implementing*			
5.6.E.	Uses performance-based assessments that allow students to demonstrate their understandings of STEM concepts.	*Implementing*			

5.6 Assessments

- Review the program requirements for Benchmark 5.6 Assessments on the previous page.

Describe how the Academy will progress along the continuum. This should include plans for:

- diagnostic, ongoing and vertically and horizontally aligned formative and summative assessments;
- state, college and career readiness, and industry standards alongside STEM program requirements;
- student readiness assessment to address gaps;
- student information systems to track progress; and
- performance based assessments that demonstrate student understanding of STEM concepts

Student assessments are performance-based, project-based and are aligned to innovative STEM programs such as those supported by the Texas STEM Coalition and the Buck Institute for Education. The T-STEM Center and Academy leadership will provide opportunities for continuous and ongoing coaching and mentoring activities to include critical thinking and problem solving and will support lessons that include expert practitioners; learning expeditions related to STEM coursework; research of current issues; intervention and acceleration plans for college entrance preparation; and opportunities for student voice recognition. The curriculum program requires all high school students to complete an internship and or capstone project prior to graduation that is specific to the annual goals of the Academy and student interest. The curriculum also designates student participation in academic clubs and or organizations.

The assessment data will continue to be used to enhance all students' academic performance levels. The summative assessments will also include capstone projects presented to a panel of judges at the end of the year, where the panel of judges will assess the validity of the student's annual progress.

Eduphoria program suite will continue to be used to develop student interventions, create and analyze assessment data and to track student progress.

The Summer Bridge program will be used to ensure Algebra I readiness by 8th grade and to prepare students for dual credit enrollment and advanced credit coursework.

Benchmark 6: Strategic Alliances

Program Requirements

6.2.A.	Identifies and secures key business, industry, and community partners to support STEM Academy efforts (mentorships, service learning projects, etc.).
6.2.C.	Identifies and secures key business and industry partners to provide STEM-related job shadowing, internships, and externships for students and teachers.
6.3.A	Develops a Memorandum of Understanding (MOU) for dual credit.
6.3.C	Develops partnerships to support a college going culture and to provide STEM graduates access to college support services (college trips, college entrance aid, GEAR UP and P-20 initiatives).
6.1.B	Provides opportunities to educate students/parents on STEM Academy expectations such as parental engagement, college connections, scholarship opportunities, mentorships, etc.

	Developing	**Implementing**	**Mature**	**Role Model**
6.2.A 6.2.C	Initiates a few partnerships with business, community, and industry.	Initial contact made and some support is provided by community business partners. Business and industry relationships are limited to onsite mentoring activities and some minor financial support.	Partnership with business and industry is formalized via established agreements. Outcomes and expectations are concrete and regularly reviewed. Partnership is evident by two-way communication of goals and vision as to what the STEM program provides.	Each major academic area is sponsored by corporate or community partners. Industry representation is a key component of the STEM strategic planning process. Integration of Academy students in business and community activities is visible.
6.3.A 6.3.C	Initial contact made and some support is provided by higher education organizations. Some courses are available to enhance STEM curriculum integration.	Develops Higher Ed connections to facilitate MOUs, crosswalk plans, teacher mentors, and externships.	Partnerships and MOUs with higher education communities are an integral component of Academy delivery model.	College credit is given to STEM students upon completion of academic work sanctioned by accredited colleges. Admission rates for STEM students to IHE exceed the normalized rates for all students within the sponsor school system.
6.1.B	Minimal strategic communications with parents and families.	Regularly scheduled distribution of communications is planned and presented to key stakeholder groups. *And meets criteria from Developing.*	Strategic communications are timely and are developed ad hoc as conditions warrant. Key messages are presented by leadership emphasizing the importance of the communication to the intended audiences, via community town halls, PTO meetings, advisory board meetings, and school board presentations. *And meets criteria from Developing and Implementing.*	Real time communications are evident via communications technologies such as websites, newsletter articles, and media presentations using the community's public service forums, (public television and radio). Leadership is easily accessible and continuously engages partnerships with stakeholders in community and student families. *And meets criteria from Developing, Implementing, and Mature.*

Benchmark 6: Strategic Alliances

- Review the program requirements for Benchmark 6 above.

Describe how these strategic alliances will support the Academy. The description should include details regarding the role of each IHE, business, and/or community partnership; along with parent/family partnerships and communication conventions with the Academy.

The Academy alliances include institutions of higher education for virtual learning opportunities, project based learning collaboration, dual credit coursework, and industry certification support.

Community and family partnerships will provide internships / externships for students and capstone project participation. The Academy will continue to host parent meeting nights and activities.

The district website, phone calls (and automated phone and text messages), letters and newsletters will continue to provide current and updated information to all stakeholders.

Benchmark 7: Assurances

The following document must be attached in order for the T-STEM Designation application to be submitted.

Official signature: OOfficial signature of a district or charter official authorized by the local board to bind the applicant organization in a legally binding contractual agreement. By signing the designation application, the district assures the minimum requirements for T-STEM Designation will be implemented in the designation year.

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Dual Credit MOU: The district or CMO provides assurance that a Memorandum of Understanding (MOU) with an Institution of Higher Education that defines the dual credit agreement is current (for the 2017-2018 school year). The MOU must be signed by all parties and ensure that sufficient detail are included and is on file at the T-STEM Academy. The executed IHE MOU for dual credit must be available for review by TEA upon request.

☑ Assurance Provided

If the T-STEM Academy is only providing AP coursework, list the AP courses that will be taught in the 2017-2018 school year.

Professional Development Plan: The T-STEM Academy applying for designation, provides assurance that a Professional Development Plan detailing the types, frequency, the provider of STEM professional development to be provided during the 2017-2018 school year, and is on file at the T-STEM Academy. The professional development plan must be available for review by TEA upon request.

☑ Assurance Provided

Business Agreement: The T-STEM Academy applying for designation, provides assurance that a minimum of one business agreement is current (for the 2017-2018 school year), signed by all parties, provides sufficient detail regarding the role of each party, (which allows students to participate in internship programs, capstone projects, or conduct field work) and is on file at the T-STEM Academy. The business agreement must be available for review by TEA upon request.

☑ Assurance Provided

2017-2018 Master Schedule: The T-STEM Academy applying for designation, provides assurance that the proposed master schedule, demonstrating a commitment to STEM education, rigorous coursework including Dual Credit, AP, or IB courses, and a vertically and horizontally aligned curriculum is on file at the T-STEM Academy. The 2017-2018 master schedule must be available for review by TEA upon request.

☑ Assurance Provided