Nevada STEM Program Recognition Rubric K-12

Categories	Attribute	Exploratory *The Exploratory STEM program describes a school program that has intermittent STEM-related opportunities for students.*	Developing *The Developing STEM program describes a program that provides STEM- related experiences for students in specific classes or instructional settings as part of the daily schedule.*	Established *The Established STEM program describes a school where STEM- related experiences are provided for ALL students in the program in many instructional settings as part of the daily schedule.*	Model *The Model STEM program describes a school where STEM-related experiences are provided for ALL students within the program and are integrated in all instructional settings throughout the school day. This may be realized through a non-traditional daily schedule.*
Curriculum Practices	*Degree of integration of the scientific, technological, engineering and mathematical practices.*	STEM practices may be integrated into curricular opportunities for some students with or without technology and engineering design integration.	STEM practices are partially integrated into some instructional settings for ALL students in the program as part of daily instruction with technology integration and minimal engineering design .	STEM practices are integrated into daily instruction for ALL students in the program with technology integration and engineering design.	STEM practices are fully integrated into daily instruction for ALL students in the program throughout the school day in a scientific, technological, engineering, and mathematical learning environment.
	Students use appropriate problem solving practices to develop multiple solutions and communicate their ideas both orally and in writing, with argumentative support.	Teachers guide students through engineering processes to discover problems have multiple solutions.	Students are supported by the teacher to apply content knowledge and compare multiple solutions using evidence.	Students are persistent in applying content knowledge from multiple subject areas to implement solutions and communicate them both written and orally.	Students are persistent in applying content knowledge from multiple subject areas to implement solutions and support argumentation.
	Ethical implications are part of the decision making process.	Teachers identify that ethical implications are a part of decision making.	Teachers encourage discussion of ethical implications among students.	Students explain ethical implications associated with global problems.	Classroom operations and student work clearly consider ethical implications.
Curriculum	*Degree of*	STEM and non-STEM	STEM and non-	STEM and non-	STEM and non-

Integration	*integration of STEM content within classroom instruction with non-STEM content areas such as Art, PE, English Language Arts, Social Studies, and Health.*	content may be integrated into curricular opportunities for some students with or without technology and engineering design integration.	STEM content is partially integrated into some instructional settings for ALL students in the program as part of daily instruction with technology integration and minimal engineering design .	STEM content is integrated into daily instruction for ALL students in the program with technology integration and engineering design.	STEM content is fully integrated into daily instruction for ALL students in the program throughout the school day in a scientific, technological, engineering, and mathematical learning environment.
Learning Environment	*Degree of fair and equitable access to a STEM-related experience for ALL students in a culture that is welcoming, stimulating, and nurturing.*	STEM-related experiences are equitable, accessible and are partially integrated into instruction for ALL students in a welcoming environment.	STEM-related experiences are equitable, accessible and are integrated into instruction for ALL students in a welcoming and stimulating environment.	STEM-related experiences are equitable, accessible and are integrated into instruction for ALL students in a welcoming, stimulating and nurturing environment.	STEM-related experiences are equitable, accessible and are fully integrated into instruction for ALL students in a welcoming, stimulating and nurturing environment.
STEM Instruction	*Degree in which teachers are facilitators of independent student learning, providing high quality cognitive tasks and higher-level questioning during a STEM-related experience.*	Teachers guide STEM-related learning opportunities offered to students with minimal independent and interdependent student learning that include a small number of high-level cognitive tasks and multi-level questioning.	Teachers guide STEM-related learning opportunities offered to students in group situations with limited independent and interdependent student learning that includes some high-level cognitive tasks and questioning.	Teachers facilitate STEM-related learning opportunities offered to students in group situations with greater independent and interdependent student learning that includes high-level cognitive tasks and multi-level questioning.	Teachers are facilitators of collaborative groups in STEM-related learning experiences with independent and interdependent student learning that includes high-level cognitive tasks and multi-level questioning.
	Students work collaboratively to solve engineering problems.	Teamwork in the classroom takes place weekly, team roles are not defined.	Teams exhibit evidence of defined roles.	Students exemplify cooperative teamwork daily.	Student teams design and evaluate solutions to age appropriate difficult and unfamiliar

					problems.
	Students will participate in a STEM program that is recognized and assessed at the local/state/national levels	Students are not evaluated through varied assessment in specific STEM-learning environments on school / state / nationwide level.	Some students are evaluated through varied assessment in specific STEM-learning environments on school / state / nationwide level.	A majority of students show some growth through varied assessment in STEM-learning environments on school / state / nationwide level.	All students show significant growth through varied assessment in STEM-learning environments on school / state / nationwide level.
STEM Integration	*Teachers and students recognize the Importance of curriculum (curricular) choices to future STEM career development and preparation.*	Teachers and students understand appropriate course selection will help prepare students for opportunities in a STEM career.	Students recognize a need for educational and STEM career goals.	Teachers help students identify STEM courses of study as possible routes for their own educational development.	Students identify possible STEM career goals and possible educational pathways to reach the goals.
	Students understand and find solutions to local and global problems within the community.	Teachers identify local and global problems and their relationship to the community.	Teachers explain how local and global problems impact the community.	Students understand how the community can solve local and global problems.	Students explain multiple-solution approaches to a variety of local and global problems.
Leadership	*Degree in which administrators support STEM-related experiences within the school such as scheduling, funding, teacher time for collaboration, and opportunities for professional learning.*	Administrators minimally support STEM-related experiences within the school to include collaborative time for teachers and STEM related professional learning opportunities.	Administrators partially support STEM-related experiences within the school to include collaborative time for teachers and STEM related professional learning opportunities.	Administrators mostly support STEM-related experiences within the school to include collaborative time for teachers and STEM related professional learning opportunities.	Administrators strongly support fully integrated STEM related practices in daily instruction within the school that includes collaborative time for teachers and STEM related professional learning opportunities.
	Administration and teachers provide	Administration and teachers identify	Administration and teachers collaborate	Administration and teachers apply	Administration and teachers encourage

	experiences for STEM related career awareness.	opportunities to collaborate with the local industry and community.	with the local industry and community to provide interactions with students	collaborative principles to form industry and community partnerships.	experiences for students both outside the classroom and in the classroom to develop STEM practices and related career awareness opportunities.
Stakeholders	*Degree of parent/guardian engagement and STEM partnerships ' collaboration, in support of the STEM related experience within the school and/or classroom.*	Parents/ Guardians minimally participate in some STEM related experiences and/or a STEM partner occasionally collaborates with teachers concerning STEM related experiences.	Parents/ Guardians sometimes participate in some STEM related experiences and/or a STEM partner collaborates with teachers concerning some STEM related experiences.	Parents/ Guardians usually participate in STEM related experiences and/or STEM partner(s)usually collaborate with teachers concerning STEM related experiences.	Parents/ Guardians actively participate in STEM related experiences and STEM partner(s) actively collaborate with teachers in STEM related experiences
	Degree of STEM partnerships with community, industry, business, higher education, informal education, outdoor education, or afterschool programs.	School has a STEM partner that occasionally assists with some STEM related activities.	The school has STEM partner(s) that sometimes support STEM related activities in specific classrooms.	The school has STEM partner(s) that often support STEM related classroom experiences.	The school has STEM partner(s) that actively support a STEM-centered school setting.