The professional development quality rubric was created to provide STEM professional development providers an opportunity to perform a self-assessment and reflection of the types of professional development that are being offered in the context of some identified best practices of high-quality professional development. The STEMSTL Professional Development workgroup engaged in comprehensive research on best practices for PD, using various sources including the following article: "Effective Teacher Professional Development."

This rubric is intended to be used as a tool for self-reflection rather than judgment or evaluation. Your assessment of your professional development activity is meant to provide you a "temperature check" as to where you currently are in implementing high quality STEM professional development.

	Extending	*Proficient*	*Developing*	*Emerging*
Design Element ONE: Professional Development is content focused	Ongoing professional development offered that is focused on teaching strategies associated with specific curriculum content that supports participant's learning within their contexts. This element includes an intentional focus on discipline-specific curriculum development and pedagogies in areas such as mathematics, science, engineering and technology. Professional learning goals and objectives are aligned to appropriate leveled state/national standards.	The professional development offered is focused on teaching strategies associated with specific curriculum content that supports participant's learning within their classroom contexts. This element includes an intentional focus on discipline-specific curriculum development and pedagogies in at least one STEM subject.	Professional development may or may not be related to STEM content. Strategies that are shared are general in nature and not aligned to a specific content focus.	Professional development is offered but is not aligned to curriculum content. Professional learning goals and objectives are not aligned to appropriate leveled state/national standards.

	Extending	Proficient	Developing	Emerging
Design Element TWO: Professional Development incorporates active learning	Active learning engages teachers/educators directly in designing and trying out teaching strategies, providing them an opportunity to engage and receive ongoing feedback in the same style of learning they are designing for their students. Such professional development significantly uses authentic artifacts, interactive activities, and other strategies to provide deeply embedded, highly contextualized professional learning.	Active learning engages teachers directly in trying out teaching strategies, providing them an opportunity to engage and receive occasional feedback in the same style of learning they are designing for their students. Professional development activities moderately use authentic artifacts, interactive activities, and other strategies to provide deeply embedded, highly contextualized professional learning.	Teachers are given direct instruction regarding learning strategies, with limited feedback	Teachers are not engaged in professional development activities that provide the same style of learning that they are designing for their students. Feedback is not provided.

	Extending	Proficient	Developing	Emerging
Design Element THREE: Professional Development supports collaboration	High-quality professional development creates ongoing opportunities for teachers to share ideas and collaborate in their learning, often in job-embedded contexts. Teachers have significant opportunities to collaborate in professional development activities with peers in their content areas within and outside of their particular context.	High-quality professional development creates opportunities for teachers to share ideas and collaborate in their learning, often in job-embedded contexts. Teachers have some opportunities to collaborate with professionals in learning opportunities. Most collaboration occurs within their particular context.	High-quality professional development creates limited opportunities for teachers to share ideas and collaborate in their learning. Professional development collaboration is sporadic in occurrence.	Little to no evidence that collaboration occurs between teachers.

	Extending	Proficient	Developing	Emerging
Design Element FOUR: Professional Development incorporates effective or best practices	Curricular models and modeling of instruction provide teachers with a clear vision of what best practices look like. Teachers may view multiple models that include lesson plans, unit plans, sample student work, observations of peer teachers, and video or written cases of teaching. Teachers have an ongoing opportunity to reflect and discuss best practices.	Teachers utilize some models that include lesson plans, unit plans, sample student work, observations of peer teachers, and video or written cases of teaching. Teachers have an opportunity to reflect and discuss best practices.	Limited evidence exists that teachers utilize models that include lesson plans, unit plans, sample student work, observations of peer teachers, and video or written cases of teaching. Teachers have limited opportunity to reflect and discuss best practices.	Professional development models do not incorporate a vision of best practices. There is not an opportunity to reflect and discuss best practices.

	Extending	Proficient	Developing	Emerging
Design Element FIVE: Professional Development provides coaching and expert support	Coaching and expert support involve the one-on-one sharing of expertise about content and evidence-based practices, focused directly on teacher's individual needs. This support is on-going, job embedded and supports a growth model.	Coaching and expert support involve the one-on-one sharing of expertise about content and evidence-based practices. Experiences may not be directly focused on teacher's individual needs.	Some evidence exists that professional development activities incorporate coaching or expert support, but its usage is sporadic.	Professional development models do not incorporate coaching or expert support.

	Extending	Proficient	Developing	Emerging
Design Element SIX: Professional Development provides opportunities for feedback and reflection	High-quality professional learning frequently provides built-in time for teachers to intentionally think about, receive input on, and make changes to their practice by facilitating reflection and soliciting feedback. Feedback and reflection both help teachers to thoughtfully move toward the expert visions of practice.	Professional learning provides built-in time for teachers to intentionally think about, receive input on, and make changes to their practice by facilitating reflection and soliciting feedback.	Professional learning provides limited time for teachers to intentionally think about, receive input on, and make changes to their practice by facilitating reflection and soliciting feedback.	Professional learning does not support time for teachers to explore feedback and self-reflection.

	Extending	Proficient	Developing	Emerging
Design Element SEVEN: Professional Development is of sustained duration	Effective professional development provides teachers with significant time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice.	Professional development provides teachers with adequate time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice.	Evidence supports that teachers are given limited time to learn, practice, implement, and reflect upon new strategies that facilitate changes in their practice.	No evidence that professional development occurs over a sustained duration.

	Extending	Proficient	Developing	Emerging
Design Element EIGHT: Professional Development incorporates the use of data	Significant commitment that professional learning increases educator effectiveness and results for all students. Uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.	Commitment that professional learning increases educator effectiveness. Uses sources and data to plan, assess, and evaluate professional learning.	Limited evidence that professional learning uses data to plan, assess, and evaluate professional learning.	No evidence that professional learning uses data to plan, assess, and evaluate professional learning.

	Extending	Proficient	Developing	Emerging
Design Element NINE: Professional Development is aligned with Performance and Curriculum Standards	Professional learning that increases educator effectiveness and improves results for all students significantly and consistently aligns its outcomes with educator performance and student curriculum standards.	Professional learning that increases educator effectiveness and improves results for all students and often aligns its outcomes with educator performance and student curriculum standards.	Some evidence supports that professional learning aligns its outcomes with educator performance and student curriculum standards.	Inadequate or no evidence supports that professional learning aligns its outcomes with educator performance and student curriculum standards.

	Extending	Proficient	Developing	Emerging
Design Element TEN: Professional Development is aligned to Transportable Skills relevant to the topic/audience	There is significant evidence that professional development activities incorporate at least four of the six categories identified in STL STEM Transportable Skills Document (see appendix) including an appreciation of cultural differences as a valued skill in STEM learning.	There is evidence that professional development activities incorporate at least three categories identified in STL STEM Transportable Skills Document (see appendix) including an appreciation of cultural differences as a valued skill in STEM learning.	There is limited evidence that professional development activities incorporate multiple categories identified as transportable skills and some introduction of cultural differences as a valued skill in STEM learning.	There lacks any documented evidence that transportable skills or relating across differences is recognized and facilitated as part of the professional development experience.