

K-8 STEM Resource Criteria

Consider the essential criteria and indicators of quality when proposing a new resource for inclusion within the Quality STEM Implementation Guide for Louisiana K-12 Schools.

| Key Element | Essential Criteria | Indicators of Quality |
|--------------------------|--|--|
| Overall Design | Materials are up-to-date and available to any educator through digital access. | Materials created on or after 2012 are available for review online or in digital format and contain units or modules to be used over an extended period. Both teacher- and student-facing materials are available. |
| Features of Quality STEM | All students have access to quality STEM learning experiences. | Materials are free from exclusionary practices, such as grade or class prerequisites, that are unnecessary for use or language that excludes groups of students. |
| | STEM instruction is a continuous spectrum of experiences across multiple disciplines from K-12. | Materials are part of a larger progression that spans more than one grade level or across more than one grade band. |
| | Student-centered investigation and design drive learning outcomes for students. | Activities provide opportunities for students to lead investigation and design in which they take ownership of the learning. |
| | Career-connected STEM experiences expose students to future opportunities, partnerships with industry, and possibilities in STEM extending beyond the classroom. | Connections to careers in STEM that are age-appropriate and help to extend student thinking and perceptions about STEM careers throughout the resources. |
| | Disciplinary practices in science, technology, engineering, and mathematics are leveraged appropriately, driving engineering design and innovative technology integration. | Evidence of students engaging in science, engineering, and mathematical practices which serve as the tools to achieve engineering design and technology integration. *Computer Science Exploratory courses must align to the K-12 Louisiana Student Standards for Computer Science. |
| Professional Learning | Teacher capacity is developed through intentional training and additional support to ensure accurate resource implementation. | Teacher training and other opportunities for professional development are provided by qualified personnel and include best practices for teaching and learning. |