

Characteristics of a Quality STEM Student

- The student pursues excellence in their work.
- The student stays focused and desires to complete their work.
- The student enjoys making presentations on their work.
- The student is able to write about their experience.
- The student can apply math to their projects.
- The student pursues safety.

Assessing STEM Projects & Activities

What is the best way to assess a STEM student when they do projects and activities?

Every student approaches their project different and every student comes with different experience. It is impossible, at best, to give a standardized test to measure what a STEM student has accomplished or learned from a project.

From ten years of teaching STEM across Mississippi I have come up with a working solution to this problem. I call my evaluation approach the Quad-C™ or CCCC™ method.

- **C = Commitment** – Contractual commitment with student to start and complete the project as defined and within the agreed schedule. For younger students (k-6th) it can be verbal, however, for older students it needs to be in writing with as much detail as the student wants to commit to or have time to accomplish.
- **C = Completion** – Completion of the project or activity as defined in the commitment contract based on the SAGS Rubrics Chart (not included). The Rubrics will assist the teacher in measuring the partial or incorrect completion of the project or activity.
- **C = Cycle/Recycle/Redo/Rework**. Based on the contract and the goals of the teacher, this phase allows for the teacher to have the student continue working on the project until an additional part of it is working according to the contract or modified contract. Once the project or activity meets the satisfaction of the teacher and contract, the students move into the fourth phase of documenting the project and preparing a written and verbal presentation.
- **C = Comprehension** – Ability to show final results, express in writing, and express verbally the committed project.

The final grade can be expressed in a number ratio, percentage, or pass, or incomplete.