Assessing your STEM Activity

Ray Holt

Grading STEM Activities

- Should the student just play and have fun?
- What if the activity takes several days?
- What if the activity is messy?
- Do you grade a 4th grader and 12th grader the same?
- Do you give a test?

What is 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.

Working with STEM students?

- ✓ All students are a work in progress.
- ✓ All students are different.
- ✓ Some students need to be taught basic hands-on.
- ✓ Every student comes with different skills & experience.
- ✓ A standardized STEM test is impossible to give.
- ✓ Students must be allowed to seek & learn skills.
- ✓ Mentoring is critical.

My CCCC Method ©

- Commitment
- Completion
- Cycle / Recycle / Redo / Rework
- Comprehension

My CCCC Method ©

- Commitment

  contractual commitment with student to start and finish the project as defined.

- Completion

  as defined with Commitment the student completes the project. Rubrics chart or checklist might help with expectations.

My CCCC Method ©

- Cycle/Recycle/Redo/Rework
  keep working and reworking the project until the original commitment is satisfied or amended. Mentoring is critical.

- Comprehension
  the student expresses the final results verbally, in writing, or with media.

Failure is an option

- Failure is good in learning STEM.
- Teach recovering from all failures.
- Students learn troubleshooting from failures.
- Troubleshooting is one of the highest skills requested by industry. (the others are tool usage and math)

A Challengine Project for a 9th grade student

- Computer Take-a-Part Video