Effective STEM Experiences Rubric

You can find a Word file for the rubric at http://greatercincystem.org/new_stem_resources.php

You can use the on-line version at http://greatercincystem.org/new_stem_rubric.php

Purpose, Objectives, Scales and Directions
With the overall goal of increasing the number of students prepared for and interested in STEM studies and careers, the Greater Cincinnati STEM Collaborative has developed a rubric that provides a definition for "effective" STEM experiences. Engaging students in high quality STEM experiences is a proven tactic to meet our overall goal. Researching best practices across the country and tailoring it to meet the needs of our region developed the rubric.

The objectives of this rubric are to provide:

- A self-assessment tool for existing programs to benchmark current curriculum and identify areas of strength and areas that perhaps can be further developed. While it is not intended that all programs have all elements of the rubric, the rubric can provide useful topics for discussion from a continuous improvement standpoint. Also, if a program chooses to share their assessment results publicly, educators, parents and volunteers to identify programs that meet their needs can use it.
- An assessment tool for educators (teachers/administrators) and parents who are reviewing program options for their students/children for inside or outside classroom activities. The rubric can be used to evaluate which programs can most closely meet the learning needs of the students.
- An assessment tool for volunteers (especially from businesses, institutions, and organizations) seeking opportunities to share their individual time and talents or that of their employees. This is particularly critical for matching STEM professionals to the programs that are the best fit for the students.

The scales on the rubric are defined as:

Accomplished – check here for items that are a major focus/key design element for the program. These concepts are fully integrated into most aspects of the program.

Emerging – check here for items that are minor or secondary design elements. These elements are important to the overall impact of the program, but are secondary to the major focus areas.

Limited – check here for items that are new to the program and are being piloted for future expansion in some way if the pilot is successful.

Not Applicable – check here for items that are not intended to be included in the design of the program. For instance, a one-day program may have many check marks in this category because you simply cannot cover a lot of material in a meaningful way in a one-day program.

Comments – this column can be used to explain why you checked the column that you selected. It can also be used to capture any plans for future changes/improvements that are intended to enable a move from one category to another.

The Greater Cincinnati STEM Collaborative strongly encourages all programs to use this rubric to continuously improve and raise awareness of the wide variety of opportunities in our community. Engaging students in effective STEM activities can be a life-changing experience for our children!

Directions:
Place an "x" in the box to the right of each rubric component that best describes your personal evaluation for each rubric component (Accomplished, Emerging, Limited, Not Applicable). At your discretion, you may add brief comments in the box labeled "Comments" for each rubric component in order to provide additional perspective.