

S.T.E.M.

Highlights of a good program:

1. Clearly identify the problem, to create and develop solutions.
2. Through authentic experiences, students should understand how key science and math concepts are applied out in the world.
3. Lessons are inquiry-based, where kids carry out hands-on investigations that encourage critical thinking and problem solving.
4. The lessons are not prescriptive and teachers play a facilitator role, providing just enough guidance and monitoring.
5. Kids should have plenty of opportunity to muck about, make decisions, and test their ideas as possible solutions.
6. Technology should be presented as more than computers; technology includes all tools used to make life easier and better.
7. STEM coursework should help them learn and value productive communication at personal, team and public levels.

Gallier House Museum offers a special mock archaeological dig
that supplements S.T.E.M. standard learning

Through planning and design of the dig site, students gain a deeper understanding of interdisciplinary **methods to solve a problem** and learn more about a particular place and time in the past. Planning and design require basic engineering, assessment, and scientific inquiry.

It is learning through a **real-life, authentic experience** which engages students. It encourages them **to follow a process and communicate effectively** to answer questions about the past. They are **guided** through the process by experienced staff and given the opportunity to ask questions, experiment, and try new methods.

Technology is a key component due to the need for digital recording, photographs, and digital publication of findings.

It gives them the opportunity to **investigate and evaluate** their efforts when they have completed the dig. The program takes them through a scientific process from development, implementation, to evaluation in a unique and interesting way.