

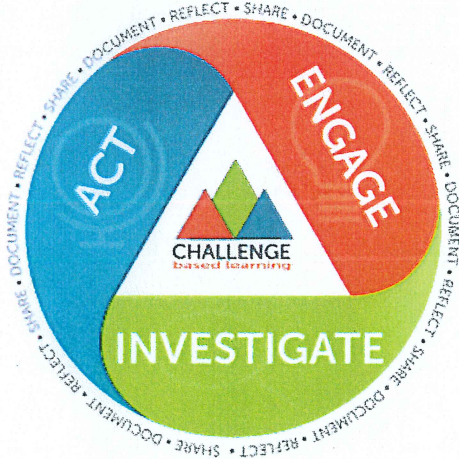
Challenge Based Learning (CBL) provides an efficient and effective framework for learning while solving real-world Challenges. The framework is collaborative and hands-on, asking all participants (students, teachers, families, and community members) to identify big ideas, ask good questions, identify and solve challenges, gain deep subject area knowledge, develop 21st century skills, and share their experience with the world.

Challenge Based Learning provides:

1. A flexible and customisable framework.
2. A scalable model with multiple points of entry.
3. A process that places all learners in charge and responsible for the learning.
4. An authentic environment for meeting academic standards and deep learning.
5. A focus on global ideas with local challenges and solutions.
6. An authentic connection between academic disciplines and real world experience.
7. A framework to develop a wide range of 21st century skills.
8. Purposeful use of technology.
9. The opportunity for learners to make a difference now.
10. A way to document and assess both the learning process and product.
11. An environment for deep reflection on teaching and learning.

FRAMEWORK

The Challenge Based Learning Framework is divided into three interconnected phases: Engage, Investigate and Act. Each phase includes activities that prepare you to move to the next phase. Supporting the entire process is an ongoing process of documentation, reflection and sharing.



Engage – Through essential questioning learners move from an abstract big idea to a concrete and actionable challenge.

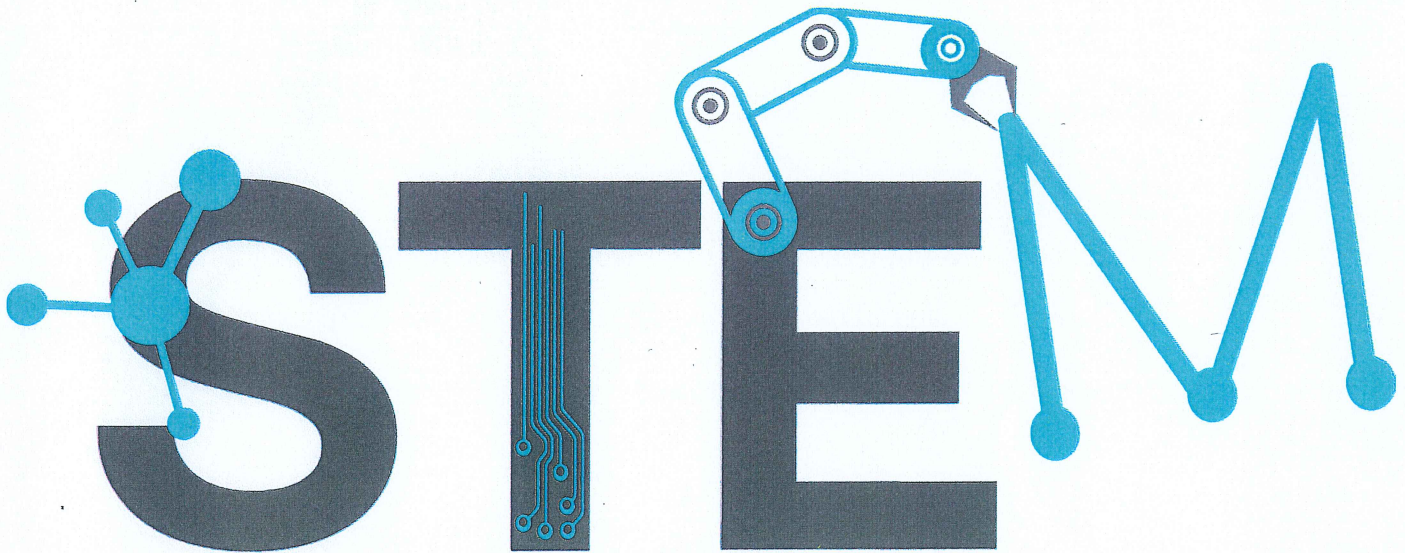
Investigate – The learners plan and participate in a journey that builds the foundation for solutions and addresses academic requirements.

Act – Evidence based solutions are developed, implemented with an authentic audience and then evaluated based on the results.

Document, Reflect and Share – Throughout the challenge, learners document the experience using audio, video, and photography. This ongoing collection of content provides the resources for reflection, informative assessment and evidence of learning.

STEM and CBL

Current research in challenge based learning (or project-based learning) demonstrates that 'challenges' can increase student interest in science, technology, engineering and maths (STEM) because they involve students in solving authentic problems, working with others, and building real solutions. Through an integrated approach to STEM education (CBL, Maker Space, Tech Teams, Science Challenges etc) focused on real-world, authentic problems, students learn to reflect on the problem-solving process. Research tells us that students learn best when encouraged to construct their own knowledge of the world around them. It is through CBL and STEM projects that this type of learning can occur.



SCIENCE ⚙️ TECHNOLOGY ⚙️ ENGINEERING ⚙️ MATH