

Inquiry Based Learning

What is it?

Inquiry-based learning is an education approach that focuses on investigation and problem-solving. Inquiry-based learning is different from traditional approaches because it reverses the order of learning. Instead of presenting information, or 'the answer', up-front, teachers start with a range of scenarios, questions and problems for students to navigate.

Inquiry-based learning prioritises problems that require critical and creative thinking so students can develop their abilities to ask questions, design investigations, interpret evidence, form explanations and arguments, and communicate findings.

How does it help?

Students learn key STEM and life skills through inquiry-based learning. Inquiry-based learning also promotes:

- Social interaction. This helps attention span and develops reasoning skills. Social interaction encourages students to generate their own ideas and critique in group discussions. It develops agency, ownership and engagement with student learning.
- Exploration. This allows students to investigate, design, imagine and explore, therefore developing curiosity, resilience and optimism.
- Argumentation and reasoning. This creates a safe and supportive environment for students to engage in discussion and debate. It promotes engagement in scientific discussion and improves learning of scientific concepts. It encourages students to generate questions, formulate positions and make decisions.
- Positive attitudes to failure. The iterative and evaluative nature of many STEM problems means failure is an important part of the problem-solving process. A healthy attitude to failure encourages reflection, resilience and continual improvement.

How do you do it?

- [UNESCO](#) recommends a four-step process:
 - set a challenge for students
 - encourage active student investigations
 - make generalisations
 - reflect

How do I do it?

Here are some ideas I've used in my classes.

Question Set 1

Physical Activity & Personal Health

- 1) What would you include on a list about physical activity?
- 2) How does physical activity affect your personal health?
- 3) What would happen to a person's health if they were physically active every day? What would happen to their health if they were never physically active?
- 4) Create a daily schedule that includes 60 minutes of physical activity.

Question Set 2

- 1) What are 3 physical activities that you really enjoy?
- 2) What do you need in order to participate in those activities? (Think about equipment and space.)
- 3) How can you change those activities so you can do them at home or at school?
- 4) Create a short conversation that you could have with a family member that will help you ask them for help in participating in your favourite physical activities.

Social & Emotional Health

Question Set 1

- 1) What does trustworthy mean?
- 2) How can you show your classmates and teachers that you're trustworthy?
- 3) How is respecting personal space related to being trustworthy?

Question Set 2

- 1) What is enthusiasm?
- 2) What do you know about enthusiasm?
- 3) How would you describe someone who is enthusiastic?

Question Set 3

- 1) What is encouragement?
- 2) Can you make a list of encouraging things you can say to a friend?
- 3) How is encouragement related to a person's enthusiasm?