Investigate

* Identify the problem
* Develop the design brief
* Formulate a design specification

Plan

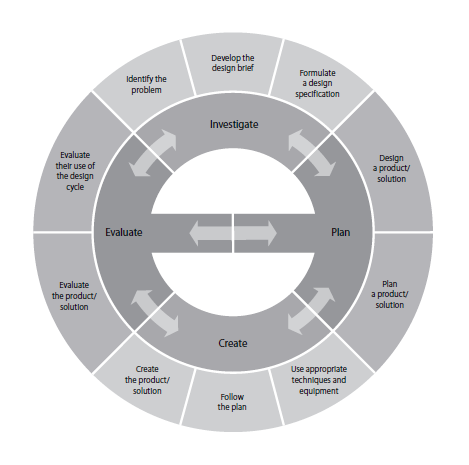
* Design a product/solution
* Plan a product/solution

Create

* Use appropriate techniques and equipment
* Follow the plan
* Create the product/solution

Evaluate

* Evaluate the product/solution
* Evalutate use of the design cycle



**Attitudes in technology -**

This objective goes beyond technology and refers to encouraging attitudes and dispositions that will contribute to students’ development as caring and responsible individuals and members of society.

**Example A**

Observing

Questioning

Hypothesizing

Predicting

Planning and Investigating

Interpreting

Communicating

[*www.exploratorium.edu/ifi*](www.exploratorium.edu/ifi)

**Example B**

Ask a Question (based on an observation)

Do Background Research

Construct a Hypothesis

Test Your Hypothesis by Doing an Experiment

Analyze Your Data and Draw a Conclusion

Communicate Your Results

[*http://www.sciencebuddies.org/*](http://www.sciencebuddies.org/)

**Look carefully at works of art.**

**Talk about what they observe.**

**Back up their ideas with evidence.**

**Listen to and consider the views of others.**

**Discuss many possible interpretations.**

**VTS is an inquiry-based facilitation technique for engaging students in critical discussions about works of art. There is no prior knowledge needed to approach the work of art. VTS, a learner-centered technique, has been proven to develop critical thinking, foster rigorous examination of a work of art, and engenders respect for multiple points of view.**

**Teachers are asked to use three open-ended questions:**

* What’s going on in this work of art?
* What do you see that makes you say that?
* What more can we find?

[*www.vue.org*](www.vue.org)

Read widely

Select an issue or topic to research

Develop a theory about the information (a working thesis)

Plan (locate multiple resources)

Gather and evaluate information in order to form a “working thesis”

Collect evidence to support and possibly redefine the working thesis

Interpret the information

Develop a plan for writing

Draft, Revise, Edit, Publish

***SDUSD Middle Level Units of Study Grades 6-8***

Research Process

Visual Thinking Strategies

Scientific Process Skills

IB Design Cycle

Inquiry Processes