Information Technology
Design Model

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

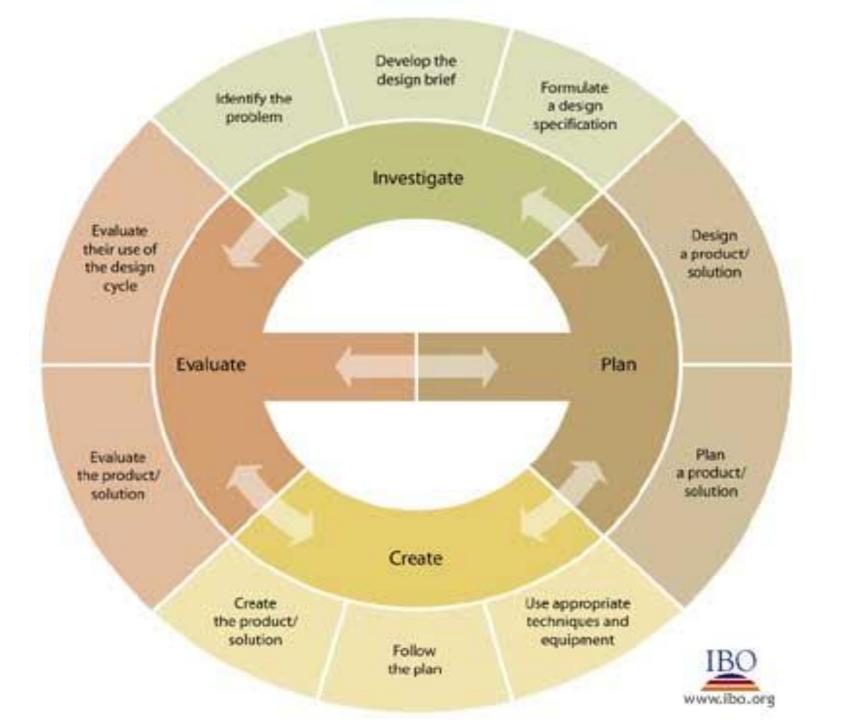Evaluate
- Evaluate the product/solution
- Evaluate their use of the design cycle

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During the **Investigation**, students should:
• recognize the extent of the use of technology in their surroundings, and in the world
• research historical and cultural developments in technology
• analyze specific situations and needs
• analyze the environmental and social impact of technological processes and products
• explore simple and complex technological objects and processes
• consider attitudes and values relating to technological change

During the **Planning** stage, students should:
- develop 'brain-storming' skills
- research methods and techniques, using a variety of sources
- use ideas and information from a broad range of sources and cultures
- develop strategies for the management of resources and time
- test a variety of techniques
- devise or interpret a design specification
- review plans and proposals critically
- acknowledge all sources of information and ideas

During the **Creation** stage, students:
• should use tools and techniques safely and efficiently
• should follow their design specification
• should adjust their work plan if necessary
• may develop models and prototypes
• may make products to detailed specifications and standards
• may work cooperatively
• should adapt to new ideas, constructive criticism and suggestions
• should follow a schedule

During the **Evaluation** stage, students should:
• compare the product/solution to the original need
• assess the aesthetic and practical qualities of the product/solution
• suggest ways of improving the fit and quality of the product/solution
• assess the efficiency of the process and suggest ways of improving it
• reflect on their own involvement at every stage of the design process
• recognize the possible cultural dimensions of the project
• reflect on their overall performance and, where relevant, that of the group