

# Comparative Analysis of Design Models

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NASA	IDEO	DARTMOUTH	Hockinson Middle School MESA
Ask	Observation	Define Problem/Identify Constraints/Specifications	What's the Problem?
Imagine	Brainstorm	Brainstorm/Research Alternatives/ Identify Potential Solution using Trade off Matrix	Explore Ideas
Plan		Research, Design & Present Solution	Plan: "Sketch & Talk"
Create a Working Model	Rapid Prototype	Construct Prototype	Build a Model
Experiment		Evaluate Prototype	Experiment
Improve	Refine Design	Simplify Design	Share Findings--Get Feedback
	Implementation		Improve Design



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Focus: Developing engineering habits of mind	Focus: Designing Human Experiences	Focus: Developing solutions requires teamwork & compromise	Focus: Developing teamwork, engineering habits of mind & Communication
Team members record and communicate each step in the process	The customer participates throughout the process	Ideas, findings and solutions are shared in oral & written reports	Teacher coaches students to "talk" through the process
Process is cyclical, not linear	Process: Fast and "No Frills"	Process: The heart of the process is the analysis of design alternatives	Process: Play and dabble before a more organized approach