Step	NASA Design Process	Step	Dartmouth Engineering Design	Step	IDEO	Similarities	Differences
1	Identify the Problem	1	Define the Problem	1	Observation	- NASA and Dartmouth provide a clearer vision for what is involved in the "observation" step and put an emphasis on truly understanding the problem before creating a solution	- IDEO provides brief summary of each step potentially to make it easier for their clients to easily understand the process
2	Identify Criteria and Constraints	2	Restate the Problem				
		3	Develop constraints and criteria				
3	Brainstorm Possible Solutions	4	Brainstorm ideas	2	Brainstorming	- All three models highlight the importance of brainstorming before building	- Dartmouth provides more space for evaluating and analyzing alternatives before deciding on an approach - IDEO highlights the importance of teamwork and building onto, not putting down, the ideas of others
4	Generate Ideas						
5	Explore Possibilities	5	Research alternatives				
		6	Analyze alternatives by a trade-off matrix				
6	Select an Approach	7	Identify a potential solution				
		8	Research in detail the potential solution				
		9	Design a potential solution (prototype)	3	Rapid Prototyping	- All three models including prototyping	- IDEO's prototyping puts an emphasis on working quickly and cheaply. It also encourages using video to better communicate ideas to all - Dartmouth breaks down each step of the prototype process and includes a step to keep trying as needed
7	Build a Model or Prototype	10	Construct a prototype				
		11	Evaluate prototype				
		12	Reiterate if necessary				
8	Refine the Design	13	Simplify if possible	4	Refining	- All three models include a step to re-assess and improve the design	- IDEO specifically makes time to "engage the client" to include them as part of the decision making process
				5	Implementation		- Only IDEO includes the implementation step as part of the process - Again, seems motivated by the client-facing nature of their process