

Check List for Teachers:

Item	Discussion																				
Overview: These are the warm up exercises!	What steps do we take with our students to get them excited about using design and thinking skills to do project based learning from literature? This is a simple guide to start you off on your journey of discovery in design learning.																				
Important thoughts to keep in mind while starting the students off.	You should understand that most of the items the students will learn center around the divergent and convergent thinking process. That implies that failure should not be feared but embraced as part of the learning process. Creative ideas should be many and most thrown out that will not work in this situation.																				
Simplified check list of learning items. <i>Think of hooks and activities you can use to help the student prepare and focus on their learning.</i> Relate to Multiple Intelligences: I <ul style="list-style-type: none"> • Intrapersonal • Logical-Math. • Spatial • Bodily-kinesthetic • Musical • Verbal-linguistic • Interpersonal • Naturalist 	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; background-color: #c0c0c0;">Learning task</th></tr> </thead> <tbody> <tr> <td style="text-align: center;"></td><td>Understand the design process</td></tr> <tr> <td style="text-align: center;"></td><td>What do engineers, scientists and mathematicians do?</td></tr> <tr> <td style="text-align: center;"></td><td>What are the design challenges in stories?</td></tr> <tr> <td style="text-align: center;"></td><td>How do we connect them to the design process (thinking skills)?</td></tr> <tr> <td style="text-align: center;"></td><td>How will we measure our success and how will we get feedback to improve?</td></tr> <tr> <td style="text-align: center;"></td><td>How do we work as teams? What role will I play in the team?</td></tr> <tr> <td style="text-align: center;"></td><td>How do we report our results to others?</td></tr> <tr> <td style="text-align: center;"></td><td>What did we learn from doing this? What will I do to improve for the next time?</td></tr> <tr> <td style="text-align: center;"></td><td>What can I bring to my other learning from using the design process and thinking skills?</td></tr> </tbody> </table>	Learning task			Understand the design process		What do engineers, scientists and mathematicians do?		What are the design challenges in stories?		How do we connect them to the design process (thinking skills)?		How will we measure our success and how will we get feedback to improve?		How do we work as teams? What role will I play in the team?		How do we report our results to others?		What did we learn from doing this? What will I do to improve for the next time?		What can I bring to my other learning from using the design process and thinking skills?
Learning task																					
	Understand the design process																				
	What do engineers, scientists and mathematicians do?																				
	What are the design challenges in stories?																				
	How do we connect them to the design process (thinking skills)?																				
	How will we measure our success and how will we get feedback to improve?																				
	How do we work as teams? What role will I play in the team?																				
	How do we report our results to others?																				
	What did we learn from doing this? What will I do to improve for the next time?																				
	What can I bring to my other learning from using the design process and thinking skills?																				
How do you engage your students? (use of questions)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; background-color: #c0c0c0;">What question do you ask</th></tr> <tr> <th style="background-color: #c0c0c0;">Situation</th><th style="background-color: #c0c0c0;">Question</th></tr> </thead> <tbody> <tr> <td>Find the design challenge</td><td>Where are the opportunities to make things better?</td></tr> <tr> <td>Teacher assigns the design challenge</td><td>How would you make things better in this situation?</td></tr> </tbody> </table>	What question do you ask		Situation	Question	Find the design challenge	Where are the opportunities to make things better?	Teacher assigns the design challenge	How would you make things better in this situation?												
What question do you ask																					
Situation	Question																				
Find the design challenge	Where are the opportunities to make things better?																				
Teacher assigns the design challenge	How would you make things better in this situation?																				
Follow up questions for the students	<ol style="list-style-type: none"> 1. What is the need for this? 2. Who is it that you are helping? 3. How do you measure if you will be successful? 																				