Workshop Flowchart

Time in minutes	Time on Clock		
30 minutes before start		Prepare	● Prepare team materials (supplies) for rocket challenge ● Test wi-fi ● Hang posters in room ● Test PPT slides
8	10:00 - 10:08	Welcome	1. Make sure everyone is in the right place (at the right workshop) 2. Get to know you activity -- STEM questions
2	10:08 - 10:10	Learning Objectives	The learning objectives of this session are: 1. Understand what integrative STEM education is (and i 2. Experience an “engineering design challenge”. 3. Learn how to start an integrative STEM education prog at your school.
10	10:10 - 10:20	PVC pipe game	1. Create teams of 4 people. Make teams diverse. 2. PVC Pipe Challenge: NASA has an oxygen leak at th International Space Station. Your team must stop the l Connect all the PVC pipe pieces in such a way that th system is sealed (nothing in and nothing out). Time is essence.
10	10:20 - 10:30	Debrief PVC pipe game	Was your team successful? If yes, why? If no, why? **Plus -- Delta** Product & Process is like iceberg Explore roles your team played in the project? Did you come up with a plan? How were ideas shared or not shared? Do you think this is a STEM challenge? If yes, why?

30	10:30 - 11:00	**Engineering Design Challenge "Time Aloft"**	1. Distribute handouts describing the engineering design challenge. 2. Tom to demo rocket launch procedures 3. Teams follow the engineering design process.
10	11:00 - 11:10	**Competition**	Teams launch their tennis balls
15	11:10 - 11:25	Team Presentations (3-5 min. / team)	1. Teams rate themselves in the rubric 2. Teams share how they worked through the engineerin design process
10	11:25 - 11:35	Tom's STEM presentation	Slideshow Video message from ITEEA president Share portion of PBS video?
20	11:35 - 11:55	Project Connect	Teams pick two of the following: 1. Math 2. History 3. Language Arts / Literature 4. Science (Chemistry, Physics, Biology) ● Teams brainstorm how the engineering design challen (time aloft) can be integrated into the two subject areas chosen. ● Teams brainstorm multiple variations for the engineerin design challenge (time aloft). Example: greatest distan measure thrust, greatest height (rocket only), launch c and drop one and determine which will hit the ground fi heaviest payload to X height, ● Teams make a presentation.
5	11:55 - 12:00	Wrap Up	CCL card -- pick the card that reflects your biggest / most important takeaway. complete eval