

Engineering Lens:  
 Assessment strategy for Engineering Lens... Connecting design challenges from stories to Math and Science using engineering design and thinking skills.

We will use the approach of assessment that comes from feedback on assignments that the students are working on.

## Rubric: / Assessments

*How will we measure success?*

How do we add Rubrics? *Assessments start with outcomes and provide the students with self-appraisal and direction in their own learning*



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<b>Best-</b> used all the thinking skills and shows very good understanding of questions. Engage team members in activities and worked very well with them. Contributed a high level of content knowledge	<b>Very good-</b> Used a good portion of thinking skills and questions within the project. Provide team support and worked within the guidelines of the project. Contributed content knowledge.	<b>Adequate-</b> Used their thinking skills when other requested help. Provided team support when necessary and contributed adequate level of content knowledge	<b>Needs support-</b> Did not work at their level in using questions and thinking skills for the project. Did not support the team and contribute to its success. Did not know the content when called upon
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Area	Assessment
Use of thinking skills	
Relating to the science	
Communication skills	
Team work	

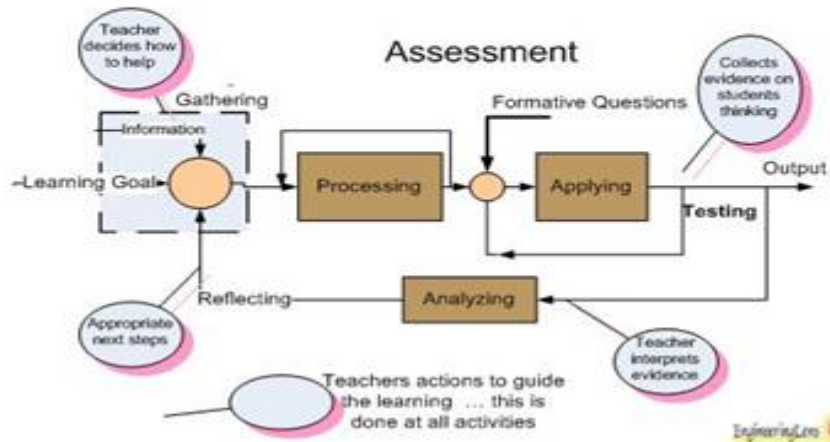


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## Assessment is Learning Student Self-Assessment



### Outcomes:

Elements to assess whether to program is working:

**By the end of this course, the PreK-5 Teachers will be able to:**

- Clearly articulate the nature of technology/engineering as defined in the Framework.
- Create a learning environment that engages the students and excites them in learning.
- Explain the relationship between science, math and technology/engineering.
- Provide examples of the types of tasks that engineers perform.
- Describe the steps of the engineering design process/ problem solving
- Work in an interdisciplinary environment and utilize the engineering design process.
- See the fun and have a system view of learning new things.
- Be able to use productive questioning, meta-cognitive reflection, creative and critical thinking skills in the learning process.

## Engineering Lens:

### Assessment:

Item	Description	Level of achievement
Articulate the nature of Engineering/Technology	Be able to define and understand the nature of Engineering and Technology	
Ability to understand the elements of Problem Solving and how to apply them	Understand the different parts of the process and the importance of framing the problem.	
Iterative and Divergent/Convergent process	Be comfortable in working in this type of process	
Handling Road-blocks when encountered	Be able to work around a road block in their learning process	
Thinking Skill utilization	Be able to use productive questioning, meta-cognitive reflection, creative and critical thinking skills in the learning process.	
Work between the engineering design process and problem solving process	Understand the relationship and be able to explain it.	
Use Portfolio that the student created during the learning process.	Use this to re-call the students work during the whole time period versus a snap-shoot of one item.	