STEM Matrix and Activity Index

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STEM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering and mathematics. In the chart listed below, Innovation activities have been correlated to STEM skills.

Activity	Science				Technology				Engineering					Math			
	Science as Inquiry	Energy Sources, Forms and Transformations	Science and Technology	Personal and Social Perspectives	Productivity Tools	Communication Tools	Research Tools	Problem-solving and Decision-making Tools	Historical Perspective	Design and Modeling	Invention and Innovation	Test, Design and Troubleshooting	Use and Maintain	Numbers and Operations	Measurement	Data Analysis and Probability	Connection to the Real World
Conventional Electric Power Generation Systems, Process and Fuel Sources		•	•	•		•	•		•								•
Energy for Electricity	•	•	•	•						•							•
Conventional Electric Power Generation Pros and Cons		•	•	•		•	•		•					•			•
Alternative and Renewable Energy Sources		•	•	•		•	•		•								•
Your State's Electrical Generation			•	•		•	•		•								•
Your Local Area Fuel Mix			•	•		•			•								•
Greenhouse Gas Emissions and Your Local Fuel			•	•		•			•								•
History of Electricity and Transmission			•	•		•	•		•								•
Westinghouse versus Edison – AC versus DC			•	•		•	•		•								•
The Transmission and Distribution Process			•	•		•	•		•								•
Transmission Heat and Temperature	•	•	•	•		•	•		•						•		•
The Smart Grid			•	•		•	•		•								•
Surveying Electrical Safety	•		•	•	•	•	•									•	•
When Lightning Strikes	•	•		•	•	•	•										
What's in a Watt?	•	•	•	•	•	•	•	•	•					•	•	•	•
Classroom Comfort and School Lighting Audit	•	•	•	•	•	•	•	•	•					•	•	•	•
Food for Humans	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•