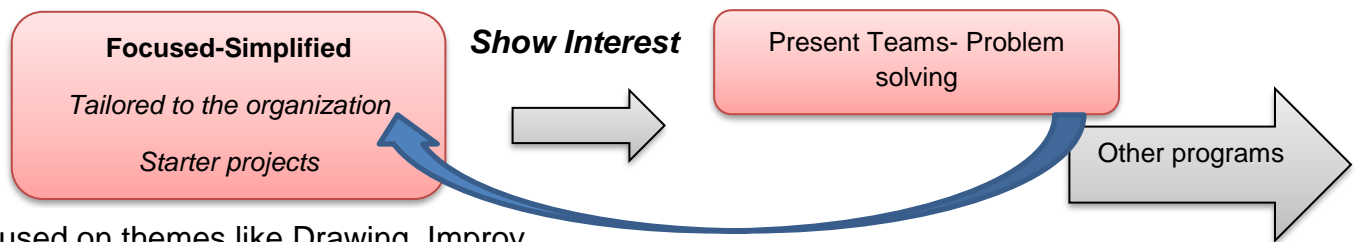


Bruce-filter-process ... After-School Programs

Creating additional after-school programs for middle-school students with a simpler learning process (“playing the whole game at a junior level”... David Perkins) but still focuses on building a learning team, problem solving and life-skills. This allows a series of steps (level of course work) in the learning process based on the student’s desire.

Our goal is to get young students excited about learning using mind tools (Engineering mindset) by solving community problems while working in a team environment



Focused on themes like Drawing, Improv, Civics, Community, Research projects, Outdoor design, Science areas

Doing activities around the chosen themes. The projects are simplified and focused on the FUN activities to be used as the learning base for a limited set of life-skills and problem-solving process.

Day (1hr)	Activity	Outcomes
1	Spaghetti Tower	Ice-Breaker
2	Intro theme	How are going to work together
3	Engineering mind-set language	Thinking style ... like an engineer
4-9	Multiple activities ... student lead	Exhibition of work
10	Public reporting	Community

General items: Work in competitive teams with ground-rules, prizes, and badges. Badges will be designed for problem solving, team work & other life-skills. The problems will be fixed and more open ended for the students to work on their own,



Examples of different themes or projects: (Details to follow)

Drawing: Designing a problem around creating a special map that leads people to the treasure using picture clues. In addition, characters that are part of the story are also drawn (limited to 4 characters) (See *Example page 3*)

Mapping: Students learn to draw maps, Mental maps to mind maps. Tools for thinking. How to organize and present information.

http://www.projectacademy.org/Documents/mindmapping_11082016.pdf

Improv: A series of improvs are done each week around the life-skills of building a problem-solving business. Improv “engineering lens” stories picture books will be the base for the problem-solving process. (Do one Improv, each session)

Civics: <https://www.icivics.org/> Running for the presidency isn’t easy! In *Win the White House*, you get to manage your very own presidential campaign by strategically raising funds, polling voters, launching media campaigns, and making personal appearances. Keep a close eye on the map as you battle over electoral votes and popular support.

Community: Get to know the community, research its organizations, gov’t, schools, businesses Develop ... Document its culture and map the community.

Outdoor projects: Design playgrounds, paths, and other community project to make the town better.

Research: Developing a research approach to current events and community problems. Provide summary and detail report on finding. You work as the research director for the mayor of Framingham, MA. She wants to know what the citizens are concerned about

Science: Create (build a plastic bottle water system) and learn about the water cycle in the planet, Learn about the weather, build instruments and make predictions. Learn about the properties of water ... ponds to particles



Drawing Curriculum example:

Drawing: Designing a problem around creating a special map that leads people to the treasure of a better community, using picture clues. In addition, characters that are part of story are also drawn



the

Date	Activity
Day 1	Spaghetti Tower ... Ice Breaker
Day 2	Intro theme ... Team development ... Create an Icon for your team
Day 3	Engineering Mind-Set ... What's are our operating style? What does an engineer look like?
Day 4	Draw a picture map that incorporates the design steps & clues for children to search for a special treasure, Use a 11x16 sheet and colored pencils or crayon. Develop a theme for your design project. Plan out your project and assign task within the team. Add life-skills along the way and develop questions for them. Limited to 4 characters
Day 5-8	Continue the design ... Can you make a game of your design?
Day 9	Finalize your design and test it out. How can you add web tools to your process?
Day 10	Present your design to the other groups Prizes will be given based on the following rubric: <ul style="list-style-type: none"> • Creativity of the idea • Drawing skills and color • Discussion of what we missed and Rev1

