



# THINKING DOING LEARNING

Alternative Learning Place



***Dr. Roger Schank and his team at Socratic Arts have designed Alternative Learning Places (ALP), an alternative to traditional school.***

What does this alternative look like? Students working in teams on exciting hands-on projects that they're interested in, with goals they care about, students practicing the skills they need for lifelong success in the real-world, such as teamwork, goal conflict resolution, judgment, persuasion, management, and communication, and students making mistakes and learning from those mistakes to do better next time.

The engineering curriculum for 5-6 years is complete. Our goal is to develop a wide-range of year-long curricula in a variety of real-world fields such as media and medicine, for students aged 5-18 years. Students will be able to choose a curriculum in their area of interest, at their age level, and work on the curriculum for an entire year, completing a series of real-world, hands-on projects in that field. Contact Michael McGarry, President of Socratic Arts, for more information:

(708) 366-1690 or [mcgarry@socraticarts.com](mailto:mcgarry@socraticarts.com)

***Dr. Roger Schank, CEO of Socratic Arts and Executive Director of Engines for Education***

Dr. Schank has had a significant impact on the landscape of all learning. He is one of the world's leading researchers in artificial intelligence and applying cognitive learning theory to education. His approach to learning involves helping people learn by doing, allowing people to make mistakes in a safe learning environment and sharing stories with leading teachers and experts. He was the Founder of the renowned Institute for the Learning Sciences at Northwestern University, where he is John P. Evans Professor Emeritus in Computer Science, Education and Psychology. He was Professor of computer science and psychology at Yale University and Director of the Yale Artificial Intelligence Project. Dr. Schank is the author of more than 20 books on learning, language, memory, reading, e-learning, and storytelling. He has been named 5th in the world in the Training Press Release "[Top Ten Most Influential People in the Corporate E-Learning Sector.](#)"

[www.alternativelearningplace.com](http://www.alternativelearningplace.com)

# What Sets ALP Apart?

# Skills That Matter



*Traditionally, schools only deal with some of the cognitive skills and rarely address them directly*, instead choosing to focus on subjects and knowledge retention rather than on thinking ability. The ALP is different because it focuses on the thinking skills essential for success in life. Instead of studying subjects and

memorizing content, ALP students practice cognitive skills in the context of real-world problems and improve their thinking ability by learning from mistakes and receiving feedback.

People have different interests as far as subjects go, but everyone has a deep need to become proficient at these skills in any area they pursue. A student might have a limited idea about the skills. The goals of any learning program should be focused on enhancing and extending each student's limited experience with these skills, and that's exactly what the ALP does.

*The ALP curricula focus on the cognitive skills* that you need to function in the world, the ones that affect how we are perceived and judged by others, the ones that will help students succeed both personally and professionally.

ALP projects are designed to help students practice the skills listed below on a daily basis in meaningful contexts, and to improve through self-evaluation and feedback from peers and teachers. Through a cycle of practice, feedback, reflection, and refinement, students get better at all the important skills they need to succeed in life.

Conceptual Processes:	Analytic Processes:	Social Processes:
Prediction Modeling Experimentation Evaluation	Diagnosis Planning Causation Judgment	Influence Teamwork Negotiation Description



# ALP Engineering The Curriculum

5 - 6 Years



*In the engineering curriculum students aged 5-6 work through a series of engineering projects* by following a basic engineering process: design, build, test, and revise. The projects within the engineering curriculum, while varied in their subject matter, all follow this basic process. While students learn about engineering, including what engineers think about and do on the job, the focus is on having students, through the project activities, practice the cognitive skills that are critical to personal and professional success.



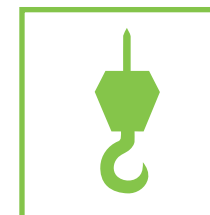
## Drought

Teams design and build a working model river and dam system to produce a lake for a fictional town.



## Airshow

Teams experiment with paper, foam and wooden gliders (and other aircraft) parameters to determine what factors cause what type of performance, culminating in an 'air show.'



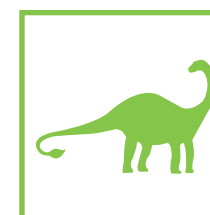
## Junkyard Machine

Teams experiment by making and testing cranes for a junkyard called Junkster, ultimately building a crane that can transport cars and drop them into a compactor. They build and test the crane in parts, achieving one or two of the success criteria in each activity.



## Wind Powered Vehicle

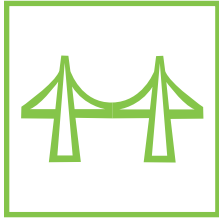
Teams design and build a wind powered vehicle to carry two (model) people across a distance of 5ft as quickly as possible. They test sail and cab parameters and ways to reduce friction.



## Super Dino

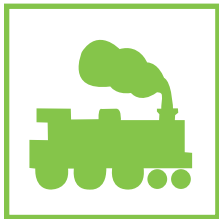
Teams design and build a model of a 'super dinosaur'- one that is suited to survival in its environment. They also design and build an LED-lit showcase to present their dinosaur in its environment.

# Design, Build, Test, Revise.



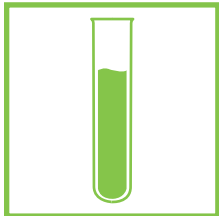
## River Crossing

Teams design and build weight-bearing model bridges for a fictional town, which needs a strong bridge that can carry a lot of vehicles across a rough river.



## Train

Teams plan the route a train line will take around a town, according to criteria provided by the town Mayor. They build a monorail track and train, and plan a schedule for the train.



## Reaction Challenge

Teams experiment to harness as much gas as quickly as possible from a calcium carbonate/vinegar reaction, in order to fill a balloon and to 'race' foam up a tube.



## Chocolate

Teams experiment with unique ingredients to make chocolate bars for company Chocolate Delight, which wants ideas for a bar to appeal to 5-10 year olds.



## Safe Landing

Teams design and build a working parachute system to save an egg from a 10-foot drop, simulating saving a fragile package of food and medical supplies landing in a town.



## Story Scratch Animation

Teams write an original story and animate it using Scratch animation software.



## Boat Build

Teams design and build self-propelled model boats to showcase possible design ideas to a fictional company that needs an efficient cruise liner big enough to transport a large number of guests, and steady enough not to spill water from the swimming pool on board.



## Rocket

Teams experiment with rocket parameters to design and create compressed-air launch rockets, culminating in a launch event to see which goes highest.



## Car

Teams build model cars to race on a track, optimizing their cars' performances by modifying the cars after each race. They then build and race team push cars, large enough and strong enough for a student to ride in.

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