# Implementing an

# **Innovation and Engineering Summer Day Camp**

for Middle School Students



Manual Developed By:

The Center for Innovation in Engineering and Science Education Stevens Institute of Technology

2012



"Evan was so excited every day to show me the projects he had brought home and tell me about all the things he had worked on. Last week definitely solidified his interest in the engineering field; He learned so much."

-Mother of Evan, Camper



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# About the Center for Innovation in Engineering and Science Education (CIESE)

CIESE was founded in 1988 to increase the pool, persistence, success, and diversity of students who pursue STEM study and careers. The Center carries out its mission through teacher professional development and graduate programs; curriculum development; and education research. Since its founding, CIESE has led programs that have directly impacted more than 35,000 K-20 educators in 23 states and 8 countries.

Since 2005, CIESE has led more than \$29 million in STEM education and research projects sponsored by the National Science Foundation, the US Department of Defense, the NJ Department of Education, and the US Department of Education, mainly exploring teacher and student learning in the areas of K-20 engineering and science education; STEM learning and 21<sup>st</sup> century skills; and in scale-up and capacity building of STEM innovations in K-12 and higher education.

In January, 2011 CIESE was awarded the prestigious Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM) at the White House in recognition of our expertise, encouragement, and mentoring of teachers and students in science and engineering. CIESE has also been recognized by the U.S. Department of Education, the American Association for the Advancement of Science, the National Science Teachers Association, the National Council of Teachers of Mathematics, and other organizations for its curriculum materials and professional development programs for K-12 STEM education. More information about CIESE may be found at <a href="https://www.stevens.edu/ciese">www.stevens.edu/ciese</a>.



## **About this Manual**

The CIESE Innovation and Engineering Summer Day Camp and this manual were made possible by a grant from The National Science Foundation through a Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM).

This manual supplies the information needed to run an Innovation and Engineering camp and encompasses everything from the required forms to the hands-on activities that will help create an exciting engineering experience for campers.

You are welcome to use or adapt any of the information in this manual for your own camp needs. However, materials in this manual may not be re-published without permission from Stevens Institute of Technology. Requests for permission may be addressed to Patricia.Slater@stevens.edu.

## **Camp Structure**

## **Exploring Engineering**

The purpose of an Innovation and Engineering Summer Day Camp is to provide students with opportunities to experience the Engineering Design Process (EDP). In doing so, campers develop 21st Century skills and gain valuable insight into engineering and careers in engineering.

What better way to get students interested in engineering than to bring them to a great facility, surround them with mentors, and engage them in innovative, hands-on experiences. Stevens Institute of Technology's Center for Innovation in Engineering and Science Education (CIESE) accomplished this in the summer of 2011. Middle school students participated in a week-long day camp that challenged their problem solving skills, introduced them to iterative design, and helped them understand what real engineers do. The camp was designed for middle school students of all grade levels and aptitudes. Student groups were randomly assigned. However, if camp organizers are familiar with their campers, putting together pre-planned cooperative learning groups might be advantageous. For more on facilitating group dynamics, see page 12.



#### **Staff**

The Innovation and Engineering camp conducted by CIESE was directed by an experienced STEM educator, one undergraduate student and one graduate student. The camp was supported by additional CIESE administrative staff. Although it is recommended that an engineering camp be run by trained STEM educators, it is not imperative. The camp activities detailed in this manual have instructions that can be followed by both formal and informal educators.

# **Selecting a Camp Location**

The CIESE camp was located on the campus of Stevens Institute of Technology. Located a stone's throw from Manhattan, in the quaint Hudson River-front city of Hoboken, New Jersey, Stevens provided a picturesque location for campers.



When selecting a site, however, it is not critical to use a school or university. Students only need enough room to spread out and work in groups. Any large room with good-sized group tables will suffice.



# **Camp Schedule**

The agenda for each day of the camp is shown below. Informational links to each of the specific activities are provided elsewhere in the manual. Many activities used for the camp were from freely available resources.

#### **MONDAY**

#### 9:00 - 9:30 Welcome and Introductions

- Discussion: daily procedures, location of restrooms, lunch time, etc.
- Answer student questions

#### 9:30 - 10:30 Introduction to Engineering

- Discussion: What is technology? What is engineering? What is the difference between Invention and Innovation?
- Activity: The World of Engineering (p. 14)
- Discussion: What is the Engineering Design Process (EDP)? (Handout p. 13)
- Overview of the week's engineering activities and daily schedule

#### 10:35 - 11:55 Design Challenge

- Design Challenge #1 Time to Invent: Rescue 911 (p. 14)
- Discussion: What is a Rube Goldberg device? (Show online examples from teachertube.com)
- Introduce Crazy Contraptions Activity (p. 14)

#### 12:00 - 12:55 Lunch

#### 1:00 - 2:30 Design Challenge

- Design Challenge #2 Time to Invent: Pinball Party (p. 15)
- Group Discussions: Initial Meeting of the Crazy Contraption Project Teams
  - o Engineering Guide
  - o Portfolio
  - o Demonstration: Tools and use of construction materials
  - How will you apply the EDP? Begin by brainstorming and sharing ideas

#### 2:30 - 3:00 Wrap-Up

- Classroom Cleanup
- Debriefing and overview of tomorrow's activities Hand out Camp T-shirts



# **Camp Schedule (continued)**

#### **TUESDAY**

9:00 – 9:30 Group photo – (Students should wear Camp T-shirts)

9:30 – 10:45 Design Challenge

• Design Challenge #3 – House of Cards (p. 15)

10:45 - 11:55 Structures Activities - Why Buildings Stand

- Discussion: Natural vs. Engineered Structures
- Activity: Building bridges using card and paper structures
- Towers Time to Invent: Trophy Tower (p. 15)
- Activity: Building domes using straws/paper clips

12:00 - 12:55 Lunch

1:00 – 2:30 Crazy Contraptions Project Work (p. 14)

2:30 - 2:45 Wrap-Up

- Classroom Cleanup
- Debriefing and overview of tomorrow's activities

2:45 - 3:00 Ice Cream Party



# **Camp Schedule (continued)**

#### **WEDNESDAY**

9:00 - 9:45 Guest Speaker

9:50 – 10:20 Electronic Components and Circuit Design

• Activity: SNAP Circuits (p. 15)

10:25 - 10:55 Wind Turbines

• Activity: Construct Wind Turbines (PITSCO kits) (p. 15)

11:00 – 11:55 Crazy Contraptions Project Work (p. 14)

12:00 - 12:55 Lunch

1:00 – 1:45 Crazy Contraptions Project Work (p. 14)

1:45 - 2:30 Wind Turbine testing

2:30 - 3:00 Wrap-Up

- Classroom Cleanup
- Debriefing and overview of tomorrow's activities



# **Camp Schedule (continued)**

#### **THURSDAY**

#### 9:00 - 10:25 Design Challenge

Design Challenge #4 – Touch Down (p. 16)

#### 10:30 - 11:55 Theory of Flight

- Discussion: How do planes fly?
- Activity: AWIM Glider Construction and testing (p. 16)
- 12:00 12:55 Lunch Pizza Party
- 1:00 2:30 Crazy Contraptions Project Work (p. 14)
- 2:30 3:00 Wrap-Up
  - Classroom Cleanup
  - Debriefing and overview of tomorrow's activities

#### **FRIDAY**

#### 9:00 - 10:00 Design Challenge

- Activity: Design, build, and redesign AWIM Jet Toys (p. 16)
- 10:00 11:00 Final Crazy Contraptions Project Work (p. 14)
- 11:00 11:55 Preliminary testing of Crazy Contraptions
- 12:00 12:55 Lunch
- 1:00 1:45 Demonstration of Crazy Contraptions & Classroom Cleanup
- 1:45 2:30 Jet Toy Testing (p. 16)
- 2:30 3:00 Award Program
  - Invite parents to afternoon's activities
  - Distribute student parent handout with list of additional online educational resources (p. 16)



# **Recruiting Engineering and Science Mentors**

Having an engineer and/or scientist at the camp can help emphasize career opportunities for students interested in engineering and science – and offer much needed helping hands.

#### Recruitment

Many individuals in professional careers would like to give back to the community, but find it difficult to take the initiative. Reach out to local organizations and ask if there are any scientists or engineers who might be interested in volunteering during your camp.

Your role models do not necessarily need to be representative of the camp's theme (engineering), although it would make the content more relevant to the campers. Below is a sample recruitment letter for role models, as well as a list of organizations to reach out to.

## **Sample recruitment letter:**

During the period of [Timeframe], [Camp] is hosting a middle school summer day camp called [Project Name if different]. Campers will design, build, and test various engineering and science-based projects. Interactive hands-on activities will facilitate the understanding of what it means to be an engineer. We would like to have real scientists and engineers visit the camp to share their stories and enthusiasm for science, technology, and engineering with our campers.

If you are interested in visiting the school for a day or part of a day to share information about your career path, interact with students in hands-on activities, and have a huge impact on students' perceptions of scientists/engineers, please e-mail us to set up a visit!

Contact [Name] at [E-mail] for more information.

# **Organizations for outreach:**

- Museums, zoos, observatories
- Universities and community colleges
- Large and small local businesses (diversity and outreach departments)



- Society of Women Engineers
- Engineers Without Borders
- Government science agencies

# **Facilitating Group Dynamics**

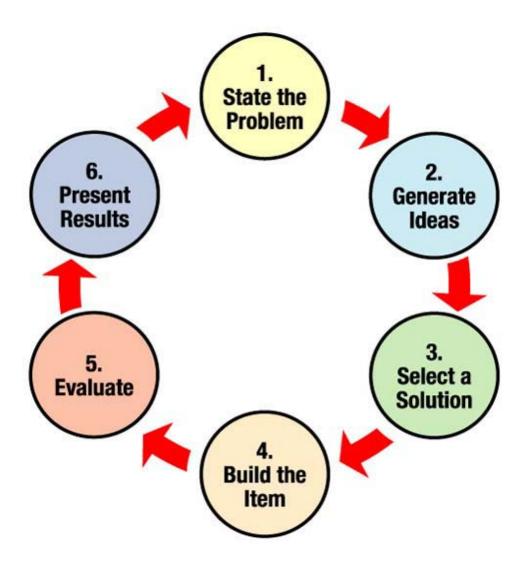
When students work in teams, there will be different personalities, skills, and backgrounds. Students must learn how to deal with these differences and work together since they will be in teams during most of the camp activities. You can strategically facilitate the team interactions by placing students in specific groups or teams, as well as by working with the individual teams to make sure everyone contributes their ideas.

## **Strategies for team management:**

- Place students into teams based on compatible personalities. It is acceptable to place two
  friends on the same team; however, do not create teams based on student cliques.
- Use icebreakers and short activities to learn which students work well together.
- If you see a problem arise within a team that cannot be resolved on its own, sit with the team to discuss it. Ask the team to explain what is wrong and then have each person contribute one idea for a solution. Remind the teams that there are no bad ideas.
- You may need to change team members if a problem continues to go unresolved. Do not
  make it obvious that you are changing certain individuals within a team. You may need to
  change members of every team in order to do this strategically.
- If you notice a student taking over too much of a project, or if nobody in a team is working, it is likely the students need help dividing up the work responsibilities among the members of their team. Talk with the team and decide who will focus on each aspect of the activity. Ask for ideas from the whole group and try to get them to agree on an idea from someone who has not contributed as much in the past.
- If a group is stuck in their design process, coach them back on track. Have the team identify which step of the engineering design process they are in and what some possible solutions are.



# **The Engineering Design Process**



From NASA www.nasa.gov



# **List of Camp Engineering Activities**

- The World of Engineering
- Crazy Contraptions
- Rescue 911
- Pinball Party
- House of Cards
- SNAP Circuits
- Wind Turbines
- Trophy Tower
- Flying with Gliders
- Touch Down
- Jet Toys

## **The World of Engineering**



Description: Use cards from Engineering, Go For it! (EGFI) to have campers discuss various disciplines of engineering. Ask the students what types of engineering interest them.

Source: http://teachers.egfi-k12.org/ideas-for-using-egfi-cards/

## **Crazy Contraptions**



Description: Students use materials from Teachergeek.com to design a Rube Goldberg-style device. Students worked on this activity each day throughout the week.

Source: <a href="http://www.teachergeek.com/Products-Crazy">http://www.teachergeek.com/Products-Crazy</a> Contraptions.html

### Rescue 911



Description: Students design a device that retrieves, or "rescues" a ping-pong ball from the bottom of a paper-towel tube.

Source: http://ef.engr.utk.edu/efd/diversity-2011/mites-2011/tti meeting 10.pdf



# **List of Camp Engineering Activities (continued)**

## **Pinball Party**



Description: Students build, test, and redesign home-made pinball machines.

Source http://ef.engr.utk.edu/efd/diversity-2011/mites-2011/tti meeting 11.pdf

#### **House of Cards**



Description: Students are given seven 3" x 5" index cards and 36" of masking tape and challenged to build a strong, lightweight structure that will support as much weight as possible. The structure must have a flat roof since books will be stacked on top until the structure fails. During the activity students are introduced to key engineering terms including dead load, live load, tension, compression, torsion and shear.

Source: <a href="http://scienceray.com/technology/engineering/house-of-cards-an-engineering-marvel/">http://scienceray.com/technology/engineering/house-of-cards-an-engineering-marvel/</a>

#### **SNAP Circuits**



Description: Students use SNAP Circuits to design and build various devices. Over 100 devices can be built with a SNAP Circuit set. This activity introduces students to concepts that include electricity, voltage, current, resistance, and circuits.

Source: <a href="http://www.snap-circuits.com/phpstore/index.php">http://www.snap-circuits.com/phpstore/index.php</a>

#### **Wind Turbines**



Description: Students will use formulas and measurement, calculate averages, and understand series and parallel circuits to design and build a working wind turbine. This is a PITSCO activity.

Source: <a href="http://shop.pitsco.com/activities/item.aspx?CategoryID=70&act=140">http://shop.pitsco.com/activities/item.aspx?CategoryID=70&act=140</a>

# **Trophy Tower**



Description: Students will use flexible straws and masking tape to build the tallest tower they can that will support one tennis ball.

Source: <a href="http://timetoinvent.files.wordpress.com/2011/03/tti-meeting-2.pdf">http://timetoinvent.files.wordpress.com/2011/03/tti-meeting-2.pdf</a>



# **List of Camp Engineering Activities (continued)**

## **Flying with Gliders**



Description: A World In Motion (AWIM) makes great engineering activities for both formal and informal education environments. In this activity, students will design and build a gliding toy.

Source: http://www.awim.org/curriculum/glider/

#### **Touch Down**



Description: Students work together to produce a "lander" device that will keep "marshmallow astronauts" safe from a drop – like the Lunar Excursion Module landing on the moon.

Source: <a href="http://pbskids.org/designsquad/parentseducators/resources/touch\_down.html">http://pbskids.org/designsquad/parentseducators/resources/touch\_down.html</a>

#### **Jet Toys**



Description: Students design and build a balloon-powered toy made from inexpensive, readily-available materials.

Source: http://www.awim.org/curriculum/jettoy/

#### Additional Online Educational Resources

- A World In Motion (AWIM) http://www.awim.org/
- Design Squad http://pbskids.org/designsquad/
- Engineering a World of Difference http://engineeringaworldofdifference.org/
- Engineering, Go For It <a href="http://www.egfi-k12.org/">http://www.egfi-k12.org/</a>
- Pitsco http://www.pitsco.com/
- Teach Engineering http://www.teachengineering.org/
- Try Engineering <a href="http://www.tryengineering.org/">http://www.tryengineering.org/</a>
- The Center for Innovation in Engineering and Science Education (CIESE) http://www.stevens.edu/ciese



## **Education Standards**

#### **New Jersey Core Curriculum Content Standards for Grade 8**

- Core Curriculum Content Standard 5.1 Science Practices, Strand C: Reflect in Scientific Knowledge
- Core Curriculum Content Standard 5.1 Science Practices, Strand D: Participate Productively in Science
- Core Curriculum Content Standard 8.2 Technology Education, Engineering, and Design,
   Strand B: Design: Critical Thinking, Problem Solving, and Decision Making

# **Online Funding Resources**

#### Finding donors for projects and materials:

- Donors Choose <a href="http://www.donorschoose.org/">http://www.donorschoose.org/</a>
- Adoptaclassroom.org <a href="http://www.adoptaclassroom.org/">http://www.adoptaclassroom.org/</a>
- Classwish.org http://www.classwish.org/

#### Grants to run Science, Technology, Engineering, and Math (STEM) programs:

- PSEG Education Grants
   http://www.pseg.com/info/community/education/education.jsp
- Best Buy Community Grants
   http://www.bestbuy-communityrelations.com/community\_grants.htm
- Verizon Foundation Grants <a href="http://www.verizonfoundation.org/grants/">http://www.verizonfoundation.org/grants/</a>
- Toshiba America Foundation Grants <a href="http://www.toshiba.com/taf/612.jsp">http://www.toshiba.com/taf/612.jsp</a>



# Sample Camp Application

#### **Innovation and Engineering Day Camp**

Dates:	- <u></u>
APPLICATION DEADLINE:	
Date	
Name of Student	T-shirt size
School Name	
Current Grade Date of Birth	
Home Mailing Address	
Home Phone	
Parent/Guardian Name	
Parent/Guardian Cell Phone	
NOTE: Parents/guardians are responsible for transporting s times and location will be provided prior to the start of the	
FOR PARENT/GUARDIAN	
I give permission for my child to attend the Innovation and E at	ngineering Day Camp from
Signature of Parent/Guardian	
Date	
PLEASE MAIL COMPLETED APPLICATION TO:	
Camp Recruiter Address	



# Sample Acceptance Letter

Dear Parent/Guardian:
We're delighted to inform you that [name of student] has been accepted into the Innovation and Engineering Day Camp program at beginning [date] and ending [date]. Students should be brought to the Building at [time] daily and picked up at the same location by [time]. See attached map. Attire is neat casual (shorts are okay).
Attached is a photo release form for your signature. The form can either be mailed, faxed or hand-delivered on the first day of camp.
In case of emergency, we will contact you either at the home number or cell number you listed on the application form. If there is another number we should have, please let us know ASAP.
We look forward to having [name of student] join us for the week. Since demand for this camp is high, please let us know if there's been a change in plans and your child can no longer attend so that we may provide another student with this opportunity. If you have any questions in the meantime, please feel free to contact
Sincerely,
[Name]
Enc: Student Consent and Release of Photos/Recordings



# Sample Photo Release Form

## STUDENT CONSENT AND RELEASE OF PHOTOS/RECORDINGS

	agrees to allo	w still and/or video images	s of
Name of Parent/Guardian	ugrees to uno	W still alla, or viaco illiages	
Name of Child or Minor	to be taken a	nd used for educational and	d/or
promotional purposes (projects report	ts, web site, broch	ure) in connection with a p	project sponsored by
	· '	Students will be involved in	n a week-long
Innovation and Engineering Day Camp	. Student names	will NOT be used and stude	ents will in no way be
identified in any educational or promo	otional material re	lated to the project.	
Signed:			
Parent/Guardian		Date	
To be returned to:			
Organization name, address, and fax #			



# **Sample Consent for Survey Form**

[Date]

# **Innovation and Engineering Camp Parent or Guardian Consent Form**

Dear Parent or Guardian,	
The purpose of this message is to inform you that the camp your child [organization's name] will be collecting information about children's at engineering. We will ask the children to respond to 5-10 questions about impressions of science and engineering on the first and last day of the to report the impact of the camp. We will remove the children's name have been collected. At no time will any child's name or other identifying the data collected. This is not a required part of the camp. If you decid these questions, they can participate in all other camp activities.	ttitudes about science and out the camp and their camp. This research will be used s from their papers after the dataing information be associated with
Please sign below to indicate that you approve of your child answering attitudes about science and engineering and impressions of the camp	
Thank you for your time.	
Sincerely,	
[Signature] [Print name] [Title] [Organization name and contact information]	
I have read the above information and have received answers to any q my child answer questions about their camp experience and their attit engineering.	
Your signature	Date
Your name (printed)	
Your child's name	



# Sample Pre-Camp Survey

Name	
------	--

## **Innovation and Engineering Camp**

Pre-Camp Questionnaire

Below are several statements about science and engineering. Circle the code that represents how strongly you agree or disagree with each statement.

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't Know
Science is useful for the problems of everyday life.	5	4	3	2	1	DK
I enjoy talking about science.	5	4	3	2	1	DK
Engineers are usually "nerdy' people.	5	4	3	2	1	DK
Scientists and engineers mainly work alone.	5	4	3	2	1	DK
It makes me nervous to think about science class.	5	4	3	2	1	DK
I like solving problems that have more than one right answer.	5	4	3	2	1	DK
It is more important for boys to be good in science than it is for girls.	5	4	3	2	1	DK
Having a career in science or engineering takes too many years of education.	5	4	3	2	1	DK
I would like to marry a scientist or engineer.	5	4	3	2	1	DK
Being an engineer is a good way to serve humanity.	5	4	3	2	1	DK
I know more about science than other students my age know.	5	4	3	2	1	DK
People can get along perfectly well without knowing about science.	5	4	3	2	1	DK
Engineers are responsible for causing pollution.	5	4	3	2	1	DK
Science is easy for me.	5	4	3	2	1	DK
Solving science problems is fun.	5	4	3	2	1	DK
It is important to know science to get a good job.	5	4	3	2	1	DK
Scientists and engineers have boring jobs.	5	4	3	2	1	DK
I would rather be given the right answer to a problem than to work it out myself.	5	4	3	2	1	DK



# **Sample Pre-Camp Survey (continued)**

**Careers:** The list below has some careers that you may be familiar with. For each career, circle the number or code that indicates how interested you are in that career.

	Interest				
Career	A Great Amount	Some	Not Too Much	None	Don't Know
Art	4	3	2	1	DK
Business	4	3	2	1	DK
Computers	4	3	2	1	DK
Engineering	4	3	2	1	DK
Law	4	3	2	1	DK
Medicine (doctor or nurse for example)	4	3	2	1	DK
Public service (police or firefighter for example)	4	3	2	1	DK
Sales	4	3	2	1	DK
Scientist	4	3	2	1	DK
Secretarial work	4	3	2	1	DK
Teaching	4	3	2	1	DK



# Sample Post-Camp Survey

Name			

#### Innovation and Engineering Camp Post-Camp Questionnaire

Below are several statements about science and engineering. Circle the code that represents how strongly you agree or disagree with each statement.

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't Know
Science is useful for the problems of everyday life.	5	4	3	2	1	DK
I enjoy talking about science.	5	4	3	2	1	DK
Engineers are usually "nerdy' people.	5	4	3	2	1	DK
Scientists and engineers mainly work alone.	5	4	3	2	1	DK
It makes me nervous to think about science class.	5	4	3	2	1	DK
I like solving problems that have more than one right answer.	5	4	3	2	1	DK
It is more important for boys to be good in science than it is for girls.	5	4	3	2	1	DK
Having a career in science or engineering takes too many years of education.	5	4	3	2	1	DK
I would like to marry a scientist or engineer.	5	4	3	2	1	DK
Being an engineer is a good way to serve humanity.	5	4	3	2	1	DK
I know more about science than other students my age know.	5	4	3	2	1	DK
People can get along perfectly well without knowing about science.	5	4	3	2	1	DK
Engineers are responsible for causing pollution.	5	4	3	2	1	DK
Science is easy for me.	5	4	3	2	1	DK
Solving science problems is fun.	5	4	3	2	1	DK
It is important to know science to get a good job.	5	4	3	2	1	DK
Scientists and engineers have boring jobs.	5	4	3	2	1	DK
I would rather be given the right answer to a problem than to work it out myself.	5	4	3	2	1	DK



# **Sample Post-Camp Survey (Continued)**

**Careers:** The list below has some careers that you may be familiar with. For each career, circle the number or code that indicates how interested you are in that career.

Career	A Great Amount	Some	Not Too Much	None	Don't Know
Art	4	3	2	1	DK
Business	4	3	2	1	DK
Computers	4	3	2	1	DK
Engineering	4	3	2	1	DK
Law	4	3	2	1	DK
Medicine (doctor or nurse for example)	4	3	2	1	DK
Public service (police or firefighter for example)	4	3	2	1	DK
Sales	4	3	2	1	DK
Scientist	4	3	2	1	DK
Secretarial work	4	3	2	1	DK
Teaching	4	3	2	1	DK

Rate your camp experience. Circle the number for how you would rate each item in the list below.

		Very		
	Excellent	Good	Fair	Poor
Amount of time for activities	4	3	2	1
Amount of fun	4	3	2	1
Learning about engineering	4	3	2	1
Design Challenge 1-Rescue 911	4	3	2	1
Design Challenge 2-Pinball Party	4	3	2	1
Snap Circuits	4	3	2	1
Design Challenge 3-House of Cards	4	3	2	1
Design Challenge 4-Trophy Tower	4	3	2	1
Geodesic Dome	4	3	2	1
Wind Turbines	4	3	2	1
Jet Toy Activity	4	3	2	1
Glider Activity	4	3	2	1
Crazy Contraption Activities	4	3	2	1



# **Sample Post-Camp Survey (Continued)**

Which activity was your favorite?	
What did you like about this activity?	
Which activity did you like the least?	
What didn't you like about this activity?	
<b>Background Questions</b>	
What is your age?	
What is your sex?	
M	
What is your race? Check all that apply.	
American Indian or Alaska Native	
Asian	
Black or African American	
Native Hawaiian or Other Pacific Islander	
White	
Are you Hispanic or Latino?	
Yes	



No

# Sample Camper Award

# CERTIFICATE OF PARTICIPATION

presented to

# [Name]

In recognition for participation in the Innovation and Engineering Camp

This certificate is award from

[Name of Organization]

[Date]

