VentureLab
Entrepreneurship

Girl Scout C/S/A

About

Creating the next generation of changemakers and innovators.

At VentureLab, we believe entrepreneurship isn't just about starting companies. It is a skillset and a way of thinking. It involves identifying needs, brainstorming creative solutions, taking calculated risks, learning from failure, and persevering despite setbacks. In short, it's about having a vision and making it a reality.

We're passionate about empowering girls to innovate, create, and discover their potential. That's why we have created innovative and fun entrepreneurship curriculum, training, and programs—the perfect vehicles to help students, and especially girls, develop a mindset and 'heartset' that they can use for a lifetime, no matter what they choose to become. Together, let's develop resilient, confident kids equipped for the challenges of today and tomorrow.

According to the World Economic Forum, roughly 65% of children entering primary schools today will likely work in jobs that don't currently exist. Our challenge is twofold: we can't predict the "hard skills" and jobs of the future and our current education system is not preparing students for a rapidly-changing job market and the world. In order for our kids to succeed, we believe they must develop the ability to channel their innate creativity to create their own opportunities and tackle the problems they are passionate about solving. That's why we focus on nurturing an entrepreneurial mindset—the ability to learn from failure, be resourceful and confident, and work well with others to bring your ideas to life.

To learn more about VentureLab's full entrepreneurship curriculum, parent-child workbooks and our educator and community training offerings, visit venturelab.org.

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Girl Scouts of Central Texas & Venturelab are proud to bring you the VentureLab Entrepreneurship Patch Program

Our girls are known for their entrepreneurial spirit during Cookie Season, but what about after their last box is sold?

GSCTX has partnered with VentureLab, a non-profit organization that is helping develop the next generation of innovators, to bring our girls a new entrepreneur program that focuses on how to instill that mindset all year long. VentureLab Founder/CEO, Cristal Glanchai, PHD, is a scientist, entrepreneur, and mentor who is passionate about developing the next generation of creative leaders. As entrepreneurs, girls gain essential life skills and work as a team to accomplish common goals and solve problems, while building the confidence they need to shine as girls, as young women, and as future leaders. And did we mention the fun? They have lots of that along the way, too.

Steps to Earn the VentureLab Entrepreneurship Patch

Step One:

1. Complete this [form](#).

Step Two:

2. Read through the activities.

3. Think about what you would like to do.

4. Complete 1 activity per unit.

Step Three:

5. *Complete [Troop Leader Survey](#). If you complete all the activities in 5 or more of the units, let us know in the feedback form, and you will receive an additional recognition along with the VentureLab Entrepreneurship Patch.*

6. [Order](#) your VentureLab Entrepreneurship Patch.

The Girl Scouts Leadership Experience

Girls at every level of Girl Scouting participate in *"leadership experience."* A leadership experience is an exciting way of working with girls in a series of themed activities focused on building leadership skills. By enlisting the three keys to leadership (*Discover, Connect, and Take Action*) girls learn that they can take the lead to make a difference in their community and the world. The three keys are at the heart of the Girl Scout philosophy of leadership.

Discover
Girls understand themselves and their values and use their knowledge and skills to explore the world.

Connect
Girls care about, inspire, and team with others locally and globally.

Take Action
Girls act to make the world a better place.

It's not just what girls do, but how. When girls are engaged that creates a high-quality Girl Scout leadership experience. All Girl Scout experiences are built on three processes (Girl-Led, Cooperative Learning, and Learning by Doing) that make Girl Scouting different from school and other extra-curricular activities. When used together, these processes ensure the quality and promote the fun and friendship so integral in Girl Scouting.

Girl-Led
Girls play an active role in the planning and implementation of activities while adults provide age-appropriate facilitation, ensuring that planning, organization, set-up, and evaluation of all activities are done jointly with girls.

Cooperative Learning
All members of a group work together towards a common goal that can only be accomplished with the help of others.

Learn by Doing
A 'hands-on' learning process that engages girls in cycles of action and reflection resulting in deeper understanding of concepts and mastery of practical skills.

When Discover, Connect, and Take Action activities are girl-led and involve learning by doing and cooperative learning, girls achieve the desired and expected leadership outcomes ultimately resulting in Girl Scouting achieving its mission.

In addition to earning your VentureLab Entreprenuer patch you have completed some or all of the following badges!

Business Plan

Public Speaker

Entrepreneur

Social Innovator

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CSA Lesson: Creativity

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In this Lesson:

Wacky Inventions (45 Min)
Observation Walk (45 Min)

Play and being playful are considered cornerstones of creativity and developing new ideas. There is significant evidence that many ideas for new products and services were developed through playing around with ideas, materials and products. Play itself gives a fresh perspective which is often critical in solving problems and being innovative. Play also helps us better understand the world around us because we can explore things in a fun way – we can make and build, create new worlds and personas, play new games and break the rules without fear of consequences. Play helps entrepreneurs innovate because it's risk-free—there's no judgement or failure when you're playing.

Using play and being playful as a tool can improve one's ability to generate ideas and solve problems. Often, to be able to come up with lots of ideas people need to be given permission to play around and be free from judgement!

Observation is another creative thinking tool that entrepreneurs use because their ideas often come from actively observing their surroundings. This is how they can identify problems and opportunities for new solutions. Entrepreneurs know that if they focus on just one aspect of a scenario or sense during an experience, they may miss out on great ideas.

In **Wacky Inventions** girls will work in groups to use existing products and objects to come up with (and then act out) the wackiest inventions they can think of.

In **Observation Walk**, girls will move out of their meeting area to practice active observation using their different senses. They'll look for potential problems in the environment, just like entrepreneurs do to generate new ideas.

Goals

For the girls to:

- Play without fear of failure
- Explore different types of play
- Create new ideas during play
- Explain the importance of play in creativity, idea generation, and innovation
- Make active observation and explain how they help entrepreneurs innovate

Entrepreneurial Mindsets

- Curiosity
- Adaptability
- Redefining Failure
- Growth Mindset
- Resourcefulness
- Optimism in the face of challenges
- Problem solving
- Empathy

Entrepreneurial Skills
- Creativity (through play)
- Teamwork (collaboration and communication)
- Idea Generation

WACKY INVENTIONS, INC. (45 minutes)

Introduction

After playing freely and exploring materials, the girls are now are going to use a playful frame of mind to explore objects and ideas to help them become inventors!

Materials and Resources

- An assortment of boxes/empty cartons, ruler, plastic bottle, old cell phone, brick/construction block, cup/plate/spoon, hat/scarf, board game/cards
    - These can be anything you have on hand
    - You'll need 3 items per group. (These can be taken from the play stations materials boxes.)
- Items for Warm-Up (object can be taken from Wacky Invention materials)
- Wacky Inventions Inc. Team Brief Handout

Preparation

1. Read through entire activity.

2. Select object for warm-up.

3. Gather materials for Wacky Inventions.

4. Print or make available Wacky Inventions Inc. Team Brief Handout.

Instructions

1. Students play a warm up game called "What is it anyway?" (10-15 minutes)

2. Form groups of between 2 to 5 girls. Have them gather around an object on the floor.

3. Everyone in the circle will say "What is it anyway?"

4. One person will go to the middle, pick up the object and say "This is my_____" (filling in the blank by coming up with a new invention/use for the item - using an action to help everyone understand).

5. Then the next person goes to the middle (they don't need to go in order – students can just take a turn as soon as they think of an idea).

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6. The goal is to come up with as many different ways that this object could be used, reinvented and/or repurposed...the wackier the better! There are no wrong ideas here and the girls should feel free to have fun and act out their ideas.

7. It is a good idea to model the game beforehand by acting out an example: Put a pen in the middle of a group - say "What is it anyway?" and then walk to the middle, pick up the pen and say, "This is my new microphone" while holding it up as if to sing/talk, or "This is my invisible ink."

8. Ask one person from each group to collect an object and then return to their group.

9. Give the groups one minute to come up with as many ideas as they can.

10. Stop the groups and get one person to return their object and collect a different one.

11. Play the game 3-4 times (or as many as is fun)!

12. Girls will now take their playful ideas further.

13. They should continue to work in the same groups as they did for the warm-up game.

14. Explain to the group that they are inventors for the company called "Wacky Inventions Inc." - the company is relying on them to come up with a revolutionary new product that will sky rocket the company's poor sales!

15. Give out the Wacky Inventions Inc. Team Brief Handout to help you explain the activity - read through the instructions on the handout with the whole group.

16. Once you have read through the instructions with everyone, give out 3 objects to each group.

17. If a group is struggling for ideas, it can be helpful to add something new by allowing the group to choose one object to exchange.

18. As groups work together, encourage them to get onto their feet and act out their ideas - encourage them to exaggerate and be silly so they can push the boundaries of their ideas.

19. Give girls around 20 minutes to play and create. Each group should then share their Wacky Inventions skit - after they have shared, ask each group to briefly explain how the object inspired their ideas.

20. Try to highlight that ideas develop and evolve - so using a starting point like the objects helps us tap into our creativity. As we have the freedom to play, we can explore and try out many ideas! When an entrepreneur plays around with ideas, objects, products etc. they will think through and often test many different ideas and many different versions of each idea before focusing on developing a few of them in more depth.

Post-Activity Discussion

Ask the girls:

1. Did the play stations activity influence the way you worked through this activity? If so, how?

2. Did you find the process of inventing something new difficult or easy? Why?

3. How do you think entrepreneurs come up with new ideas?

4. Can you think of any products or services you use that would have been considered *wacky* 100 years ago?

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OBSERVATION WALK (45 minutes)

Introduction

In this activity you will take students on an observation walk and have them identify things they notice about the environment they're surrounded by. Entrepreneurs use observation to find patterns and discover what potential customers want and need. During the walk, the girls should focus on facts and occurrences, not on their own assumptions and inferences about what is happening. There are many examples of creative ideas that didn't last very long because they were solutions based on an entrepreneurs' inferences about what the customer needed, instead of what the customer *actually* wanted.

Materials and Resources

- [Observation Walk Record Sheet](#) – 1 per student
- Clipboards – 1 per student
- A watch/timer

Preparation

1. Read through entire activity.

2. Print Observation Walk Record Sheet – 1 per student.

3. Identify area for observation walk.

Instructions

1. Before the activity, be sure to scout out the best place for this observation walk to occur. If your meeting area is located near a place with green space, try to get outside. If you're in the city, walk around the block.

   Tip: If the weather is bad or you can't leave the premises, find at least 3 different locations in the building you are in for the girls to observe.

2. Hand out the Observation Walk Record Sheet and let students know they'll be leaving the meeting room for about 30 minutes. Make sure they have what they need, including weather-appropriate clothing, a pencil or pen, a water bottle, etc.

3. Before you leave, let them know that this walk is meant for them to practice active observation. They'll see on the worksheet that they should use as many senses (besides taste) as possible and be open to the idea of looking at things very closely. Tell students they'll also be making inferences and using their opinions to decide on both the best things about the environment and potential problems/areas for

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improvement.

4. If you're walking outside, start on the path. Let students walk for about 5 minutes before asking them to stop and record observations. Give them about 5 minutes to do this. Repeat this procedure twice more in two different spots. If you're working inside, move to the first spot and let students explore the room or new space for about 5 minutes and then stop and write observations for 5.

5. Repeat step 4 twice more in two different locations.

6. Return to the meeting room and have girls get into two or three groups. Have them share with their groups the things they observed—sights, smells, sounds, and tactile feelings. Then have them share within the whole group.

Post-Activity Discussion

Ask the girls:

1. What observations did most everyone have in common? Why do you think that is?

2. What observations were unique within the group? Why do you think that is?

3. What role do your thoughts and opinions play when you observe the world?

4. Think about a product you use. What do you think an entrepreneur first observed that led them to invent the product?

CSA Lesson: Intro to Entrepreneurship

In this Lesson:

Marshmallow Challenge (45 Min)
Analyze a Product (60 Min)

Entrepreneurship is traditionally thought of as related to starting your own business. And, entrepreneurs as the people that bring the resources together to set up the company and make a profit. It is likely that the girls will have this type of understanding of entrepreneurship. While setting up and running companies is part of entrepreneurship, at VentureLab we believe that it is much more than this.The core of entrepreneurship is building a solution to a problem and taking the necessary steps to make it a reality. Entrepreneurs spot an opportunity and develop a vision for a new product, business or solution and put together all the resources needed to bring their ideas to life.

We aim to give girls the opportunity to experience and develop an entrepreneurial way of thinking and behaving that will be valuable to them whichever career path they choose. It is important to emphasize that these activities will help them experience and develop their entrepreneurial skills and way of thinking—rather than the specifics of creating a business or starting and running company.

In **Marshmallow Challenge**, girls will work in teams to complete a challenge to build the tallest free-standing structure out of dry spaghetti noodles that also supports the weight of a regular-sized marshmallow. Along the way, teams will be asked to reflect on what they've been doing and how they're feeling as they experience what it means to have an entrepreneurial mindset. It will also help girls start building some key entrepreneurial skills including creativity, teamwork, and prototyping.

In **Analyze the Products**, girls will start by examining three different products from the same category/market. They will consider different aspects of the products including unique features, packaging, the company that made the product, the potential customers, pricing, and branding. They will present their findings to the larger group and then develop ideas for new products in this market.

Goals

For the girls to:

- Explain their mindsets of how they approach challenges and problems
- Explain how entrepreneurs actively learn and develop their mindset and skills over time
- Explain how failures is an opportunity to learn something new
- Explain the importance of testing ideas and taking action
- Recognize and honor the individual strengths people bring to a team
- Consider the different activities entrepreneurs undertake to develop, make, and sell their products and services
- Determine how entrepreneur solve problems and meet the needs of their customers
- Pitch new ideas

Entrepreneurial Mindsets

- Resourcefulness
- Optimism
- Redefining Failure
- Growth Mindset
- Adaptability
- Problem-solving
- Opportunity seeking
- Curiosity
- Empathy

Entrepreneurial Mindsets

- Creativity
- Teamwork (Collaboration and Communication)
- Design Thinking
- Prototyping
- Idea Generation
- Pitching

THE MARSHMALLOW CHALLENGE (45 minutes)

Introduction

The girls work in teams to complete a challenge to build the tallest free-standing structure out of dry spaghetti noodles that also supports the weight of a regular-sized marshmallow. Along the way, teams will be asked to reflect on what they've been doing and how they're feeling as they experience what it means to have an entrepreneurial mindset. It will also help them begin building key entrepreneurial skills including creativity, team work, and prototyping.

Note: You'll notice a longer than normal post-activity discussion section as this is the first activity to explicitly introduce entrepreneurship. The extended discussion guides the girls to make connections between the activity and entrepreneurial mindsets and skills.If your time is limited, consider discussing certain themes more than others.

Materials and Resources

- Pens/pencils
- VentureLab Entrepreneurial Skills and Mindsets Sheet
- Marshmallow Challenge Materials - 1 set per group
  - 20 uncooked spaghetti noodles
  - 1 yard of masking tape
  - 1 yard of string
  - 1 regular size marshmallow (not mini)
- 1 Marshmallow Challenge Team Observations Card
- Measuring Tape/Stick
- Timer
- TED TALK: "Build a tower, build a team | Tom Wujec" video: https://www.youtube.com/watch?v=H0_yKBitO8M (Optional)
- "Running a Marshmallow Challenge is Easy!" Sheet (Optional)

Preparation

1. Read through the entire activity.

2. Gather materials for Marshmallow Challenge.

3. Print/make copies of Marshmallow Challenge Team Observations Card (1 per group).

4. Familiarize yourself with:
   - The Marshmallow Challenge. You can watch the TED talk or read about it on the optional "Running a Marshmallow Challenge is Easy!" Sheet. (Note: This

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lesson has been adapted slightly from the original challenge you'll see or read about.)
- ○ The key points that are highlighted in the post-activity discussion section.
- ○ VentureLab Entrepreneurial Skills and Mindsets for reference during activity and Post-Activity Discussion.

Instructions

1. Have the girls get into groups of 3-5.

2. Briefly explain that they are going to do an **entrepreneurial challenge.**

3. Ask them if they have heard the word "entrepreneur" before and take a few answers/ideas. (Keep this brief, as the goal is for them to have the experience of the activity to help them more fully understand entrepreneurship).

4. Explain that in today's activity they will experience what it is like to be an entrepreneur and they will learn more about how people who are entrepreneurial think and behave. Emphasize that being entrepreneurial isn't just about setting up and running a business; whatever they choose to do in the future, they will benefit from these skills and ways of thinking (mindsets)!

5. Explain the Marshmallow Challenge: Tell the girls that they will work in teams to build the tallest tower possible that can hold a marshmallow on the top. They will only be able to construct the towers with the materials provided.

6. Let them ask questions as needed. Make sure that they understand that:
   - Towers must be **free standing** - they cannot be stuck down/taped down or suspended.
   - Teams can **only use the materials they have been given** (20 spaghetti noodles, masking tape, string, and one marshmallow) but they do not have to use all the materials.
   - They can use the materials in anyway they'd like (except for anchoring or suspending the tower) - for example, they can break the spaghetti into smaller pieces.
   - The tower **must hold the marshmallow on top** and still stay standing. The marshmallow has to stay in one piece.
   - The winning team is the one with the **tallest tower that holds the marshmallow on top.**
   - Let the girls know they will have a **total of 18 minutes** for the challenge– including both planning and building the tower.

7. Hand out the Team Observations Card. Let them know that at 2 points during the activity, and then at the end, you will ask them to reflect on their progress and

thinking. Each time you direct them to record, a different team member should be the recorder. Have the group take a minute before the activity starts to assign when each person will be the recorder and have them write the names down next to the "Recorder" notes in each time box.

8. Explain that you will tell the recorders when to ask the group the questions on the Team Observations Card, they will ask the questions and note down answers while the rest of the group continues building the tower.

9. Handout sets of materials to each group.

10. Start the timer! The recorder should write key points on the card while everyone continues building and the timer is going.

11. At 6 minutes, the recorder should ask their teammates questions using the Team Observations Card.

12. Repeat the above step at 12 minutes.

13. At 17 minutes let groups know they have 1 minute remaining.

14. At 18 minutes, tell all groups to stop what they are doing and stand back from the towers.

15. Ask the final recorder to complete the last section in the Team Observations Card.

16. Go to each tower and determine whether it is free standing and if it is holding the marshmallow. If it is, measure the tower's height.

17. Record the results and announce the winner!

18. Ask the girls to briefly review the notes on the Team Observation Cards before the Post-Activity Discussion. This will help them settle down after the final countdown excitement and give them a chance to think about the activity.

Post-Activity Discussion

During the discussion, the girls should gain some insight into what it means to be an entrepreneur and make connections between the experiences and feelings they had during the marshmallow challenge with entrepreneurial skills and mindsets. They should use their own reflections and the team observation notes to help them participate in the discussion.

<u>**Discussion Theme 1:**</u> *How did each team approach the challenge? What did they do in the time they were given?*

Compare and contrast what the groups did during the challenge. Try to highlight the different stages they likely went through: planning, prototyping, testing and emphasize the importance of teamwork.

Planning:

Ask the girls:

1. How long did you spend on planning or talking about what to do?

2. How useful was it to spend time talking and planning? Why?

Key Takeaway

Entrepreneurs start making as soon as possible. When entrepreneurs start creating earlier, they identify problems sooner rather than later! Sometimes people plan for a long time because they are afraid of making mistakes so they try to get the perfect plan or design. But, entrepreneurs know that in the early stages, they are bound to make a lot of mistakes, but will learn important things from these mistakes. Detailed planning often comes later in a project.

Prototyping (*building/making the tower):*

Ask the girls:

1. How many of the 18 minutes did you spend making/building your tower?

2. Did anyone change their design or rebuild their tower? How many times?

3. Why did you change the way you were building it?

Key Takeaway

Entrepreneurs make many prototypes and improve on them as they gather more information. This repetitive process of making and revising prototypes is called iteration. Entrepreneurs learn something from each new prototype (or "iteration") in order to ultimately make something better than their original designs.

Testing:

Ask the girls:

1. When did you first try to put the marshmallow on top of the tower?

2. How many times did you test using the marshmallow?

3. If you waited until the end to put the marshmallow on, why did you wait and what impact did it have?

4. What were the benefits of testing early?

Key Takeaway

Entrepreneurs test early. It's likely that successful groups tested to see if the tower could hold the marshmallow before the end of the activity. If the tower could not hold the marshmallow, they probably changed the design before time ended. Emphasize that entrepreneurs test, observe what happens and get valuable feedback so they can **adapt** and improve.

Teamwork:

Ask the girls:

1. What other things helped you be successful (e.g. did certain team members have particular skills or experiences)?
2. How well did the team work together? Did you collaborate (use each other's different ideas and skills) or did individuals make decisions/do things on their own? Why?
3. There may be some of you who have done a similar challenge or have a lot of experience with building models. If so, did this help the group?

Key Takeaway

Teamwork and collaboration are key entrepreneurial skills. Many factors contribute to success (including past experiences and technical skills) – teams do better if they can use each member's strengths to achieve the group's goal!

Discussion Theme 2: What problems did the teams face during the challenge and how did they deal with them?
Tell the group you want to focus on the things that didn't go so well because understanding and dealing with failure is an important part of being successful. That is why they noted down their problems on the Team Observation Card.

Learning from Failure:

Ask the girls:

1. What problems did you have during the different stages of the challenge?

2. What went wrong and how did you "fail"?

3. How did you cope when things went wrong? Be honest.

4. In what ways did "failing" help you in the challenge? What did you learn from your failures?

Key Takeaway

- Entrepreneurs expect to make mistakes and get things wrong (especially at the beginning of something new).
- Entrepreneurs are resilient in the face of failure. They show determination and grit to overcome challenges. They stay optimistic about their work and try to solve problems in a creative way.
- Again, emphasize that these ways of thinking/mindsets can be learned by exposing yourself to challenges—they will see the world doesn't stop if they fail and they usually find out something valuable!
- Entrepreneurs see failure as an opportunity to learn. They learn from many small failures and adapt and improve. This leads to better products and a greater likelihood of success in the end.

ANALYZING PRODUCTS (60 minutes)

Introduction

In teams of 3-5, the girls will start by examining three different products from the same category/market. They will answer questions that encourage them to consider different aspects of the products including unique features, packaging, the company that made the product, the potential customers, pricing, and branding. The girls will present their findings to the larger group and discuss their ideas further during a discussion. They will then use this information to develop ideas for new products in this market.

This activity will help the girls look more closely at what entrepreneurs and companies do and how they are able to meet the needs of customers. They will also consider how these activities help an entrepreneur or business solve problems, sell products, and make a profit—even when there are lots of competitors.

Materials and Resources

- Product Analysis Sheet
- Facilitator's Product Analysis Sheet
- Products - 3 per group
    - Collect 3 products from the same general market or product type that the girls will be familiar with or actually use themselves. One group might get 3 kinds of shower gels/bath products and another group 3 different snack foods or drinks.
    - Ensure there is variety in ingredients, packaging, prices, and brands among the 3 products each group is given. It is useful to have products targeted at customers with different needs, i.e. different age groups, genders, or people with social, environmental, or health concerns.

Preparation

1. Read through entire lesson.

2. Gather products.

3. Print Product Analysis Sheet (1 x girl).

Instructions

1. Have the girls get into pairs. Pose the following 2 questions: What is an entrepreneur? What roles do entrepreneurs play in business?

2. Give them 2-3 minutes to discuss in pairs to activate their thinking. Then come back together as a whole group for discussion. There are no perfect definitions of either word but discussion points should include that **an entrepreneur is someone who:**
    a. Comes up with **new ideas** and initiatives/develops **new ideas** for products and services
    b. Spots an **opportunity** for a new product or business or implements **solutions** for cultural, social, or environmental problems
    c. Takes the **risks** of setting up a business (invests their own time & money) and aims to make a **profit** from the ideas and business (profit is where the money earned is more than the costs of running the business).
    Emphasize: This might be the kind of entrepreneur the girls are familiar with but this is not the only kind of entrepreneur! Everyone in their own way can be an Entrepreneur. Artists and doctors may start their own gallery or practice. Teachers have to find the right resources for their classes. And even within companies, people need to be entrepreneurial in order to innovate. Today, we will focus on entrepreneurship in business though throughout the various VentureLab activities we will look at all kinds of examples of entrepreneurship.

3. Put all the products out on a table, in their groups of 3, so that everyone can see them.

4. Ask the girls to look at the different piles of 3 products - what do they notice about them?
    a. They are all_____(i.e. shower gels/snack foods/drinks).
    b. They are in one main market - all the businesses that make these products are **competing for customers** with all the other businesses that make similar products.
    c. They are similar but have differences – e.g. color, packaging etc.

5. Explain that they are going to work in their teams to examine and analyze 3 of the products. To do this, they should observe as much as possible about the products by using all their senses - it is good to feel, smell, and taste where appropriate (be careful of any health/allergy issues when deciding if it's okay to taste any of the products!).

6. They will use the Product Analysis Sheet to record their answers. They should feel free to draw pictures or diagrams to help them explain their answers. Explain that even though they are each receiving a sheet, each person in the group should be making the same notes. If the whole group does not agree, they should list the multiple ideas or opinions generated.

7. Hand out 3 products to each team along with one Product Analysis Sheet for each girl. The team should work together to come up with answers, but each girl needs a record of those answers to help during discussions and later activities.

8. Give teams **30 minutes** to complete the Product Analysis Sheet.

9. While teams complete the product analysis and the girls record their answers, check in with the groups and be available to answer any questions they may have. Their answers should come from observations, comparisons, experiences, and ideas so they should not need significant help - your job will likely be prompting them to take a closer look and to capture their ideas.

10. After 25 minutes, let them know they have 5 more minutes. If there are several groups not close to finishing, and if possible, you can extend the time. If groups appear to be finishing up in less time, shorten this observation section and dive right into the post-activity discussion.

Post-Activity Discussion

Use the Facilitator's Product Analysis Record Sheet for discussion questions and to see responses that will help introduce more entrepreneurship terminology.

CSA Lesson: Idea Generation

In this Lesson:

Role Playing and Reverse Brainstorming (45 Min)
Visual Idea Generation (55 Min)

Idea generation is the process of forming, revising, pondering, and sharing new ideas of any kind—realistic, abstract, or anywhere in between. Most girls will be familiar with the general concept of brainstorming - where either an individual or a group of people come up with as many new ideas as possible for a specific topic or problem. It's important because it helps people say their ideas out loud, however silly they may seem. Once an idea is out in the open, it is recorded and can be developed and tested. Sharing ideas in a group has the added advantage that they can evolve and morph into other ideas and spark additional new ideas.

Besides traditional brainstorming, there are other ways to generate ideas. For example, visual idea generation methods can help girls use imagery and role-playing to explore situations and ideas in creative and organic ways. This can lead to more unusual or novel ways to solve problems. Each activity below introduces girls to one or more idea generation techniques.

Entrepreneurs in all fields use idea generation techniques whenever they need new ideas related to any aspect of entrepreneurial activity, such as product development, concept improvement, and, in particular, problem solving.

Regardless of which activity the girls do, be sure to go over the **4 rules of brainstorming**: *1. Go for large quantity of ideas. 2. There are NO bad ideas. 3. Encourage wild and crazy ideas. 4. Record and capture everyone's ideas.*

In **Role Playing and Reverse Brainstorming**, girls will use their imagination to role play as well as use the technique "reverse brainstorming" to make a problem worse in order to encourage a wide variety of ideas.

Visual Idea Generation builds on observation techniques and encourages deeper situational understanding by using empathy and differing perspectives. Girls will role-play situations related to their visual idea generation. Finally, they'll put together their understandings and experiences gained from visual brainstorming and role-playing to brainstorm for solutions to the problems they've defined.

Goals

For the girls to:

- Demonstrate confidence when sharing ideas
- Encourage everyone in a group to actively participate so that everyone's ideas are captured (written down/recorded)
- Recognize the benefits of building on other people's ideas and sharing ideas
- Find new and different ways to create more innovative ideas
- Consider different people and perspectives

Entrepreneurial Mindsets

- Opportunity Seeking
- Problem Solving
- Curiosity
- Optimism
- Adaptability
- Empathy

Entrepreneurial Skills

- Brainstorming/Idea Generation
- Creativity
- Teamwork

ROLE PLAYING AND REVERSE BRAINSTORMING (45 minutes)

Introduction

The girls will learn and practice two simple techniques that can be used to encourage a wide variety of ideas: role playing and reverse brainstorming. Both techniques are quick and easy to apply in any group situation when people are feeling a bit stuck and need a way to change their perspective and increase the number of different ideas they generate.

Materials and Resources

- Character List for Role-Playing Brainstorm Handout
- Brainstorming Topics List Handout
- Lined paper, plain paper or large poster paper
- Makers/Pens

Preparation

1. Read through the entire activity.

2. Print or have accessible the Character List for Role Playing Brainstorm Handout and Brainstorming Topics List Handout.

Instructions
Role Playing

1. Have students get into new groups of 4-6. Explain that they will use role-playing to help them brainstorm solutions to a topic/question. They will take on the persona or characteristics of another person or character. The persona doesn't have to be a real person; entrepreneurs might use superheroes or characters to help them break away from routine thinking.

2. Explain to students that you will call out a person or character and everyone will take on that persona for two minutes. For those two minutes they will contribute ideas as if they were that person or character. Then you will call out another person/character for them to do the same thing and so on.

3. Choose a topic/question from the Brainstorm Topic List Handout or come up with your own and write it on the board.

4. Each group should record their ideas on lined paper, plain paper or large poster paper.

5. Give the groups a moment to nominate a new scribe(s) - remind them they are

simply trying to get the most ideas down.

6. Start by giving two minutes for them to give their own ideas and then call out one of the people/characters listed on the Character List for Role Playing Brainstorm Handout. Set the timer for two minutes and then call out another character/persona. You can go through the list of people in any order you choose. Feel free to add your own characters or personas and make them people the students would know!

7. Repeat this process with 5-6 different personas/characters (or more if it is working well and you can see the groups want to continue) and then stop the groups for a short reflection.

Post-Activity Discussion
The aim of this activity is to get students to think about how the technique worked for them and their group and if there were any issues with it. Ask the girls:

1. What were the benefits of using role-playing while brainstorming?

2. How could you use role-playing for brainstorming and problem solving at school/at home?

3. How do you think entrepreneurs use role-playing?

4. Were there any issues with the techniques? If so, what were they and why?

Reverse Brainstorming

1. Explain to students that they will now use reverse brainstorming to help them come up with ideas. Instead of making the problem better, they will first come up with as many ideas as they can to make the problem worse! For example, if students were trying to generate ideas on how to get to school on time, they would switch it around and ask how can they can make sure they are never on time/always late!

2. Once the groups have spent time getting ideas to make things worse they will review each one and then use these to help suggest ways to make things better/come up with solutions.

3. Get the groups set up with paper and pens.

4. Have each group decide to use either the group brainstorming or brainwriting technique during reverse brainstorming.

5. Give the group an initial 6-7 minutes for reverse brainstorming - then feel free to extend by another 3-4 minutes if the groups are still working well.

6. Stop the groups and ask them to go over their ideas and reverse them back into solutions. As they do this it may generate more than one way to reverse it. They should record everything that they come up with.

       Tip: The girls may find it easiest using a different color pen to write their solutions next to each "worse idea."

If they used brainwriting they can then use brainwriting again by passing the papers around and reversing the points into solutions (again: this is easier if they use a different color pen). Give the groups approximately 10 minutes. Again, feel free to extend if students are still engaged.

Post-Activity Discussion

Ask the girls:

1. What were the benefits of trying to making the problem worse?

2. How could you use this approach for brainstorming and problem solving at school/at home?
3. How do you think entrepreneurs use this technique?

4. Were there any issues with the technique? Why?

5. Which of the techniques did you prefer - role-play or reverse brainstorming? Why?

Key Takeaway

This is often a great technique for businesses to try to identify all the things that make a service experience or use of a product worse for the customer - often recognizing what they are doing that makes things worse is a great start to problem solving.

VISUAL IDEA GENERATION (55 minutes)

Introduction

The girls will start with the Squiggle Birds warm-up to get students thinking about using pictures to stimulate idea generation. The purpose of this activity is that even familiar items and patterns can be seen in new ways when you set the intention to solve problems creatively.

Next, the girls will be assigned a persona (e.g. a parent with 3 children under 5 years old). They will then pick a setting in which to imagine their personas. The settings are common places that many girls will have some experience with. They will look at images of these places and consider the experiences of their personas—including certain difficulties or problems their personas may have in these settings. They will then act out some scenarios related to each setting to help further develop a sense of what problems might need to be solved for their personas. A combination of the visual prompt and the role-playing should help them generate ideas and begin problem-solving. Finally, the girls will participate in a flash-brainstorming session to think up some solutions or products for the problems they've identified.

Materials and Resources

- "Squiggle birds" video: https://www.youtube.com/watch?v=vK3yQBouzNs
- Image Prompts Handout
- List of Personas Handout
- Role-Playing Scenarios Handout
- Blank Paper
- Pencils, pens, markers, etc.

Preparation

1. Read through the entire activity.

2. Watch the "Squiggle birds" video.

3. Print or have available:
   a. Image Prompts Handout (x 1)
   b. Personas List Handout (1 x instructor)
   c. Role-Playing Scenarios Handout (1 x instructor).

Instructions

1. Ensure each student has blank paper and a pen or pencil.

2. Explain that you want everyone to draw random squiggles on their paper. Somewhere between 12 and 16 squiggles is enough! Demonstrate what a "squiggle" looks like.

3. When everyone has finished squiggling, tell the girls that they will turn their squiggles into birds. Again, demonstrate with a few on the board to help everyone get started. You may want to suggest things that can be added, such as a beak, wings, tail, feet, etc.

4. Allow for 2-3 minutes to complete making the "Squiggle Birds" and then ask them to share their birds with one other person. Give them time to enjoy their squiggles!

5. Use the experience to highlight these key points about **drawing to convey ideas**:
   a. We don't have to worry about our drawings because our minds fill in the details.
   b. We are all able to recognize patterns and familiar objects (such as birds) which allows us to communicate through visuals even when our drawings are not highly artistic!
   c. The girls should always feel free to label their work by adding a few words, arrows, and diagrams to help develop drawings.
   d. Brainstorming drawings do not need to be perfect, as the creative idea and message are the purpose.

6. After the warm-up, introduce the activity by explaining to the girls that they will each be assigned a persona. Then they will choose a setting and be given a set of images of that setting. They'll think about their personas' experiences and problems in the setting. Then they'll do a few role-play scenarios to further consider the experience. Finally, they'll come up with a few ideas or products that would solve certain problems they've discovered.

7. Use the Personas List Handout to assign a persona to each student. You can have them number off 1-6 and assign personas that way. Or for an easy way to increase the energy in the room, you can have each student roll a die and assign them the persona of the number they land on.

8. Answer any questions they may have about their personas.

9. Display photo cards: Airport, Medical Facility, Park, Store, Library.

10. Instruct the girls to choose a setting and give them a photo card with pictures of that setting.

11. Tell them that they will be given 5 minutes to write down anything they can about what the experience in that setting would be like for their persona. They can start

with observations and simple details about the environment from the photos or from personal experience. If they are stuck, you can ask guiding questions such as: *What would you be feeling? Happy? Nervous? Angry? Calm? Why might that be? What would you be thinking? Why would those thoughts be on your mind?*

12. Give the girls 5 minutes to work on their own.

13. After 5 minutes, have them find someone who chose the same setting and then discuss what they wrote for another 5 minutes.

14. Now that they have a good sense of the setting, ask the girls to brainstorm potential problems for their persona in the setting they chose. For example, what problems might someone who is hearing impaired have at an airport? What problems might someone with social anxiety have at a store? Remind them that they don't have to stick to what they see in the photos. For example, you could consider a store during the holidays or a park during an outdoor concert or a library during finals.

15. Give the girls 10 minutes on their own to brainstorm problems for their personas in the setting they chose. Remind them of brainstorming strategies like reverse brainstorming that might help.

16. Have them meet with others who have their persona and discuss the problems generated across multiple settings. They can add to their list as they hear from others. Let the groups discuss for about 5 minutes.

17. Have the girls stay in these small persona groups to do some role-playing scenarios for about 10 minutes. Project or display the scenarios and have each girl in the group choose one they'd like to act out for their persona.

18. Remind them that as they portray people who have certain limitations they should be respectful and thoughtful about the experience.

19. Have them watch the role-playing of the others in their group. The other girls can ask any questions about the role-playing performance and offer their own ideas of what the scenario would be like for that persona.

20. After the role-play, have them add to their lists of problems in the setting for their persona. They should use the thoughts that came up while they were acting, as well as ideas generated by comments and suggestions from their group. Give them about 5 minutes for this.

21. Now tell the girls that they should look over all of their notes from the session— observations about the setting, experiences that can happen in the setting, problems for their persona in the setting, etc. and then come up with a list of ways

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to solve some of the problems. These ideas can be certain services, like apps or design ideas or they can be physical products like off-road wheelchairs or lighted signs for notifications.

22. Remind them of the 4 rules of brainstorming:
    - Go for large quantities of ideas (the more the better)
    - There are no bad ideas (If you are working on your own, don't edit out ideas and, if you are in a group, don't criticize others ideas or make judgements)
    - Encourage wild and exaggerated ideas (anything goes in brainstorming)!
    - Capture everything - every idea must be recorded!

23. Give the girls 2-5 minutes to brainstorm solutions to problems in their chosen settings.

Post-Activity Discussion

Ask the girls:

1. How many ideas did you come up with?

2. Did you find much variety in everyone's ideas or did each idea build on the next?

3. What information did you get from the pictures that you might not have thought of otherwise?

4. How could you use this method for your own idea generation? (For example, when the girls are somewhere and they see a problem, they could take a photo to brainstorm on later.)

CSA Lesson: Opportunity Analysis

In this Lesson:

Learning From Failure (25 Min)
Opportunity Analysis of an Existing Product (65 Min)

Opportunity analysis is the first key step in the process entrepreneurs go through to select ideas to follow through on before doing more detailed market research, prototyping, and testing. Though opportunity analysis is a first step, it is revisited throughout the development process as new information is discovered and the idea becomes more defined.

Opportunity analysis is the process of deciding which ideas represent a market opportunity. A market opportunity is an idea that:
- Can realistically be turned into a product or service. This means the technology and resources needed exist or can be obtained.
- Meets the needs of customers who would also be willing to buy the product.
- Can be priced in a way that generates sufficient sales and profits for it to be attractive to the entrepreneur and any investors.

Finding out if an idea represents a market opportunity is not an exact process. There are many factors to consider - girls should recognize that by carrying out opportunity analysis they gain deeper understanding of the idea and its likely success. The process also helps to highlight what is not yet known about the idea and determine where more research is needed.

Entrepreneurs often talk about a window of opportunity for an idea, which refers to whether the timing is actually right to act on this idea. The window (time period) for an idea being a real opportunity for a successful product will depend on many factors such as social, technological, and economic trends, as well as the actions of competitors. Many entrepreneurs have had great ideas only to have a competitor launch first, thus closing the window of opportunity!

In these activities girls will explore entrepreneurial ideas and learn how entrepreneurs decide if an idea really represents a market opportunity.

In **Learning from Failure**, girls work to sort a set of real life business ideas into two groups - success or failure and then discuss their rationale.

In **Opportunity Analysis of an Existing Product**, girls go through the opportunity analysis process using a real case study. This activity will highlight the idea that entrepreneurs see problems as potential opportunities to develop new products and services, and change the way the world does things!

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Goals

For the girls to:

- Explore problems in more detail and from a range of perspectives
- Use **Opportunity Analysis** as a key step in the entrepreneurial process
- Consider how trends and changes in the world both create and restrict opportunities. This includes Social, Technological, Economic, Environmental and Political (STEEP)
- Make decisions based on evidence and information available
- Explain how decisions are limited by what is currently known
- Consider and make recommendations about future actions

Entrepreneurial Mindset

- Problem Solving
- Curiosity
- Opportunity Seeking
- Empathy
- Resourcefulness
- Adaptability

Entrepreneurial Skills

- Teamwork
- Opportunity Analysis

LEARNING FROM FAILURE (25 minutes)

Introduction

This activity will help the girls begin to think about why business ideas may succeed or fail and what businesses can do to try to reduce the likelihood of failure. This type of thinking is called opportunity analysis. The post-activity discussion will introduce them to the language and vocabulary that entrepreneurs use when conducting opportunity analysis.

Materials and Resources

- [Success or Failure Cards](#)
- [Success or Failure – Instructor Notes Sheet](#)
- Notebook Paper & Pens
- Large Paper/Poster Paper (optional)
- Marker Pens (optional)

Preparation

1. Print or have available:
   - Success or Failure Cards (x 1 per group) (cut into cards)
   - Success or Failure Cards – Instructor Notes Sheet (1 copy for you).

Instructions

1. Briefly explain to the girls that during the next activities they will be exploring how entrepreneurs decide if an idea they have for a product or service is likely to be a success. What entrepreneurs want to do is select the ideas that they think have the best chance of being turned into a product or service that people will buy. Then they can focus on developing these ideas. However, entrepreneurs - both new and established – make mistakes sometimes. What is important is to try to learn from errors in judgment and analysis for future endeavors.

2. Put them into small groups (2-4).

3. Give out one set of Success or Failure Cards per group.

4. Ask the girls to look at the cards and read through the description of the product. Tell them that all of these items and services are real—they were all brought to market. Some failed and some succeeded. Then explain to the girls that they'll sort the cards into two groups/piles based on which products/services they think were successful and which failed.

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5. Write or project these two questions to help them decide if an item was a success of failure:
   a. Are there customers who would really need or want the product or service?
   b. Would customers be willing to pay for the product or service?

6. Give the girls 5-6 minutes for this part of the activity. Though it's quick, make sure they have enough time to justify their decisions about each product/service.

7. Ask groups to first share which ideas they thought were a success. Note whether there were there any differences between groups.

8. Use the Success or Failure Cards – Instructor Notes Sheet to tell the girls which products were successes and which were failures. Be sure to tell them the names of each item on the Success or Failure cards—they might recognize some!

9. As a whole group, briefly look at the ideas that were successful. Have the girls explain their justifications. If someone brings up a topic or reason that is listed on the Success or Failure Cards – Instructor Notes Sheet in bold, be sure to affirm their answers using the vocabulary. For example, if someone says the Walkman was a success because the technology was already built into bigger stereos, you should reply by saying something like, "*Yes, the product was feasible at the time it was created, so it could be built quickly.*"

10. If they don't touch on certain vocabulary that is in bold on the Instructor Notes sheet, be sure to introduce that the vocabulary to them. You might say, "Social and health trends were favorable for the Walkman. What do you think that means?" Lead them into a discussion of the fact that aerobics and workouts were very popular in the 1980s, soon after the product went to market.

11. Be sure to cover each of the reasons for success listed on the Instructor Notes sheet. This type of analysis and vocabulary development will help the girls complete an opportunity analysis of their own in the next activity.

12. Now ask each group to go back through the failure cards and decide why they think each idea was a failure. Follow the same procedure as discussing the successes - make sure to use the bolded vocabulary and ideas on the Instructor Notes Sheet to help them think about opportunity analysis like an entrepreneur.

13. Ask them what they think an entrepreneur can learn from failure.

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OPPORTUNITY ANALYSIS OF AN EXISTING PRODUCT (65 minutes)

Introduction

The girls will carry out the opportunity analysis process using a case study of an existing product: the Ooho Water Orb. They will take on the role of expert entrepreneurial consultants asked to carry out an opportunity analysis and advise the makers of Ooho, Skipping Rocks Lab, on whether the Ooho should be launched, and if so, what they should do next.

Materials and Resources

- Opportunity Analysis Packet (x 1 per group)
- Notes on Video – Instructor Version Sheet
- Expert Group Note-Taking Sheet – Instructor Version Sheet
- "Scientists Created Edible Water Orbs to Replace Plastic Bottles" article
- "Scientists have created edible water" video: https://www.youtube.com/watch?v=KppS7LRbybw
- "Rodrigo Garcia Gonzalez talks Ooho! - The Edible Water Bottle" video: https://www.youtube.com/watch?v=-J68mz2agIA

Preparation

1. Read through entire activity.

2. Print Opportunity Analysis Packet- x1 per girl.

3. Print or have available:
   a. Notes on Video – Instructor Version Sheet
   b. Expert Group Note-Taking Sheet – Instructor Version Sheet

4. Read the article "Scientists Created Edible Water Orbs to Replace Plastic Bottles."

5. Watch videos:
   - Scientists have created edible water
   - Rodrigo Garcia Gonzalez talks Ooho! - The Edible Water Bottle

6. **Plan the groups you will use**. Each girl will be part of:
   a. A Consultant Team (their general decision-making team).
   b. An Expert Group (when the girls break out from consultant teams they will focus on one area of opportunity analysis in their expert group).

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7. Create Consultant Teams of 4 by numbering the girls 1, 2, 3, & 4 to represent their expert groups. If you need to have more than 4 in a consultant team group, then put two girls into an expert group (e.g. have 2 number 1s.) The number 1's will go to Expert Team 1, the number 2's will go to Expert Team 2 and so on. You should have a maximum of 6 girls in an expert team.

    If you have a large group, create 2 expert groups within each number. You can plan this ahead of time by having expert groups 1a and 1b.

8. **Decide on the report format**: This activity suggests a simple written report or poster format, but depending on time and the skills you would like your group to develop, you can adapt it. For example, you may want teams to create a slideshow or written report and then give a team presentation.

Instructions
Introduction (5 minutes)

1. Briefly explain to the girls that before they start the main activity they are going watch a short promotional video about a new product.

2. Play the Ooho Water Orb video "Scientists have created edible water."

3. Ask for their initial reaction and have them vote on whether they think the product is likely to be successful.

4. Now ask them to put their own "gut reactions" aside because they are going to look more objectively at the different factors that will likely determine whether Ooho is a success or failure.

5. Explain that all entrepreneurs and companies with new ideas spend time investigating their ideas in more detail to decide whether to take any of them further. They do this to find the ideas that will be the most worthwhile investments.

6. Pass out Opportunity Analysis Packets to each girl.

7. Review the Opportunity Analysis Definitions on pages 2 - 3 of the activity packet. Ask the girls to take a look at the definitions on pages 2 - 3 in their packets. Read through each part of the opportunity analysis (Demand, Feasibility, Innovation, and External Factors). Explain that they'll become experts in one area today, but that they need to understand the whole process, because entrepreneurs don't look at just one factor to make a decision about their product or service.

Consultant Teams - The Ooho Water Orb (20 minutes)

8. Put the girls into Consultant Teams (prepared groups of at least 4).

9. Ask each team to nominate a lead consultant (or allocate someone this role).

10. Have each girl turn to page to their Consultant Brief on page 4 of their packets.

11. Ask the lead consultant in each team to take a few minutes to read through the brief with their team. They should highlight any words they need help with and any questions they have. (Alternatively read through as a whole group).

12. After a few minutes, stop the groups, check for understanding, clarify terms, and answer any questions.

13. You may wish to discuss the concept of **market opportunity** a bit further. To do so, relate it back to the success or failure activity by reminding them that some business ideas failed because there really wasn't a market opportunity for that product.

    > Tip: Another example of market opportunity is a lemonade stand on a busy street in summer is likely an opportunity to sell lots of lemonade and make some money. Exactly the same stand in winter or on a quiet street is not likely to represent a market opportunity. There are many factors that affect whether an idea is an opportunity.

14. Have the girls turn to the Notes on Video Sheet on page 5 of their packet and ask them to look at the questions.

15. The presentation they will see was at a Moonshot event in Berlin. Moonshot is a forum where entrepreneurs trying to solve big problems and disrupt the way things are currently being done can get their ideas heard and gain support.

16. Tell the girls to concentrate on answering Questions 1 & 2 for the first part of the video clip.

17. Play the "Rodrigo Garcia Gonzalez talks Ooho! - The Edible Water Bottle" video.

18. Stop the clip at approximately **1:40.** Pause and review answers (for guidance, refer to the instructor notes).

19. For Question 2 - The girls should link the problem with increasing consumption of bottled water worldwide. Prompt the girls to think behind the statistics and ask why they think this is happening, specifically what they think is causing the increased consumption of bottled water.

20. Have them suggest ideas and then add/annotate their notes - see examples in the Instructor Notes. They do not need to list all of the suggested examples but they should understand the idea that there are reasons why people are buying more bottled water.

21. Start the video again from where you left off (1:40) – In this clip the girls will see the ideas the entrepreneurs had while trying to solve the problem of plastic use, and more details about the Ooho. They should add any extra details/description about Ooho to the Solution box. They can add a sketch/diagram to help them.

22. Stop the clip at **5:00**.

23. Review information so far and ask if there are any questions.

24. It is useful to highlight how the entrepreneurs are observing and taking inspiration from nature. This is a very common way to come up with new ideas for solutions to problems.

25. Continue showing the video - the next part of the clip shows the development of the orb and the company. There's no need to take specific notes but the girls can add to any points/annotate answers. If time is short, you can skip this section.

26. Stop clip at **10:55**.

27. Have the girls share thoughts so far about the process of development of Ooho. What do the girls think about Rodrigo saying his "moonshot" for today is "Can we produce products the same way as nature?"

28. Now focus them on Questions 3 & 4. Show the clip **until the end** and review everyone's answers. Have them think about everything they have heard and seen so far.

Expert Groups (15 minutes)

29. Remind the girls that the Consultant Team Brief (p. 4 of packet) states that they will first work in expert groups to look at one part of the opportunity analysis for Ooho. Then they will join back together with their consultant group to share their expert findings and come to a decision.

30. Have everyone look at the Expert Group Note-Taking Sheet on p. 6 of their packets. Instruct them that they will start filling this sheet out in their expert groups.

31. Assign the girls to their expert groups (either from prepared lists or have them number off 1-4 - have a maximum of 6 in each expert group):
    - Group 1 - Demand

- Group 2 - Innovation
- Group 3 - Feasibility
- Group 4 - External Influences

32. Have each group gather together and refer to the Expert Group Info Sheets on their expert topic (Group 1: pp. 7-8, Group 2: pp. 9-10, Group 3: pp. 11-12, Group 4: pp. 13-14). Each group should nominate a leader. Ask the leader to read through the information on their Info Sheets and then read each question in turn for the expert group to discuss.

33. As they discuss the questions, they should note down their responses on the Expert Group Note-Taking Sheet (p. 6). Everyone in the group must take notes on their Note-Taking Sheet in the correct box. They will need these notes to provide feedback to their consultant group.

34. Use the Expert Group Note-Taking Sheet – Instructor Version Sheet to support each group as needed and encourage them to note down any questions they have so they can be discussed later.

35. After 6-7 minutes of discussion, check if the groups need more time or have any important questions. Give a further 2-3 minutes if needed.

36. Have them return to their consultant teams.

Consultant Team Sharing and Decision (15 minutes)

37. Ask the lead consultant in each group to organize their team so that everyone gives expert feedback. Everyone should listen to the analysis made by the other experts and make notes about each area. They should note down any questions they still have.

38. Give the teams 4-5 minutes to share their findings and then pause the groups to see if there are any questions at this stage. Then give another 4-5 minutes to finish the discussion.

39. After 5 minutes, stop the groups and answer any questions. Refer to the Expert Group Note-Taking Sheet – Instructor Version Sheet as needed.

40. You may need to help them come to a decision about whether Ooho is a market opportunity. Try to have them consider how many things are in favor of the product and how many are against. Then have them think about whether there is one thing they have looked at that overrides the other areas. There is no right or wrong answer - these are the decisions that entrepreneurs have to make. Starting something new is never without risks.

Consultant Team Report (**10 minutes**)

41. Direct the teams to the Present Your Findings information on pp.15-16 of their packets and read through the instructions (as appropriate).

42. Give instructions on how you would like them to present the report. Timing here is for a simple written report but feel free to choose what works for your timing and girls' development of skills (e.g. short written report, poster/display, slideshow, team presentation to the audience). Have the team leader note down these instructions.

43. Now the girls should work through the "Guidance on Report Content" section to help them create the report. They must include their decision, the reasons for their decisions and recommendations on what to do next.

44. Consultant groups will present their findings and share with the class. If there is time, compare the decisions of different groups and discuss why there may be differences. This is a good time to highlight that decision-making is difficult and even with the same information we may reach different conclusions.

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CSA Lesson:
Market Research

In this Lesson:
Secondary Research (50 Min)
Primary Research (60 Min)

A market is 1) a group of people who like or need the same things and 2) competing businesses who sell similar products or services to this group. Market research is the process of gathering and analyzing information about a market. The aim of market research is to help businesses make better decisions so that they can be more successful. Entrepreneurs need to do market research on many different aspects of the market - competitors, local conditions, growth areas, and, perhaps most importantly, the customers' needs and wants! Market research doesn't neatly fit into one place in the entrepreneurial process and is an ongoing activity that will help entrepreneurs develop and improve their product or service and increase their chances of success.

Primary research is new research done by entrepreneurs themselves through talking directly to customers to better understand their needs, wants, buying habits, opinions, and experiences. Primary research methods include surveys, interviews, focus groups, and consumer tests. Primary research is very useful and designed to be specific to the entrepreneur's research questions but often difficult to do, time-consuming, and relatively expensive! *Secondary research* is using information or data that already exists and has been collected by someone else. Using an internet search engine is the most common form of secondary research. Types of information found while searching includes competitor websites, comparison and review sites, market reports, and research studies. Secondary research may not be specific to the needs of the entrepreneur but can give a low or no cost way to get background information about the market conditions, trends and competition.

In **Secondary Research**, girls will work in small groups to identify potential products, services or business opportunities they could pursue and then carry out secondary market research on that idea. To help explain to girls how to carry out their research, they will examine the fictitious example of "Nutriteen" - a group of entrepreneurs that are developing a new range of healthy snack bars that are targeted at teenagers.

In **Surveys: Asking Questions** girls will write a short survey and carry out primary research. It is important that girls get a lot of practice asking questions face to face to overcome the initial fear of asking questions. The more people that girls speak to, the more likely they are to become confident in seeking out the opinions of others which is an essential entrepreneurial skill.

Goals

For the girls to:

- Collect secondary research to answer research questions
- Explain the importance of primary research for entrepreneurs
- Conduct primary research through a focus group and survey
- Design and ask questions that lead to useful data
- Increase their confidence in speaking to potential customers

Entrepreneurial Mindsets

- Curiosity
- Opportunity Seeking
- Empathy
- Problem solving
- Resourcefulness
- Adaptability

Entrepreneurial Skills

- Creativity
- Market Research
- Communication

SECONDARY RESEARCH (50 minutes)

Introduction

The girls will work in groups to identify potential products, services, or business opportunities that they could pursue and then carry out secondary market research on that idea.

Materials and Resources

- [Secondary Research Task Guidance](#) x 1 per group
- [Research Record Handout](#) x 1 per student
- Internet access

Preparation

1. Read through entire activity.

2. Print copies of:
   a. Secondary Research Task Guidance x 1 per group
   b. Research Record Handout x 1 per student.

Instructions

1. Explain to the girls that they are going to be doing market research for a business idea. Market research is how entrepreneurs find out what customers want, what problems exist for customers, and helps them uncover how those problems can best be solved or needs met. Market research helps entrepreneurs figure out if they have a great new idea that will work and if people will buy their product.

2. **Secondary research** is a type of market research that uses information that already exists in order to get information about existing products and/or or markets.Online secondary research is a particularly useful form of market research for entrepreneurs because it can give useful background information about the market and the competitors. It is also cheap when you have access to the internet.

3. Have the girls get into groups of 2-5.

4. Give out a Secondary Research Task Guidance Handout to each group and a Research Record Sheet to each girl.

5. Read through the task instructions and then encourage them to work through the questions as a group to help come up with an entrepreneurial idea.

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6. Remind the girls that the aim is for them to get started on their market research as soon as possible so they should not spend too long on coming up with an idea.

7. As groups work on coming up with their ideas, circulate and encourage them to move on and start working through the tasks on the Guidance on Secondary Research section.

8. Once most of the groups have got their idea (after about 10 minutes) ask everyone to direct their attention to the Guidance on Secondary Research section of the handout and read through/check for understanding.

9. Remind the girls to complete the Research Record Handout handout as this will help them share information and easily return to useful websites.

10. As they work through the handout and start their research, circulate around the room and give tips/ideas/answer questions. Encourage everyone, and remind them that this process is a bit of trial and error and they will learn best by trying!

11. After most groups have had 10 minutes of research time, remind them to complete the record sheet.

12. Approximately 10-15 minutes from the end of the activity, have them return to their groups and share their research with each other.

13. Ask groups to discuss how their research findings affect their original idea. They should update their idea description and then identify 3-5 new questions they have.

Post-Activity Discussion

Ask the girls:

1. How has this research helped you?

2. What was difficult about carrying out secondary research?

3. What was your best sources of information?

4. What advice would you give other entrepreneurs about using secondary research?

PRIMARY RESEARCH (60 minutes)

Introduction

In this primary research activity, the girls will survey various people by writing their own questionnaire. They will ask their questions to others to increase their confidence in communicating their ideas and gathering data.

Materials & Resources

- [How to Write Survey Questions](#) (x 1 per group)
- Computers (optional)

Preparation

1. Print How to Write Survey Questions (1 x group).

Instructions
Introduction to Surveys (10 minutes)

1. Explain to the girls they are going to write a questionnaire they will use to survey other people in order to get further information about their ideas.

2. Explain that a survey involves asking questions to lots of different individuals to find information that will help them make decisions. Surveys can give data (quantitative information) - this means they can find out for example how many people would want to buy a product/want a particular feature, or what prices most people would be willing to pay, etc. The exact questions they ask should be focused on the information they need to help them make decisions.

3. Have them form their entrepreneurial groups and ask them to spend **5** minutes deciding on what information they would most like to get from a survey - do they need to know more about prices? the product? competition? advertising? etc. Have them make a list of the key things they want to find out.

4. As a whole group, spend a few minutes sharing some ideas about the information they want to find. If they are struggling, you can prompt them with some examples like:
   a. How many people would buy your product/service?
   b. How much would people pay for the product/service? What should you charge?
   c. Which feature(s) of the product/service is most important?
   d. What products do people currently buy and why?
   e. Where/how should you advertise?

Writing Questions - Questionnaire Design (20 minutes)

5. Give each group a How to Write Survey Questions handout.

6. Read through the handout with the class and use the example of Nutriteen to help demonstrate closed questions and how to avoid leading questions. Have the girls note down any ideas next to the sample questions on the handout.

7. Remind them that they should aim for most of their questions (6-8) to be closed with 1 or 2 open questions where they are looking for more opinions or ideas.

8. Give the girls 15 minutes to write their survey - remind them that they are not trying to write the perfect questions (let them know it takes many attempts to write a great questionnaire!).

9. If they have access to computers to write their surveys you can have them print out a copy for each person in the group. If they are working by hand, each student will need to write out the questions so they have their own copy to ask people.

10. Be available to help talk through questions and help test out the wording of their questions.

11. After **10** minutes, remind them to read their questions out loud to check that they make sense the way they are written and to make sure they each have a copy of the questionnaire!

Conduct The Survey (20-25 minutes)

1. Explain to the girls that they will now ask their questions to other people (in other words, conduct the survey). This might be other troop members, adults, or members of the community where you live. We recommend you determine who you want the girls to survey in advance and make arrangements to make that possible.

2. The girls should tally answers for each person on their survey copy and note down any problems/issues that arise with the questions.

3. After **15-20** minutes ask them to return to their entrepreneurial group to review their findings.

4. Tell the girls they should:
   a. identify any questions that caused a problem for the respondent or where they felt they were not getting the intended information. They should re-write these questions.
   b. analyze the results by adding up the responses to the closed questions.

c. note down anything they have learned from the survey that will help them with their entrepreneurial idea.

Post-Activity Discussion

Focus on having the girls reflect both on what they learned and the process of conducting a survey. Ask the girls:

1. What did you learn from your survey that will help you with your entrepreneurial idea? Share some answers here and highlight how useful it is to ask other people.

2. What did you enjoy about doing a survey?

3. What did you find challenging about writing the questions?

4. What did you find challenging about asking the questions? Did it get easier to ask questions? Why do you think it gets easier?

5. If you were to write another survey/re-write the survey what would you do differently and why?

CSA Lesson: Design Thinking and Prototyping

In this Lesson:

Up the Mountain Design Challenge

- Part 1: Empathize, Ideation, Prototyping (60 Mins)
- Part 2: Test, Iterate (30 Mins)

We define design thinking as an approach to solving problems by understanding users' needs and developing insights to solve those needs. Design thinking is a process centered on contact, observation, and empathy with end-users. The goal is to find a solution to the problems in their environments. This process differs from trying to compete with other companies or trying to use existing products in new ways. Instead, it's a creative process meant to tailor solutions to people's needs. At VentureLab, we define the steps in the process as: Empathize, Define, Ideate, Prototype, Test, and Iterate.

You may notice that prototyping is a step in design thinking and yet, we've called it out specifically in the title of this section too. That's because prototyping is an important part of the process and one that the girls will explore here. Prototypes are rough models, made quickly and inexpensively. They aren't meant to function as the end product will. Instead, their purpose is to gather feedback. After considering that feedback, entrepreneurs can choose to make changes, take new directions, or discard the idea altogether. One of the most important parts of the design process is this type of iteration, the process of when entrepreneurs make small changes to ideas and prototypes in order to reach a desired goal.

We wanted to introduce girls to an abbreviated version of design thinking so they feel comfortable with all of the steps. Of course, for most entrepreneurs, this process can take days, weeks, and even years. The more feedback the entrepreneur gets, the more changes or tweaks there are to be made. Eventually though, after really thinking through and testing solutions, the entrepreneur eventually gets to the point when it's time to release the product or service.

In **Part One** of the Up the Mountain Design Challenge, girls will learn about Sherpas and empathize with the difficulty they face when carrying heavy loads. They will then generate solutions to solve this problem. Each girl will create a basic prototype of a solution and present it to their team. The team will then select one prototype to build a 3D working prototype.

In **Part Two,** the girls will test each other's prototypes and give feedback so they can make iterations on their design. They will present their ideas again and discuss the factors that entrepreneurs consider before taking an idea to market.

Goals

For the girls to:

- Use empathy to solve problems
- Explain the design thinking process
- Brainstorm solutions to a problem
- Develop prototypes that solve a given problem
- Test/get feedback on prototypes
- Iterate their prototypes based on user feedback

Entrepreneurial Mindsets

- Opportunity Seeking
- Problem Solving
- Empathy
- Resourcefulness
- Adaptability
- Redefining Failure
- Growth Mindset
- Courage
- Persistence and Grit

Entrepreneurial Skills

- Teamwork
- Opportunity Analysis
- Market Research
- Design Thinking
- Prototyping
- Creativity
- Brainstorming/Idea Generation

UP THE MOUNTAIN DESIGN CHALLENGE (90 Min)

Introduction

The girls will learn about Sherpa porters and design new ways for heavy loads to be carried. They'll be introduced to and create low resolution prototypes using basic crafting materials and discuss their designs with others to get feedback.

- Part 1: Empathize, Ideation, Prototyping (60 minutes)
- Part 2: Test, Iterate

Materials and Resources

- Sherpa videos:
    - "Strongest People in the World" video: https://www.youtube.com/watch?v=MpX5mIcMegw
    - "Sherpa porters carry heavy loads - EBC trek, Nepal 2014" video: https://www.youtube.com/watch?v=MdwVXeKKF5I
- Low Resolution Handout
- Just Build It. Poster
- "How to make a cardboard prototype" video: https://www.youtube.com/watch?v=k_9Q-KDSb9o&feature=youtu.be
- Materials for prototyping – aim for a variety including items like poster paper, markers, sticky notes, tape, construction paper, lined paper, cardboard, scissors, other cutting tools, junk/recycled modeling materials, boxes, plastic, rubber bands, etc.

Preparation

1. Read through entire activity.

2. Collect materials for prototyping.

3. We recommend making your own prototype before beginning this activity to use as an example.

Instructions
Part 1: Empathy

1. Tell students that many entrepreneurs get started by empathizing with what's happening to people in the world around them. They specifically look for interesting problems people face that they think they can solve.

2. Explain to students that they're going to watch two quick videos about Sherpa porters. Sherpas are the indigenous people in Nepal who live in and among the Himalayan mountains in Asia. The term "Sherpa" has become synonymous with the job of porter, or people who carry luggage, up to Himalayan base camps, including those on Mount Everest. The Sherpa porters are known for carrying extremely large and heavy loads strapped to their foreheads. They are an integral part of the treks made to high elevations. Everything from food, water, and building supplies need to be brought to the base camps. The hikers themselves usually carry their own packs of clothes and personal supplies while the Sherpas carry everything else.

3. Show students the two Sherpa videos.

4. Ask students to share their reactions about what they saw in the videos.

5. Explain to students that an entrepreneur might see what Sherpas do and think of a way to improve the process by creating something to make it easier for them to carry heavy loads or to get heavy loads to higher elevations. During the design thinking process, the entrepreneur would learn as much as possible about the life of the Sherpa, the current methods of carrying and travel, and what challenges the Sherpas face.

6. To come up with some new ways for Sherpas to carry heavy loads or to get heavy equipment to high elevation base camps, the entrepreneur might interview Sherpas, the people who climb, people who live in high elevation areas, construction workers, and anyone who has experience transporting items from one place to another. Even students could be interviewed because they carry heavy books, supplies, and equipment from home to school and around the hallways from class to class. The entrepreneur would use empathy to understand the challenges people face when they carry heavy loads. The entrepreneurs would then take that information and start to think of solutions.

Part 1: Ideation

7. Put girls in groups of 3-5. They can use brainstorming techniques shared in Idea Generation activities (brainwriting, reverse brainstorming, role-playing) to generate as many ideas as possible for carrying a heavy load. Remind them that during brainstorming, there's no need to limit their ideas or pass judgments on them yet.

8. Have the groups share their ideas and let them know they'll be selecting a few to prototype.

Part 1: Prototyping

9. Once students have generated as many ideas as possible, review the Low Resolution Handout and the Just Build It poster.

10. Explain that entrepreneurs create low resolutions prototypes in the early stages of the design thinking process to make their ideas visible.

11. Explain that a low resolution prototype is an early prototype, like a rough draft. It quickly communicates an idea so that feedback can be gathered quickly and cheaply. Sharing early prototypes with others lets entrepreneurs better understand functions or details they haven't thought of.

12. The girls don't need to worry about the time it would take to build the actual product or the actual materials needed to make the final solution. They also don't need to worry about how obvious (or not) the solution is. They just need to to sketch and build so that they get a different perspective of the challenge and solutions.

13. Quickly discuss some of the options for low resolution prototyping on the handout:
    - Storyboarding to show how the product is used
    - A paper model
    - A drawing on paper or a whiteboard
    - A wireframe to show how something might be laid out on a screen
    - An ad for the product

14. Have each team member choose one solution and spend about 5-10 minutes creating a low resolution prototype. You may choose to have them make more than one type of low resolution prototype.

15. Each girl should present their prototypes to their team.

16. Each team should then pick just one idea they think is a workable solution to build a more detailed, working prototype. If a team cannot agree on one prototype, encourage the team to combine two ideas or do a tiebreaker vote (ex. rock, paper, scissors).

17. Show the "How to make a cardboard prototype" video about 3D prototyping. Ask them what the benefits of this kind of prototyping are compared to drawing the idea. Answers might include: getting an idea of size and actual materials needed, deciding on the layout of features (buttons, straps, levers, etc.), role-playing how it functions.

18. Make the materials you have available to the groups and give them 15-20 minutes to build a 3D prototype before they stop to test.

Part 2: Test

19. Now that each team has a working prototype of their solution, have them carefully test each other's prototypes. Have the girls testing the prototypes role-play carrying something heavy to empathize with Sherpas. Take this moment to point out that the design thinking process is not linear, but rather is a cycle where they constantly revisit prior steps.

20. As the girls test another group's prototype, the girls should ask questions and offer feedback to the group that made it that will help the other team make changes to improve their design.

21. It is not expected that the prototype actually carries a 'heavy load' since they are using cardboard and other basic materials. Have them use their imagination and talk through what would be happening.

Part 2: Iteration

22. Entrepreneurs learn new things about their ideas and prototypes and make small changes as improvements. The girls will now take the feedback offered in the testing stage and make changes to their prototype.

23. Give them 5-10 minutes to make at least one iteration to their prototype based on feedback from another group. They can make additional changes as well.

24. Have the girls present this new iteration of their prototype to the other groups and explain the changes they made and why.

25. With additional time, you can have the girls make more iterations to their prototype.

> NOTE: At some point, entrepreneurs need to decide when to stop making small changes and build the actual product. However, iteration also happens on products that have been released. If you use a cell phone, you know that your apps get updated all the time. The software company released the app and then iterates changes to make it better and improve functionality.

Discussion

26. Review with the girls the list of things entrepreneurs have to consider when deciding IF and HOW to produce a final version of their solutions. There are a lot! Don't worry if time doesn't allow for you to cover all of them.
    - Function (how well does it work?)

- Ergonomics (how efficient/safe is it?)
- Use cycle (how usable is it? How will people use it?)
- Cost effective manufacturing/assembly/packaging processes (What's the cost to build, put together, and package?)
- Cost effective transportation/shipping (What will it cost to ship?)
- Cost effective retail display (How will it be sold in store or to users?)
- Easy and effective maintenance procedures (Is it easy to set up and take care of over time?)
- Marketing and cost/perceived value (Do customers think it's worth the cost?)
- Satisfy relevant industry standards and laws (Does it meet industry guidelines?)

27. Let students know that in order to answer these questions, entrepreneurs have to research things like cost of materials and find out how much money it'll cost to build and ship their product and then how much they'd have to charge to make a profit. If it would cost more to make the solution than people would be willing to spend to buy it, the entrepreneur has to make some decisions about what types of materials to use and if the solution is even worth building. If not, they'll start the design thinking process over again, looking for a new idea.

Post-Activity Discussion

Ask the girls:

1. What parts of the design thinking process have you experienced today?

2. How does design thinking help entrepreneurs?

3. Why does design thinking center on problems?

4. How does prototyping help an entrepreneur think through solutions?

CSA Lesson: Business Models

In this Lesson:

What's Your Unique Value Proposition? (20 Min)
What is Your Business Model? (40 Min)

A business model is a coherent plan that describes what the business offers its customers (product/service), how it organizes its resources to do this, and how it will generate revenue (income) from these products or services. There are many different ways to create a business model. Encourage the girls to think critically about the examples of different business models and why and how the models work for those particular businesses. It is worth emphasizing that there is no one right model and many businesses will change and adapt their model over time as different opportunities arise and conditions change, like a new competitor or change in technology. However, all successful businesses will need to create a coherent model that fits with their business mission, their values, and strategy.

In **What Is Your Unique Value Proposition?**, girls will be introduced to the concept of a Unique Value Proposition (UVP). UVP is a clear statement that describes what a business does that no other business does or what it does *better* than any other business that offers something similar.
Girls will use case studies of different businesses to look at what they offer their customers and determine what makes them unique or better than the competition.

In **What Is Your Business Model?**, girls have the opportunity to get creative and write a business model for a new business idea using the VentureLab business model called the Venture Canvas. Girls can either use the business idea that is provided (about setting up a new magazine for teens) or they can use their own business idea that they worked on in other activities. Girls will be asked to justify the model they put forward, explaining both why they chose their model and what approaches they rejected. Here, girls should consider that not all ways of generating revenue are appropriate for all businesses. The way a business generates revenue needs to be consistent with the overall mission, values, and strategy of the business.

Goals

For the girls to:

- Explain how businesses create value for customers and a unique value proposition
- Explain the importance of a coherent business model for a business
- Create and justify a choice of business model for a new business idea

Entrepreneurial Mindset

- Problem solving
- Opportunity Seeking
- Resourcefulness
- Adaptability
- Creativity

Entrepreneurial Skills

- Business Model Methodology
- Teamwork

WHAT IS YOUR UNIQUE VALUE PROPOSITION?
(20 minutes)

Introduction

When entrepreneurs begin their journey, they spend a great deal of time and effort on idea generation, market research, and the design and prototyping process, trying to work out what customers want and how best to make the product or service. They also have to make sure they deliver the product or service in a way that can reach the right customers and genuinely make money! The business model pulls all of those things together in a plan. In this activity, the girls will focus on one aspect of the business model, Unique Value Proposition. They will learn about several businesses and consider what makes them unique.

Materials & Resources

- Business Models Case Studies Handout
- Unique Value Proposition Handout

Preparation

1. Read through entire activity.

2. Read the Business Model Case Studies

3. Print:
   a. Business Model Case Studies Handout (x1 per pair/group)
   b. Unique Value Proposition Handout (x1 per pair/group).

Instructions

1. Explain to the girls they are going to learn how businesses create their plan to be successful - this is called a "Business Model."

2. Ask students to first think about 2-3 things they have bought in the last month. For each item they bought, ask them to note why they bought it.

3. Have the girls share their thoughts with a partner. They should be able to answer the following questions about their partner's product:
   a. what problem the product solved for them and
   b. why they bought that item (and not a competitor's' product/alternative).

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4. When the pairs have finished discussing, as a group take some ideas from different pairs.

5. Use the discussion to highlight that all businesses need to develop a business model - a coherent plan for their business so that customers see the product or service as beneficial to them, solves a problem or fulfills a need. And to be truly successful, it does this in a way that is better or different to other businesses. You may be able to link to the "why" students chose the product explanations and highlight that this can be about the product itself or other things such as price, availability, brand/image etc.

6. Put students into their pairs/small groups and pass out the Unique Value Proposition (UVP) Handout and the Business Model Case Studies Handout.

7. Review the questions on the UVP Handout and tell the girls that before they look at a complete business model in the next activity, they are first going to focus on a few sections.

8. Assign each pair/group to one of the case studies so that each of the case studies is used. It may be helpful to complete one case study together with a whole group before having the girls work independently.

9. Give the pairs/groups 5-10 minutes to complete the activity.

10. Support pairs/groups during the activity and encourage them to use their own ideas and thoughts as that will lead to a better discussion.

11. Once each pair/group has made an attempt at completing their handout, have them share with another pair/group that has a different business case study or with the whole group. Ask the groups to compare and contrast the ways in which their example business created value.

12. The girls should be able to see that:
    a. Businesses often create value through design of the product or service - having a truly original product or service e.g. The Bradley Timepiece by Eone Timepieces, Inc. has a unique design.
    b. Some businesses create value through use of patents - The Bradley Time Piece & Swiffer® (also Coca-Cola formula, pharmaceutical companies, etc.)
    c. Some businesses create value by tailoring the product/service to the specific needs of the customer segment - Spotify uses a model where people who want to listen to music unlimited without ads can pay for it and Netflix creates custom profiles that help customers select movies and content. The Bradley Timepiece supports people with visual impairment.

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d. Some businesses create value by being ethical and trusted - Lush is environmental and animal friendly and the Bradley Time Piece features inclusive design.
e. Some create value for customers through availability & ease of service - Netflix can be used on multiple devices and Swiffer is widely sold in many different stores & is available online.

WHAT IS YOUR BUSINESS MODEL? (40 minutes)

In this activity, the girls will discuss a completed business model. They will then write their own using an original business idea use a provided example.

Materials & Resources

- Slides
- Venture Canvas for Edible Dough Handout
- Venture Canvas Handout
- Entrepreneurial Idea - A Magazine for Teens Handout
- VentureCanvas for Teen Magazine Handout
- Butcher paper or large poster paper
- Pens

Preparation

1. Read through entire activity.

2. Preview the Slides and presenter notes.

3. Print:
   a. Venture Canvas for Edible Dough Handout (1 x girl/group).
   b. Venture Canvas Handout (1 x girl).
   c. Entrepreneurial Idea - A Magazine for Teens Handout (Optional).
   d. VentureCanvas for Teen Magazine Handout (Optional).

Instructions

1. Pass out Venture Canvas for Edible Dough Handout. This is a completed Business Model.

2. Read through the Venture Canvas for Edible Dough Handout with the girls to give them a working example of the full business model canvas.

3. Use slides 3-6 and the presenter notes to help explain each section. It may be helpful to use Girl Scout Cookie sales model as a way of connecting business terms to what the girls already know.

4. At this point, you can either have the girls work to create a plan for their own idea using a blank Venture Canvas Handout or if they need more practice, you can work together to create a business model using the Entrepreneurial Idea - A Magazine for Teens Handout.

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5. If they are ready to work on their own idea, pass out the Venture Canvas Handout. Support the girls by referring back to the slide notes, edible playdough, and Girl Scout cookie examples.

6. Have the girls present to the group when they are done with their first draft of the model.

7. If they need more practice, pass out Entrepreneurial Idea - A Magazine for Teens Handout and butcher paper or large poster paper and pens to each group.

8. Explain that they will recreate the Venture Canvas on the large paper and create a business model for the magazine using the information given in the handout. They will also need to annotate their model to justify and try to explain why they chose particular parts of the model (e.g. customer segments, UVP, revenue generation) and say what they rejected and why.

9. Give students support and time to work. When they finish, use the completed Venture Canvas for Teen Magazine Handout as a guide to discuss possible answers.

10. Now, have the girls create a plan for their own idea using a blank Venture Canvas Handout.

Post-Activity Discussion

To help discuss the process of completing the Venture Canvas, ask the girls:

1. Which part of the business model are you most confident about?

2. Which part of the business model was most difficult to do? Why?

3. Was everyone in agreement or were there competing ideas?

4. What have you learned that will help you write a business model in the future?

CSA Lesson: Pitching

In this Lesson:

What Goes Into a Pitch (20 Min)
Make a Pitch Video (45 Min)

Pitching is essentially explaining your business plan verbally. An entrepreneur uses a pitch to summarize their ideas and sell themselves to potential investors. The process is so important to entrepreneurs because a successful pitch can secure the funding needed to launch an idea from theoretical to reality. There are two main skills that are critical to effective pitching: public speaking skills and persuasion.

In **What Goes Into A Pitch** the girls will review persuasive and public speaking techniques and watch actual pitch videos to see how the techniques applied by entrepreneurs.

In **Make a Pitch Video** girls will put together a pitch video or a pitch deck.

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Goals

For the girls to:

- Demonstrate effective public speaking techniques
- Demonstrate effective persuasive techniques
- Explain the importance of pitching to entrepreneurs
- Demonstrate confidence when speaking in front of large groups
- Create and deliver a pitch

Entrepreneurial Mindset

- Opportunity Seeking
- Problem Solving
- Optimism
- Adaptability
- Redefining Failure
- Growth Mindset
- Courage
- Persistence and Grit

Entrepreneurial Skills

- Pitching
- Public Speaking
- Creativity
- Brainstorming/Idea Generation

WHAT GOES INTO A PITCH? (20 minutes)

Introduction

The girls will view and analyze additional pitch videos to identify the characteristics of a successful pitch. This will help them create their own pitch in the next activity (Make a Pitch Video).

Materials and Resources

- "Teen Pitch Tank 2016 Winner - The CoSkin" video: https://www.youtube.com/watch?v=zYTEXKVr5OA
- "Elevator Pitch Winner" video: https://www.youtube.com/watch?v=i6O98o2FRHw
- Pitching Checklist Worksheet

Preparation

1. Read through entire activity.

2. Watch videos.

3. Print Pitch Checklist Worksheet (1 x girl)

Instructions

1. Remind the girls that when entrepreneurs come up with new ideas, they have to make short persuasive speeches targeted at potential investors (people who might use their own money to fund a new business or venture in exchange for partial ownership). These speeches are called "pitches."

2. Explain that entrepreneurs who give pitches must speak persuasively about their products or ideas. Often, they make pitch videos to send to investors via email or post these videos to crowdfunding sites to raise money. They must also remember that a major part of communicating is body language. It's not only what you say, it's how you say it!

3. But that's not all. Remind the girls that a pitch should provide specific answers to the following questions:
   - Who are you?
   - Why should we care?
   - What are you selling?
   - Who are you selling to?
   - Who are you competitors?
   - What is the price?
   - What do you need?

4. Show the two video pitches and ask the girls to compare and contrast them using the Pitching Checklist Worksheet. The CoSkins pitch is a video pitch, while the Cup Ad pitch is done in person in front of an audience.

5. Ask which pitch answered most of the questions and which product they'd invest in if they had the money.

MAKE A PITCH VIDEO (45 minutes)

Introduction

The girls will write their own pitch script. They will then choose to either put together a pitch video or a pitch deck. The Pitch Checklist will help them as they create their script. Watching themselves on the pitch video will provide an opportunity to make changes and improve their pitch.

Materials and Resources

- Pitching Checklist Worksheet (from prior activity)
- Computers
- Cameras (anything that records—digital, smartphones, handycams, camcorders, etc)
- Slideshow software or app (Optional)
- Projector (Optional)

Preparation

1. Read through entire activity.

2. Make sure cameras and/or computers are charged.

Instructions

1. Tell the girls it's time to try their hand at creating their own Pitch Video or Pitch Deck. A pitch deck is a slideshow that you can play while you're giving an in-person pitch. A pitch deck can contain extra information or elaborate about the topic you're discussing. Give the option to create whichever kind of pitch they like.

2. Next, let them know they have some options about what they should pitch. The number one thing an entrepreneur needs when pitching an idea is enthusiasm about the topic. As such, they should be given a choice for what they'd like to pitch. Here are options:
    a. Their own idea: If you've been participating actively in all of the VentureLab activities so far, your girls may already have products or service ideas they've been developing. If not, then offer them time to create a pitch for their own ideas.
    b. An existing product: Give the girls the opportunity to pitch an existing product that they absolutely love. This should be something they use regularly and know a lot about. The pitch video can explain the great features of the product or service. The girls can do some research about the actual developers of the product or idea.

c. Draw Three: You've probably played Venture Lab's Draw Three game if you've done our Intro to Entrepreneurship Lesson. This is an idea generation activity to help the girls come up with quick ideas for products to pitch. The girls can use this method to create a new product to pitch via video or slideshow.

3. Give the girls 15-20 minutes to draft their pitch. Remember, the girls should be really enthusiastic about the new idea and have thought enough about it that they can effectively practice the elements of pitching.

4. As they work on their drafts, have them use the Pitching Checklist column "My Pitch" to track the different elements of their pitch.

5. Allow them to record their pitch, watch it, and then make changes to the script and record again. The best way to evaluate and improve their pitch is to watch themselves pitching so they can see how they appear to others (sometimes we perform very differently in our own heads than we do in real life!).
   TIP: Videos can be made many different ways depending on the devices you have. The girls could hold a smartphone and record themselves, sit in front of a computer, or hold a camera to record one another.

6. If you do not have access to a recording device, direct the girls to pair up and practice pitching to one another or while looking in a mirror.

7. When everyone has had a chance to practice and revise their pitch script, have the girls pitch to the entire group or share their videos.

CONGRATS, YOU DID IT!

BRAINSTORMING (IDEATING) is when either an individual or a group of people come up with as many new ideas as possible for a specific topic or problem.

BRAINWRITING is an inclusive group brainstorming method. Participants individually brainstorm on a piece of paper and then switch papers until everyone has contributed to everyone else's paper. This intentionally creates a space for everyone's idea to be heard.

A **BUSINESS i**s an individual or organization that sells goods (products) or services.

A **BUSINESS MODEL** is a written plan that lays out the details of a business to help the entrepreneur have a successful business by making a profit.

There is **DEMAND f**or a product if there are people who are willing to buy it. This means they need or want the product and they will pay for it.

The **DESIGN THINKING PROCESS** is an approach to solving problems by understanding users' needs and developing insights to fill those needs.

EMPATHY means showing understanding and sharing in another's feelings.

ENTREPRENEURSHIP isn't just about starting companies; it is a skillset and a way of thinking. The core of entrepreneurship is building a solution to a problem, having a vision and making it a reality.

ENTREPRENEURS spot an opportunity and develop a vision for a new product, business or solution and put together all the resources needed to bring their ideas to life.

EXTERNAL INFLUENCES are changes in the wider world that entrepreneurs act upon and react to. Trends or patterns can be identified in these changes - entrepreneurs look for these trends to spot new opportunities for products and services.

FEASIBILITY is all about deciding if making and selling a product is really possible (feasible) given the technology and resources available to the entrepreneurs.

IDEATING (BRAINSTORMING) is when either an individual or group of people comes up with as many new and different ways as possible to solve a problem.

IDEA GENERATION is the process of forming, revising, pondering, and sharing new ideas.

INNOVATION (as it relates to opportunity analysis) involves taking inventions and turning them into a product that can be sold to customers.

ITERATION is the process when entrepreneurs make small changes to ideas and prototypes in order to reach a desired goal. Iteration can happen as many times as needed.

A **MARKET** is a group of people who like or need the same things. Competing businesses sell similar products or services to this group.

MARKET RESEARCH is how entrepreneurs find out what customers want, what problems exist for customers, and helps them uncover how those problems can best be solved or needs met. Market research helps entrepreneurs figure out if they have a great new idea that will work and if people will buy their product.

OBSERVATION means acquiring information from the world around you based on your five senses: sight, sound, touch, smell, and taste.

OPPORTUNITY ANALYSIS is the process of identifying which ideas represent a market opportunity

PITCHES are short, persuasive speeches (formal or informal) targeted at potential investors or other kinds of customers or supporters.

PRIMARY RESEARCH is new market research done by entrepreneurs that involves going directly to their customers to hear from them and better understand their needs and wants.

PRODUCTS are items sold by businesses.

A **PROFIT** is money that is made in a business after all expenses are paid.

PROTOTYPING is when entrepreneurs create their ideas into visual and physical representations to show how they would work.

REVERSE BRAINSTORMING is the process of looking at a problem backward. Instead of ideas for solutions, participants come up with ways to *cause* the problem or to make the problem worse. Once they have identified as many different ways as possible to do this, they then spend time "reversing"/solving each of those problems.

SECONDARY RESEARCH is a type of market research that uses information that already exists in order to get information about existing products and/or or markets.

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TESTING is showing your prototypes to users to get feedback on them. With this feedback, you'll figure out if you should bring it to a larger market.

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