



HOW START-UPS START OUT

A Framework for Teaching Entrepreneurship For ALL Career, Technical, and Agricultural Education Pathways

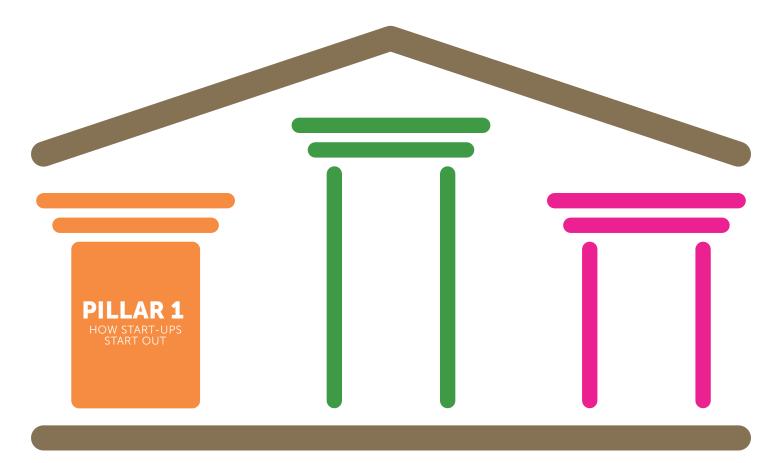
LESSON 1 OF A 3-PART SERIES



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For ALL Career, Technical, and Agricultural Education Pathways

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Anyone Can Start a Start-Up
Identifying Opportunities
What's the Problem
Use Design Thinking
Empathize

Define Ideate Prototype Test





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INTRODUCTION

With so many people starting their own businesses these days, it is more important than ever that we equip our students with the basic knowledge they will need should they decide to become an entrepreneur. You do not need to be an expert in starting or running a business. We have developed three turn-key lessons for you to be used in each of the three courses in a career pathway. All you have to do is read a couple of paragraphs, discuss it with your students, and have them complete the accompanying activity.

Each of the three lessons will give students the very basics they will need to get a business off the ground and has several activities for students to complete. Most activities can be taught and completed within 20 minutes. Everything you need is provided. Each activity builds on the previous one so students will need to save their work from each activity. Also, each lesson builds on the one taught in the previous course so they need to be taught in order.

1ST PATHWAY COURSE How Start-Ups Start Out

2ND PATHWAY COURSEBusiness Model Canvas

3RD PATHWAY COURSE Emerging Entrepreneur

There are several ways you can approach these lessons. You can incorporate activities throughout the course. You can teach the entire lesson as a unit at any point during the course. Or you might teach the lesson at the end of the course once you have finished your course content. If there is another way that works better for you and your class, that is okay as well. Just remember to go in order so students see the continuity of the work they are doing.

HOW TO USE EACH LESSON

Before you begin teaching the lesson, take about 20 minutes to read the packet in its entirety and make sure you understand what will be required of the students. The first page of the actual lesson will give you an explanation of the entire lesson that you will then share with your students. After that, there will be several activities for students to complete. Begin with a discussion on the importance of each activity. Then students can either complete the activity in class or they can do it for homework.

You will not need to grade their work; however, it is important to check the work they do to ensure they understood the activity. The ultimate goal is for each student to understand and have a basic plan for getting their own business up and running once they complete their pathway.

ANYONE CAN START A START-UP

WHAT IS A START-UP?

According to Merriam-Webster¹, a start-up is "a fledgling business enterprise". An article² published in Small Business Trend in March 2019 states that more than two-thirds of entrepreneurs start their businesses at home, one-third have only a high school education, and one-fourth start their business to be their own boss. The article goes on to give reasons new businesses fail. The biggest reason for failure, according to this article, is no market need (42%). The next reason is running out of money (29%). Other reasons include not having the right team, being out-competed, issues with pricing and costs, a product that is not user-friendly, and poor marketing. By avoiding these pitfalls an entrepreneur can help ensure the success of their new business.



IS YOUR IDEA FOR A PRODUCT A GOOD ONE?

So, you have a great idea for a product. That's exciting! Before you jump out there and open your business you need to get answers to a few questions.

- Is the market already flooded with this product or something similar?
- What is unique about this product? What sets it apart from similar products?
- Who is the target market? Be specific.

You will need to conduct some basic research to be sure that your product is something the market needs. You may be the only one offering this product, but if no customers want to buy it, your business will fail. There are several ways to find out if you are heading in the right direction.



Read everything you can find on the topic. Read reviews of similar products to see what improvements customers would like to see in those products.



Try your competitors' products. What do you like or dislike about their products? How could you improve your product based on your personal observations?



Find market research data online. Is the need for your product growing or declining? Is the market already saturated? What other valuable market data can you find?



Talk to potential customers to get their input. This can be done in person, or you could send out a survey.

It is important that you use the results of your research in making your decision on which product you want to offer. Keep in mind that your goal is to sell a product to a customer to solve a problem they have, and to do it better than anyone else.

¹https://www.merriam-webster.com/dictionary/start-up, 12-3-2021

²https://smallbiztrends.com/2019/03/startup-statistics-small-business.html

IDENTIFYING OPPORTUNITIES

The first step in starting a new business is deciding on a product. The term product will be used in this lesson to refer to goods and services. So, how do you decide what product to offer? There are several methods entrepreneurs use to choose a product.

- Some start by looking at their passion. If you love working on cars, you could open your own car repair shop. If baking is more your thing, then you may want to open a bakery. If you love reading, open a bookstore. Not sure what your passion is? What do you spend most of your free time doing? Once you know your passion, consider ways you could turn that into a profitable business.
- Others start by capitalizing on their skills and experience. You may be very skilled in carpentry and could build custom furniture for homeowners or local businesses. Suppose you have been babysitting for several years. You could open a day care center in your area.
- Some look around their communities to see what product is missing. How many times have you said, "I wish we had ______in our town"? Maybe you live in an area that could use a restaurant meal delivery service. Or are you part of an ethnic community that has a problem finding products specific to your needs and tastes?
- Still others want to improve products they already use. For example, cell phones have lots of add-on products you can purchase—covers, card pockets, phone stands, and much more. Or maybe you have an idea to improve a product that has just entered the market.
- And, of course, a few will even invent a brand-new product. New products are being invented every day. Why not you?

There are lots of ways to come up with a good idea for a start-up business. As you are thinking of ideas for
a business, keep in mind that you will be devoting most of your time every day to this business so make
sure it is something you will enjoy.

ACTIVITY

Write down at least one item for three or more of the suggestions above. (What is your passion, what skills do you have, etc.) As you go through this lesson, feel free to refine any of your ideas. Keep this list handy as you go through the next activities in this lesson to help you stay focused on your strengths.

JOT DOWN YOUR IDEAS IN THE SPACES BELOW:

WHAT'S THE PROBLEM?

Every day people run into problems that need solutions. Many of the products we enjoy were designed because someone identified the problem and set out to solve it. For instance, someone somewhere was working on a task and needed some extra light on the specific area where they were working. They knew they needed a flashlight that they could use themselves and still keep their hands free. So, they designed a hands-free flashlight that can be strapped to your head.

THERE ARE THREE BASIC STEPS TO SOLVING A PROBLEM.

- 1. Identify the problem: We like listening to music on our phones, but the wires get in the way.
- 2. Come up with an idea: We could make earbuds that do not need wires.
- **3. State the solution:** A way to use Bluetooth technology to make wireless earbuds.

ANOTHER EXAMPLE:

- **Problem:** You are hungry and would love to have a steak dinner delivered to your house.
- Idea: We could pay somebody to pick up our order and bring it to us.
- **Solution:** A delivery service that would pick up restaurant call-in orders and deliver them.

Think about innovations in your career interest area that have really made a difference. Here are a few examples: cameras on vehicles to aid when backing up, robots that deliver medication around a hospital, automatic milking machines in a dairy. There are countless examples out there but concentrate on those in your career cluster.

ACTIVITY

Using the examples above, fill out each step for an innovation in your career area. Now think of a product you would like to see developed and fill out each step.

EXISTING INNOVATION EXAMPLE:

•	Problem:
•	Idea:
•	Solution:

PRODUCT YOU WOULD LIKE TO SEE DEVELOPED:

•	Problem:
•	ldea:
•	Solution:

USE DESIGN THINKING

Design Thinking is a five-step process that can be used to solve almost any type of problem. Design Thinking is unique in its approach because it focuses on what the user wants, thereby making the final product more user friendly and more successful on the market.

The five steps in the Design Thinking process are

- EMPATHIZE
- DEFINE
- IDEATE
- PROTOTYPE
- TEST

These steps will not always be sequential and there will be times when some steps may need to be repeated. Keep in mind that the ultimate goal is to design a product that consumers want so that they will make the purchase. Each of the steps will be explained and students will have an activity to complete that will help guide them toward a product they may want to use to start their own business.

In the previous activity students were asked to come up with a problem, an idea, and a solution to something they would like to see developed. They will use their response in the remaining activities in this lesson.

ACTIVITY

Thinking about everything you've learned so far, list at least three ideas for a business you could start. The first one should be the idea you came up with in the last activity. The other ideas should include something you are skilled in and something you are passionate about.

1. (problem/solution)	
2. (skill)	
3. (passion)	

EMPATHIZE

Once students have identified a problem and a possible solution, it is time to begin the design process. The first step in Design Thinking is Empathize. When we empathize, we are seeing things from another person's point of view. In this step the engineer works with potential customers to learn what features and capabilities customers would like to see in the new product. The engineer must put aside any preconceived ideas about the product and, instead, try to put himself in the shoes of the customer to understand the needs, wants, and frustrations of the user. To develop the best product possible, the engineer needs to have a deep understanding of the issues the customer is dealing with and needs to address those issues in the design of the new product.

ACTIVITY

Identify at least 5 potential users (more is better) of the proposed new product. Make a list that includes their names, occupations, and how they will use the product. Now develop a list of interview questions. Your list may include the following, but there may be many other questions you could ask.

- 1. How could you use this product if it was available now?
- 2. What are you currently using to accomplish the tasks you mentioned in Question 1?
- 3. What do you like most about what you are currently using? How could those features be enhanced?
- 4. What do you like least about what you are currently using? How could those features be improved?
- 5. What new features would you like to see in the new product?
- 6. What would you like to see removed from the product?

7. What else would you like to add?	

Interview each of the people on your list. Record everything they tell you. Do not leave out anything. Remember, in order to empathize with your customer, you must set aside your own beliefs about the product and listen to what your potential customer is telling you.

DEFINE

The next step in Design Thinking is to define the problem. So far, we have come up with a problem and potential solution, we have talked about potential businesses based on our skills and experiences, and we have used the empathizing step of the Design Thinking process to see what customers are interested in as a new product.

Using all this information, it is time to define the problem we would like to solve. Our problem statement should start by identifying our customer, followed with what they need in the product, and finally, giving the reason. For example, instead of starting the problem statement with "we need to…", begin it with "drivers need a vehicle that will…". Read the examples below to get an idea of how to define the problem so that it focuses on the needs of the customer.

Teenagers need a restaurant that serves foods they enjoy that are healthy and delicious, so they avoid health issues in the future.

Business travelers need a carry-on bag that carries business clothing for 2 days without getting them wrinkled so they look professional when they arrive at their meetings.

Football players need uniforms made from cooler fabric to reduce the number of heat-related illnesses in the warmer months.

Parents need a car with built-in child safety seats to prevent child injuries caused by portable safety seats that come loose during an automobile accident.

ACTIVITY

Write a problem statement that clearly defines what you are trying to accomplish with your new product. It may take several attempts to get it right and that is okay. Start the statement by identifying who your **potential customer** will be (parents, teenagers, drivers, gamers, business professionals, etc.). Next, state the **need** of your customer. And finally, **explain why** they need this particular product. Refer to the examples given above, if necessary.

Note: they are color-coded to help you identify each component.

Potential Customer	
Need	
Explain Why	

IDEATE

The third step is referred to as Ideate. This is where the entire team comes together for a brainstorming session. When brainstorming, write down every idea anyone suggests no matter how outlandish it may seem at the time. The goal in brainstorming is to be as creative and innovative as possible. There are no right or wrong ideas. Everyone should keep throwing out ideas until no one has any other ideas to contribute. When the brainstorming session is complete, there should be enough information to begin developing a prototype of the new product.

ACTIVITY

If you do not already have a team in place, find 3 or 4 friends who are in the same career area as you and ask them to brainstorm with you. Share the information you have collected thus far from the Empathize and Define activities. Before you begin brainstorming be sure you have plenty of paper to record all the ideas that come out of this session. Someone will need to record every idea that is given during this session. Continue the brainstorming session until everyone has run out of ideas. At this point your team should have an idea for your new product. Save your ideas to use in the next step.

Brainstorm

PROTOTYPE

In the fourth step of the Design Thinking process, you will develop a prototype of your new product.

Prototypes are simply a physical representation of a proposed product. There are many ways to develop a prototype.

- You can sketch it on paper.
- You can create a 3-dimensional model using paper or cardboard, scissors, markers, tape, and other materials.
- You can use computer-aided design (CAD) software to sketch the product.
- If you use CAD software, you could use a 3-D printer to print a prototype.
- If you are developing a web-based product, such as an app, you can create a prototype using software such as Microsoft Publisher or PowerPoint.

Prototypes are not intended to be working models of the product. Their purpose is to provide a visual model that can be used to see if it provides the solution to the problem statement in the Define step.

ACTIVITY

Create a prototype based on the product you and your team decided on in the previous activity. When making your prototype, be sure you are addressing the issues your potential customers described in the Empathize step. Save your prototype for the next step in the Design Thinking Process.

Issues with potential customers

TEST

The final step in the Design Thinking process is Test. In this step the prototype is tested by the potential user. They provide feedback on what works well, what does not work, and what could work if it had some modifications. This is an important step in product design because it helps ensure the product meets the needs of the customer.

Using the customer feedback, the team may need to go back to one of the earlier steps, such as redefining the problem, brainstorming new issues, and/or redesigning the prototype. It may take multiple attempts before the product is ready to go into production.

ACTIVITY

Using the prototype you developed in the last activity, have your team (from the Ideation step) test the product. If there are issues, address those in a new prototype and have your team test it as well. Once they approve the prototype, have your potential customers (from the Empathize step) test it for you. You should find other potential customers and let them test it as well. You want to get as much feedback as possible so you are sure your product is providing everything your customers have said they need and want. Use their feedback to make additional modifications to your prototype. Once your customers are happy with your product, you are ready to go into production.

Feedback

HELPFUL WEBSITES

These websites may be helpful when teaching students about deciding on a product for a start-up business.

https://www.startups.com/library/expert-advice/how-to-start-a-startup

https://www.geeksforgeeks.org/how-to-launch-a-startup-8-step-process/

https://www.interaction-design.org/literature/topics/design-thinking

https://www.ifaai.org/blog/design-thinking-principles/

GLOSSARY

Brainstorm — a discussion among a group to come up with ideas to solve a problem

Empathize — see things from another person's point of view

Entrepreneur — someone who starts their own business

Goods — tangible items that are made to be sold

Ideate — to come up with an idea; brainstorm

Innovations — new ideas, new products

Product — something that is for sale; can be goods or services

Prototype — physical representation of a proposed product; can be sketched or created in a 3-D form

Service — the work someone performs; such as changing the oil in a car

Start-up — a business that is starting from the ground up

Target market — group of people for which a product is designed; people who are likely to purchase a product

User — person who uses a product