

So you want to be a...

Curriculum Guide
2.0



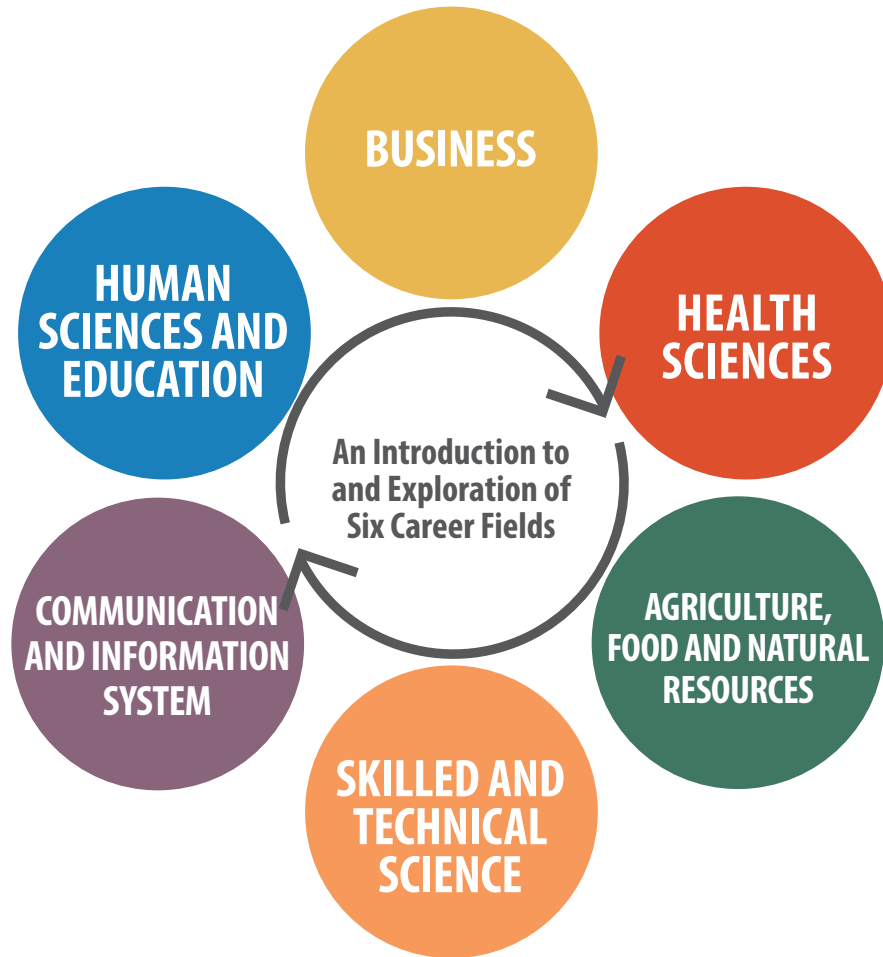
Beyond School Bells
nebraskachildren

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So you want to be a...

Career Education Curriculum for Afterschool Programs



The Career Education After School Curriculum is an introduction to and exploration of the six career fields and is designed to be 18 lessons in length. Each of the six career fields will cover three themes, intended to:

- **Engage** students in an in depth look into the career fields and pathways.
- **Explore** what career possibilities exist within each of the fields for each student.
- **Encounter** real life problems—students will be asked to seek a solution for these problems as if they were already employed in the career field.

Each of the six fields is broken into three lessons: **Introduction, Exploration and Demonstration.**

At the end of the six units, after school programs are encouraged to add a fourth component: **Connection.** The Connection component is an opportunity for students to showcase their unit projects and connect with the community—specifically individuals within the career field they have studied as well as local business, school and government leaders.

UNIT PROJECTS

Each unit is centered on a project—students will work on their unit project during each of the three lessons.

BUSINESS

UNIT PROJECT:

“WHAT MAKES OUR COMMUNITY GREAT”

As a class, students will create an information brochure, detailing the variety of local businesses in their city. The brochure will be likened to a “What Makes our Community Great” concept.

HEALTH SCIENCES

UNIT PROJECT:

“HOW DO WE KEEP EVERYONE HEALTHY”

As a class, students will look at the top 5 health problems plaguing their community. Students will work as partners to develop a plan to try and keep everyone in their community healthy by preventing the top 5 health problems.

AGRICULTURE, FOOD AND NATURAL RESOURCES

UNIT PROJECT:

“AGRICULTURE & ENTREPRENEURSHIP” AND “IMPACT OF POLLUTION ON OUR NATURAL RESOURCES”

As a class, students will either 1) Organize a school-wide clean up of a specific area in need of cleaning. (2) Students will organize a plant sale, where students will work with a local florist/nursery to cultivate and eventually sell selected plants.

SKILLED AND TECHNICAL SCIENCES

UNIT PROJECT:

“WHAT DOES OUR IDEAL COMMUNITY LOOK LIKE?”

As a class, students will design their ideal community 2-dimensionally as well as 3-dimensionally.

COMMUNICATION AND INFORMATION SYSTEMS

UNIT PROJECT:

“HOW DO PEOPLE KNOW WHAT’S GOING ON IN THE WORLD”

As a class, students will look at issues facing the community/world around them. Students will then create a newspaper using school computers as well as a news program, which will be recorded.

HUMAN SCIENCES AND EDUCATION

UNIT PROJECT:

“WHAT WOULD MAKE MY COMMUNITY GREAT?”

As a class, students will discuss problems in their town or school. After deciding on a “fixable” problem, the class will work together to identify how they will go about solving and fixing the problem.

Additionally, a number of the units have “Digging Deeper Projects” which provide a more in-depth project experience if your program has more time to allot to a specific career cluster.

Upon completion of the six career units, programs will participate in the “connection” component of the curriculum. A **“SHOWCASE EVENT”** will be held in which the unit projects will be presented/showcased. This is an opportunity for students to invite and connect with their parents and the community—specifically individuals within the career pathway they have studied, school personnel, community leaders and families.

DELIVERY OF CURRICULUM

There are six units (one for each career field), with three lessons in each unit. Thus, a total of 18 individual lessons. Each lesson is approximately 40 minutes in length, the time frame of one afterschool club.

Career Field/Unit	Lesson (each lesson is approximately 40-45 minutes in length) 1 Lesson = 1 afterschool club time frame	
Unit 1: Business	Lesson 1- Introduction	**The six units do not have to be delivered in this sequence, they can be delivered in any order**
	Lesson 2- Exploration	
	Lesson 3- Demonstration	
Unit 2: Health Science	Lesson 4- Introduction	
	Lesson 5- Exploration	
	Lesson 6- Demonstration	
Unit 3: Agriculture, Food and Natural Resources	Lesson 13- Introduction	
	Lesson 14- Exploration	
	Lesson 15- Demonstration	
Unit 4: Skilled and Technical Science	Lesson 7- Introduction	
	Lesson 8- Exploration	
	Lesson 9- Demonstration	
Unit 5: Communication and Information Systems	Lesson 10- Introduction	
	Lesson 11- Exploration	
	Lesson 12- Demonstration	
Unit 6: Human Sciences and Education	Lesson 16- Introduction	
	Lesson 17- Exploration	
	Lesson 18- Demonstration	
At the end of the six units, a “showcase event” will be held. This is a special hour-long event to be held during programming hours or on an evening. We recommend that it be held at a time when community members, city council, school board, school staff and families can attend.		

The curriculum can be implemented as a club to best match your programming calendar. To keep the momentum of the lessons, it is recommended that the curriculum be implemented over a maximum of a quarter (9 weeks).

The club needs to meet a minimum of twice per week.

Additionally, a unit (three lessons) could be implemented over the course of a district in-service day. Field trips or on-site related activities could occur on this day as well.

Curriculum Materials Include:

- (1) Curriculum Guide
- (2) Facilitator Guide (available on a mobile app)
- (3) Student Field Journal
- (4) Career Education Posters (set of 5) that can be displayed around school/program sites

**Professional Development will also be provided to staff teaching the curriculum.*

UNIT 1: BUSINESS, MARKETING AND MANAGEMENT

Unit Objective: Students will be able to discuss the businesses in the community and explore their interests in business, marketing and management.

Unit Project: “What Makes our Community Great”

As a class, students create an information brochure or tri-fold, detailing the variety of local businesses in their community. Brochure will be likened to a “What Makes our Community Great” concept.



LESSON 1: INTRODUCTION

Lesson Objective: Students will be able to describe what a career in business entails as well as why it is vital to have different businesses in a community.

Career Skill Focus: Teamwork

Valuing those you work with, listening to those you work with, and working together to accomplish a goal.

STARTER ACTIVITY

HUMAN KNOT

1. Students will form groups of 8-10 and get in a circle.
2. Every student will grab a hand across from them (both hands), so that they are holding two separate hands. Every student should now have a hold of two hands.
3. The groups should now be told that they have 5 minutes to try and untangle themselves by working together. They are not allowed to break hands or let go and reconnect. They must work together to “untie the knot” and form a circle where they are still holding hands.
4. Once students have successfully made a circle have them sit down.



LESSON INTRODUCTION

Instructor begins by asking the following questions:

- a. What was easy about the human knot?
- b. What was difficult about the human knot?
- c. How might this activity relate people who work in our community?

“Great Work! Over the next couple of club meetings we will be talking about how groups of individuals work together to hopefully create a perfect circle just like you did today. In our community many businesses rely on one another. When we have more business and they work together, the better our community becomes.”

INSTRUCTOR

*** Use the list below to help prompt if necessary***

CAREERS IN THE BUSINESS, MARKETING AND MANAGEMENT FIELDS

1. Have students pair up to see how many businesses they can think of.
2. When this partner sharing activity is done, have each student share 1-2 businesses they came up with to the entire class. Students should fill in any empty circles in their field journal with businesses that other students share.

MARKETING	<ul style="list-style-type: none">• Art Director• Professional Event or Party Planner• Store Display Designer• Professional Salesperson• Online/Web Advertising• Product researcher• Model• Travel Agents
HOSPITALITY & TOURISM	<ul style="list-style-type: none">• Water Park employee• Soda Salesperson• Chef or Baker• Tour Guide• Zoo Keeper• Parks and Rec counselor• Pilot or flight attendant• Translator• Museum technician
BUSINESS MANAGEMENT/ ADMINISTRATION	<ul style="list-style-type: none">• Business Owner• Computer Operator• Office Manager• Librarian• Online Store Owner
FINANCE	<ul style="list-style-type: none">• Accountant• Stock Manager• Bank Teller• Goods Purchaser• Fraud Investigator• College Business Teacher• Financial Advisor



INSTRUCTOR

LESSON

“Everyone has done great work looking at our community to come up with some businesses you see and use every day. Now let’s explore this pathway in a little more depth. Today you are going to learn about a local business.

POTENTIAL INTERVIEW QUESTIONS CAN BE FOUND IN THE APPENDIX

COMMUNITY CONNECTION

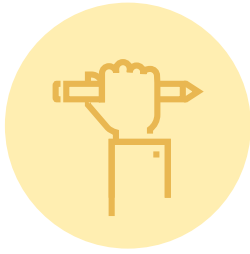
A local business person will speak to students about their job in this career field. Students will have the opportunity to ask questions—encourage students to utilize the Interview Questions.

****Please see COMMUNITY CONNECTION documents to support this activity in the appendix. This includes speaker talking points and a support guide for lining up guest speakers.****

LESSON INTRODUCTION

Ask students to share a few things that they learned about this career field from listening to the speaker.

What did you find interesting about the person’s job? Is there something you would like to learn more about with regards to this job?



LESSON PROJECT

“What Makes our Community Great”

Every community, including ours, has a basic challenge or opportunity they need to address and solve daily: “How do we get people to visit our community and then eventually move to our community to create and run businesses?”

Your students’ task is to explore as many local businesses as you can in your community. As they research these businesses, they will work as a team to create a brochure outlining all of the great businesses of the community. The final project could be “presented” to the mayor and chamber of commerce president for their approval.

***Go to the PROJECT PAGE at the end of this unit for project information and instructions.*



WRAP-UP

COMMUNITY CONNECTION

STUDENTS WILL COMPLETE THIS TASK OUTSIDE OF THE CLUB TIME. Point this task out to the students and encourage them to complete this task in the next week. Ask them to think of at least one person (or more!) that they know in the Business Field and encourage them to ask that person what they like about their job in this field. Let students know that you will be checking back in with them about this task...

Help them to think about who they could ask...a relative, neighbor, family friend. If students are having difficulty thinking of someone, help locate a person that they could talk to.

LESSON 2: EXPLORATION

Lesson Objective: Students will explore different careers within the Business, Marketing and Management career field and begin to see how their interests and strengths fit into this field.

Career Skill Focus: Focus — Being Perceptive

Using your brain and observations you make to generate ideas and form opinions.

SOFT SKILL:
PERCEPTIVE



STARTER ACTIVITY

LOGO GAME

Students will play a game to try and match a “business” with its logo. Students will work in pairs to accomplish the task. The winning team will receive an incentive (instructor chooses incentive).

See appendix for game materials



LESSON INTRODUCTION

When the game is over, instructors should say:

“Great job everyone! Besides being a fun activity to see how much you all know about companies in the world and our community, this activity demonstrates a very important job within this career field, marketing. The second pathway in this field is marketing. Does anyone know what marketing is or what our game might have to do with marketing?” (Provide wait time for students)

“Marketing is all about identifying needs that a community has, creating a product or service to address that need, and then supporting the sales of that product through creative advertising and product understanding.”

“The game you just played supports the concept of marketing because these companies have created a brand with a very identifiable logo. The idea is that when you see this specific logo you as the consumer are able to think about a specific product or service offered and then maybe you will spend your money on that product/service. Does this make sense? Great!”

INSTRUCTOR



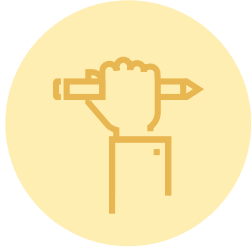
INSTRUCTOR

WHAT DO OTHERS SAY
ABOUT THEIR CAREERS?

LESSON

“Today, before we get working on our “What Makes Our Community Great” brochure we are going to explore three different people who entered the Business, Marketing and Management career field. As we look at each of the six career fields in this curriculum we will spend time examining different people involved in the career fields who took very different paths. Today we will be looking at three careers that are in the field of business, but that look very different from one another.”

- a. Divide the class into groups of three and have each group read one of the biographies within the career field. ****Biographies can be found at the end of this unit.****
- b. As they read, ask students to think about 2-3 interesting facts that they learn as well as 1-2 similarities they have in common with the person they read about.
- c. When all groups have finished reading and recording, have each group share about the person/career they read about so that the other students can hear about the varying career options. As students are listening to their classmates share about the other two biographies, they can write down their interesting facts and similarities in the remaining two boxes.
- d. When everyone is done, spend 2-3 minutes talking about these jobs as well as the jobs listed in the chart found in Lesson 1. Have students share out 1-2 jobs that they find interesting in this career field.



LESSON PROJECT

“What Makes our Community Great”

Students will spend the remainder of the time working on their project. Continue to refer to the project guide at the end of this unit.



WRAP-UP

BEACH BALL GAME

1. After students have cleaned up and saved their work for the Community Brochure have all of the students get into a circle.
2. You are going to play a quick game so that students can share where they see themselves in the field of business. Using either a beach ball or another type of soft ball, students will throw the ball to someone in the circle. The person who catches the ball will first either state a similarity they had with one of the business people they read about or share a specific job within the business field they are interested in. Give this activity enough time so that each person gets an opportunity to share at least one time.

LESSON 3: DEMONSTRATION

Lesson Objective: Students will demonstrate their understanding of the Business career field as well as demonstrate who they can be and see themselves being within this career field.



LESSON PROJECT

“What Makes our Community Great”

Students will spend the remainder of the time working on their Community Brochure project. Continue to refer to the project guide at the end of this unit.



WRAP-UP

Have students share their road map with their peers. Give each student an opportunity to share out if they would like. Doing this activity provides students with ownership over what they wrote, as well as “cements” the concept of the experiences in their head at a greater capacity.

PROJECT REFLECTION

Give students 2-3 minutes at the end of the club time to talk through their thoughts on this career field.

INSTRUCTOR

“We are now done with the Business Unit and I want each of you to spend a few minutes to reflect on the Community Brochure project that we just completed. Please share something that you liked about the project. You could also share something new that you learned about the Business Field. Can you see yourself in a Business job when you are older?”

UNIT 1 PROJECT

In regards to the project/s outlined below, please note that these are intended to be project frameworks. The descriptions provide the overall “framework” for the project and an outline of the basic steps involved in accomplishing the goal/s of the project/s.

Prior to beginning each project, instructors should take time to further develop and plan these projects, as there are a number of details that are not included in these descriptions. Due to the vast differences between afterschool programs and their programming structures/resources, these details will vary for every program and thus were intentionally not included in the project descriptions below.

Project Title: *“What Makes our Community Great”*

Project description: As a class, students will create an information brochure, detailing the variety of local businesses in their city. The brochure will be likened to a “What Makes our Community Great” concept.

Materials: Brochure examples, computers (preferably with Microsoft Publisher), city demographics (income, ethnicity breakdown, age, schools, etc)

Project directions: For this project, students will either work by themselves or with a partner. Have each student (or pair) choose one business to write about, as well as find graphics from the internet to support their writing. In their writing, they will provide an overview of the business by outlining (1) what the business does and what service/s they offer to the community, (2) the history of the business, (3) the future of the business and (4) why this business is so important to the community. It may be helpful to provide the students with a list of ten local businesses to choose from.

Lesson 1:

Students should spend time doing online research about the business and try to find answers to the four areas outlined in the previous paragraph. Have students print or write out this information. They should also look up the business logo/related graphics (or draw their logo). With your assistance, they should call and/or email the business to schedule an interview (hopefully this can be scheduled during the next club time or the email can be received by this time). If it is possible to have a few of these business interviews occur during a club time, this would be incredibly valuable to the students’ projects and experience.

Lesson 2:

Conduct interviews with the businesses. If these interviews are unable to be done over the phone or in person, they could be done via email.

For the interview students can ask any question(s) they feel would be appropriate, but below is a list of potential questions:

1. How long has your business been in operation?
2. What does your business do?
3. What is your role with your company?
4. How many employees do you have?
5. What is the best part of your business?
6. What is the hardest part of your business?
7. If I can ask, how much money does your company make?
8. Why do you like working in this community?
9. What is the future of your company?

After students compile information from their research as well as their interview, students will write up a short overview of the company.

Students can also write a short paragraph detailing all the things they love about their community (it would be great to have a combination of both, so maybe encourage each student to have a personal opinion as well as business write up).

Lesson 3:

During the third lesson of the unit, students should be finishing independent/partner work. At this point the instructor will collect the work either hard copy or an electronic copy. At this point it is the programs decision as to how to “publish” the brochure. One option is to put the work into an electronic brochure using Microsoft Publisher or if that is not an option, each students work can be put onto a word document, which will consist of everyone in the clubs’ work. This can be printed and given to each student so they can have a copy of their work along with their classmates.

The other option, if technology is difficult to access is to take all of the students work, and organize it neatly on 1-2 tri-fold display boards. This would then serve as the brochure and can be displayed in the office or maybe even given to the mayor/city council to display. If this option is chosen, I would recommend making a copy of the student work, and giving it to them to keep in their career journal as well as taking a picture of the completed project so that each student can have a reference of the entire classes work.



UNIT 1: BIOGRAPHY 1

FOUNDER (ENTREPRENEUR...FANCY WORD FOR FOUNDER)

“Hello! My name is Matt and I own a plumbing business. I am a plumber by trade, but I am also an entrepreneur. This means that I started my own business and have people who work for me at my business. I am my own boss!

Being an entrepreneur is a great job. I know you are probably the most interested in how much money I make, so I will start there. I make \$100,000 a year. This is a lot of money. Some entrepreneurs make more and some less, so I feel very good about my salary.

Many people asked how I went from being a plumber to owning my own company. Well, first it took a lot of hard work and determination. I had a vision for wanting to create my own company, and quite honestly I did not want to work for a boss anymore, so starting my own company seemed like the right idea. It was tough, but I was able to do it with a lot of hard work.

As an entrepreneur I now have a lot of duties that I am responsible for. I have to make sure my company makes money so that I can not only make money, but I have to pay the other people who work for me. I am responsible for advertising my business. This means that I need to tell people in my community about my company and why they should use our services. The other big responsibility I have is that I have to hire and fire employees. This is one of the best parts of my job (hiring people) and one of the worst parts (firing people). I do all of this, plus I still get calls to go out and fix problems at houses and businesses all over town.

All in all I love my job as an entrepreneur and plumber. I want to leave you with a few key qualities about me that help me be the best entrepreneur. I am a good communicator (talker, listener, and writer), I am able to make decisions, and I can solve problems. I am also a hard worker. Remember not only do I still practice the trade of plumbing but I also run my company. Lastly, being an entrepreneur takes perseverance. This means that you never give up, even when things get hard. You always work hard to be successful.

I wish you luck as you think about your career.”



UNIT 1: BIOGRAPHY 2

MANAGER (SUPPORTS ENTREPRENEURS WITH RUNNING A BUSINESS)

“Good evening! My name is Sara and I am an assistant manager at McDonald’s. I have worked at McDonald’s for 5 years. I started by making food for guests. I was promoted to working the cash register after 2 years. Recently, my boss at McDonald’s felt like I had leadership qualities and promoted me to assistant manager.

I bet you had no idea that managers at fast food restaurants make really good money. This year I will make \$38,000, which may not sound like a lot, but the manager at my restaurant will make \$49,000 next year. That is really good money. I’ll be honest with you, the job is not easy, and I work really hard, but at the end of the day I do love my job.

Now let me tell you a little bit about what I do, and what makes a good manager at a restaurant. I, along with the other two managers, are in charge of everything that happens at our restaurant. We have to make sure that all of the people who work there are doing their job really well. We are responsible for ordering the food that we serve, which is really important because we don’t want to run out of French fries (can you imagine how upset people would be). Most importantly we are responsible for making sure that customers are happy when they leave our restaurant. If I do this well then I had a great day. Actually, if I do it really well the people who are in charge of all of the McDonald’s restaurants will give me a bonus (extra money for doing good).

People ask me what it takes to be a manager. First, let me tell you that I did not go to college; I did graduate from high school though. McDonald’s paid for me to go through their management training program. I am planning on going back to college but it was not a requirement. I think that good managers are able to be good listeners as well as direct communicators. You have to be able to listen to your staff but also give directions in a respectful manner. You have to be a detail-oriented person. This means that you keep track of what is going on at the restaurant and are good with numbers. The other really important quality is that you have to be someone who wants to make others happy. Really, that is the most important job because everyone should leave McDonald’s happy, right? ”



UNIT 1: BIOGRAPHY 3

SUPPORTER (PEOPLE WHO WORK IN BUSINESSES BUT NOT IN LEADERSHIP ROLES)

“Hi everyone, my name is Jose and I am a Customer Service Representative for a local tractor company. You are probably already thinking, what is a customer service representative and why would I want to do that job? This is a great question, and I am going to tell you.

First, I want to start by telling you what the job is and why I think I am great at my job. When people need to call our tractor company they begin by talking to me. I listen to people when they are angry, I help them if they want to buy a tractor and I provide information to people about our products and the services we offer. Doesn't sound too bad, huh?

To be great at my job, I would say you have to be really good at talking to others. This does not just mean you are good at saying things, but you also need to know how to listen to people. Remember, one of my duties is to handle problems that people have. This means that you also need to be a person who is patient. Trust me there are a lot of times when I really REALLY want to hang up the phone on the person who is complaining and not being very nice, but I have to be patient because they are a customer. If I don't do my job then the customer may not buy tractors from us. Lastly, I think it is really important to be a problem-solver. I have to be able to answer questions quickly and help people when they have problems.

Most of my work is done over the phone and some days I get to work from home (in my pajamas if I want), I just have to use my home phone to answer calls from customers. My company pays me \$15.00 an hour, which is much higher than minimum wage, and though not great, it allows me to live a good life. One more thing because people ask me this, I did graduate high school but I did not go to college. I really don't like school that much, so at this point in my life, I think I am done with school (but who knows, maybe I'll go back and learn how to be a tractor mechanic. They make \$25 per hour.). Thanks for reading!”

UNIT 2: HEALTH SCIENCES

Unit Objective: Students will be able to discuss health sciences in relation to their community and how they might one day fit into that career field.

Unit Project: “How do we keep everyone healthy.” As a class, students will look at the top 5 health problems affecting the community. Students will work with partners to develop a plan to try and keep people in their community healthy by preventing the top 5 health problems.

LESSON 1: INTRODUCTION

Lesson Objective: Students will be able to describe what a career in the health sciences entails as well as why it is vital to have different people filling a variety of needs to keep everyone healthy.

Career Skills Focus: Managing Stress

Stress is the feeling you get when everything in your life weighs on you like a ton of bricks. Managing stress is key in life. You can do this in many ways, but a few include eating well, working out, reading, and staying on top of daily responsibilities.



STARTER ACTIVITY: HEALTH AND YOUR BODY

Every student will receive a drawing of a human torso and a list of 10 body parts. The drawing and list is included in the appendix. Instruct students to do their best to quickly draw and label the 10 different body parts on the torso (heart, lungs, brain, etc). This activity should not take longer than five minutes.

****See appendix for Starter Activity for lists and blank drawing.****



LESSON INTRODUCTION

“Today we are going begin our unit on the career field of Health Sciences. Before I introduce this field, lets look at our starter activity. What do you think this activity has to do with health sciences?”

INSTRUCTOR

Give students the opportunity to provide enough responses so that you feel comfortable with their understanding that Health Sciences is all about the study of the human body and what makes us healthy.



LESSON

“Today our focus will be on introducing the career field of Health Sciences. To do this, we are going to complete a chart. The career field of health sciences is vast and offers a great deal of opportunities for each of you. As we look at this field we are going to break the field into the following three categories and begin looking at specific careers.”



STARTER ACTIVITY

POTENTIAL INTERVIEW QUESTIONS CAN BE FOUND IN THE APPENDIX

COMMUNITY CONNECTION

A local Health Science professional will speak to students about their job in the health sciences. Students will have the opportunity to ask questions—encourage students to utilize the Interview Questions (found in the Appendix).

****Please see COMMUNITY CONNECTION documents to support this activity in the appendix. This includes speaker talking points and a support guide for lining up guest speakers.****

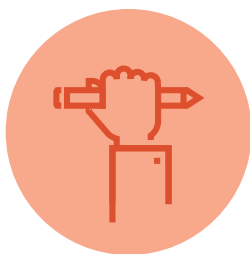


LESSON INTRODUCTION

Ask students to share a few things that they learned about this career field from listening to the speaker.

INSTRUCTOR

“What did you find interesting about the person’s job? Is there something you would like to learn more about with regards to this job or others in the Health Sciences area?”



LESSON PROJECT

“How do we keep everyone healthy”

For this project, students will use local experts and the Internet, to research a specific disease that is affecting people’s health in the community (diabetes, injuries, cancer, heart disease, drugs, obesity, etc). Students will describe the disease as a whole as well as how it hurts the community. Students will then work on a specific plan that the community can enact that will help prevent this specific illness from taking off.

If you have extended lesson time for this career field, a second project involves the class as a whole working together to organize a wellness fair. This is not a short-term project and will take additional planning beyond the three lessons/club times designated in this unit. The wellness fair is a great opportunity for your program to “market” themselves all while organizing a great cause. The wellness fair should be held at the school and should feature various health science professionals who come to the fair to provide specific wellness treatment to the community. It is recommended to focus on the “How do we keep everyone healthy” project and only look into a wellness fair if you have time to “dig deeper” into this career field.

***Go to the PROJECT PAGE at the end of this unit for project information and instructions.*



WRAP UP

COMMUNITY CONNECTION

Point this task out to the students and encourage them to complete this task in the next week. Ask them to think of at least one person (or more!) that they know in the Health Sciences Field and encourage them to ask that person what they like about their job in this field. Let student’s know that you will be checking back in with them about this task.

Help them to think about who they could ask (a relative, neighbor, family friend). If students are having difficulty thinking of someone, help locate a person that they could talk to.

HEALTHY RECIPE

The second activity is to encourage students to ask someone in their family, neighborhood or school for a recipe for a healthy meal. Ask them to bring the recipe back to the next club time so that they can record it in their field journal and share their recipe with the class.

LESSON 2: EXPLORATION

Lesson Objective: Students will explore different careers within the health sciences career field and begin to see how their interests and strengths fit into this field.

Career Skills Focus: Self Confidence

Believing in yourself, your abilities, and your talents in everything you do, but also being able to ask for help when necessary.



STARTER ACTIVITY

TIME TO WORK OUT

Prior to the activity, you should spend a few minutes reviewing the prevention side of this career while talking about good health habits.

For today's starter, utilize either indoor or outdoor space to explore the idea of exercise. Spend 5 minutes doing cardiovascular work with your students (relays, aerobics, etc). When the activity is complete use the time to talk about the importance of prevention exercise in regards to health.



INSTRUCTOR

LESSON INTRODUCTION

"Do you know of any careers specializing in the prevention of specific health related issues? Why is it important that people have jobs that focus on this type of prevention?"

PREVENTION ACTIVITY

Have students spend a few minutes talking about as many ways that they can think of to help prevent them from becoming sick. Remind them to think specifically about what they can eat, how they can exercise, or the lifestyle they choose. After a few minutes of discussion, move into the lesson.



LESSON

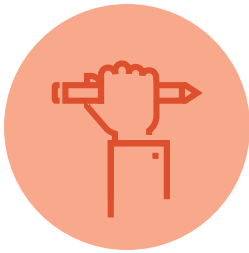
"Today, before we get working on our unit project we are going to learn more about people who entered the Health Sciences career field. Today we will be looking at three careers that are in this field, but that look different from one another."

- Divide the class into groups of three and have each group read one biography of the jobs within the career field. These biographies are of three people who represent the three specific categories: preventer, responder and supporter.

***Biographies can be found at the end of this unit.

WHAT DO OTHERS SAY
ABOUT THEIR CAREERS?

- b. As they read, ask students to think about 2-3 interesting facts that they learn as well as 1-2 similarities they have in common with the person they read about.
- c. When all groups have finished reading and recording, have each group share about the person/career they read about so that the other students can hear about the varying career options.
- d. When everyone is done, spend 2-3 minutes talking about these jobs as well as the jobs listed in the chart found in Lesson 2.
- e. Have each student take a minute to identify 2-3 jobs that they would like more information on—ask them to share out.



LESSON PROJECT

Students will spend the remainder of the time working on their project **“How do we keep everyone healthy.”** Students can also work on the wellness fair, if the program has decided to move in that direction. Continue to refer to the project guide at the end of this unit.

DISCUSSION

Ask students to brainstorm and record specific jobs in each of these three Health Science categories (Preventers, Responders, Supporters). Have students move around the room and write answers on paper with titles.

One of the goals of this lesson is to break stereotypes that students have. Within this career field, most students will only be able to think of nurses and doctors. Support students in this activity by referring to the careers listed in the chart on the next page—provide them with prompts to recognize these various careers.

See chart below for a list of careers in each pathway. Use this list to help guide the discussion

CAREERS IN THE HEALTH SCIENCE FIELD

PREVENTERS AND RESPONDERS	<ul style="list-style-type: none"> • Athletic Trainer • Mental Health Counselor • Nurse • Dentist • Paramedic • Emergency Room Doctor • Health Teacher • Sports Medicine Physician • Veterinarian • Pharmacist • Medical Assistant • Lab Technician • Dietician 	<ul style="list-style-type: none"> • Nutritionist • Physical Therapist • Radiologist (read X-Rays) • Dental Hygienist • Audiologist (helps with hearing) • Massage Therapist • Medical Secretaries • Orthodontist (Braces) • Pharmacy Technician • Sports Medicine • Substance Abuse Specialist
SUPPORTERS	<ul style="list-style-type: none"> • Hospital Custodian • Receptionist at clinic • Insurance Billing • Hospital Cafeteria cook 	




WRAP UP

ANTS ON A LOG

Today's wrap up will be once again focused on the health sciences, but thinking about it again from prevention. Students will enjoy making ants on a log. Another snack option could be a variety of vegetables with hummus.

Use this time to discuss careers such as a dietician, nutritionist or personal trainer who focus on the preventive side of the health sciences. Instructors are encouraged to have students use their journals to guide them in the discussion.



ANTS ON A LOG RECIPE

Ingredients

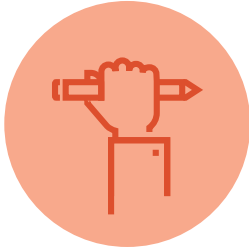
- Celery (one bunch)
- Jar of Peanut Butter
- Raisins

Instructions

1. Wash, trim and cut your celery into serving size pieces.
2. Spread peanut butter in the recessed side of the celery.
3. Decorate top of peanut butter with raisins (ants).

LESSON 3: DEMONSTRATION

Lesson Objective: Students will demonstrate their understanding of the Health Sciences career field as well as demonstrate who they can be and see themselves being within this career field.



LESSON PROJECT

“How do we keep everyone healthy?”

Have students share out their group projects “**How do we keep everyone healthy.**” Give each group an opportunity to share their presentations as well as answer any questions. If presentations are in a hard copy format (poster), ask the school if they can be displayed somewhere to bring attention to the work being done in your after school program.

Continue to refer to the project guide at the end of this unit.



WRAP UP

PROJECT REFLECTION

Give students 2-3 minutes at the end of the club time to discuss their thoughts on this career field.

INSTRUCTOR

“We are now done with the Health Sciences Unit and I want each of you to spend a few minutes to reflect on the project that we just completed. Please think about something that you liked about the project. You could also think about something new that you learned about the Health Science Field. Can you see yourself in a Health Science job when you are older? This is a time for you to finalize your thoughts on careers in Health Science.”

UNIT 2 PROJECT

In regards to the project/s outlined below, please note that these are intended to be project frameworks. The descriptions provide the overall “framework” for the project and an outline of the basic steps involved in accomplishing the goal/s of the project/s.

Prior to beginning each project, instructors should take time to further develop and plan these projects, as there are a number of details that are not included in these descriptions. Due to the vast differences between afterschool programs and their programming structures/resources, these details will vary for every program and thus were intentionally not included in the project descriptions below.

Project Title: *“How do we keep everyone healthy?”*

Project Description: As a class, students will look at the top 5 health problems affecting people the city. Students will work as partners to develop a plan to try and keep everyone in their community healthy by preventing the top 5 health problems.

Materials: Art supplies, poster board, computers, examples of posters to guide students.

Project directions: For this project students will begin by working as a class to talk about health problems they see in the city. The instructor can support the conversation by offering the following suggestions:

1. Cancer
2. Heart Disease
3. Mental Health
4. Drugs/Alcohol
5. Smoking
6. Obesity
7. Etc.

After a list of 8-10 health issues have been discussed, each pair of students will pick one of the identified health problems. Students will be responsible for creating a graphic poster detailing the problem of the disease/health concern and potential solutions.

As students work on this project the goal is to create an eye catching, visually appealing poster that can potentially be displayed at a local hospital or medical office.

Lessons 1 and 2:

From a timeline perspective, it is advised that the first lesson be used to research information on computers and record findings. For the second lesson, students should begin working on their poster by designing the layout of their poster. Students will need to use computers to type their findings out (key facts, warning signs, etc—they do not have to write this as a “report”) as well as print any related pictures, charts, etc that they want to include on their poster. Depending on your program’s access to computers, students can entirely create their “poster” utilizing technology or have them print out their materials and then glue them to a poster board. The end of the 2nd lesson as well as the beginning of the 3rd lesson (if necessary) should be used for students to put their research and creative designs on their poster (either on computer or poster board).

Lesson 3:

During the third lesson, have students share out their projects “How do we keep everyone healthy.” Give each group an opportunity to share their presentations as well as answer any questions. Ask the school if the posters can be displayed somewhere to bring attention to the work being done in your after school program. It is recommended that you also reach out to a local hospital/health care facility and ask if the student’s posters could be displayed

***Digging Deeper:*

*Digging Deeper Project:
If you have more time to allot to this unit than the three lessons in this curriculum guide, this project is intended to “dig deeper” into this career field and provide a more in-depth project experience.

Project Title: *“Community or School Health Fair”*

Project Description: Some programs may have time to add another project in the health science unit. This project is a great connection between the after school program, health care community and the community at large. Try to work with a local medical practice or the local hospital to organize a community health fair at the school. The health fair would be a very basic health screen (height, weight, blood pressure, other tests that the medical professionals leading the health fair deem appropriate). The students would be the “coordinators” and they would advertise the health fair, set up the location and arrange the medical professionals.

Materials: Computers, paper supplies for advertising

Project directions: Before moving forward with the project, the program director needs to reach out to the local hospital or local medical office to determine the viability. This is a partnership opportunity, in which you would be asking the local hospital/clinic to cover the costs of the health fair (this includes the in-kind donation of medical professionals’ time). It is recommended that the program director also discuss this project with the school nurse and invite him/her to be involved in this project.

The next step would be for the program director to determine a location for the health fair. The ideal/preferable location would be at the school (gymnasium or cafeteria). If that is not possible, a local Vets hall, a community center, or another public facility that includes a large room. Whichever site is selected, permission must be secured. The program director will also need to ensure that all procedures/processes are followed to hold an event at this specific location.

Once the health care professionals have been identified, a location has been picked, and a date has been selected the students involved in the after school club will begin organizing the event. Students should come up with an advertising campaign (posters, flyers, radio, newspaper, etc). Students will also be responsible for helping with the layout of the health fair (tables and chairs) and providing light refreshments for those that attend the event (light snacks and drinks).

At the event, students will serve as “medical assistants.” They will greet people who come to the health fair, serve snacks and help with setup and cleanup.

This is a big event and requires quite a bit of work; however, it also provides several significant outcomes. First, it provides an opportunity for members of the community (who may not have health insurance) to get a very basic health screen (height, weight, blood pressure, other tests that the medical professionals leading the health fair deem appropriate). Second, it provides community wide exposure to the after school program. The greater amount of exposure programs receive, the easier it is to build partnerships that can lead to program sustainability.



UNIT 2: BIOGRAPHY 1

NUTRITIONIST (PREVENTER...KEEPS ME HEALTHY)

“Hello, I am Lakisha, and I am a nutritionist. Most of you have probably never heard of my job, but you do recognize the word NUTRITION. Before you put me down let me say Nutrition is not a bad word. In fact, it is quite good. I am an expert on what good food is all about and I help people eat the right stuff so they can be healthy. Now that doesn't sound too bad, right? Let me tell you a little more about my job duties.

I work in a hospital and am part of the medical team that helps keep people healthy. I work with doctors, nurses, and patients to develop plans on what people should and shouldn't eat to maintain their health and get better. I talk to patients when they leave the hospital and listen to their concerns. I help them figure out what will be the best foods to eat and the foods they should stay away from. I don't just work with patients, but I get to go on trips and speak to other nutritionists and medical professionals about the work that I do. This is really fun because I get to visit really cool places (how does Hawaii sound?).

So this all sounds pretty good, right? If so, here is what you should begin thinking about. You will need to graduate high school and take lots of science classes. You will also need to go to college and get a bachelor's degree (this means going to college for 4 years). Some hospitals require you to get a Master's degree (2 more years), but they usually pay you more. How much you may ask? How does \$60,000 a year sound? That is what I made last year. Not too bad.

Now, I believe there are specific qualities that are required for all nutritionists. First, you need to have a love for good food, science, how the two go together, and a passion for telling others about this. I believe you need to have compassion for others. At the root of this job is the desire to help others and this is what compassion is all about, helping others. You need to be a good communicator, specifically the ability to speak well. You should be able to communicate plans to individuals as well as to large groups (remember those fun trips you get to speak at). Lastly, you need to be able to work with a team of people to problem solve, sometimes really big problems. If all of this sounds like you, becoming a nutritionist may just be in your plans.”



UNIT 2: BIOGRAPHY 2

NURSE (RESPONDER...HELPS ME WHEN I AM SICK)

“Hold on, your sick...what did you say?...you need help? Well, your in luck, my name is Tim and I am a registered nurse. I know that I can help you. I think I have the greatest job, because I am always busy, I am always working to make peoples' lives better, and I get to work on a team with some of the smartest people you will ever know. If this sounds like a good job (and I am going to tell you a little more) then perhaps you should consider becoming a nurse (oh and by the way this is not just a job for women).

I loved science when I was your age. I also loved helping others. I wanted to pursue a career that combined the two. I graduated high school and went to community college and got an associates degree (2 years of college) to become a nurse. I then went back to college for 2 more years and got my bachelor's in nursing and am now a registered nurse at a hospital. It was a lot of school, but this year I am going to make \$67,000 in salary.

Let me tell you about my day. I work with patients when they come to the hospital and assist doctors with the plan they put in place to make sure people stay healthy. I perform tests, and give medicine. I operate medical equipment (which is pretty cool) and answer patient's questions. I report to doctors any concerns I see and some doctors even ask for my opinion. Most importantly though, I make sure that patients and their families are given the best possible treatment when they are in the hospital. It really is the best job.

What qualities are found in great nurses? It starts with compassion. We are people who want to help others, always. We are people who listen first and speak second. We are team players, always desiring to grow in our medical knowledge so that we can help others. We are detail oriented, meaning we have to make sure we don't make mistakes because patients rely on us for everything. Lastly, we are emotionally stable people. This means that we have a hard job, and we see hard things but we continue to do our job even in the worst days. This is what nursing is all about. It is a great career. I hope that one day, you join me on the hospital floor and we can save lives together.”



UNIT 2: BIOGRAPHY 3

HOSPITAL CUSTODIAN (SUPPORTER...HELPS PREVENTION & RESPONSE)

“I only have a few minutes (because I am extremely busy today), so I will get right to it. My name is Tonya and I am a custodian at the hospital. It is my job to support every other hospital worker and medical professional staff by making sure that they work in a clean and safe environment. I also am responsible for fixing things that are broken; making sure that when people walk in the doors of the hospital they walk in to a building that is exceptionally clean and well maintained. This is what I do, and I love it.

I graduated high school ten years ago, and was unsure of what I wanted to do for a career. I needed a job, so I applied for a custodial job at our hospital and got it. I have been doing the job ever since. I continue to receive good evaluations (this is like my report card) from my supervisor (my boss) and every year have received a raise (pay increase) for my work. I am now making \$14.25 an hour.

I am obviously responsible for making sure that everything in the hospital is clean. Thankfully, I don't do it all by myself, but I have a great team that I work with to help me. I love cleaning, but my favorite thing to do is to fix anything that needs fixed.

There are many qualities that are important for me to be successful. One of the most important is time-management. This means that every day when I come to work, I have to remember that I only have 8 hours to get 30 things done. If I take too much time doing one task, I won't get another one done, this is called time-management. I also have to be physically fit and have the ability to work hard for about 8 hours a day. Most of my work is done standing, moving, and working with my hands so I usually go home tired. Lastly, I have to have skills and knowledge to be able to fix things at the hospital. Now, unfortunately I have to get back to work, I have 28 more things left to do! ”

UNIT 3: AGRICULTURE, FOOD AND NATURAL RESOURCES

Unit Objective: Students will be able to discuss Agriculture, Food, and Natural Resources in relation to their community and how they might one day fit into that career field.

Unit Project(s): “Agriculture & Entrepreneurship” and “Impact of pollution on our Natural Resources.” During this unit, the project will be to create a marketing campaign about the importance of keeping our natural environments clean and will organize a school wide clean-up of a specific area in need of cleaning. The digging deeper project focuses on a plant sale, where students will grow and then sell their plants.

LESSON 1: INTRODUCTION

Lesson Objective: Students will be able to describe what careers in agriculture, food, and natural resources entails as well as why it is vital to have different people filling a variety of needs to keep everyone in our world fed.

Career Skill Focus: Curiosity

Always look at things in a way that makes you ask questions, expands your brain, and opens up your world to new possibilities.



STARTER ACTIVITY

NATURE WALK

For this starter activity, after welcoming students to the class, you will be taking students on a 5 minute nature walk. Students will take their field journal with them. The purpose behind this nature walk is for students to connect with the “natural” world around them.

The nature walk will ideally end at a pre-determined destination area near your school/site that is essential to agriculture, food, or natural resources in the community (i.e. school garden, field or another place that supports the students understanding of this career cluster). Decide on your destination prior to the walk.

Near the end of the walk, have students stop and discuss the natural items or environments (grass, trees, insects, birds, etc.) they have seen along the walk.

When you get to your destination, have students sit down and take a few minutes to draw the selected location in a notebook or paper that you bring.

WHAT DO I SEE IN MY ENVIRONMENT?



INSTRUCTOR



LESSON INTRODUCTION

“Today we are going to begin our unit on the career field of Agriculture, Food and Natural Sciences. Before we talk about these careers, let’s talk about what you saw on our nature walk. What were some of the things or places you saw near our school/in our community that you believe would require jobs that fall into this specific career field?”

Allow several minutes for student response.

STARTER ACTIVITY

POTENTIAL INTERVIEW QUESTIONS CAN BE FOUND IN THE APPENDIX

COMMUNITY CONNECTION

A local professional will speak to students about their job in the Agriculture, Food and Natural Resources Field. Students will have the opportunity to ask questions—encourage students to utilize the Interview Questions (found in the Appendix).

****Please see COMMUNITY CONNECTION documents to support this activity in the appendix. This includes speaker talking points and a support guide for lining up guest speakers.****

Ask students to share a few things that they learned about this career field from listening to the speaker.

INSTRUCTOR

“What did you find interesting about the person’s job? Is there something you would like to learn more about with regards to this job?”



LESSON

Think/Pair/Share activity

“Now we are going to take a deeper look and explore specific jobs that may be found within these three areas of the career field.

“Today we are going to do a Think, Pair, Share to explore these jobs. First, I want each of you to take a minute to THINK and write down any specific jobs you can think of that would pertain to this career field.”

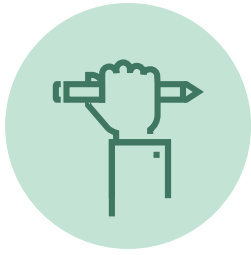
“Then you will PAIR up and take 2-3 minutes and write down those jobs that you both thought of in the category where they belong.”

“Finally we will SHARE out as a class what we found out. I will be available for help. Ready...Go!”

****Use the careers in the chart to help guide the discussion****

CAREERS IN AGRICULTURE, FOOD, & NATURAL RESOURCES

AGRICULTURE/ FOOD/ NATURAL RESOURCES	• Animal Scientist	• Recycling Coordinator
	• Farm Manager	• Butcher
	• Food Safety Worker	• Fisherman/Fisherwoman
	• Animal Trainer	• Earth Driller
	• Environmental Scientist	• Land Surveyor
	• Explosives Worker	• Fish & Game Warden
	• Floral Designer	• Conservationist
	• Food Scientist	• Logger
	• Park Educator	• Coal Miner
	• Recycling Worker	• Ship/Boat captain
	• Rancher	• Floral Designer
	• Animal Breeder	• Nursery worker (where they grow plants)
	• Animal Trainer	• Tree trimmer
	• Hunters	• Farm Equipment sales
	• Zoologist	
	• Pest Control	



LESSON PROJECT

The project for this unit is called **“Impact of Pollution on our Natural Resources.”** Students will be creating a “marketing campaign” about the impact of pollution and the importance of keeping your school grounds and natural resources clean. Student will also organize and participate in a school clean-up project.

The “Digging Deeper” project is called **“Agriculture and Entrepreneurship.”** For this project students will be working to grow and cultivate a variety of plants that they will sell as a class. This project will provide students with a hands-on approach to growing their own plants/vegetables as well as learning how to create a small business to eventually sell their products.

***Go to the PROJECT PAGE at the end of this unit for project information and instructions.*



WRAP UP

KOOSH BALL GAME

To wrap-up today’s lesson, play a quick game so that students can share where they see themselves in the field of Agriculture, Food and Natural Resources. Using either a koosh ball or another type of soft ball, students will throw the ball to someone in the circle. The person who catches the ball will first state a job that is in this field. Then they will pass it to another person who will state a different job that is in the field. Give this activity enough time so that each person gets an opportunity to share at least one time.

LESSON 2: EXPLORATION

Lesson Objective: Students will explore different careers within the agriculture, food and health science field and begin to see how their interests and strengths fit into this field.



STARTER ACTIVITY

DIRT PUDDING

UTILIZE APPENDIX FOR “DIRT PUDDING RECIPE”

SOFT SKILL:
ORGANIZED

For today’s starter, students are going to be “chefs” and participate in a short food preparation activity. Students will be making “dirt pudding” (although if you were involved in this career field you may call it “soil pudding” because soil is found in the ground and dirt is found under your fingernails). This is also an opportunity to talk about how specific jobs in this career field were required to prepare each ingredient so you can use it. This starter activity not only gives students the opportunity to have fun with food (as well as eat food they make), but they also get to learn about this career field in greater depth.

- Ask all students to wash hands thoroughly.
- Guide students through each step of the recipe—allow students to take part in making the dessert.
- Refrigerate immediately so the students can enjoy the dessert at the end of the lesson.



INSTRUCTOR

LESSON INTRODUCTION

“Think about the dirt pudding our class just made together. What agriculture and food jobs do you think were involved in the ingredients we used for the recipe?”

“Today we are going to dig deeper into looking at careers that are found in this field.”

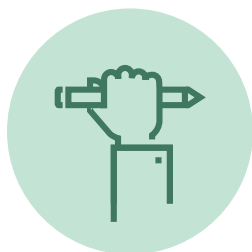
LESSON

“For today’s lesson you will spend time reading about three different people who have entered the agriculture, food and natural sciences career field. The three biographies represent specific career areas in this field: farmer, chef and environmental scientist.”



WHAT DO OTHERS SAY ABOUT THEIR CAREERS?

- a. Divide the class into groups of three and have each group read one biography of the jobs within the career field. These biographies are of three people who represent the three specific categories: preventer, responder and supporter.
****Biographies can be found at the end of this unit.*
- b. As they read, ask students to think about 2-3 interesting facts that they learn as well as 1-2 similarities they have in common with the person they read about.
- c. When all groups have finished reading and recording, have each group share about the person/career they read about so that the other students can hear about the varying career options. As students are listening to their classmates share about the other two biographies, they can write down their interesting facts and similarities in the remaining two boxes.
- d. When everyone is done, spend 2-3 minutes talking about these jobs as well as the jobs listed in the chart found in Lesson 3. Ask students to share 1-2 jobs within this career field they find interesting.



LESSON PROJECT

Students will spend the remainder of the time working on their project. Continue to refer to the project guide at the end of this unit.



LESSON PROJECT

- For the wrap up, students will enjoy eating the dirt pudding dessert that they created at the beginning of the lesson.
- The instructor should use this time to lead a class discussion about what they have learned thus far regarding this career field and the importance of it. Additionally, use this time to verbally prompt conversation among the students about what a possible job could look like for them in this career field.

LESSON 3: DEMONSTRATION

Lesson Objective: Students will demonstrate their understanding of the agriculture, food, natural resources career field as well as demonstrate who they can be and see themselves being within this career field.



LESSON PROJECT

Students will spend the remainder of the time completing their agriculture projects. Continue to refer to the project guide at the end of this unit.



WRAP UP

PROJECT REFLECTION

Give students 2-3 minutes at the end of the club time to process their thoughts on this career field.

INSTRUCTOR

“We are now done with the agriculture, food and natural sciences unit and I want each of you to spend a few minutes to reflect on the project that we just completed. Please think about something you liked about the project. You could also write something new that you learned about this career field. Can you see yourself in an agriculture, food and natural sciences job when you are older? This is a time for you to reflect a few sentences about your thoughts on careers in this field.”

UNIT 3 PROJECT

In regards to the project/s outlined below, please note that these are intended to be project frameworks. The descriptions provide the overall “framework” for the project and an outline of the basic steps involved in accomplishing the goal/s of the project/s.

Prior to beginning each project, instructors should take time to further develop and plan these projects, as there are a number of details that are not included in these descriptions. Due to the vast differences between afterschool programs and their programming structures/resources, these details will vary for every program and thus were intentionally not included in the project descriptions below.

Project Title: *“Impact of Pollution on our Natural Resources”*

Project Description: The goal of the project is for students to take ownership in cleaning up the school/community of pollution (in this case trash). You can start small and organize a clean-up event that will occur at the school/afterschool site. This event can be limited to just the students in this club and they can brainstorm and choose a specific clean-up project at the school (work with the school administration to determine a few viable options). If possible, the project can also include afterschool staff and students in which they spend 45 minutes walking around and picking up trash outside the building or working on another specified clean-up project, such as a segment of a trail or a parking lot.

You will first need to create excitement amongst the students and create a marketing/advertising campaign around the school during the first two lessons.

Lesson 1:

The first lesson should be spent on students creating a “marketing campaign” about the impact of pollution and the importance of keeping your school clean. This would include posters/signs or a “PSA-public service announcement” to be read during the daily school announcements. Allow students to be creative: create slogans to keep the outdoor school environment clean, design logos to remind students to not pollute the environment, etc.

Lesson 2:

For the second lesson, students should take five minutes to present their “marketing campaign” to a school administrator and ask for permission to hang their “ads” (posters) up and/or to read their PSA during the school announcements. Students will then hang signs around the school with the help of the custodian.

Lesson 3:

The third lesson will serve as the culmination of the project: the actual clean up event. For the clean-up project, bring plenty of trash bags, buckets, and rubber gloves for students/staff to wear. As the group picks up trash, use this time to remind students of the importance of keeping our Earth clean because we only have one Earth which contains all of our natural resources. Have a camera available as well to take pictures of the students working. These pictures could also be given to students to go in their field journal.

***Digging Deeper:*

*Digging Deeper Project:
If you have more time to allot to this unit than the three lessons in this curriculum guide, this project is intended to “dig deeper” into this career field and provide a more in-depth project experience.

“Agriculture & Entrepreneurship”

Materials:

1. Bags of potting soil
2. Styrofoam cups
3. Plastic planting pots
4. A variety of seed packets (flowers and vegetables)
5. Small gardening tools (not necessary but may be useful)

***All of these materials can be donated by florists or hardware stores—this is an excellent partnership opportunity. If materials cannot be donated, you can advertise your plant sale, get pre-orders, and then use the money to pay for the materials.

Project directions: This project requires the instructor to plan in two areas simultaneously: horticulture and business. The directions are divided accordingly.

1. Horticulture...growing your plants for the sale:

You will need packets of various seeds (decide on plants/vegetables/flowers), Styrofoam cups, paper towels, & potting soil.

- a. Begin by giving every student several Styrofoam cups. They will need to poke holes in the bottom of the cups that are small enough so that soil does not fall out, but large enough so that water will drain, when watered.
- b. Students should then put soil in the cup and plant several seeds in the soil of the cup. Cups should be labeled with the student’s name and then put in a place where they will stay warm and receive sun light. Designate student(s) to be responsible for watering the cups on a schedule and as the seeds begin to sprout.

(An interesting side project would be to plant some “test” cups and have the students water them with salt water or even ask the custodian to visit and spray a cleaning solution on the test cups to see if the flowers grow then. This would elicit great discussion on the topic of pollution).

2. Plant Sale Planning (this should occur simultaneously as the plants are growing):

- a. After 1-2 weeks of growing time, the plants may be ready to transfer into a larger plastic pot. You will again use the potting soil to fill up the plastic pots. Carefully remove the plant along with the soil from the cup and put it into the soil in the plastic pot. Again, place the plastic pots in a warm location where they will receive sun. You should again assign students to water the plants.

This process will take several weeks (3-6 weeks) and will therefore require students to continue with this project, likely while continuing on with other career units (or your program can create additional lessons to lengthen this unit).

- b. During this time of plant growth, students should be working on the marketing of their plant sale (see second step). The important aspect of this part of the project is that students plant their flowers and then are able to care for the plants so that they can eventually be involved in the selling of the plants.

3. Plant Sale (planning while the plants are growing):

The second component of this project is organizing and planning for the plant sale. This work should all occur during the time that the plants are being cared for and growing. Planning should include:

- a. Deciding on a date/location, marketing and selling the plants. Students should decide on a date/time/location for the sale (i.e. from 3-6pm on Mon, Tues, Wed of a given week). Possible locations could be the school gym, cafeteria, school courtyard, etc. Students should then present this proposed time frame and location to school administration for permission of this sale.
- b. Students should begin marketing the plant sale while the plants are growing. This marketing involves making signs to hang around the school and possibly in local businesses/community locations (with permission).
- c. Not only will students market their plant sale, but they will need to work on the “business” aspect of this plant sale. Students will work to figure their cost margins and decide on price points/what to charge for their plants. This part of the project should lead to teachable moments about the concept of pricing so that students’ make money but not price plants so high that you can’t sell them.
- d. “Managing” the business. Think through all the logistics of the sale and then help students plan. A few (but not all) of the issues to be addressed: How will the sale be set up? What will each student be responsible for (greeter, cashier, etc)? How will the revenue of the sale be used (after costs of supplies are covered)? Will the revenue be utilized to fund the next plant sale or purchase equipment for the program?
- e. When the project is complete, students should be given time to reflect in their journal. Provide students with a few writing prompts.

***In planning this project, consider being able include the plant sale as part of your community showcase event. ***



UNIT 3: BIOGRAPHY 1

FARMER

“Good afternoon everyone. My name is Mike and I am a farmer here in the great state of Nebraska. My father was a farmer, as was my grandpa. When I was a boy, I knew that this is what I wanted to do; I wanted to continue in the family business and continue farming.

Most people, at least non-farmers, have no idea what we do or what we make in salary, so allow me a few minutes to tell you a little bit. I graduated from high school and went to college and received my bachelor degree. My dad told me that it would help me be a better farmer because I would learn business skills that would help that side of the job. He was right.

As a farmer I am in charge for planting our corn, making sure the corn grows, harvesting the corn, and then selling the corn to other people. I have 5 other farmers who work for me and help me every day. We work really hard. We usually wake up at 5 am to meet as a team and plan our day. We then have assigned tasks to make sure that all of our crops grow well. I usually make sure that our tractors are working well, water the crops, and problem solve when there are issues. It is a busy job, but it is great. Last year, all my hard work helped me make almost \$65,000. That is a great salary doing something you love.

There are many qualities that are necessary for a successful farmer. Farmers need to be experienced and trained. I learned how to farm from watching my dad and grandpa. They taught me how to do the tasks necessary to run a farm. Farmers also need to be smart because they are running a business. We need to be strong because we are constantly on our feet, working with our hands, and lifting heavy weight throughout the day. Lastly, we need to be problem solvers. One of the tough things about being a farmer is you can't control the weather. This is a real problem at times and farmers need to be able to problem solve when things don't go well. If this sounds like you, I am always looking for some good people to be on our crew.”



UNIT 2: BIOGRAPHY 2

ENVIRONMENTAL PROTECTION AGENCY SCIENTIST

“I first have to say that I love planet Earth. Don’t you? I mean, who doesn’t love the green grass, blue skies, mountains, rivers, and oceans. It was this love that drove me to work as an environmental scientist with the Environmental Protection Agency. I worked hard to get to this spot. Not only did a graduate high school, a 4 year college, and a Masters degree, but I did it all while taking some very hard science classes. It all paid off 5 years ago because I got my dream job studying our planet and helping to write reports that will save our planet. I also make a nice yearly salary. How does \$67,000 sound?

What exactly does an environmental scientist do? Great question. I do a lot of experiments and tests trying to figure out the best way to solve any problems we see in the environment as well as to prevent problems from occurring. I then write reports showing the results of my tests. After I have written my reports I am then responsible for presenting my findings to other scientists and government workers. Sometimes I even get to go on trips and speak at conferences to tell people about what I found in my research. I am very proud of the work I do, because many of my suggestions are then used to help make different laws to help protect the environment. How cool!

I admit, I am a bit of nerd when it comes to science, but it takes more than that to be a great environmental scientist. For me to be great, I have to be a question asker. It is important that I never stop asking questions, because it is these questions that lead me to tests and experiments. I also have to be a great team player. The problems we are solving are really big; think the melting of the North Pole (now that is a big problem). There is no way I can do that by myself, instead I have to work in a team. At the same time, there are days when I am working all by myself on writing reports or preparing to give a speech, this requires self-discipline (the ability to force myself to work hard).

I love my job and if you love science, love the environment, and love performing experiments, you will love this career, too.”



UNIT 2: BIOGRAPHY 3

CHEF

“My name is Chad, and I am a chef. I work in a fancy restaurant downtown and boy do I work hard. You would think as a chef all I am responsible for is cooking food at dinner time, but that could not be further from the truth. My day starts around 8 in the morning. I go to the restaurant and do inventory. That is a fancy word meaning I count all of the food we have in the restaurant and determine if we need to order more food. After doing inventory I move on to preparing for that night's dinner service. This requires a lot of chopping vegetables, baking bread, preparing desserts and other tasks to get ready for guests when they come in.

After lunch, several other staff come in to prepare the dining room for guests. I usually help them set the tables and tell them about what we will be serving for dinner. I try and change the menu around every week to give customers a new experience every time they eat at my restaurant. One of my favorite parts of the job is what we call “family meal.” Family meal is when all of the staff eats dinner together before we open for the night. It is a great time to develop our team as we prepare to serve those who come to the restaurant.

We open every night at 5 p.m. and from 5-10 it is non-stop action. I work with three other chefs and we are constantly busy making people's dinners. It is very hot in the kitchen and it can be loud sometimes as we are trying to cook and talk to the servers as well. It is very important to be organized and well prepared because we want to get people their food in a timely manner.

When dinner is over, it takes about 2 hours to clean the kitchen, which is really important because a lot of times inspectors will come in to make sure we have a clean cooking space. I even know friends whose restaurants have closed because they were not clean.

So, basically I work every day from 8 a.m. to midnight. Then, on Sunday I have to do paperwork to make sure we are taking care of money, ordering supplies and staying up to date on everything. It is a tough job, but I would not trade it for the world. I love cooking and creating art with food. Plus, I love seeing people be happy when they are at my restaurant. How much do I make you ask? I make about \$42,000 a year.”

UNIT 4: SKILLED AND TECHNICAL SCIENCES

Unit Objective: Students will be able to discuss skilled and technical sciences in relation to their community and how they might one day fit into that career field.

Unit Project: “What does our ideal community look like?” As a class, students will design their ideal community 2-dimensionally as well as 3-dimensionally.

LESSON 1: INTRODUCTION

Lesson Objective: Students will be able to describe what a career in the skilled and technical sciences is, as well as why it is vital to have different people filling a variety of needs to keep a community operating effectively and efficiently.

Career Skill Focus: Risk-Taker

Being able to look at life through the lens of safe choices and ones that have risk. Not being opposed to choosing the risky option in times only when the choice is not illegal or does not pose a threat to you or anyone else.

SOFT SKILL:
RISK-TAKER



STARTER ACTIVITY

MARSHMALLOW BUILD

Today's starter activity is quite fun, but requires some preparation. Students are going to need the following supplies: a box of toothpicks, large marshmallows and mini marshmallows. Students will have 10 minutes to build the tallest tower in the class. The winning team gets a prize.

The purpose of this starter activity is first and foremost to provide the students with a fun activity that engages them in teamwork. This activity also allows the students the opportunity to see that within this career field there is the potential for creativity, hands-on building, etc. It would also be advised that the instructor have a digital camera so that students can take pictures of their work, which can be printed and pasted in the career field journals.

****Pictures of this activity and more detailed directions can be found in the appendix****



INSTRUCTOR

LESSON INTRODUCTION

Instructor will first provide encouragement of the starter activity work that was done.

“At the end of today’s club, we will be able to describe what a career in the skilled and technical sciences is as well as why it is vital to have different people filling the variety of needs to keep our community effectively and efficiently operational.”

“Think about the activity of building a marshmallow tower. What do you think this fun activity could possibly have to do with the career field of skilled and technical sciences?”

Allow wait time and students the opportunity to provide answers.



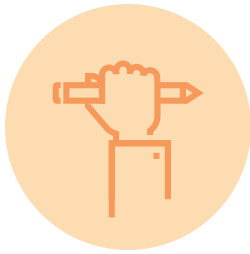
STARTER ACTIVITY

POTENTIAL INTERVIEW QUESTIONS CAN BE FOUND IN THE APPENDIX

COMMUNITY CONNECTION

A local professional will speak to students about their job in the Skilled and Technical Science Career Field. Students will have the opportunity to ask questions—encourage students to utilize the Interview Questions (found in the Appendix).

****Please see COMMUNITY CONNECTION documents to support this activity in the appendix. This includes speaker talking points and a support guide for lining up guest speakers.****



LESSON PROJECT

Ask students to share a few things that they learned about this career field from listening to the speaker.

“What did you find interesting about the person’s job? Is there something you would like to learn more about with regards to this job?”

“What does our ideal community look like?”

This project has the ability to be extremely fun, very team oriented, and could be a great opportunity to showcase your student’s vision for their community to the actual community. Introduce this project by letting students know that the community they live in was carefully designed by skilled and technical scientists—the houses they live in and every building and road that they go in or drive on. For this unit they will have the opportunity to be these scientists and design their own community.

****See the end of unit for a complete Project Description****

****Pictures of finished products can be found in your appendix****



WRAP UP

Finish the day by telling the students what a productive day it was.

Ask each student to close their eyes and imagine they are 30 years old. Ask them to think about one specific career they wrote down and have them share which career they like the best of all the careers they saw heard about today.

COMMUNITY CONNECTION

In the career journal there is a “community connection” activity. Encourage students to take their career journal home and work with a family member, trusted adult, or friend to complete the activity.

LESSON 2: EXPLORATION

Lesson Objective: Students will explore different careers within the skilled and technical sciences career field and begin to see how their interests and strengths fit into this field.

Career Skill Focus: Independence

Being able to solve problems, complete tasks, and think about problems without any other person when necessary.

SOFT SKILL:
INDEPENDENCE



STARTER ACTIVITY

Have the class walk outside and sit in front of the school (or building the after school program is held at), and create a sketch of the building based off of what they see. Encourage students to draw a building that is as close to what they see as possible. Give them 3-4 minutes.

When they have completed their artistic rendering of the building have them record in the margin of the paper all of the skilled/technical scientists that were necessary to build the building as well as to keep the building operational (the list of jobs can be found in Lesson 2). Walk with students back to class.



LESSON INTRODUCTION

“Were you surprised at all the skilled/technical science jobs that were involved in constructing our school and keeping the building operational? For today, we are going to look at the many different types of jobs that are in this career field.”



INSTRUCTOR

WHAT DO OTHERS SAY
ABOUT THEIR CAREERS?

LESSON

“We are going to spend time reading about four different people who have entered the skilled/technical science career field.”

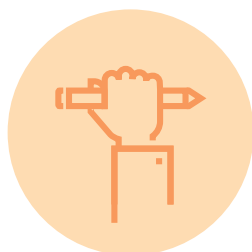
“You have four people who represent the four specific pathways: engineering, construction, manufacturing, and transportation/distribution/logistics.”

- a. Divide the class into groups of four and have each group read about one of the jobs within the career field. ****Biographies can be found at the end of the unit.****
- b. As they read, ask students to think about 2-3 interesting facts that they learn as well as 1-2 similarities they have in common with the person they read about.
- c. When all groups have finished reading and recording, have each group share about the person/career they read about so that the other students can hear about the varying career options. As students are listening to their classmates share about the other two biographies, they can write down their interesting facts and similarities in the remaining two boxes.
- d. When everyone is done, spend 2-3 minutes talking about these jobs as well as the jobs listed in the chart found in Lesson 2. Have students share 1-2 jobs that are potentially interesting to their future.

****Use the careers in the chart on the next page to help guide the discussion****

CAREERS IN SKILLED AND TECHNICAL SCIENCES

ENERGY AND ENGINEERING	<ul style="list-style-type: none"> • Road Planner (civil) • Astronomer • Aerospace Engineer • Chemist 	<ul style="list-style-type: none"> • Electrical Engineer • Environmental Scientist • Robotics Engineer • Wind Energy Engineer
MANUFACTURING	<ul style="list-style-type: none"> • Aircraft Assembler • Camera repair technician • Skilled Carpenter • Large Machine Programmer • Computer Repair Person 	<ul style="list-style-type: none"> • Electrical Engineer • Home Entertainment Installment • Environmental Equipment Engineer (wind turbines) • Bulldozer Operator
ARCHITECTURE AND CONSTRUCTION	<ul style="list-style-type: none"> • Architect • Stone Mason • Commercial Pilot • Construction Manager 	<ul style="list-style-type: none"> • Earth Driller • Landscape Architect • Commercial Painter • Railroad Engineer
TRANSPORTATION/DISTRIBUTION/LOGISTICS	<ul style="list-style-type: none"> • Air Traffic Controller • Ambulance Driver • Boat/Jet Ski Repair • Ship Captain 	<ul style="list-style-type: none"> • Tractor Trailer Driver • Train Conductor • Chauffeur • Bicycle Repair



LESSON PROJECT

“What does our ideal community look like?” Continue to refer to the Project Guide at the end of the unit.



WRAP UP

Today’s wrap up will primarily be cleaning up, but while students are cleaning up their “building materials,” the instructor should be asking students specific questions about the individuals/biographies they read about earlier.

LESSON 3: DEMONSTRATION

Lesson Objective: Students will demonstrate their understanding of the skilled and technical Sciences career field as well as demonstrate who they can be and see themselves being within this career field.

LESSON PROJECT

Students will spend the remainder of the time working on their project. Continue to refer to the Project Guide at the end of the unit.

WRAP UP

PROJECT REFLECTION

Give students 2-3 minutes at the end of the club time to process their thoughts on this career field.

INSTRUCTOR

“We are now done with the Skilled and Technical Sciences Unit and I want each of you to spend a few minutes reflecting on the project that we just completed. Please think about something that you liked about the project. You could also write something new that you learned about the Skilled and Technical Field. Can you see yourself in a Skilled and Technical job when you are older? This is a time for you to reflect about your thoughts on careers in this field.”

UNIT 4 PROJECT

In regards to the project/s outlined below, please note that these are intended to be project frameworks. The descriptions provide the overall “framework” for the project and an outline of the basic steps involved in accomplishing the goal/s of the project/s.

Prior to beginning each project, instructors should take time to further develop and plan these projects, as there are a number of details that are not included in these descriptions. Due to the vast differences between afterschool programs and their programming structures/resources, these details will vary for every program and thus were intentionally not included in the project descriptions below.

Project Title: *“What does our ideal community look like?”*

Project Description: As a class, students will design their ideal community 2-dimensionally as well as 3-dimensionally.

Materials:

1. Poster board
2. Pencils (sharpened)
3. Rulers
4. Markers
5. Glue
6. Toothpicks
7. Popsicle Sticks
8. Any other household building objects.
9. Piece of plywood

Project Directions:

Lesson 1:

This project begins with students discussing important components of a community. The instructor should lead a short discussion on what the students see as important places in their community (parks, religious building, houses, stores, movie theatres, roads, etc). The instructor will write these thoughts down.

After students compile a list of essential community structures the next component of the project is to draw/sketch a 2-dimensional drawing on a poster board of their “community plan.” Many students will not have great art skills, but for this project encourage students that artistic ability is not essential. Explain to students that architects use rulers and other instruments to draw their creations first, and the most important thing is the measurements not the beauty. In creating their “community plan”, students should remember to include streets, parks, and spacing in their community. This part of the project should be completed during lesson 1.

After Lesson 1:

Completed 2-dimensional community drawings will be turned in for judging. Instructors should ask building administrators to pick the most realistic “community plan” as the class winner. This “community plan” will be used by the entire class to create a 3-dimensional rendition of a community.

Lesson 2 and 3:

Have the administrator come down to the class to discuss how great the community plans were and to explain why he/she picked the community plan (drawing) that they did.

Once the class has seen the community plan that was chosen, each student will be responsible for creating a 3-dimensional component of the community (i.e.: one student might design a store, another two houses, and another a community center). The instructor should assign each student a structure/s to be responsible for. To design these structures, students will use Popsicle sticks, toothpicks, and other cheap materials on hand. Students can be creative in their design as they are the architect responsible for the building. This part of the project will require time in both lessons 2 and 3.

Lastly, when structures have been built, they will be placed on a piece of plywood to create an entire community. As the class is placing these structures, remind students to leave area for streets, parks, and other open spaces.

It is recommended to take pictures of the final community so that students can have a picture of their community creation.

This project has the ability to bring community exposure to your program. This “community plan” should be included in your showcase event at the end of the curriculum. When the showcase event is complete, it is recommended that the “community plan” be displayed somewhere visible for community members to see. Locations include school district offices, local library, or a government office.



UNIT 4: BIOGRAPHY 1

MECHANICAL ENGINEER

“My name is Kathy and I have worked very hard to become a Mechanical Engineer. I am going to take a few moments to tell you a bit about my job and why I love it. I get to work all day with my hands and mind designing mechanics and machines that people all over the world use. I start out with a problem that can be solved with a machine. I then sit down with a team of really smart people and we start to think of how we can solve these problems.

Once we come up with an idea, we get to work. We start by drawing out our idea and then we build a prototype. A prototype is the first of its kind and what we will use to see if we have been able to create a successful solution. This is basically what I do. I build things that make peoples lives easier and this goes on and on. Pretty cool, huh. I also make good money. Yesterday I paid my taxes (yuck) and realized I made almost \$84,000 last year.

I did go to college for 6 years and receive both my bachelor's degree and masters degree. I took a lot of classes in math, science, and engineering. I'll be honest the classes were really hard and required a lot, I mean A LOT of hard work, but I believe it was worth it. Not only do you have to be incredibly hard working, but I believe I need to be creative since much of my job is about creation. I also need to be a great listener and communicator because I am usually working with a team of people. And guess what? We don't always get along and many times we have different ideas, so I believe the last major quality that I need to bring to my job is the ability to compromise to solve problems.

If this sounds like you, Mechanical Engineering may be the perfect job. Oh, one more thing. Many of my friends in college loved math and science like me but they did not like working with machines and mechanics. There are so many other types of engineers out there, and I bet you would be great in any of those careers.”



UNIT 4: BIOGRAPHY 2

WELDER (CONSTRUCTION)

“My name is Matt and I am a builder. Well, to be more specific I am a welder and I love my job. Everyday I wake up and get to work with my hands building things. I don’t have to dress up or work at a desk. I get to build stuff. What a cool job. Let me tell you a little bit more about how I became a welder and what I do every day.

As a kid I loved working with my hands and building things. I loved my industrial technology classes in high school and new that I wanted to go on to a life of construction, but I was unsure of what that would be. After I graduated from high school, I applied to a 2-year community college and met with a college advisor (someone who helps college students figure things out). She listened to me, and when I was done talking about my passions she said that I should take some welding classes. I had never heard of welding, but decided to listen to her. I loved it, and 2 years later got my first job as a welder making about \$33,000 a year and I will have many opportunities to make more as I gain more experience.

So what exactly do I do? I essentially get to take a blowtorch and use that heat to melt two pieces of metal together to make one connected piece. Not only is this really cool, but it is also really important. Most structures that are made of metal need welders to secure the structures and bind them together. I work as part of a bigger team of construction experts to build buildings, vehicles, and other structures. I help to maintain large machinery when there are problems, and I get to go out to different types of structures to inspect them to make sure there are no problems. It really is a fun job. (Did I mention that I don’t have to work in an office or wear a suit.)?

I am a skilled worker, meaning I have had to learn how to be a great welder by working on jobs, watching others, and being taught constantly. I have to be a person who is focused on details. I need to follow plans really well. I also have to be in shape, since much of my job is physical in nature. I also need to be able to work long hours in tough conditions. There are some days I work for 10-12 hours in really hot weather, but at the end of the day it is worth it because I love my job.”



UNIT 4: BIOGRAPHY 3

WORKER ON AN ASSEMBLY LINE (MANUFACTURING)

“I am going to take a quick break from a very busy schedule to tell you a bit about my job. My name is Tong and I work on an assembly line at a car manufacturing plant. This is the long way of saying that I help build cars with a team of people and machines. I work long days in the factory doing a specific job which is helping to put the seats in the car when it comes to my section on the assembly line.

My daily duties entail: reading and understanding how the machines work first and foremost. If I don't know how the machines work, then I can't do my job. I also need to be good working with tools. Many times, I have to stop the machine to fix something, which requires knowledge of using tools and fixing big equipment. As an assembly line worker I am also responsible for doing something called a “quality control check.” This means that I continually make sure that the machine is putting the seats in correctly and there are no problems. Imagine buying a new car and the seats were not installed right. That would be my fault and I would probably get fired.

Being a worker on an assembly line pays well. When I first started I made \$30,000 a year. Today I am making \$42,000 a year after working for the company for 7 years. Not bad. I finished high school and went to a 2-year community college to study mechanics. This education helped me with my daily tasks.

To be a great worker at my job, I need to be skilled in my craft. This means I need to know exactly how to do my job or I will likely make mistakes, which could lead to big problems. I also need to have the ability to work long hours on my feet, which is called stamina. There are days when I work 10-12 hours with only a few short breaks. Lastly, I need to be skilled mechanically and technically. Everything I do is technologically and mechanically advanced. Very few people would know what to do if they walked into my facility. Therefore I need to always be skilled in these areas so that I can effectively do my job. I have to go to classes every year to learn new skills.

Sound fun? If so, you should consider working on an assembly line building things.”



UNIT 4: BIOGRAPHY 4

PILOT (TRANSPORTATION & LOGISTICS)

“Ready for Take Off! Over and Out! Full Flaps! Hello from the wild blue yonder. My name is Captain Lucas and I am a Pilot for one of the world’s largest airlines. I spend my waking hours 30,000 feet above the ground and I can’t imagine loving my job more. I also make good money. How does \$101,000 sound? So, how did I become a pilot and what else do I do besides fly. Well, step inside the cockpit and learn a little from your Captain.

Flying always fascinated me and I took this love with me to the Air Force Academy. When I graduated high school, I was accepted into the Air Force Academy, which is a 4-year college (all paid for by the United States government). I will say, I had to work very hard in high school, get straight A’s and do well on my tests to get accepted into such a good college, but it was worth it.

After the Air Force Academy I served in the Air Force for 8 years and it was there that I learned how to fly. I flew fighter jets for 8 years and it was amazing, truly amazing. After 8 years I left the Air Force and got a job with a major airline.

Today I fly people all over the world. I make sure the airplane is fit to fly before I even began anything else. Once it passes my tests and all the check boxes are checked we load up the passengers. I communicate with my copilot, the flight attendants and air traffic control and then when it is our turn in line, we take off. While in the air, I have to monitor all weather conditions and make sure the plan runs smoothly. When you think about it I am responsible for the lives of hundreds and thousands of people.

To be a good pilot, you must be a good communicator, problem solver and observer of the environment. This means that when you see something that is not good, you make changes to make sure that everyone is safe. This also requires quick reaction time. I do not have the ability to take my time to make decisions. I have to think and act quickly. It is tough and I have a great level of responsibility, but I love it and would not change a thing. Well, that being said let me say one more thing. Sit back and enjoy your flight.”

UNIT 5: COMMUNICATION AND INFORMATION SYSTEMS

Unit Objective: Students will be able to discuss communication and information systems in relation to their community and how they might one day fit into that career field.

Unit Project: “How do people know what’s going on in the world?.” As a class, students will look at five issues facing the community/world around them. Students will then create a newspaper or magazine layout using school computers as well as a news program, which will be recorded.

LESSON 1: INTRODUCTION

Lesson Objective: Students will be able to describe what a career in the communication and information systems entails as well as why it is vital to have different people filling a variety of needs to keep everyone informed.

Career Skill Focus: Listening

People want/need to be heard. In all careers, it is essential that you take time to not only listen, but to understand the needs of those you work with.

SOFT SKILL:
LISTENING



STARTER ACTIVITY

TELEPHONE GAME

The class will play the classic game “telephone.” For 5 minutes, split the class into two groups. Each group will form a line facing one another or away from each other.

As the instructor, you will come up with a phrase that the two teams will pass. You will have multiple phrases that you use. Start the game easy, and build to harder phrases.

Give each team the saying and instruct them that this is a competition and the team that is able to correctly pass the phrase from the start to the end correctly the most times will win.



LESSON INTRODUCTION

What does the game “Telephone” have to do with this specific career field?

The goal is to elicit conversation around the idea of communicating and listening to each other and the world, which is what this career field is all about at its core.

After students have had a few minutes or opportunities to respond, congratulate them again on a well played game of telephone as well as for wonderful responses to the question.



STARTER ACTIVITY

POTENTIAL INTERVIEW QUESTIONS CAN BE FOUND IN THE APPENDIX

COMMUNITY CONNECTION

A local professional will speak to students about their job in this career field. This field is broad enough that you can have someone involved in journalism, IT or another pathway. Students will have the opportunity to ask questions.

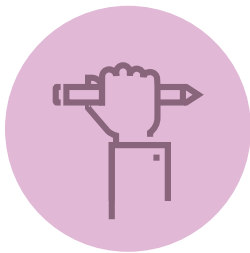
****Please see COMMUNITY CONNECTION documents to support this activity in the appendix. This includes speaker talking points and a support guide for lining up guest speakers.****



LESSON INTRODUCTION

Ask students to share a few things that they learned about this career field from listening to the speaker.

“What did you find interesting about the person’s job? Is there something you would like to learn more about with regards to this job?”



LESSON PROJECT

Before introducing the project of this lesson you are going to be asking students what are some major issues facing their community and the world. Students should be encouraged to reflect on possible stories that they have seen in the news. This is not a time to elicit opinions from students. It is simply a time to elicit ideas and current stories. If students do want to talk more about an issue or if they seem passionate about something let them know that they will have the opportunity to go into more depth on these issues with the two projects in this unit.

INSTRUCTOR

“Today we are going to begin our project covering the career field of Communications and Information Systems. Before we begin the project, let me tell you how important communications careers are in regards to us knowing what is going on in the world. If it were not for these careers we would not have TV shows, sports on TV or any news stories.”

“So before we begin I want to see what you all know in regards to news stories impacting your community, your state, your country and the world. So we are going to take 1 minute to write down as many ideas as you can in your field journal and then we will share out. Ready...Go.”

After a 1-2 minutes of writing, students should then be giving a chance to share out. Your goal as a class is to come up with 8-10 ideas.

“How do people know what’s going on in the world?”

Newspaper Project: Students will create a class newspaper or magazine focusing on 5 issues in the news (it’s an election year, so even the most underexposed student should have a small concept of some news events). Students whose interest is in print (either writing or art) will excel with this project. They will write the article, take pictures (if applicable), draw pictures, and create a lay out that will be published by the class at the end of the unit.

News Program: Students will create a recorded news program. This would be a great option for those students whose strengths are either in the realm of performing or working with Audio Visual Technology. (Ideally the class would be able to borrow a video camera from someone to make this project even more impactful). Students should watch a few clips from a local news program to get an idea for what they need to do to successfully produce the “show.”

****A full project template description with directions can be found at the end of the unit.****



WRAP UP

COMMUNITY CONNECTION

Encourage students to interview a family member or trusted adult to complete the activity.

The question they are asking: “What do you believe are the biggest issues facing the world, America, Nebraska, and our community?”

LESSON 2: EXPLORATION

Lesson Objective: Students will explore different careers within the communications and information systems career field and begin to see how their interests and strengths fit into this field.

Career Skill Focus: Energetic

Businesses hire people who have a positive energy about themselves.
Positive energy helps other people do their jobs well.

SOFT SKILL:
ENERGETIC



STARTER ACTIVITY

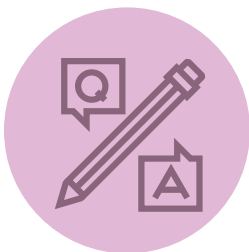
CHARADES

One of the jobs indicated by Nebraska Career Education within this career field is Performing Arts. So today students will be communicating with each other by playing a game of Charades. Most students have not played this game before and will need explanation and direction.

As the instructor you will want to have multiple clues written out that students will have to silently act out. Divide students into two teams and explain the directions. Each team will have a representative come to the front of the room and they will be responsible for acting out a clue silently. Their team will have to guess what they are acting out and the team that gets it first wins a point.

This is a fun game with a lot of movement and excitement. Give students enough time that everyone has a chance to be the actor (if they want to). If you can reward the winning team.

When you finish the game, have all students return to their seat.



LESSON INTRODUCTION

Start the lesson by spending a few minutes asking how the game of Charades relates to this career field. The idea is to get students to think about multiple ways and avenues that communication happens in our world.



LESSON

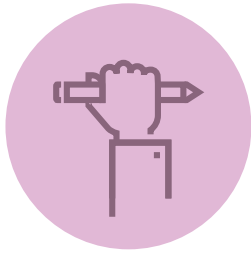
“For today’s lesson you will spend time reading about three different people who have entered the Communication and Information Systems career field. You have three people who represent three specific careers: telecommunications, computer programmer and journalist.”

WHAT DO OTHERS SAY
ABOUT THEIR CAREERS?

- Divide the class into groups of three and have each group read about one of the jobs within the career field. ****Biographies can be found at the end of this unit.****
- As they read, ask students to think about 2-3 interesting facts that they learn as well as 1-2 similarities they have in common with the person they read about.
- When all groups have finished reading and recording, have each group share about the person/career they read about so that the other students can hear about the varying career options. As students are listening to their classmates share about the other two biographies, they can write down their interesting facts and similarities in the remaining two boxes.
- When everyone is done, spend 2-3 minutes talking about these jobs as well as the jobs listed in the chart. Have students share 1-2 jobs of interest.

CAREERS IN COMMUNICATION AND INFORMATION SYSTEMS

COMMUNICATION	<ul style="list-style-type: none"> • Actor • Photographer • News reporter • Filmmaker • Screen printer • Music composer • Camera operator • Dancer • Historian • Movie director • Artist 	<ul style="list-style-type: none"> • Museum director • Sound technician • Editor • Lighting technician • Editors • Radio DJ • Talent directors • Writers/Authors • Singer • Set designer
INFORMATION TECHNOLOGY	<ul style="list-style-type: none"> • Computer programmer • Web designer • Computer game developer • Phone, internet, computer, repair • Graphic designer • College computer Teacher • Animator • Video game designer 	*Anything with Computers*



LESSON PROJECT

Students will spend the remainder of the time working on their “What’s going on in the world” projects. Continue to refer to the project description at the end of the unit to follow template as to what should be done at this point in the unit.



WRAP UP

For today’s wrap up, students will have the opportunity to hear about a current event either in the community or in the world.

The instructor will need to find a newspaper article or video detailing a highly engaging story that is currently happening. (Once again, with this being an election year, most students will have at least heard of the presidential election and should have an opinion even if it is a small one). CNN student news or Channel 1 news is a great resources to use as it is current, appropriate, and geared toward young people.

The instructor will show the video or read the article and then begin a conversation about the story. The goal of this wrap up is to elicit enough conversation that at the end the instructor can speak to the importance of this career field in regards to distributing information as well as the freedom we have to have opinions and talk about the world without consequence.

LESSON 3: DEMONSTRATION

Lesson Objective: Students will demonstrate their understanding of the communication and information systems career field as well as demonstrate who they can be and see themselves being within this career field.



LESSON PROJECT

Students will spend the remainder of the time working on their project. Continue to refer to the Project Guide at the end of the unit



WRAP UP

PROJECT REFLECTION

Give students 2-3 minutes at the end of the club time to discuss their thoughts on this career field.

INSTRUCTOR

“We are now done with the communications and information systems Unit and I want each of you to spend a few minutes to reflect on the project that we just completed. Please think about something that you liked about the project. You could also think about something new that you learned about the communications and information systems Field. Can you see yourself in a communications and information systems job when you are older? This is a time for you to reflect on careers in this field.”

UNIT 5 PROJECT

In regards to the project/s outlined below, please note that these are intended to be project frameworks. The descriptions provide the overall “framework” for the project and an outline of the basic steps involved in accomplishing the goal/s of the project/s.

Prior to beginning each project, instructors should take time to further develop and plan these projects, as there are a number of details that are not included in these descriptions. Due to the vast differences between afterschool programs and their programming structures/resources, these details will vary for every program and thus were intentionally not included in the project descriptions below.

Project Title: *“How do people know what’s going on in the world?”*

Project Description: As a class, students will look at 5-10 issues facing the community/world around them. Students will then create a newspaper using school computers as well as a news program, which will be recorded.

Materials:

1. Newspapers or magazines
2. Posterboard (to serve as newspaper background)
3. Computers
4. Recording device (cell phone, video camera, laptop with camera function)
5. If creating a news program, it would be advisable to have a set up to resemble a news program stage so that students can feel like newscasters.

Project directions:

Lesson 1:

During this lesson, the instructor should begin by spending a few minutes asking the students what issues they believe are extremely important to them and their community. Issues may include national issues such as the election, gun control, crime, racial issues, immigration, or other large societal issues. Some students may want to discuss world issues such as terrorism. Local issues can also be discussed such as school issues, testing, school lunches, or any other issue that students believe is important.

After a list has been created, ask each students to pick an issue that they would like to provide their opinion on. After they have picked an issue, students will spend the remainder of the time during lesson 1 to write a short opinion “paper” (paragraph) on the issue they have chosen. At the end of the lesson, collect student work and let them know that at the next lesson they will work together to create a class newsmagazine/newspaper with their issues written up.

Lesson 2:

During the second lesson, students will use their work from lesson 1 to create a “newspaper” or “newsletter.” These newspapers will be laid out on a poster board or can be compiled into a newsletter format. Students should take the writings they did and type them up during this lesson. It would be great if they can use the internet or art supplies to include a picture with their writing. The class as a whole will decide on a newspaper or newsletter name. Students should support with the layout of the paper.

If there are enough students, it may be a good idea to do multiple newspapers and/or newsletters so that groups are smaller. Students could be put into groups of 4 and work to create newspapers that have less content but each student gets a greater level of ownership.

Lesson 3:

During the final lesson, news stories will be turned into video recordings where students record their thoughts on the issues they wrote about. Assign responsibilities for all students, so that their roles resemble a news production. Students who want to be on camera, can read the stories that were written in Lesson 1 as if they are anchors/reporters for a news program. Students who do not want to be on camera can be responsible for recording their peers, possibly holding cue cards (with news stories written on them) for the anchors to read. These students could also help create or print visuals that can be recorded to add a visual picture to the news program.



UNIT 5: BIOGRAPHY 1

COMPUTER PROGRAMMER

“Hey, my name is Marvon and I just graduated from college. I received my bachelor’s degree in computer programming and just got my first job making \$73,000. I could not be more excited. I have worked hard in high school and college and am ready to start working full time doing something I love, working on computers.

I am going to tell you a little bit about what I do as a computer programmer, but forgive me, because I am just starting and have not really done the job yet. As a programmer, I will write computer programs and build the website for the company I work for. I will also be responsible for updating current programs that the company has. The main thing I will be doing is coding, which is essentially the language of computers. I am super excited.

I became excited about computer programming as child playing video games. I loved what I saw and I wanted to know how they were created. I started learning about this in high school and continued it in college. Today, I may not be making video games (what an amazing job that would be), but I will be using the same skills and technology to code programs for another company.

Having not been a computer programmer before, I am not sure exactly what it takes to be great, but I believe that I need to demonstrate the following qualities. I will need great concentration skills. Coding requires you to be focused at all times, so focus will be important. When working with computers it is easy to run into problems, and I will need to troubleshoot those problems (fancy way of saying fix). I also believe that it is important to be detail oriented. This means that I follow instructions and stay focused on the step-by-step process or my work can be ruined. Lastly, I need to be creative to develop the coolest looking programs and websites possible. Sounds fun right? If so, you should begin to think about this as a possible career path.”



UNIT 5: BIOGRAPHY 2

CAMERA OPERATOR (JOURNALISM AND BROADCASTING)

“Greetings from the set of your local news channel. My name is Jose and I am lucky enough to be a camera operator for the local news. I have a variety of responsibilities that I want to tell you about. First, I am responsible for filming the morning and evening news programs. To do this, I first set up the cameras, check the lighting in the studio, get the tapes ready and then do the filming. I also get to go out to different locations and film stories with our reporters (I really like this part of my job because I get to see some really fun stuff).

The other big part of my job is working with the team of people at the news station to plan out the shows. We talk about all of the big events going on in our world (like the election) and then we plan out the story we are going to tell on the news. When I decided to become a camera operator, I did it because I love technology, especially video recording equipment. I never thought I would get to be a part of actually deciding what goes on the news, but I do, and I love it.

To become a camera operator I finished high school and then went to get a 2-year degree at a local community college. After finishing that degree, I realized I wanted to learn more about video production (such as editing, sound, and lighting) so I went back to school and got my bachelor's degree. This was a good decision. Just going to school for those extra two years brought my salary up from \$33,000 to \$50,000 in just one year. That is a \$17,000 dollar raise. Who says school doesn't pay?

To be great at my job, I believe I have to have certain qualities. First, I believe I am a creative person. I need to be creative when thinking about what stories to put on the news and how to record them. I need to have strong computer and technical skills. I do a lot of filming, but I also do a lot of editing and that is all done on the computer. I also feel like I need to have great communication skills because I work on a team and we are only successful if we listen to each other and speak in positive ways.

I love my job, and if you love video equipment, television and movies you may love it, too.”



UNIT 5: BIOGRAPHY 3

CELL PHONE SALESPERSON (TELECOMMUNICATIONS)

“Hi, my name is Tasha and I am a 19-year-old college student. I graduated high school last year and am pursuing a degree in communications. My parents really wanted me to get a job, plus I need to pay for college, so I am working at a local cell phone store as a salesperson. I’ll be honest, I don’t make a lot of money (\$11/hour), but I have the ability to receive bonus pay if I sell a certain amount of phones. Plus, the company promotes people quickly to be managers. So, I may only make \$11 an hour now, but there is a chance that I will be promoted some day and make a lot more.

Being a salesperson requires me to be friendly to customers right away. I mean who wants to walk into a store and be treated bad. I also need to know and be able to explain the most recent phones and technology so that when people have questions I can provide answers. As a salesperson it is also my responsibility to be able to convince people to buy our phones. If I cannot convince people that our phones are better, then we will not make any money. Plus, the more phones I sell the bigger my bonus is.

Being a salesperson requires many important qualities, but it is also teaching me to have certain qualities that will help me later on in life. First, I learn how to work with customers who can be very nice but also not nice. I know this will help me in whatever job I have later on in life. I also get to work on a team with multiple people. We have a lot of fun together, but we also work hard and this is a life long skill. Another skill I am learning is persistence. What does that mean you ask? Persistence is never giving up even when things get hard. I’ll be honest, there are many days when no one listens to me and I don’t sell a thing. It would be easy to give up and quit, but if I can show persistence, I may be able to sell 5 cell phones in a row. This is one of the most important life skills I can learn as I move into a full time career.

Finally, I believe I am learning how to sell things to other people. I may continue being a salesperson or I might move into a new job. Whatever job I end up doing, it will be important to know how to sell my ideas and my thoughts to whomever I work with, so this is a life long skill as well. This is my job, and it may be yours as well. Good luck!”

UNIT 6: HUMAN SCIENCES AND EDUCATION

Unit Objective: Students will be able to discuss human sciences and education in relation to their community and how they might one day fit into that career field.

Unit Project: “What would make my community great?” As a class, students discuss problems in their community, school, or neighborhood. The problem could be literally anything that the class agrees is something that is fixable. After deciding on a problem, the class will work together to identify how they will go about solving and fixing the problem.

LESSON 1: INTRODUCTION

Lesson Objective: Students will be able to describe what a career in the Human Sciences and Education entails as well as why it is vital to have different people filling a variety of needs to keep everyone healthy.

Career Skill Focus: Action-Oriented

Be a doer. Be someone who is known for getting things done.



STARTER ACTIVITY

POPCORN DISCUSSION

WHAT WOULD MAKE MY COMMUNITY GREAT

The starter for today involves a class discussion. To do this well, it is important that the instructor bring a bag of popcorn for a class snack while having a class discussion.

The discussion will center on getting ideas from students regarding the problems they see in their community that they believe can be changed or fixed. These problems could center around trash pick up, graffiti clean up, unused space in the community that could be used better, etc. For the starter, spend 5 minutes introducing the concept and then asking students for their ideas.



LESSON INTRODUCTION

After thanking everyone for their thoughts and ideas, it is important for the instructor to let students know that their ideas will be revisited during the unit project time.

Next, the instructor should introduce the career field of focus this week...human sciences and education.

INSTRUCTOR

“Today we will hear from a community member in this career field.”



STARTER ACTIVITY

POTENTIAL INTERVIEW QUESTIONS CAN BE FOUND IN THE APPENDIX

COMMUNITY CONNECTION

A local government or public safety professional will speak to students about their job in this career field/pathway. Students will have the opportunity to ask questions.

****Please see COMMUNITY CONNECTION documents to support this activity in the appendix. This includes speaker talking points and a support guide for lining up guest speakers.****



LESSON INTRODUCTION

Ask students to share a few things that they learned about this career field from listening to the speaker.

“What did you find interesting about the person’s job? Is there something you would like to learn more about with regards to this job?”



LESSON

After speaker is done move in to Think/Pair/Share activity.

Think/Pair/Share activity

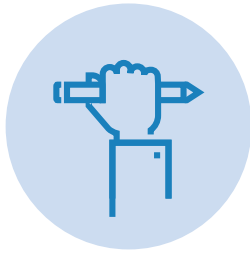
Students will now use these definitions to try and figure out specific jobs that fall into each of these categories. To do this, the instructor will use Think, Pair, Share again. First have students THINK about these career pathways and write down as many jobs as they can possibly think of.

After 2 minutes of thinking, PAIR each student with a partner. Have them talk about each job and determine if it really is in this career field and if it is, which pathway is it in.

Lastly, have students SHARE out their finding. This whole process should not take more than 5-6 minutes (no more than 2 minutes per concept).

When students are sharing out their thoughts use the graphic organizer that is found in their career journal to record these specific jobs and ask students to do the same. (Task #3)

Finish up the lesson by once again providing praise for good effort and spend a minute reviewing each of the pathways and their necessity to the community the students live in.



LESSON PROJECT

“What would make my community great?” As a class, students will discuss problems in their community, school, or neighborhood. The problem could be literally anything that the class agrees is something that is fixable. After deciding on a problem, the class will work together to identify how they will go about solving and fixing the problem.

***Please refer to the end of the Unit for a full project description and instructions.*



WRAP UP

COMMUNITY CONNECTION

In closing, encourage students to complete this activity and think about what job opportunities exist for them in your community.

LESSON 2: EXPLORATION

Lesson Objective: Students will explore different careers within the human services and education career field and begin to see how their interests and strengths fit into this field.



STARTER ACTIVITY

POTENTIAL INTERVIEW QUESTIONS CAN BE FOUND IN THE APPENDIX

STAFF INTERVIEW

For today's starter, students will be given the opportunity to interview a teacher/staff member of the school. Many students never get the opportunity to get to know the staff in the school due to the demands of the school day. It is quite impactful for staff being able to tell their story and share with students why they entered the education field.

Once again, the staff member selected does not need to be a teacher, they can fill any role within the school. The biggest criteria is to choose a staff member who is well liked by the students so that the students will have buy-in for the interview time.



LESSON INTRODUCTION

Ask students to share a few things that they learned about this career field from listening to the speaker.

“What did you find interesting about the person's job? Is there something you would like to learn more about with regards to this job?”



LESSON

“For today's lesson you will spend time reading about four different people who have entered the Human Services and Education career field. You have four people who represent the four specific pathways: government, human services, education, law/public safety.”

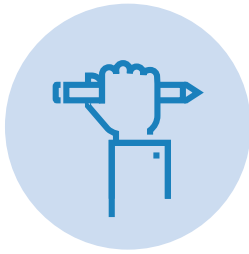
INSTRUCTOR

WHAT DO OTHERS SAY ABOUT THEIR CAREERS?

- Divide the class into groups of four and have each group read about one of the jobs within the career field. ****Biographies can be found at the end of the unit.****
- As they read, ask students to think about 2-3 interesting facts that they learn as well as 1-2 similarities they have in common with the person they read about.
- When all groups have finished reading and recording, have each group share about the person/career they read about so that the other students can hear about the varying career options. As students are listening to their classmates share about the other two biographies, they can write down their interesting facts and similarities in the remaining two boxes.
- When everyone is done, spend 2-3 minutes talking about these jobs as well as the jobs listed in the chart found in the career chart. Have students share out 1-2 potential careers they'd be interested in.

CAREERS IN HUMAN SCIENCES AND EDUCATION

GOVERNMENT/ PUBLIC ADMINISTRATION	<ul style="list-style-type: none"> • Mail Carrier • State Lawmaker • News Reporter • Service Manager 	<ul style="list-style-type: none"> • Detective • Financial Examiner • Charity Director
HUMAN SERVICES	<ul style="list-style-type: none"> • Hair Stylist • Child Care Teacher • Translator • Marriage Therapist 	<ul style="list-style-type: none"> • Music Director • Pastor • Author • Parks and Recreation Counselor
LAW, PUBLIC SAFETY, CORRECTIONS, SECURITY	<ul style="list-style-type: none"> • Lawyer • Child Social Worker • Police Officer • Judge • Fire Fighter 	<ul style="list-style-type: none"> • Forest Fire Investigator • Private Detective • Security Guard • Child Advocate
EDUCATION AND TRAINING	<ul style="list-style-type: none"> • Elementary, Middle, High • School Teacher • Librarian • Sports Coach • College Professor 	<ul style="list-style-type: none"> • Athlete • Fitness Instructor • Literacy Teacher • Musical Instrument Instructor



LESSON PROJECT

Students will spend the remainder of the time working on their Community Problem project. This project takes a level of planning prior to the session.

Make sure each student has a job to do, or this can become 1-2 people working while the rest don't do anything. For this project to not only be effectively done, but also impactful in the students' lives, each student will need a responsibility.

Continue to refer to the project description at the end of the unit.



WRAP UP

BEACH BALL GAME

The wrap up today will again involve the beach ball. The class will be standing in a circle and students will throw the ball to another student in the class.

The student who catches the ball will have to answer the following question: "One job that I can see myself in, within this career field is..."

Once the student has answered have him/her pass the ball to another student.

This is a short activity, but it is effective in the sense that students are able to quickly recall specific jobs they either learned about or read about.

LESSON 3: DEMONSTRATION

Lesson Objective: Students will demonstrate their understanding of the human services and education career field as well as demonstrate who they can be and see themselves being within this career field.



LESSON PROJECT

Students will spend the remainder of the time working on their project. Continue to refer to the project description at the end of the unit.



WRAP UP

PROJECT REFLECTION

Give students 2-3 minutes at the end of the club time to discuss their thoughts on this career field.

INSTRUCTOR

“We are now done with the Human Sciences and Education Unit and I want each of you to spend a few minutes to reflect on the project that we just completed. Please think about something down that you liked about the project. You could also write something new that you learned about the Human Services and Education Career Field. Can you see yourself in these jobs when you are older? This is a time for you to think and share a few thoughts on careers in this field.”

UNIT 6 PROJECT

In regards to the project/s outlined below, please note that these are intended to be project frameworks. The descriptions provide the overall “framework” for the project and an outline of the basic steps involved in accomplishing the goal/s of the project/s.

Prior to beginning each project, instructors should take time to further develop and plan these projects, as there are a number of details that are not included in these descriptions. Due to the vast differences between afterschool programs and their programming structures/resources, these details will vary for every program and thus were intentionally not included in the project descriptions below.

Project Title: *“What would make my community great?”*

Project Description: Students will work in groups or independently to develop survey questions that address “how people feel about their community.” After the survey has been written students will be responsible for administering this survey to community members. Finally, students will look at survey results to determine if/what can be done to solve potential issues.

Materials: No materials are needed for this project with the exception of computers or writing materials. If the class feels like there is a “post-project” (outlined at the end of the directions) materials may be necessary.

Project Directions:

Lesson 1:

You will begin by introducing this project. A great way to introduce the project is revisiting the “warm-up.” Remind students of the concerns they had with their community. Pull out the chart paper or bring students attention to what was written about and review these ideas.

Inform students that the first task of this project is to create a community survey with questions that elicit opinions/ideas about what the people think about their community. The survey can be open ended questions or the questions can be a ratings scale. See below for question examples:

Open Ended examples:

1. What is the best thing about our community?
2. What is the worst thing about our community?
3. If you could change one thing about our community what would it be?
4. Do you feel like we have enough activities for people in our community?
5. If you could make any change to the school what would it be?
6. What is the biggest need not being addressed in our community?

Rating Scale question examples:

1. On a scale from 1-5: How well does our city do educating kids?
2. On a scale from 1-5: Are the parks in our community meeting needs of the citizens?
3. On a scale from 1-5: Are people’s needs being met overall?
4. On a scale from 1-5: Are there enough after school activities for kids?
5. On a scale from 1-5: How happy are people who live in our community?
6. On a scale from 1-5: Are problems in our community addressed in a timely fashion?
7. On a scale from 1-5: How frequently is the library used by residents.

These are examples that can be used to start class discussion. Each community is different and will have their own set of concerns (based off of the warm-up discussion). Encourage students to focus their questions on these ideas.

Finish lesson 1 by having each student (or pairs) create a survey. Encourage students to have 10 questions that they can ask community members. These survey's should be collected so that copies can be made (for multiple people to be surveyed).

Lesson 2:

For lesson 2, you are going to have students give people the survey. This can happen several different ways:

1. The easiest and most efficient way to have people fill out the survey is to ask students to give the survey to teachers in the building and parents when they pick their students up from a program. Make sure that teachers are aware that students may be coming around to give the survey, but this would be efficient and easy. When parents pick up their students at the end of the day, you can also ask those parents to quickly fill the survey out.
2. The second option for delivering the survey would be to go to a local store, community spot or outside the school. The idea would be to find a location where people are frequenting and as the enter/exit the building you ask them to fill out a brief community survey.

This activity will take most of the time. The hope is that each student or group will be able to complete at least 3 surveys. The more that are completed the better because it will provide more information for the work that will be done in Lesson 3.

Lesson 3:

The final piece to this project is to compile the data from the survey and come up with an action plan. The hope is that the survey's reveal several ideas on what the residents believes should be done to make their community better. Students will begin by sharing out what they collected (this information can be written on chart paper so that everyone can follow along).

After all results have been presented, students should be given time to see if there are patterns or things that repeat. This is the opportunity for the class to determine 1 or 2 areas of focus in regards to what needs to be changed.

The remainder of the time, should be used to brainstorm what should be done. Who should the class talk to? What is reasonably possibly? How can they as a class work together to potentially solve and make this problem better? The instructor should write all of the ideas down and then take this information and create an action plan.

DIGGING DEEPER:

Once the project is complete, the class/program can begin to pursue their action plan. Work with program, school, and community leaders to being putting the plan in place to solve the problem.



UNIT 6: BIOGRAPHY 1

MAYOR (GOVERNMENT & POLITICS)

“Hello everyone! Let me first start by saying how great it is that you are learning about careers in our community. My name is Mrs. Smith and I am the mayor of this town. I think being a mayor is the single greatest job because I get to serve EVERYONE in our community by putting new ideas in place, building new buildings, and bringing new businesses into our community. How cool is that?

I also get to work with teachers to help make schools great. I work with the community to build parks and pools (in fact we are close to building a new skate park for all of you skate boarders). It really is a great job. Maybe my favorite part of the job is that every few years I get to be elected. What does the word elected mean? It means that every few years, I tell the people in our community all of my ideas for how to make things better. I tell them what I plan on doing and what I have done that is great. Then the people of this community have the chance to vote for me or someone else to be mayor. I really think that is a cool thing. You and your family (as long as you are 18) get the chance to make a decision on who is going to be mayor and be in charge of the community.

How did I get to this place? I have always loved serving people. After I graduated college I became a teacher and worked at an elementary school. I loved it, absolutely loved it, but I had a hard time with some of the things that were going on in the city. I did not like the fact that parks were closing down, streets were becoming hard to drive on, and I was upset that we did not have library.

I started talking to my friends and other people in the community about my concerns. They said: “you should try to become mayor.” I first laughed at the idea because I loved teaching so much, but then I realized that being mayor is just another way to serve people. So, that year I ran for mayor and put my name into the election. I worked very hard telling people about my ideas and listening to their ideas. That November the people of the community voted me mayor. I am paid \$38,000 a year to be mayor. Best job ever!”



UNIT 6: BIOGRAPHY 2

SOCIAL WORKER (HUMAN SERVICES)

“Hello from the world of social work. My name is Maria and I am in my 3rd year as a social worker. Before I tell you what I do, let me say that I completed a Masters degree in social worker. That means I graduated from high school, went to college for 4 years and then went again for another 2 years, receiving both a bachelors and masters degree. Having earned all of that education, I currently make \$48,000 a year, which is not a lot of money for all of my school, but I don't do my job for the money. I do my job because I want to help others.

My daily job duties vary, but these are the are my primary duties. First, I have to be able to identify people's needs in my community and then determine what type of help they need. I need to work with community organizations that offer help to people so that I can send people if they need that help. I also provide counseling to some of my clients. This means I listen to people's problems and give them advice on what they can do to get better. I also work with a team of other social workers. We meet every week and talk about the problems we are seeing and offer each other help on what to say and do.

I do love my job because I get to help others who need help. This means that I have empathy for other people. I like to think of it like this. Some people have problems in their lives that cause them a lot of heartache. As a social worker, I get to come alongside them and offer them help. It really is great. I think the other main quality that I must have to be great is that I need to be a good listener. Everyday the people I work with tell me their problems. If I don't listen to them I will not be able to offer the best solutions. I also need to stay organized. I work with many people and it is important that I keep everything organized or I might get confused when working with different people. Lastly, I need to be able to work with people from all walks of life.

If all of this sounds good to you and you want to help change the world, one person at a time, become a social worker may be for you. Good luck!”



UNIT 6: BIOGRAPHY 3

PARAPROFESSIONAL (EDUCATION)

“Everyday I wake up; get ready, and head to school to work with a group of kids. I am a teacher, right? Wrong! I am a paraprofessional or a teacher’s assistant. My name is Lois, I am a paraprofessional and I love my job. I don’t make as much money as a teacher does, but that means my job duties are a little bit different and I did not have to go to college for as long. So, how much college did I do and how much money do I make? Well, I did finish high school and then I went to community college and got a 2-year degree. As for my salary, I make about \$25,000 a year.

Everyday, I go to school and I help teachers with their lessons. I work with kids who need extra help as well. I can honestly tell you that my days look different everyday. Some days I am helping a student or students read or do some extra math. Other days, I am helping students take tests who need extra help. Yesterday, I spent most of my day helping a couple of students who were misbehaving and needed extra attention by themselves. You can tell, I do have a lot of different duties, and I only told you about three of them.

I really like being a paraprofessional at this point in my life because at the end of the day I have less responsibility as teachers. The teachers I work with usually stay at school for a few hours grading papers, getting lessons ready, and preparing their rooms. When my day is over, I can leave and go home. This works for me because I have a young daughter to take care of.

I think being a paraprofessional is great because it is a busy job. Working with kids requires a lot of energy. I am pretty much non-stop from the start to the end of my day. It may be busy, but can you imagine a more fun day than hanging out with kids and helping them. I also feel like I get the opportunity to serve kids, teachers and the school and do so in many different ways. It takes a lot of patience as well because kids make mistakes and I have to be calm and not yell when these mistakes happen. Lastly, I am a part of a team, so communication and teamwork is very important.

This is my job and I love it. If you want to be a teacher or in education, I highly recommend being a paraprofessional! ”



UNIT 6: BIOGRAPHY 4

FIREFIGHTER (LEGAL & PROTECTIVE SERVICES)

“Who am I? I make \$46,000 a year. I save peoples lives. I drive huge trucks. I spend my day with a great team of people who have become my best friends. I spend my days making the lives of the people in the community safe. Who am I you ask? My name is Chad and I am a firefighter.

I finished high school and went to college to study business. I liked what I was learning, but I wanted a job where I could help people and be active. I did not want to sit in an office all day, so I looked into becoming a firefighter, and that is what happened. So, what do I do everyday? Hopefully very little.

You see, my hope is that I never receive a call. If I am bored, that means everyone's house is safe and there are no fires, but that is not always the case. So when we receive a phone call that there is a fire, we drive our truck to the house and help put the fire out. Sometimes it is easy and we just spray water on the house. Other times, the fire is really bad and there are people in the building that we have to go in to save. It is really scary, but at the same time there is no greater feeling than coming out of a building that is on fire with a person in your arms, knowing you saved their life.

When there is no fire, we write reports about the emergencies we have responded to. We keep our trucks and equipment clean and make sure they are working really well. We also help people when they are sick. Lastly, and this is one of my favorite parts of the job, we teach kids and people about fire safety to try and prevent fires from happening.

Being a firefighter requires many qualities, but mainly you have to be very brave. When you run into a burning building you are risking your life to save someone. This is what bravery is all about. A firefighter also needs to be able to make decisions quickly. The decisions I make are life and death and because there is a fire going on, I don't have time to think. Lastly, my job requires me to be in great shape. I carry heavy equipment when there is a fire so I need to work out and keep my body in the best shape so that when I am called upon I am ready to save a life. It really is a great job. What are you waiting for?”

NOTES

[illegible]

LINING UP COMMUNITY SPEAKERS FOR THE CAREER UNITS:

1. With your program/site director and instructional team, decide on 2-3 people in the community who could fit the profile as a professional in the specified career field. Decide on which person to prioritize for your initial inquiry. If this person is unavailable, decide who should be asked next and so on. If someone on the team already has a relationship with this person, they should be the one to contact the community speaker.
2. It is recommended to contact the team's preferred person at least 2-3 weeks prior to the scheduled speaking time.
3. Introduce yourself as an instructor at your after school program. If they are unfamiliar with the afterschool program, provide him/her with a general overview of the program.
4. Provide the community member with information detailing the career education curriculum/club (teaching students about specific career fields located in the community).
5. Let the potential speaker know that one of the activities in each unit is inviting a community member in to speak to students for approximately 10-15 minutes about their specific career field. Speakers should be made aware of potential questions/talking points that can be addressed. Speakers should also be made aware that students will be able to ask questions. Let them know that you will provide them with both these lists of talking points and students questions.
6. Provide the speaker with a specific date and time to speak to the club. If there is flexibility in this time frame, give them a few options..
7. Thank speaker for their time. If they are unable to visit the program call choice #2 and repeat steps 3-6.

TALKING POINTS FOR YOUR GUEST SPEAKER

1. Why did you choose this career?
2. What are significant tasks required with this career?
3. What are the working conditions (outdoor/indoor, computer, hands on, etc)
4. What type of training is required?
5. What are the qualifications (high school, college, certifications, etc)
6. What is the job outlook like in Nebraska (will there be more of these jobs in 10 years)
7. What is the salary range?
8. What would be related jobs?
9. Are there any specialty careers within this career (i.e.: underwater welding)?
10. Did you have any idea that you would be doing this job when you were in school?
11. Do you still like doing your job?
12. What is one piece of advice you would give to students regarding your job?

GUEST SPEAKER SUPPORT DOCUMENT

Thank you for agreeing to speak to our afterschool career education club. We appreciate you taking the time out of your schedule to help students learn more about your career field. Speaker talking points have been provided below. These points do not all need to be addressed, but provide an overview of the information that would be helpful to the students. Please use these questions as your general guide in sharing about your career. Additionally, students will be asking you a few questions. These sample questions are below.

SPEAKER TALKING POINTS:

1. Why did you choose this career?
2. What are significant tasks required with this career?
3. What are the working conditions (outdoor/indoor, computer, hands on, etc)
4. What type of training is required?
5. What are the qualifications (high school, college, certifications, etc)
6. What is the job outlook like in Nebraska (will there be more of these jobs in 10 years)
7. What is the salary range?
8. What would be related jobs?
9. Are there any specialty careers within this career (i.e.: underwater welding)?
10. Did you have any idea that you would be doing this job when you were in school?
11. Do you still like doing your job?
12. What is one piece of advice you would give to students regarding your job?

POTENTIAL GUEST SPEAKER QUESTIONS:

1. What is your favorite part of your job?
2. What career did you think you would do when you were our age?
3. What made you decide on your career?
4. What is the best/least favorite part of your job?
5. What was your favorite subject when you were in school?
6. Have you had different jobs within your career?

LOGO GAME (UNIT 1, LESSON 2)

Provide students with a copy of this worksheet. Students will work in pairs to draw and color as many of the company logos as they possible can. Give students 4-5 minutes to complete the activity.

McDonald's		Lego	
Nike		Nickelodeon	
Adidas		XBOX	
Cartoon Network		Gatorade	
Facebook		WalMart	
Nintendo		Apple	
PlayStation		Mercedes Benz	
YouTube		Subway	
Domino's Pizza		Target	
Netflix		CBS	
Taco Bell		Pepsi	

HUMAN TORSO ACTIVITY (UNIT 2, LESSON 1)

Please label the ten body parts on the human torso:

Eyes

Brain

Tonsil

Heart

Lungs

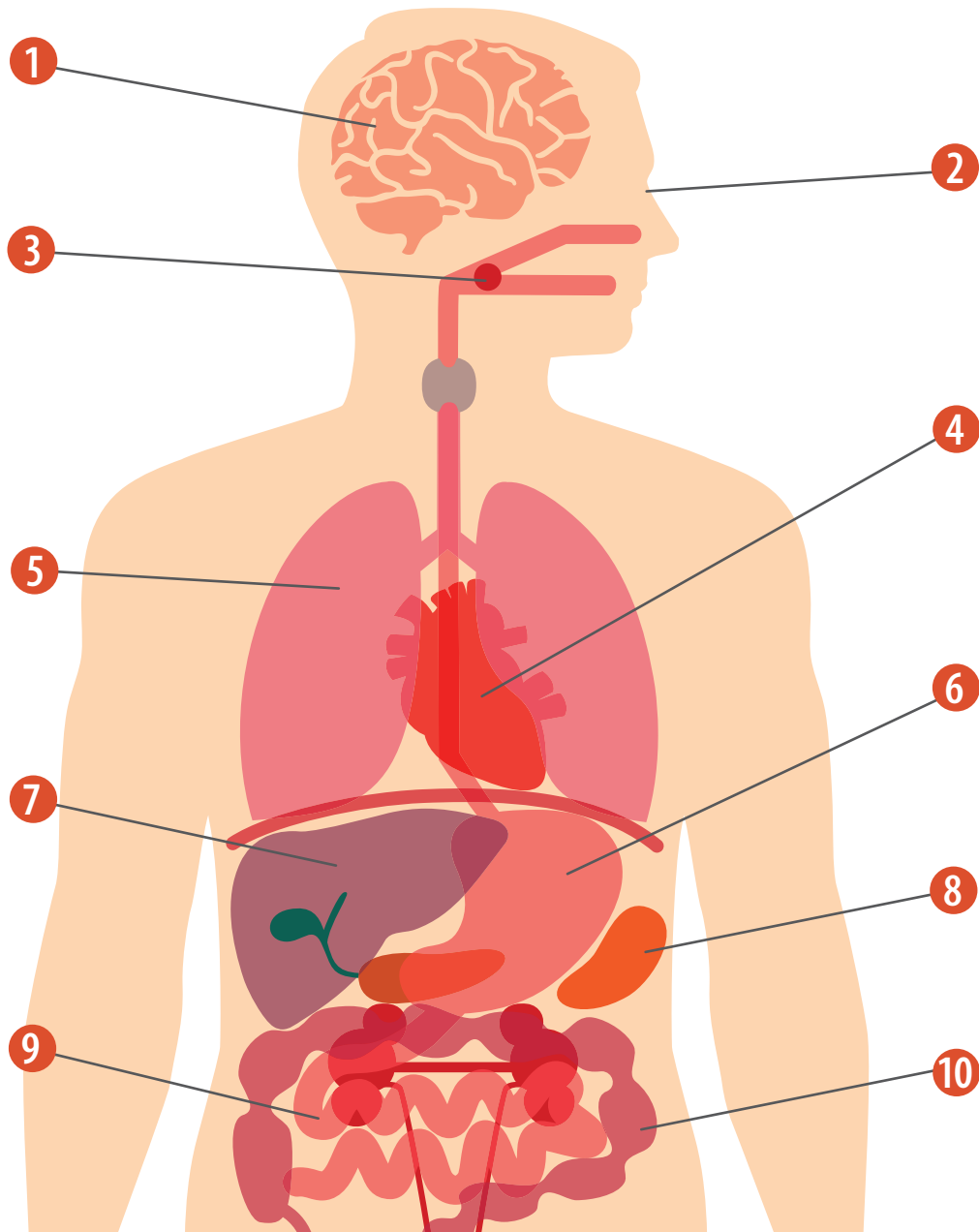
Liver

Stomach

Kidney

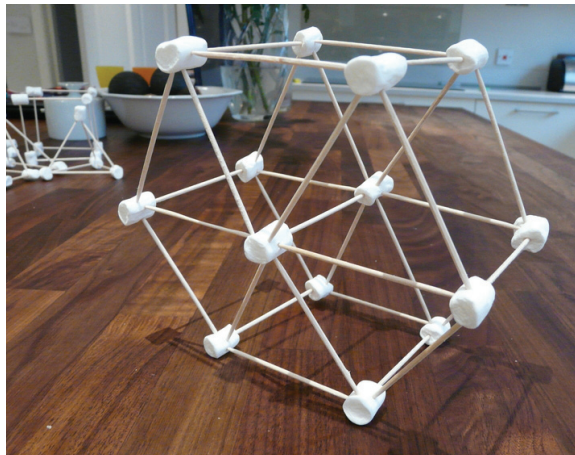
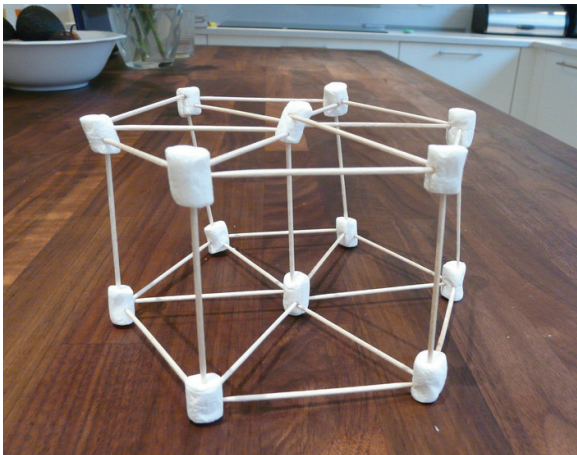
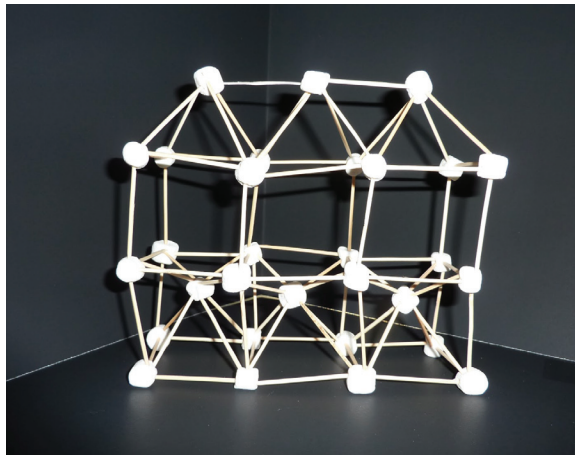
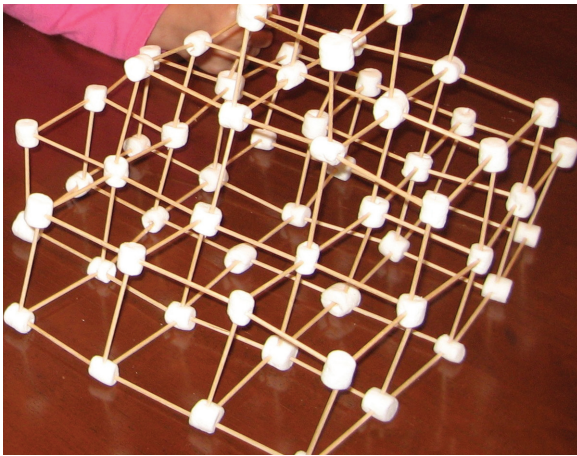
Large Intestine

Small Intestine



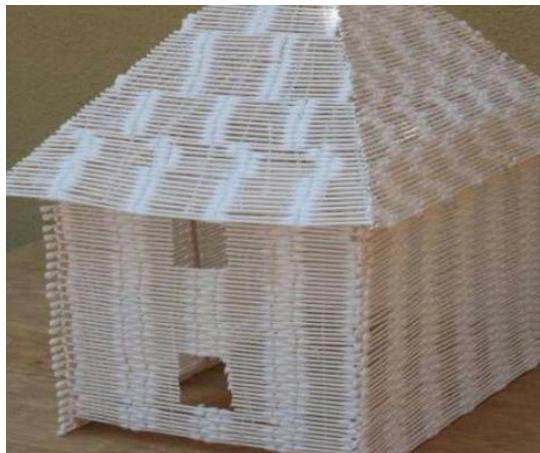
MARSHMALLOW BUILD (UNIT 4, LESSON 1)

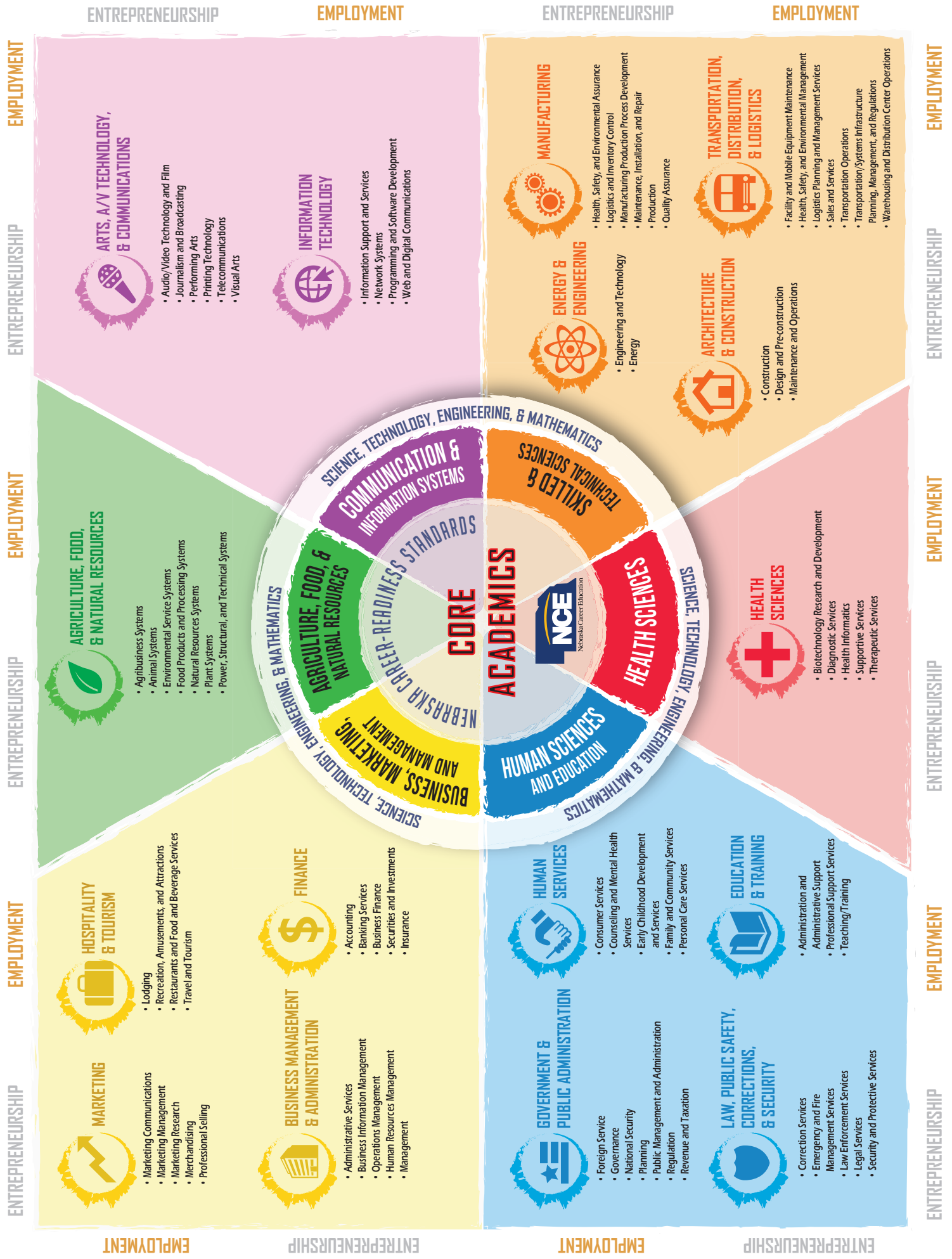
Pictures should only be used to provide a reference/starting point for students.



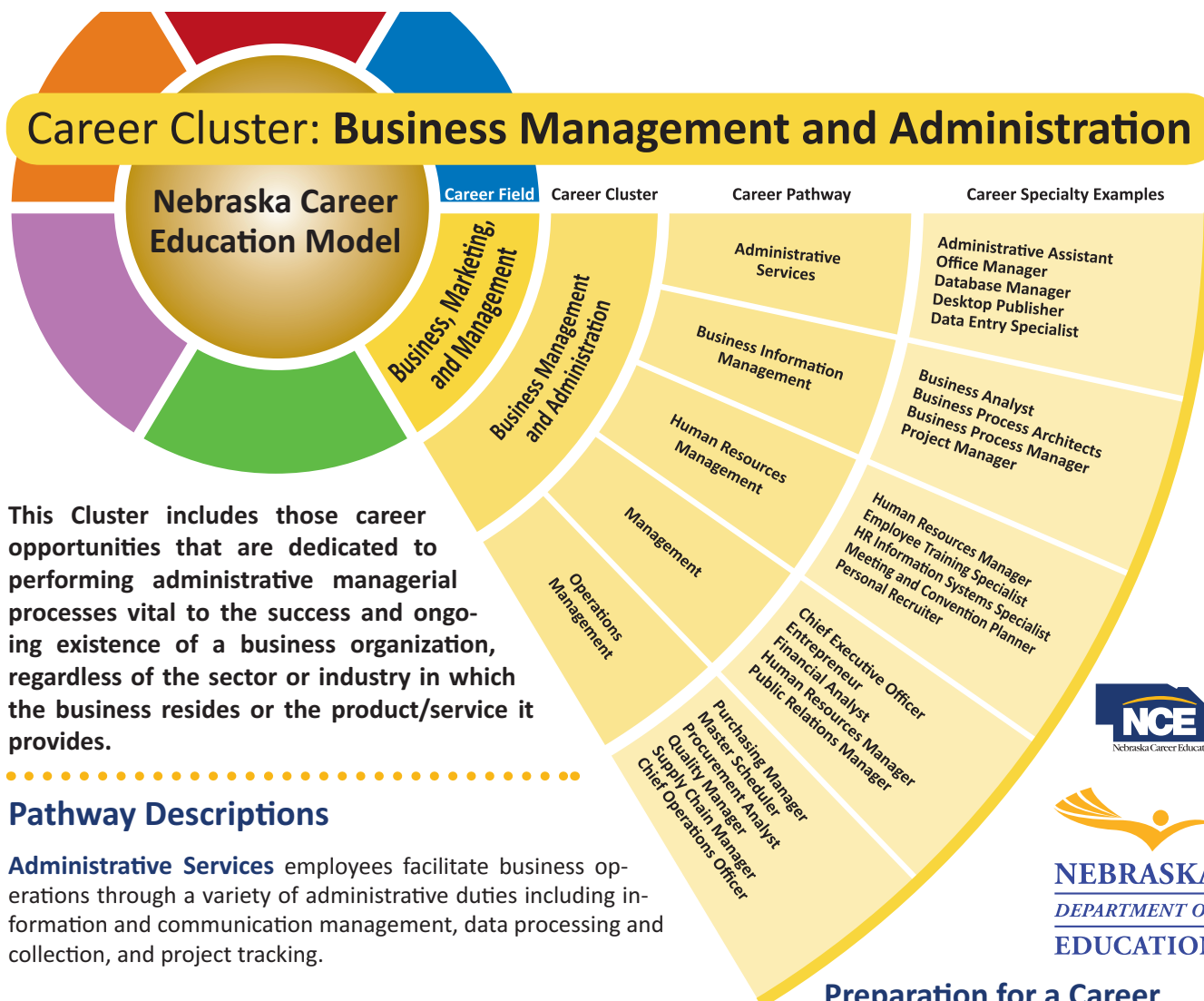
IDEAL COMMUNITY PICTURES (UNIT 4 PROJECT)

Pictures should be used to provide reference points for students.





Career Cluster: Business Management and Administration



This Cluster includes those career opportunities that are dedicated to performing administrative managerial processes vital to the success and ongoing existence of a business organization, regardless of the sector or industry in which the business resides or the product/service it provides.

Pathway Descriptions

Administrative Services employees facilitate business operations through a variety of administrative duties including information and communication management, data processing and collection, and project tracking.

Business Information Management is an umbrella term covering those careers that provide a bridge between business processes/initiatives and information technology. Employees in this area help align business and information technology goals.

Human Resources Management focuses on the staffing activities that involve planning, recruitment, selection, orientation, training, performance appraisal, compensation, and safety of employees.

Management focuses on careers that plan, organize, direct, and evaluate all or part of a business organization through the allocation and use of financial, human, and material resources.

Operations Management focuses on planning, organizing, coordinating, and controlling the resources needed to produce/provide a business's goods and/or services. Examples of activities in Operations Management are quality control, scheduling, procurement, and warehousing.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Intro to Business, Marketing and Management
Personal Finance/Economics
Accounting
Business Law
Management and Leadership
Marketing
Information Technology Applications I and II
Business Communication
Entrepreneurship
Web Design
Introduction to Digital Design

Extended Learning

DECA
Future Business Leaders of America (FBLA)
Econ Challenge
Mock Trial
Participate in youth leadership programs
Student representative on school board, city council, or Chamber of Commerce

Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area



For additional Career Cluster Information visit: www.nebraskacareerconnections.org.

Career Cluster: Finance



This Cluster includes career opportunities that relate to making strategic decisions to obtain, save, protect, and grow the financial assets of businesses and individuals. Individuals working in finance must have strong computation, analytical, and interpersonal skills.

Pathway Descriptions

Accounting encompasses careers that record, classify, summarize, analyze, and communicate a business's financial information/business transactions for use in management decision-making. Accounting includes such activities as bookkeeping, systems design, analysis, and interpretation of accounting information.

Banking Services is primarily concerned with accepting deposits, lending funds, and extending credit. Banking services include cash management, short-term investments, mortgages and other loans, credit cards, and bill payment. Banking services are delivered via a number of different institutions, from commercial banks (the largest group) and other traditional means (savings and loans associations, credit unions, and local banks) to newer ventures through brokerage houses, and the Internet.

Business Finance provides policy management and strategy for (and the implementation of) capital structure, budgeting, and acquisition and investment, financial modeling and planning, funding, dividends, and taxation.

Insurance is an industry that exists to protect individuals and businesses from financial losses, and delivers "products" that transfer risk from an individual or business to an insurance company.

Securities and Investments consists of brokerage firms, investment banks, and stock exchanges, all of which support the flow of funds from investors to companies and institutions. Related services include financial planning, asset management, hedge fund management, and custody services.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Personal Finance
Accounting
Wealth Building and Financial Management
Economics

Extended Learning

Concession management
Competitive business events
DECA
Fed Challenge
Future Business Leaders of America (FBLA)
Local investment club
Manage a school store
Organize a local fundraiser
Start a business
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.



Career Cluster: Hospitality and Tourism



This Career Cluster prepares learners for careers in the management, marketing, and operations of restaurants and other food services, lodging, attractions, recreation events, and travel-related services.

Pathway Descriptions

Lodging employees perform tasks related to the operation of lodging facilities and the care of guests who use these facilities, either through direct guest contact or the provision of background services that enhance the guest experience.

Recreation, Amusements, and Attractions employees find the work demanding but never boring. Good customer service skills are essential. Technical skills are location-specific and training is handled on the job.

Restaurant and Food/Beverage Services employees perform a variety of tasks to maintain operations and promote guest services in eating and drinking establishments.

Travel and Tourism employees focus on the development, research, packaging, promotion, and delivery of a traveler's experiences that may include developing a heritage area for the enjoyment and education of visitors, creating guide books, planning trips and events, managing a customer's travel plans, or overseeing a convention center.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Food, Nutrition and Wellness
Hospitality and Tourism
Culinary Skills I and II
Prostart I and II
Marketing
Introduction to Business, Marketing and Management

Extended Learning

DECA
Family, Career and Community Leaders of America (FCCCLA)
Future Business Leaders of America (FBLA)
Join a committee to plan an event
Join a world language or cultural club
Complete 4-H Foods or Entrepreneurship projects
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area



Career Cluster: Marketing



The Marketing Cluster includes career opportunities whose processes create, communicate, and deliver value to customers and manage customer relationships in ways that benefit the organization and its stakeholders.

Pathway Descriptions

Marketing Communications requires in-depth knowledge and skill of marketing activities that inform, remind, and/or persuade the targeted audience. Examples of marketing communications techniques include advertising, direct marketing, digital marketing, publicity/public relations, and sales promotion.

Marketing Management requires broad knowledge of all marketing functions. These functions are channel management, marketing-information management, pricing, product/service management, promotion, and selling. The cornerstone curriculum of the Marketing Management Pathway can be augmented with contextual skills and understanding in such areas as sports marketing, fashion marketing, food marketing, global marketing, etc.

Marketing Research requires in-depth knowledge of marketing activities that involve determining information needs; designing data-collection processes, collecting data, analyzing data, presenting data, and using data for marketing planning.

Merchandising requires in-depth knowledge of marketing activities focused on efficient and effective product planning, selection, and buying for resale.

Professional Selling requires in-depth knowledge of marketing and management activities performed to determine customer needs/wants and respond through planned, personalized communication to influence purchase decisions and enhance future business operations.

Preparation for a Career in this Cluster Includes...

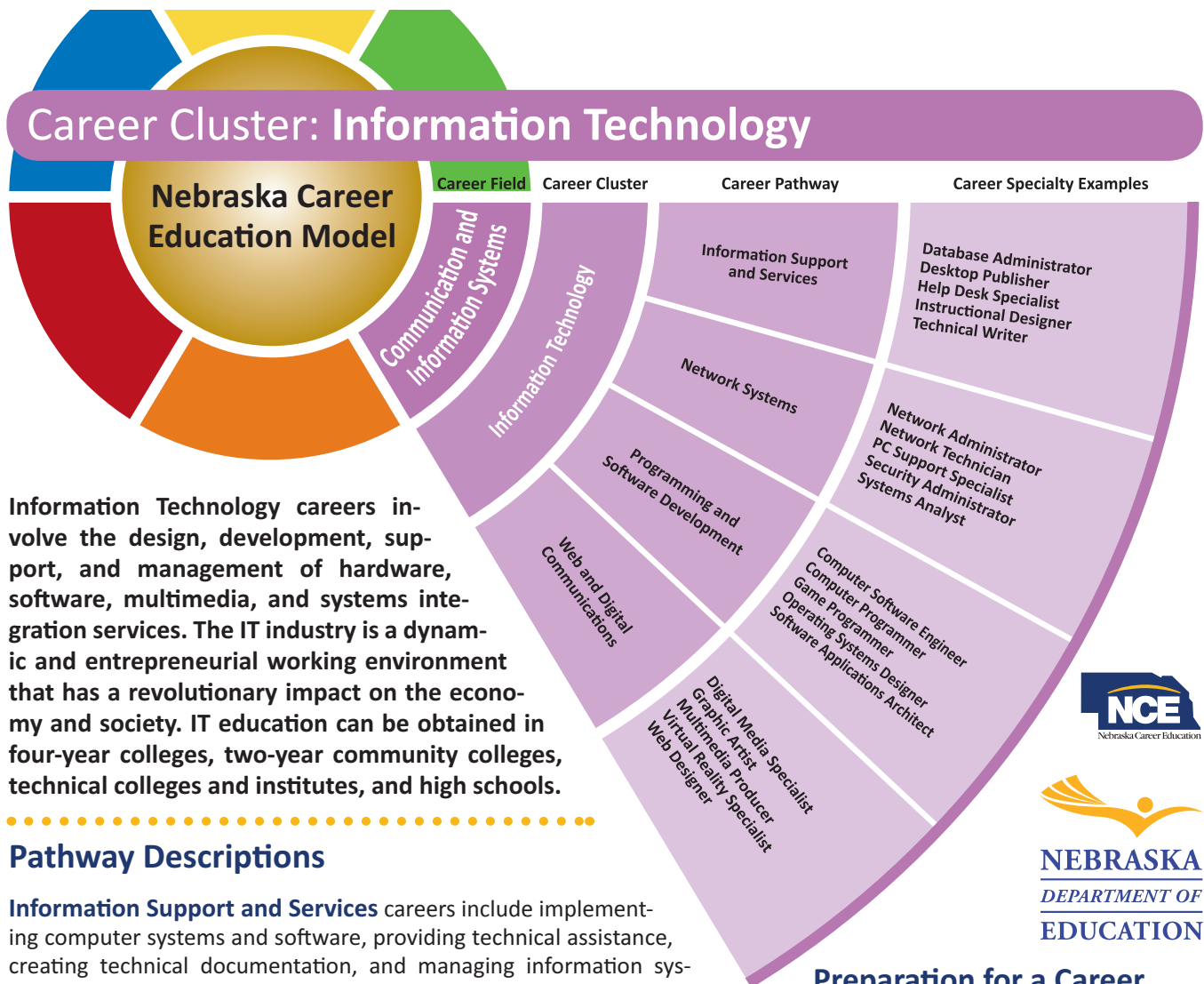
Nebraska Career Education Coursework

Marketing
Entrepreneurship
Marketing Management
Advanced Marketing

Extended Learning

Class fundraisers
DECA
Future Business Leaders of America (FBLA)
Manage a school store
Student Government
Join Junior Achievement
Participate in youth leadership programs
Start a business
Visit the Chamber of Commerce
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.



Information Technology careers involve the design, development, support, and management of hardware, software, multimedia, and systems integration services. The IT industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society. IT education can be obtained in four-year colleges, two-year community colleges, technical colleges and institutes, and high schools.

Pathway Descriptions

Information Support and Services careers include implementing computer systems and software, providing technical assistance, creating technical documentation, and managing information systems.

Network Systems careers involve network analysis, planning, and implementation, including design, installation, maintenance, and management of network systems.

Programming and Software Development careers involve designing, implementing, and maintaining computer systems and software. Knowledge in computer operating systems, programming languages, and software development is essential.

Web and Digital Communications careers involve creating, designing, and producing interactive multimedia products and services, including development of digitally-generated or computer-enhanced media.

Preparation for a Career in this Cluster Includes...

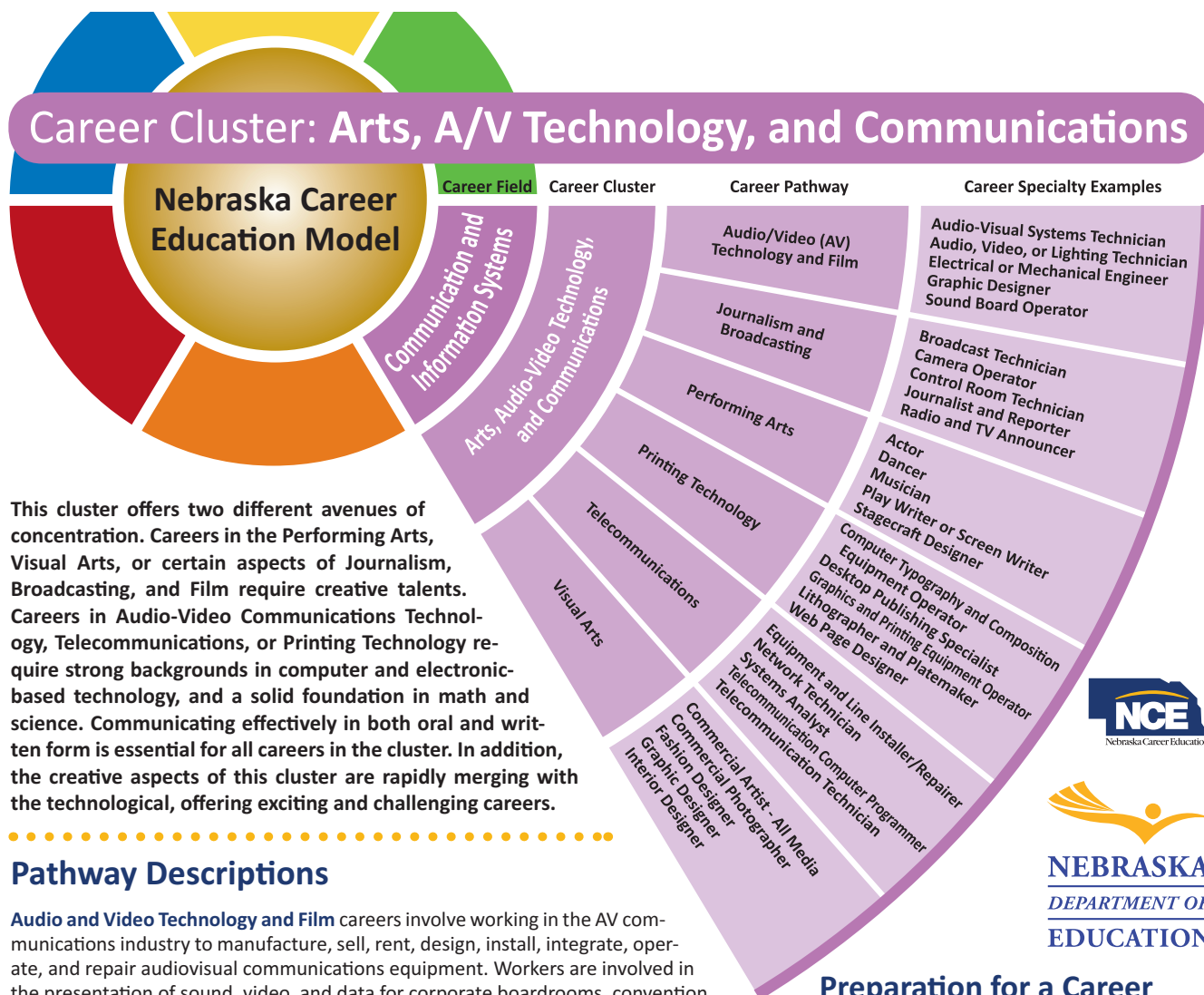
Nebraska Career Education Coursework

Information Technology Applications I
Information Technology Applications II
Information Technology Fundamentals
Information Technology Support
Network Systems
PC Support and Maintenance
Programming I
Programming II
Introduction to Digital Design
Digital Media
Web Design

Extended Learning

Maintain a school website
Future Business Leaders of America (FBLA)
SkillsUSA
Prepare school multimedia/video projects
Create a community web site or promotional video
Help individuals use a computer
Set up computers and install software
Create a webpage
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.



This cluster offers two different avenues of concentration. Careers in the Performing Arts, Visual Arts, or certain aspects of Journalism, Broadcasting, and Film require creative talents. Careers in Audio-Video Communications Technology, Telecommunications, or Printing Technology require strong backgrounds in computer and electronic-based technology, and a solid foundation in math and science. Communicating effectively in both oral and written form is essential for all careers in the cluster. In addition, the creative aspects of this cluster are rapidly merging with the technological, offering exciting and challenging careers.

Pathway Descriptions

Audio and Video Technology and Film careers involve working in the AV communications industry to manufacture, sell, rent, design, install, integrate, operate, and repair audiovisual communications equipment. Workers are involved in the presentation of sound, video, and data for corporate boardrooms, convention centers, classrooms, theme parks, stadiums, and museums.

Journalism and Broadcasting workers gather information, prepare stories, and make broadcasts to inform the public about current events. Technical support workers install, test, repair, set up, and operate electronic equipment used to record and transmit radio, television, and cable programs as well as motion pictures. Engineers and supervisors oversee the technicians who operate and maintain the broadcasting equipment.

Performing Arts careers include individuals, groups, and businesses involved in theatrical and musical performances, such as theatrical production companies, actors, agents for actors, costume design companies, and lighting and stage crews. Voice and instrumental musical performers and dancers are also included in this pathway.

Printing Technology workers are involved in one of the three stages of the printing process - prepress, press and binding, or postpress. The printing industry is rapidly moving toward compete digital imaging and computerization.

Telecommunications specialists focus on the interaction between computers and communications equipment that provide information in the form of data, graphics, and video. Telecommunications equipment technicians, installers, and repairers set up and maintain this sophisticated equipment.

Visual Arts careers are generally categorized into two groups - fine art and commercial art. Fine artists include painters and sculptors working with mediums such as oils, acrylics, pen and ink, clay and computers. Commercial artists provide service to clients such as corporations, retail stores, and advertising firms.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Introduction to Media
Media Production I
Media Production II
Introduction to Digital Design
Intermediate Digital Design
Advanced Digital Design

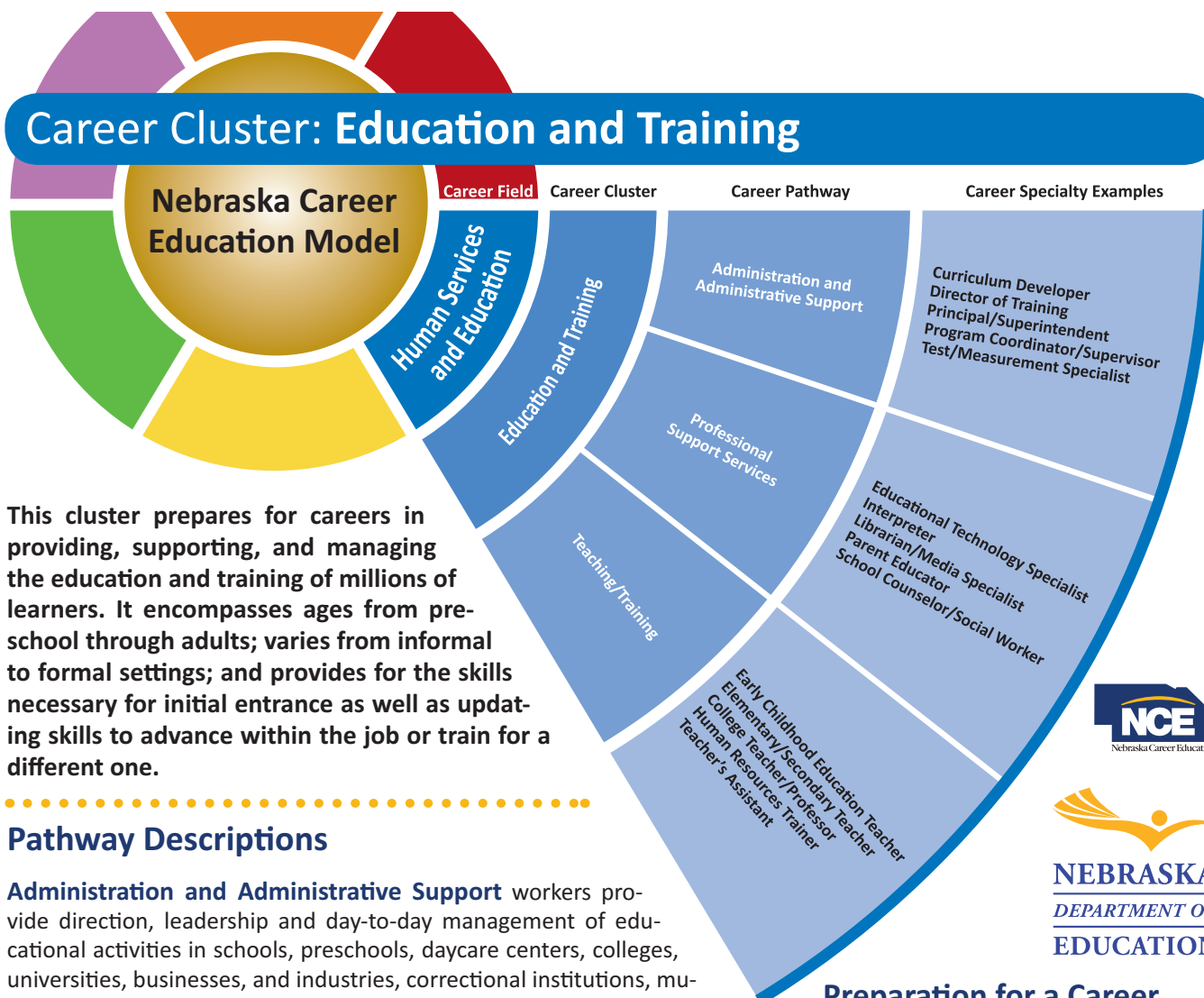
Extended Learning

Choir
Debate or Speech Team
Drama Club
Marching Band
School newspaper staff
School play or musical
Yearbook staff
Act in a community production
Create a community promotional video
Join community band, choir, orchestra, or theatre
Participate in a community art project
Take dance lessons
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area



For additional Career Cluster Information visit: www.nebraskacareerconnections.org.

Career Cluster: Education and Training



This cluster prepares for careers in providing, supporting, and managing the education and training of millions of learners. It encompasses ages from pre-school through adults; varies from informal to formal settings; and provides for the skills necessary for initial entrance as well as updating skills to advance within the job or train for a different one.

Pathway Descriptions

Administration and Administrative Support workers provide direction, leadership and day-to-day management of educational activities in schools, preschools, daycare centers, colleges, universities, businesses, and industries, correctional institutions, museums, job training, and community service organizations.

Professional Support Services workers represent a variety of highly specialized occupations that are critical to our education and training system. Counselors, psychologists, social workers, speech-language pathologists and audiologists assist with personal and family needs, mental health assistance, educational goals, and career decision making.

Teaching and Training workers must have the ability to communicate, inspire trust and confidence, and motivate learners, as well as understand their educational and emotional needs. Teachers must be able to recognize and respond to individual differences in diverse learners, and employ different teaching/training methods that will result in higher learner achievement.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

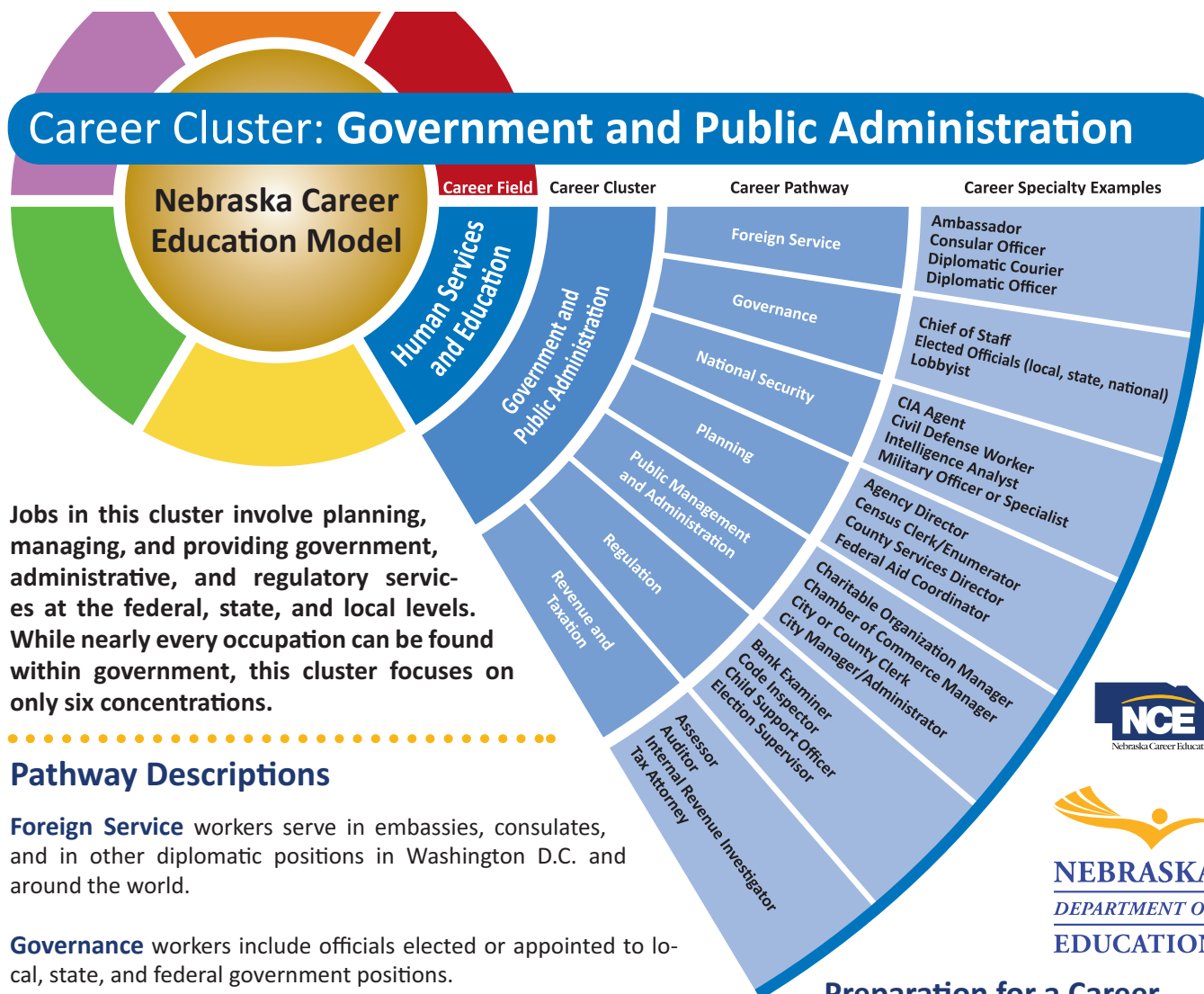
Introduction to Human Science and Career Essentials
Human Food, Nutrition and Wellness
Life and Career Readiness
Human Growth and Development
Child Development
Community and Career Leadership
Psychology
Parenting Decisions

Extended Learning

Future Educators Association (FEA)
Family, Career and Community Leaders of America (FCCLA)
Athletics
Peer Mediation
Serve as a mentor or tutor
Student Council
4-H Junior Leader
Coach Little League Sports
Library Volunteer Aide
Member of Scouting Organizations
Provide Child Care
Teach Religious Classes
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.

Career Cluster: Government and Public Administration



Jobs in this cluster involve planning, managing, and providing government, administrative, and regulatory services at the federal, state, and local levels. While nearly every occupation can be found within government, this cluster focuses on only six concentrations.

Pathway Descriptions

Foreign Service workers serve in embassies, consulates, and in other diplomatic positions in Washington D.C. and around the world.

Governance workers include officials elected or appointed to local, state, and federal government positions.

National Security workers protect American interests around the world and provide for a safe environment for American citizens.

Planning workers develop land use policies, promote best use of a community's resources, and provide data for officials to make informed decisions.

Public Management and Administration workers are stewards of public resources and work in positions within local, state, or federal agencies.

Regulation workers protect our health, safety, and environment as well as ensure the integrity of our financial transportation and public utilities.

Revenue and Taxation workers ensure that governmental units collect tax dollars, review tax returns, conduct audits, and collect overdue tax dollars.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Intro to Human Services and Resources
Business Law
International Business
Information Technology Applications
Accounting
American Government and Comparative Political Systems

Extended Learning

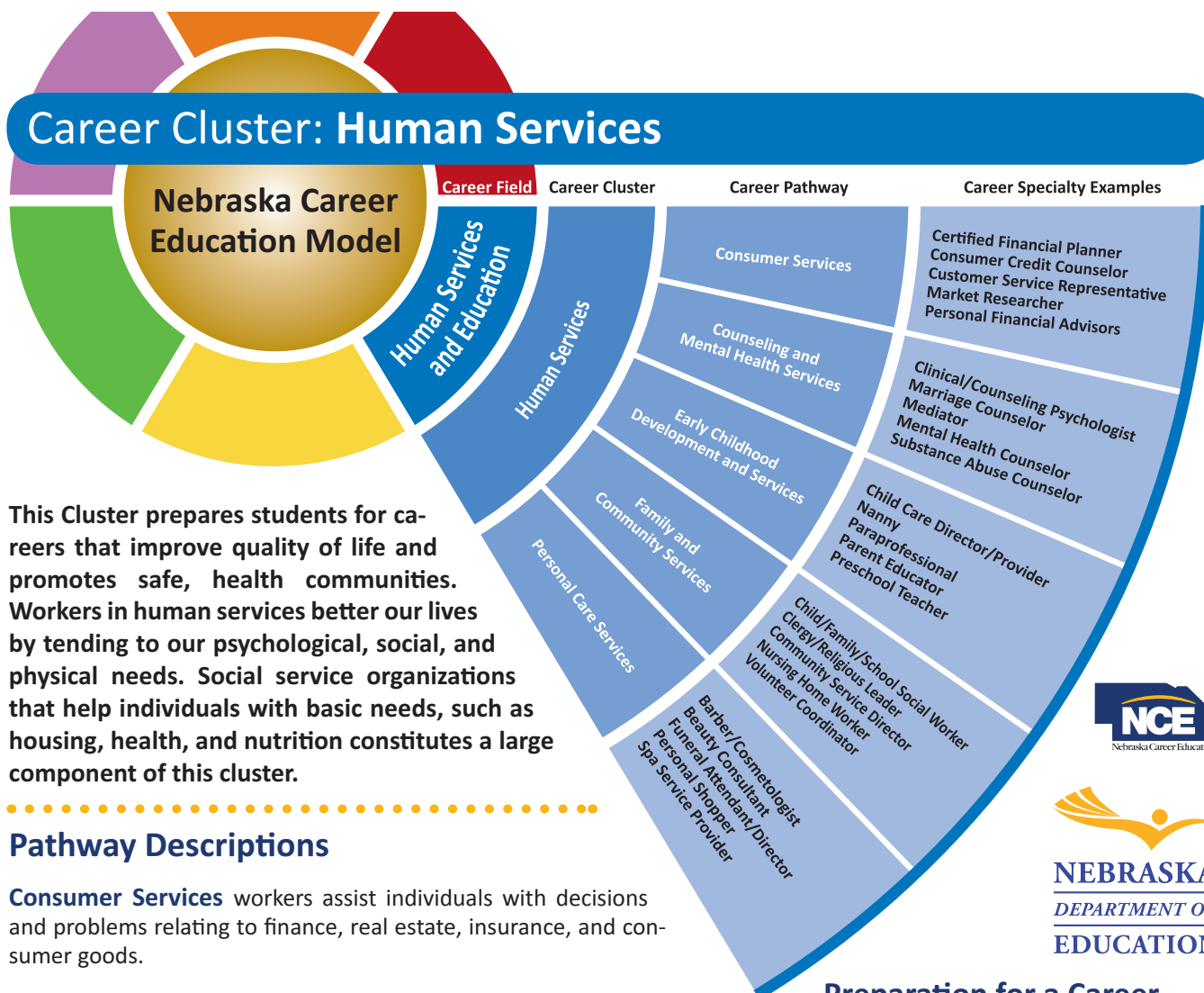
Debate Team
Mock Trial
Jr. Reserve Officers' Training Corps (JROTC)
Speech Team
Student Council
Other Student Organizations with a Leadership Focus
Attend Local Government Meetings
Boys and Girls State
County Government Day
Community Service in Occupations in this Cluster
Junior Achievement
Leadership Development Programs

Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.



Career Cluster: Human Services



This Cluster prepares students for careers that improve quality of life and promotes safe, health communities. Workers in human services better our lives by tending to our psychological, social, and physical needs. Social service organizations that help individuals with basic needs, such as housing, health, and nutrition constitutes a large component of this cluster.

Pathway Descriptions

Consumer Services workers assist individuals with decisions and problems relating to finance, real estate, insurance, and consumer goods.

Counseling and Mental Health Services workers assist people with personal, family, education, mental health, and career decisions and problems. Mental health care may be provided in hospitals, clinics, schools, or private settings.

Early Childhood Development and Services workers nurture and teach children. They provide services in childcare centers, nursery schools, preschools, public schools, private households, family childcare homes, and before- and after-school programs.

Family and Community Services workers help the homeless, housebound, and infirm cope with circumstances of daily living; counsel troubled and emotionally disturbed individuals; train or retrain the unemployed or underemployed; care for the elderly and the physically and mentally disabled; help the needy obtain financial assistance; and solicit contributions for various social services organizations.

Personal Care Services workers assist individuals with their personal appearance, including shampooing, cutting, coloring, and styling hair; giving manicures, pedicures, and scalp, and facial treatments; providing makeup analysis; cleaning and styling wigs and hairpieces; and providing personal fitness training. Also, within personal care services, funeral directors and attendants make funeral arrangements for grieving families.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

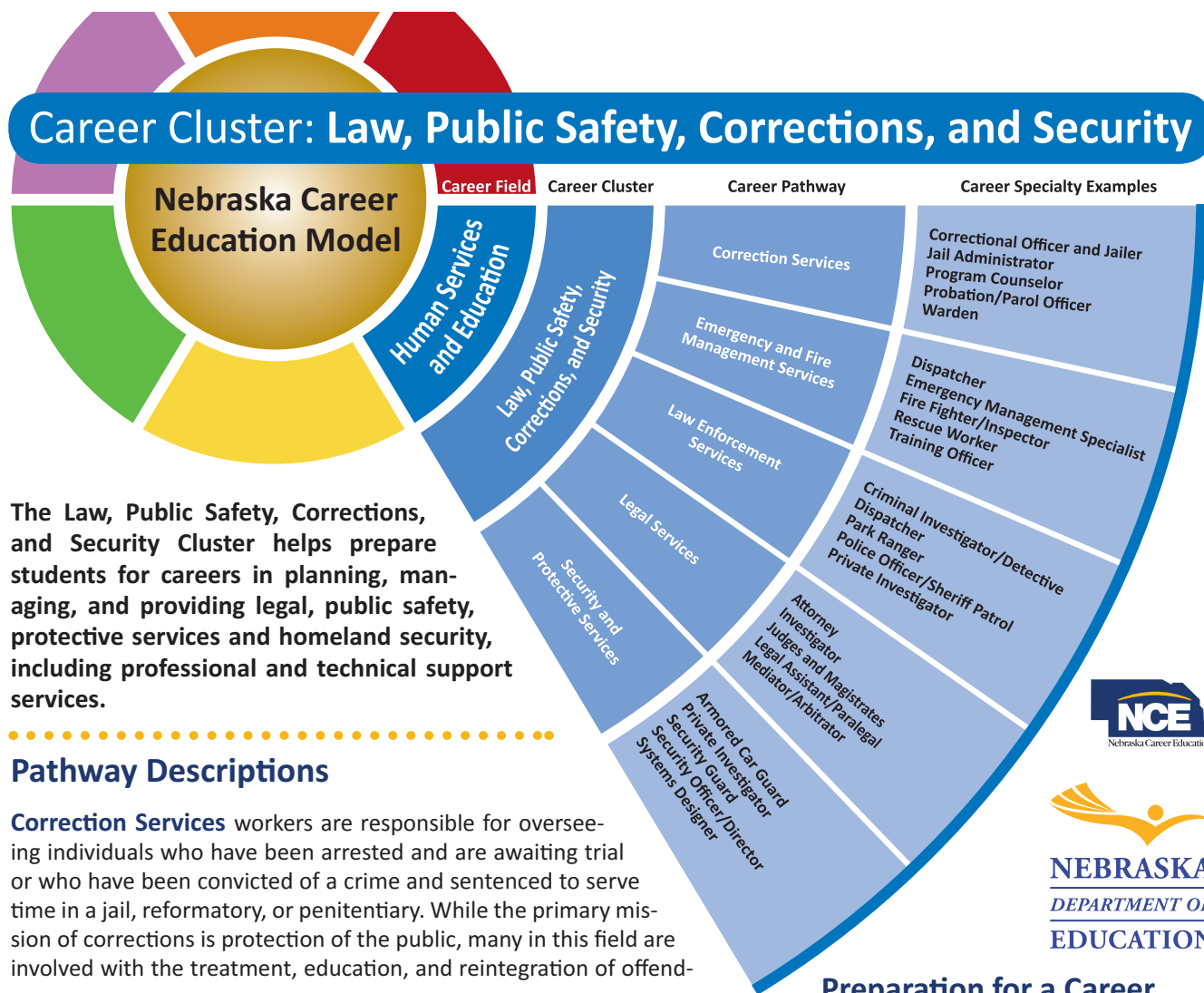
Introduction to Human Science and Career Essentials
Human Food, Nutrition and Wellness
Life and Career Readiness
Personal Finance
Human Growth and Development
Child Development
Community and Career Leadership
Textile Foundations
Consumer Economics
Psychology
Parenting Decisions
The Business of Textiles Clothing and Human Behavior
Advanced Human Food Nutrition and Wellness

Extended Learning

Family, Career and Community Leaders of America (FCCCLA)
Peer Mediation
Serve as Mentor or Tutor
Other Organizations that have a Strong Community Service Component
Scouting Organizations
Work with Individuals who are Aged or Disabled
4-H Family Life Programs
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.

Career Cluster: Law, Public Safety, Corrections, and Security



The Law, Public Safety, Corrections, and Security Cluster helps prepare students for careers in planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

Pathway Descriptions

Correction Services workers are responsible for overseeing individuals who have been arrested and are awaiting trial or who have been convicted of a crime and sentenced to serve time in a jail, reformatory, or penitentiary. While the primary mission of corrections is protection of the public, many in this field are involved with the treatment, education, and reintegration of offenders.

Emergency and Fire Management Services workers help protect the public by rapidly responding to a variety of emergencies. They may be called upon to put out a fire, treat injuries, or perform other vital functions.

Law Enforcement Services workers protect lives and property. Law enforcement officers have duties that range from controlling traffic to preventing and investigating crimes. They maintain order; enforce laws and ordinances; issue traffic summonses; investigate accidents; present evidence in court; serve legal documents for the court system; and apprehend, arrest, and process prisoners.

Legal Services workers affect nearly every aspect of our society. Workers in the Legal Services pathway form the backbone of this vital system, linking it to society in many ways. For this reason, they hold positions of great responsibility and are obligated to adhere to a strict code of ethics.

Security and Protective Services workers often work in public buildings protecting property by inspecting people and packages entering and leaving the building.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

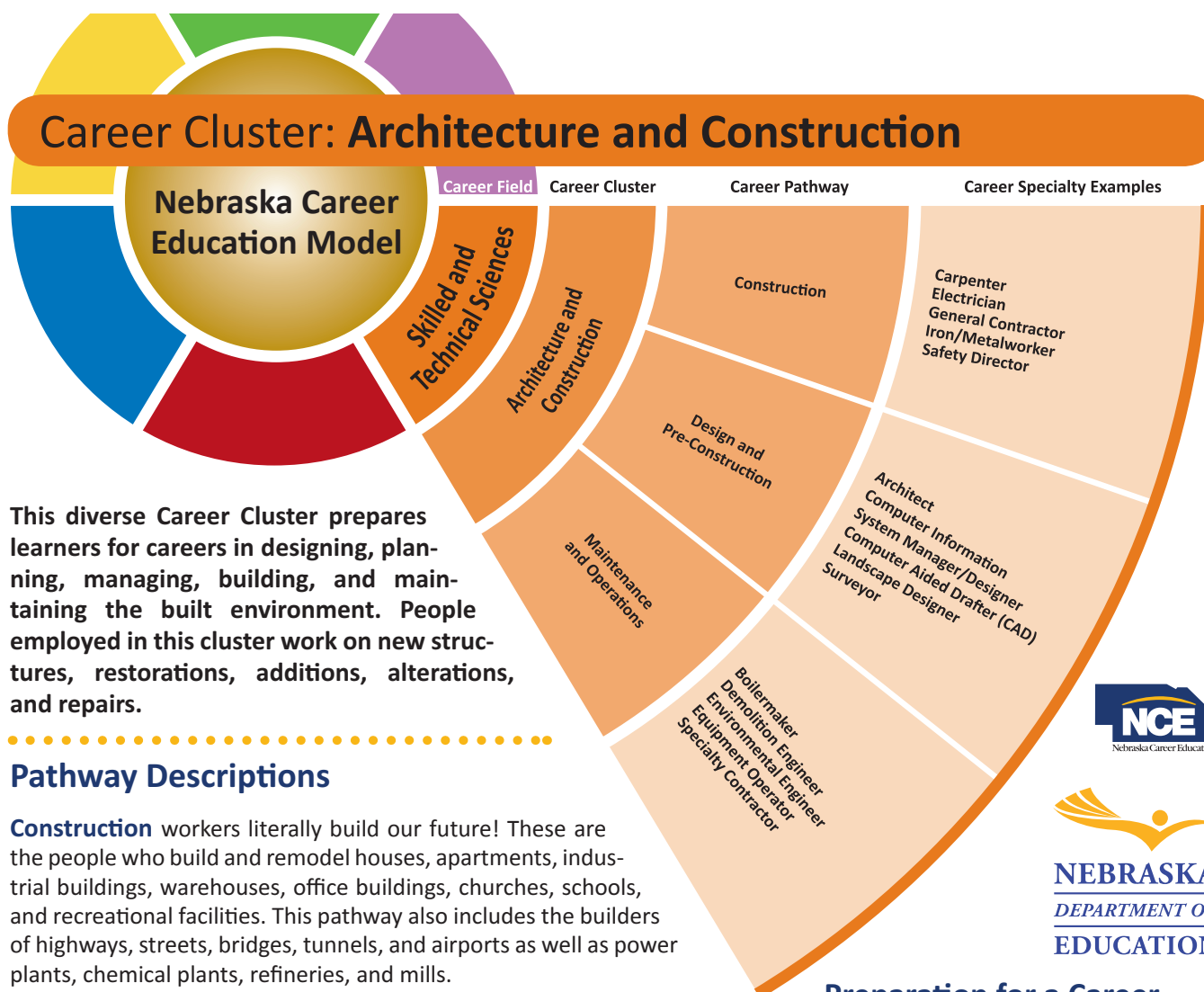
Introduction to Human Science and Career Essentials
Life and Career Readiness
Personal Finance
Psychology
Law, Public Safety, and Security
Intro to Criminal Justice
Intro to Fire/Emergency Services
Business Law

Extended Learning

Boys and Girls State
Debate Team
Explorer Posts
Family, Career and Community Leaders of America (FCCLA)
Jr. ROTC
Mock Trial
Student Council
4-H
Become Certified in CPR and First Aid
Become a Police Cadet
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.

Career Cluster: Architecture and Construction



This diverse Career Cluster prepares learners for careers in designing, planning, managing, building, and maintaining the built environment. People employed in this cluster work on new structures, restorations, additions, alterations, and repairs.

Pathway Descriptions

Construction workers literally build our future! These are the people who build and remodel houses, apartments, industrial buildings, warehouses, office buildings, churches, schools, and recreational facilities. This pathway also includes the builders of highways, streets, bridges, tunnels, and airports as well as power plants, chemical plants, refineries, and mills.

Design/Pre-Construction workers create our future. They turn a concept into a set of plans. Their plans guide other construction professionals as they continue the building process.

Maintenance Operations workers keep our future intact. These are the people who unload, inspect, and move new equipment into position. They determine the optimal placement of machines in a plant, assemble machinery, install machinery, repair machinery, and perform preventive maintenance. They detect, diagnose, and correct minor problems on machinery. They keep the structure of an establishment in good repair. They maintain the smooth operation of refineries, power plants, chemical plants, and mills. This pathway also includes the maintenance and repair of highways and roads.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

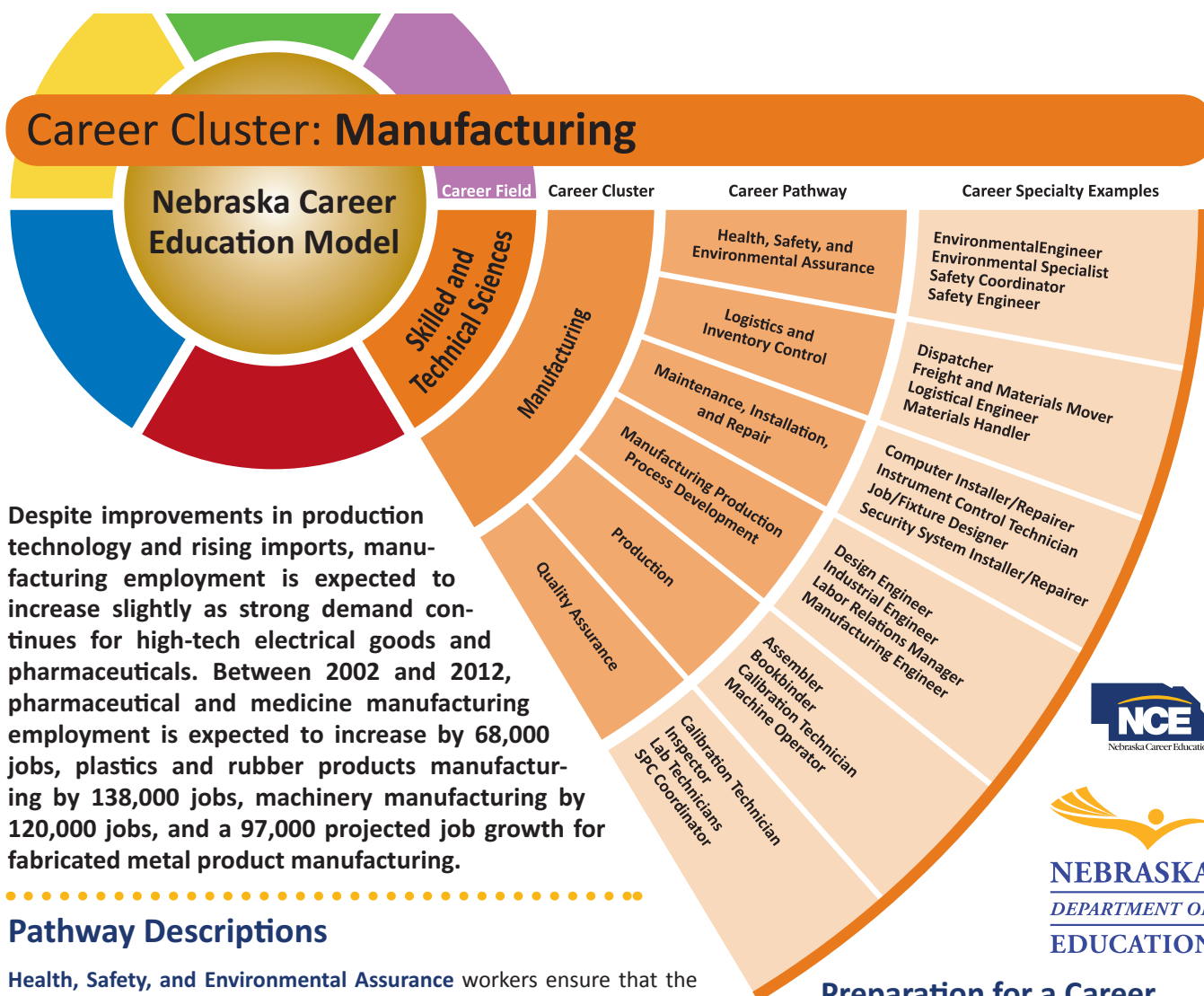
Intro to the Built Environment
Computer Aided Drafting
Principals of Construction Technology
Advanced Construction Technology
Applications in Design and Pre-construction
Housing and Home Furnishings
Electricity
Principals of Maintenance and Operations
Restoration and Repair of Existing Structures

Extended Learning

SkillsUSA
OPPD/NPPD Power Drive
FFA
Connect with Architects in your area
Do home repair projects
Learn about the history of the buildings in your community
Work with a contractor
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area



Career Cluster: Manufacturing



Despite improvements in production technology and rising imports, manufacturing employment is expected to increase slightly as strong demand continues for high-tech electrical goods and pharmaceuticals. Between 2002 and 2012, pharmaceutical and medicine manufacturing employment is expected to increase by 68,000 jobs, plastics and rubber products manufacturing by 138,000 jobs, machinery manufacturing by 120,000 jobs, and a 97,000 projected job growth for fabricated metal product manufacturing.

Pathway Descriptions

Health, Safety, and Environmental Assurance workers ensure that the equipment is being used safely in the workplace; plan for safety in new production processes; conduct hazard investigations and inspections; and implement health, safety, and/or environmental programs, projects, policies, or procedures.

Logistics and Inventory Control workers move raw materials, unload trucks, wrap pallets for shipment, and communicate with traffic managers.

Maintenance, Installation, and Repair workers perform preventive maintenance procedures on machines, tools, and equipment. They also troubleshoot and repair electrical, electronic, and mechanical systems.

Manufacturing Production Process Development workers are responsible for product design of the manufacturing process. They also monitor the manufacturing process and the materials used to manufacture the product.

Production workers make parts or assemble them. They work with machines, making or assembling electronic parts, constructing or assembling modular housing, performing welding jobs, or printing materials.

Quality Assurance workers assure that standards and procedures are adhered to and that delivered products or services meet performance requirements.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Introduction to the Built Environment
Manufacturing
Advanced Fabrication and Manufacturing
Electronics
Distribution and Logistics
Mechatronics

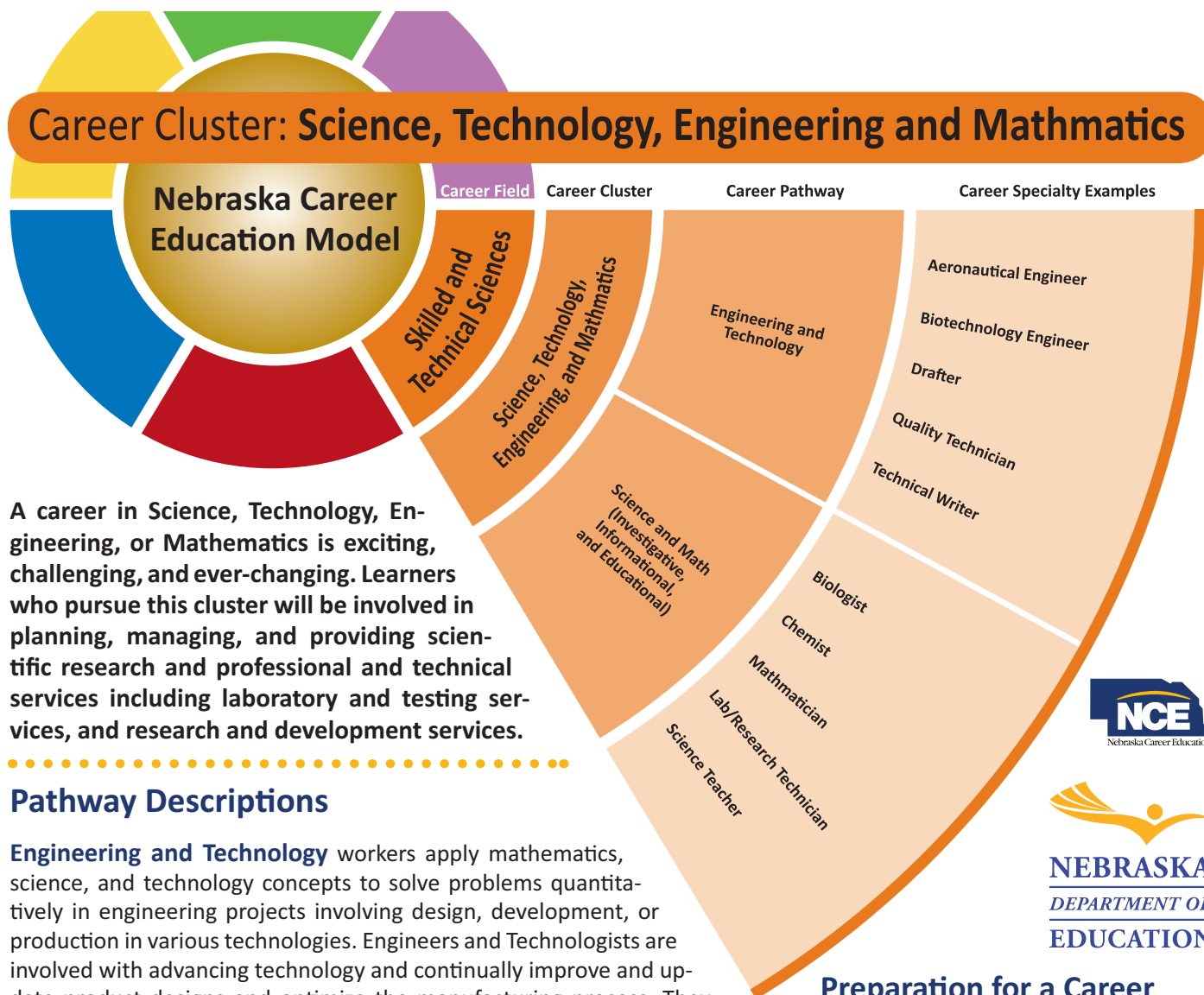
Extended Learning

SkillsUSA
OPPD/NPPD Power Drive
Robotics Competition
FFA
Math Club
Connect with manufacturing professionals
Learn about the history of the buildings in your community
Learn to repair machinery
Learn to use the latest tools for home repair
Tour a factory
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.



Career Cluster: Science, Technology, Engineering and Mathematics



A career in Science, Technology, Engineering, or Mathematics is exciting, challenging, and ever-changing. Learners who pursue this cluster will be involved in planning, managing, and providing scientific research and professional and technical services including laboratory and testing services, and research and development services.

Pathway Descriptions

Engineering and Technology workers apply mathematics, science, and technology concepts to solve problems quantitatively in engineering projects involving design, development, or production in various technologies. Engineers and Technologists are involved with advancing technology and continually improve and update product designs and optimize the manufacturing process. They are also involved in improving or building new roads, bridges, water, and pollution control systems, and other public facilities.

Science and Mathematics workers apply essential mathematics and science content and skills in a real world context. Science and mathematics occupations include those in physical, environmental, and human endeavors. Career possibilities range from teachers of science and mathematics to lab technicians to NASA astronauts.

Extended Learning

SkillsUSA
OPPD/NPPD PowerDrive
Robotics Competition
Mathematic Student Competitions
Discover Engineering Day
Science Club
Science Fairs

Participate in the following Programs and Activities provided by the University of Nebraska:
Engineers Week
Academy of Excellence
MESA (Mathematics, Engineering, Science Achievement) Program

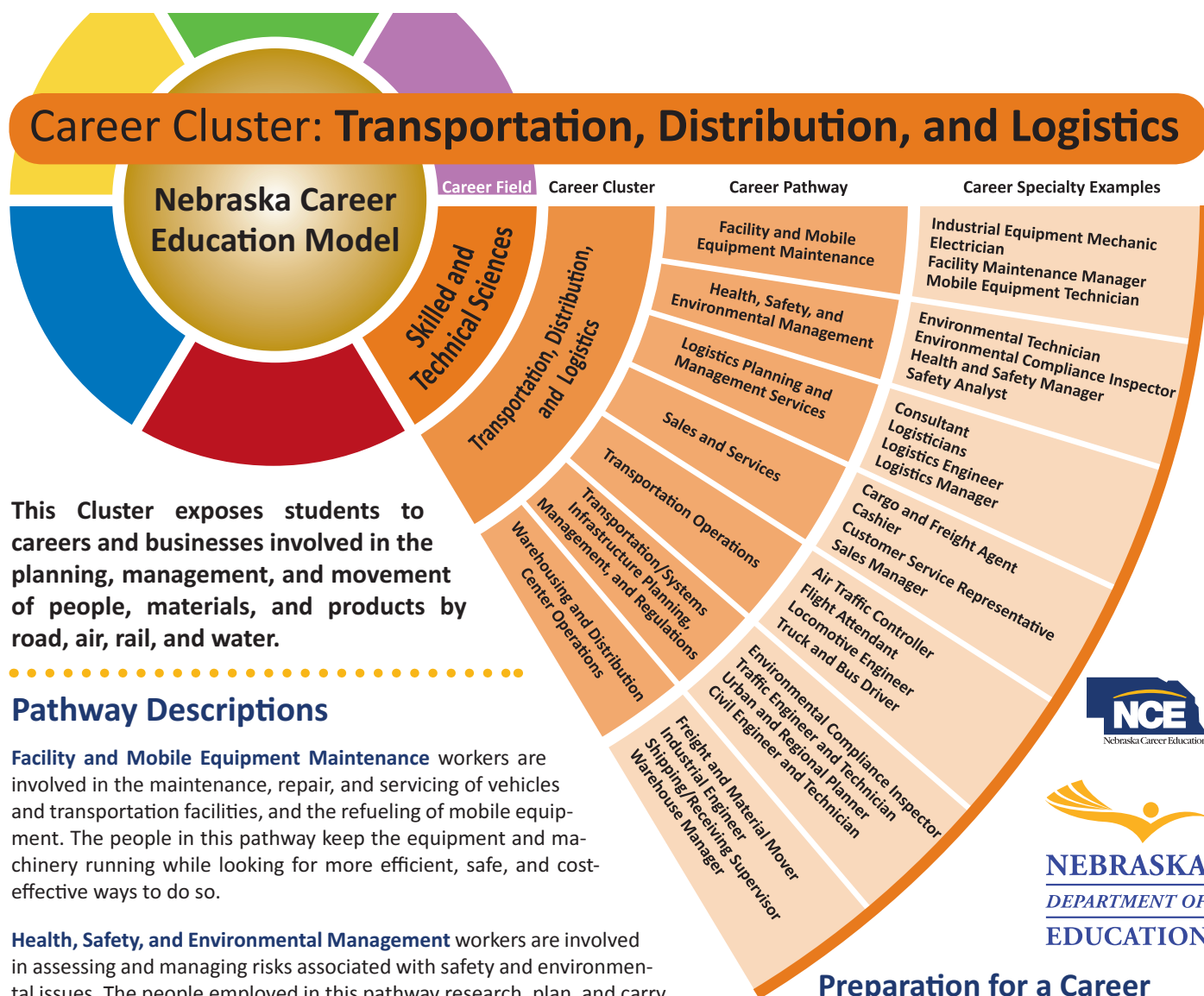
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Principals of Technology
PLTW Principals of Engineering
PLTW Intro to Engineering Design
PLTW Computer Integrated Manufacturing
PLTW Civil Engineering and Architecture
PLTW Engineering Design and Development
PLTW Aerospace Engineering
PLTW Biotechnical Engineering
Introduction to Engineering
Engineering Concepts
Engineering Applications
Robotics
Energy Exploration
Green Energy
Energy Generation and Distribution

Career Cluster: Transportation, Distribution, and Logistics



This Cluster exposes students to careers and businesses involved in the planning, management, and movement of people, materials, and products by road, air, rail, and water.

Pathway Descriptions

Facility and Mobile Equipment Maintenance workers are involved in the maintenance, repair, and servicing of vehicles and transportation facilities, and the refueling of mobile equipment. The people in this pathway keep the equipment and machinery running while looking for more efficient, safe, and cost-effective ways to do so.

Health, Safety, and Environmental Management workers are involved in assessing and managing risks associated with safety and environmental issues. The people employed in this pathway research, plan, and carry out activities to make our environment safer and cleaner.

Logistics Planning and Management Services workers are involved in the planning, management, and control of the physical distribution of materials, products, and people.

Sales and Services workers are involved in the marketing and selling of transportation services to new customers as well as the management of existing customer relationships and customer service.

Transportation Operations workers drive or pilot the vehicles that transport people and freight.

Transportation/Systems Infrastructure Planning, Management, and Regulation workers deal with all aspects of the design and operation of our public transportation systems--road, air, sea, and rail. These functions are primarily the responsibility of people who are employed by federal, state, and local transportation agencies.

Warehousing and Distribution Center Operations workers focus on the operation of transportation and distribution facilities including ports, terminals, warehouses, and other types of facilities. All cargo needs to be tracked, sorted, labeled, and loaded accurately and safely. Timing is also important, since many loads must adhere to a schedule in order to satisfy the needs of the customer.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

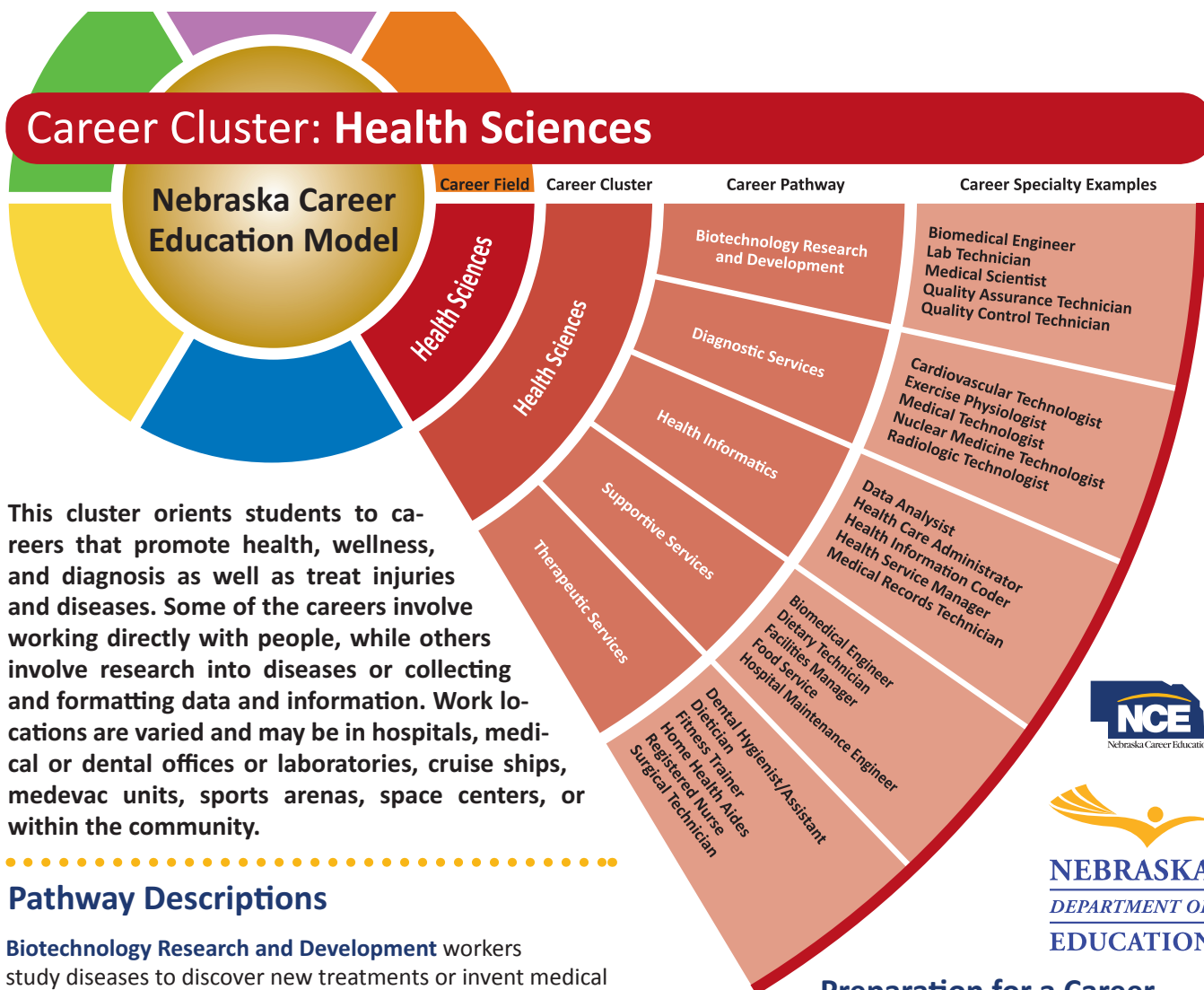
Introduction to Energy, Power and Transportation
Business Logistics
Transportation Technology, Service and Maintenance
Distribution and Logistics
Automotive Body Repair and Refinishing
Emerging Technology in Transportation and Logistics

Extended Learning

SkillsUSA
Ford/AAA Auto Skills
OPPD/NPPD PowerDrive
VEX Robotics
FFA
Math Club
Learn to drive a tractor or truck to do farmwork
Learn automotive repair and maintenance
Read automotive and mechanical magazines
Take Drivers Education
Learn to operate a forklift
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.





This cluster orients students to careers that promote health, wellness, and diagnosis as well as treat injuries and diseases. Some of the careers involve working directly with people, while others involve research into diseases or collecting and formatting data and information. Work locations are varied and may be in hospitals, medical or dental offices or laboratories, cruise ships, medevac units, sports arenas, space centers, or within the community.

Pathway Descriptions

Biotechnology Research and Development workers study diseases to discover new treatments or invent medical devices used to directly assist patients or to improve the accuracy of diagnostic tests.

Diagnostic Services workers use tests and evaluations that aid in the detection, diagnosis and treatment of diseases, injuries or other physical conditions.

Health Informatics workers occupy many different levels of health care related employment. This pathway includes health care administrators who manage health care agencies as well as those individuals who are responsible for managing all of the patient data and information, financial information, and computer applications related to health care processes and procedures.

Support Services workers provide a therapeutic environment for the delivery of health care. Support Services offers a full range of career opportunities from entry level to management, including technical and professional careers.

Therapeutic Services workers are focused primarily on changing the health status of the patient over time. Health professionals in this pathway work directly

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Introduction to Health Sciences
Exploring Clinical Lab
Medical Terms
Biotechnology
Advanced Health Science
Health Information Technology
Introduction to Sports Medicine
Personal and Community Health Issues
Nursing Assistant Certification (CNA)
Emergency Medical Technician Basic (EMT-B)
Medication Aide
Clinical Nutrition

Extended Learning

Athletics
Family, Career and Community Leaders of America (FCCLA)
Health Occupations Students of America (HOSA)
Medical Explorers
Wellness Club
Take First Aid Courses
Health Science Camps
Certified CPR Classes
EMT Certification
NE Safety Patrol-Mock Disasters
Health Fairs
Job shadow professionals
Participate in internships
Secure part-time employment
Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.

Career Cluster: Agriculture, Food, and Natural Resources



This diverse Career Cluster prepares learners for careers in the planning, implementation, production, management, processing and/or marketing of agricultural commodities and services, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products. It also includes related professional, technical, and educational services.

Pathway Descriptions

Agribusiness Systems workers use technology to coordinate all activities that contribute to production, processing, marketing, distribution, financing, and development of agricultural commodities.

Animal Systems workers study genetics, nutrition, reproduction, growth, and development of food and companion animals. They inspect and grade livestock food products, purchase livestock, or work in sales or marketing.

Environmental Service Systems workers are involved in pollution control, recycling, waste disposal, and public health. They conduct hazardous-waste management studies, analysis, and research environmental projects.

Food Products and Processing Systems workers discover new food sources, analyze and develop ways to process, preserve, package or store food. They create new food products and inspect food-processing to ensure sanitation, safety, quality, and waste management standards are met.

Natural Resources Systems workers help to develop, maintain, and manage the forest and natural environment. Conservation scientists and foresters manage, develop, and help protect these natural resources.

Plant Systems workers develop ways to improve the nutritional value and aesthetic of plants and quality of seeds. They use genetic engineering to develop pest and drought resistant plants helping producers while conserving natural resources and maintaining the environment.

Power, Structural, and Technical Systems workers apply knowledge of engineering, hydraulics, pneumatics, electronics, power, structures, and controls to the field of agriculture. They develop conservation of soil and water to improve the processing of agricultural products.

Preparation for a Career in this Cluster Includes...

Nebraska Career Education Coursework

Intro to Agriculture, Food, and Natural Resources
 Agri-Business
 Animal Science
 Plant Science
 Leadership and Human Relations
 Veterinary Science
 Biotechnology
 Food Science
 Natural Resources
 Horticulture
 Landscaping/Nursery/Turf Management
 Agriculture Mechanics and Technology

Extended Learning

FFA
 SkillsUSA
 DECA
 Supervised Agricultural Experience
 4-H
 Start your own business
 Job shadow professionals
 Participate in internships
 Secure part-time employment
 Volunteer in this career area

For additional Career Cluster Information visit: www.nebraskacareerconnections.org.



