Lesson - Careers in Therapeutic Services



Lesson Overview

In this lesson, students will be introduced to careers relating to the Therapeutic Services Pathway. A variety of occupations relating to this area of health science will be explored.

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify career opportunities relating to therapeutic services
- Articulate the educational requirements, typical job duties, occupational outlook and more for each explored profession

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	What Makes a Good Therapeutic Services Employee handout	1. Print/photocopy the <i>What Makes a</i> <i>Good Therapeutic Services Employee</i> handout – one for each pair	10 minutes
LEARN	 Job Description Project instructions Job Postings handout 	1. Print/photocopy the <i>Job Description</i> <i>Project</i> instructions and <i>Job Postings</i> handout – one for each participant	30-90 minutes
REVIEW	 Therapeutic Services Employment Self- Assessment handout Sample Careers in Therapeutic Services handout Questions for panel - optional 	 Print/photocopy the <i>Therapeutic</i> Services Employment Self-Assessment and Sample Careers in Therapeutic Services handout – one for each participant Contact local professionals, inviting them to participate in the panel discussion Set up the room with panel seating in the front and audience facing the panel 	5-10 minutes (optional activity 60-90 minutes)

Lesson - Careers in Therapeutic Services

FOCUS: Therapeutic Services Employment Skills and Abilities

10 minutes

Purpose:

Careers in the Therapeutic Services pathway are focused primarily on changing the health status of the patient over time. Based on an aging population, and a retiring workforce, the demand for health care workers will remain high. As the role of Therapeutic careers changes, professionals in this pathway will find increased opportunities to work independently. This lesson will take a closer look at the variety of opportunities available today.

Materials:

• What Makes a Good Therapeutic Services Employee handout

Facilitation Steps:

1. Share the information below with the class:

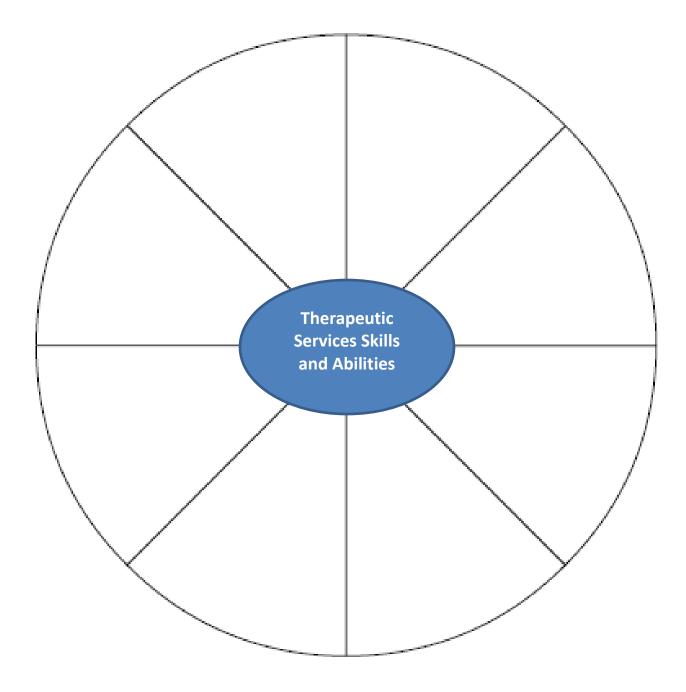
Instructor information: Careers in the Therapeutic Services pathway are focused primarily on changing the health status of the patient over time. Health professionals in this pathway work directly with patients; they may provide care, treatment, counseling and health education information.

- 2. Give students the *What Makes a Good Therapeutic Services Employee* handout. Have students pair up and give them five minutes to brainstorm and write down as many skills and abilities that they can think of.
- 3. Call the class back together and ask students the following question: What skills and abilities should a successful employee have relating to occupations within the therapeutic services pathway?

- 4. Write student responses on a master list on a white board or similar item. Continue calling upon students until every group has had a chance to contribute to the list.
- Share a list of therapeutic services skills and abilities from a career or occupational website such as https://www.onetonline.org/find/career?c=8

What Makes a Good Therapeutic Services Employee

List as many skills and abilities you can think of in the spaces provided that successful employees working in occupations within therapeutic services would possess.



Lesson - Careers in Therapeutic Services

LEARN: Job Description Project

30-90 minutes

Purpose:

The purpose of this activity is to have participants take a closer look at several different careers in therapeutic services such as: Certified Nursing Assistant, Pharmacist, Psychologist, Physician and Respiratory Therapist (this is not an exhaustive list).

Materials:

- Library and internet resources
- Job Description Project instructions
- Job Postings handout

Facilitation Steps:

- 1. Give students the *Job Description Project* instructions. Tell them that they can use the internet or other sources in the library for their research. Here are a few helpful websites:
 - <u>www.bls.gov</u>
 - <u>http://www.bls.gov/ooh/</u>
 - <u>www.careerinfonet.org</u>
 - <u>www.careervoyages.gov</u>
 - <u>http://careerplanning.about.com/od/occupati</u> <u>ons/a/car</u>
 - <u>http://www.myplan.com/careers/index.php</u> <u>eer_briefs.htm</u>
 - <u>http://www.onetonline.org/find/career?c=10</u> <u>&g=Go</u>
- 2. Give students one or two class periods to complete their research. You can also assign this as homework. Students should prepare a job posting for four positions listed in the instructions. You may give the students the *Job Postings* handout for this task.
- The suggested grading rubric for the Job Description Project is 25 points for each of the completed job postings if all information is complete. Deduct points if information is missed in required sections.

Job Description Project

Scenario: You are the Director of Human Resources for a large, new hospital that provides many types of therapeutic services. Your task is to hire four new employees that will work in your facility. You will be completing job postings for four positions. Choose from: Certified Nursing Assistant, Pharmacist, Psychologist, Physician and Respiratory Therapist (or other related titles of choice in this pathway). For each job posting, you must include the following information:

- Job title
- Degree, certification or licenses required
- Summary of the general nature and level of the job
- List of duties or tasks performed critical to success
- Job location where the work will be performed (environment)
- Equipment to be used in the performance of the job (if any)
- Starting salary range (per year or per hour)

You may photocopy and use the *Job Postings* handout. Prepare four different job postings, one for each position that you need to hire.

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Job Postings

Job Title	
Degree, certification or licenses required	
Summary and level of the job	
List of duties or tasks	
Job location and work environment	
Equipment to be used – if anything specific	
Starting salary (per year or per hour)	

Lesson - Careers in Therapeutic Services

REVIEW: Therapeutic Services Employment Self-Assessment

5-10 minutes (optional activity 60-90 minutes)

Purpose:

To review what students have learned about career opportunities relating to therapeutic services in healthcare and see if they possess the qualities to be successful in this occupational area.

Materials:

• Therapeutic Services Employment Self-Assessment

Facilitation Steps:

- 1. Give each student the *Therapeutic Services Employment Self-Assessment*. Give them five to ten minutes to complete it.
- 2. Have students add up the total number of boxes they have checked in the "Yes" column and the "No" column. If you have more yes boxes checked than no boxes, you may make a good therapeutic services employee.
- 3. Pass out the *Sample Careers in Therapeutic Services* handout to those interested.

Extension Activity: Contact a variety of local employers that relate to careers in this pathway. Invite them to attend a panel discussion in your class.

The day of the panel discussion, set up your space so that there is a table with seating for all panel members at the front of the room. If sound is an issue, have a microphone available.

Invite participants in the audience to ask questions to panel members. Remind participants ahead of time to keep questions relevant to work. You may ask participants to submit questions in advance if desired.

Therapeutic Services Employment Self-Assessment

Check Yes or No reflecting on your skills and abilities.

- Yes No
- ____ Strong critical thinking skills
- ____ Ability to show empathy and strong care giving skills
- ____ Effective communication skills
- ____ Ability to read, understand and apply research/scientific information
- ____ Flexible and adaptable on the job
- ____ Strong observational skills and being an astute and active listener
- ____ Being a positive person, redirecting negative thoughts
- ____ Able to use a variety of strategies in unpredictable circumstances
- ____ Strong interest in working with people
- ____ Ability to multitask
- ____ Ability to problem solve and make decisions
- ____ The ability to work with many types of people
- ____ The ability to remain calm and focused in difficult situations
- ____ The ability to work well on a team
- Total "Yes" _____ "No" _____

Sample Careers in Therapeutic Services

Acupuncturist	Occupational Therapist/Assistant Oral Surgeon	
Anesthesiologist/Assistant	Orientation/Mobility Specialist	
Anesthesia Technologist/Technician	Orthodontist	
Art/Music/Dance Therapist(s)	Orthoptist	
Athletic Trainer	Orthotist/Prosthetist/Technician	
Audiologist	Pedorthist	
Certified Nursing Assistant	Perfusionist	
Chiropractor	Pharmacist	
Chiropractic Assistant	Pharmacy Technician	
Dental Assistant/Hygienist	Physical Therapist/Assistant	
Dental Lab Technician	Physician (MD/DO)	
Dietitian/Nutritionist	Physician Assistant	
Dosimetrist	Podiatrist	
EMT/Paramedic	Psychologist	
Endodontist	Psychiatrist	
Exercise Physiologist	Radiation Therapist	
Home Health Aide	Recreation Therapist	
Kinesiotherapist	Registered Nurse	
Licensed Practical Nurse	Rehabilitation Counselor	
Massage Therapist	Respiratory Therapist	
Medical Assistant	Speech-Language Therapist	
Mental Health Counselor	Surgical Technician	
Naturopathic Doctor	Veterinarian	
Nurse Anesthetist	Veterinarian Assistant/Technician	
Nurse Midwife	Vision Rehabilitation Therapist	
Nurse Practitioner	Wellness Coach	

Lesson - Careers in Diagnostic Services



Lesson Overview

In this lesson, participants will be introduced to careers relating to diagnostic services. Participants will research and explore a variety of related careers in the diagnostic services pathway.

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify several professions in the diagnostic services pathway
- Consider if any of the occupations covered in class are appropriate for them to pursue

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	 Sample Careers in the Diagnostic Services Career Pathway Diagnostic Services Career Pathway Classification handout 	1. Print/photocopy Sample Careers in the Diagnostic Services Career Pathway and Diagnostic Services Career Pathway Classification handout – one for each participant	10 minutes
LEARN	 Library and internet resources <i>Career Exploration Research Summary</i> handout 	1. Print/photocopy the <i>Career</i> <i>Exploration Research Summary</i> handout – one for each participant	30-90 minutes
REVIEW	• Questions for panel (optional)	 Contact 3-5 diagnostic services- related professionals inviting them to participate in the panel discussion Set up the room with panel seating in the front with audience facing the panel 	45-60 minutes

Lesson - Career Opportunities in Diagnostic Services

FOCUS: Defining the Available Career Paths

10 minutes

Purpose:

Participants will learn the variety of occupational areas that fall within the diagnostic services pathway classification and how this translates into career opportunities.

Materials:

- Sample Careers in the Diagnostic Services Career Pathway
- Diagnostic Services Career Pathway Classification handout

Facilitation Steps:

- 1. Give each student the list of *Sample Careers in the Diagnostic Services Career Pathway*. Explain that this is a list of occupations that fall within this pathway. Divide the class into small groups. Have each group look at the list of careers and try to classify or categorize like-type of occupations together.
- 2. Give the small groups the *Diagnostic Services Career Pathway Classification* handout and 5 minutes to come up with some potential classifications of job types within the diagnostic services pathway. They should be prepared to discuss why they grouped things as they did.
- 3. Explain that there is no finite right or wrong way to classify this pathway. They should take notes while you share the following thoughts of the diagnostic services pathway.

- Diagnostic services include laboratory tests, radiology, genetic testing, diagnostic imaging and more. These types of services provide timely, cost-effective and high quality diagnostic care in safe and secure environments. It includes the clinical services of pathology and laboratory medicine, radiology and nuclear medicine.
- To learn more about the job outlook for each of these types of occupational areas you can go to websites like the following:

https://www.onetonline.org/find/career?c=8

Sample Careers in the Diagnostic Services Career Pathway

Audiologist	Histotechnologist
Blood Bank Technology Specialist	Magnetic Resonance Technologist
Cardiovascular Technologist	Mammographer
Clinical Lab Technician	Medical Technologist/ Clinical
Clinical Laboratory/Technologist	Laboratory Scientist
Computer Tomography (CT)	Nuclear Medicine Technologist
Technologist	Optician
Cytogenetic Technologist	Ophthalmologist
Cytotechnologist	Ophthalmic Assistant/Technologist
Dentist	Optometrist
Diagnostic Medical Sonographer	Pathologist
Electrocardiographic (ECG)	Pathologists' Assistant
Technician	Phlebotomist
Electroneurodiagnostic Technologist	Polysomnographic Technologist
Electronic Diagnostic (EEG)	Positron Emission Tomography
Technologist	(PET) Technologist
Exercise Physiologist	Radiologic Technologist
Geneticist	Radiologist
Geriatrician	Speech-Language Pathologist
Histotechnician	

Diagnostic Services Career Pathway Classification

Category Description	Occupations within the Category
Example: Radiology	

Lesson – Career Opportunities in Diagnostic Services

LEARN: Research Project

30-90 minutes

Purpose:

The purpose of this activity is to have participants take a closer look at related diagnostic services career options. Participants will research an occupation of their choice. Information learned from the research will be shared with the group via a brief presentation.

Materials:

- Library and internet resources
- Career Exploration Research Summary handout

Facilitation Steps:

- 1. Have students choose one of the careers to explore further. Give students the *Career Exploration Research Summary* handout. Tell them that they can use the internet or other sources in the library for their research. Here are a few helpful websites:
 - <u>www.bls.gov</u>
 - http://www.bls.gov/ooh/
 - www.careerinfonet.org
 - <u>www.careervoyages.gov</u>
 - <u>http://careerplanning.about.com/od/occupat</u> <u>ions/a/car</u>
 - <u>http://www.myplan.com/careers/index.phpe</u> er_briefs.htm
- 2. Give students one or two class periods to complete their research. You can also assign this as homework. Students should prepare a short five-minute presentation about this career including the information on the summary sheet.
- 3. Have each student present their chosen plant systems-related career to the group.

4. Here is a suggested grading rubric for the class presentation:

30 points – Completed all information on the *Career Exploration Research Summary* handout

20 points - Prepared for the presentation

20 points – Presentation content was clear, concise and gave a good understanding of the chosen career

20 points – Demonstrated the ability to think critically, taking information from other sources to create something new

10 points – Demonstrated time management skills by delivering a well-planned five-minute presentation

Career Exploration Research Summary

Identify and research one career in the Diagnostic Services Pathway. Complete this worksheet for your career choice. Possible sources for information include your school library, public library, Bureau of Labor Statistics website, Occupational Outlook Handbook website and other career-related websites on the internet.

Sources used for this project:

Realityworks® www.realityworks.com

Lesson - Career Opportunities in Diagnostic Services

REVIEW: Career Panel Discussion

45-60 minutes

Purpose:

To hear from healthcare diagnostic services professionals who work in a variety of careers that fall within the diagnostic services pathway.

Materials:

• Panel of 3-5 local professionals who are audiologists, clinical lab technicians, geneticist, optometrist, pathologist and similar occupations

Facilitation Steps:

- Contact local diagnostic services professionals and invite them to attend a panel discussion in your class. Audiologists, clinical lab technicians, geneticists, optometrists, pathologists and similar occupations would be great resources for students to have access to. Also, local professionals from a variety of different types of related businesses would provide additional and interesting perspectives.
- 2. The day of the panel discussion, set up your space so that there is a table with seating for all panel members at the front of the room. If sound is an issue, have a microphone available.
- 3. Invite participants in the audience to ask questions to panel members. Remind participants ahead of time to keep questions relevant to work. You may ask participants to submit questions in advance if desired.

Lesson - A Day in the Life of a Health Informatics Professional



Lesson Overview

In this lesson, participants will be introduced to health informatics careers. Participants will gain a better understanding of what life on these jobs looks like.

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify work tasks that health informatics professionals do on the job and the working conditions
- Consider if a health informatics career is a good fit for them
- Identify a variety of career opportunities that fall within health informatics

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	• Career Exploration K-W-L handout	1. Print/photocopy <i>Career Exploration</i> <i>K-W-L</i> handout - one for each group	10 minutes
LEARN	 Video clips about health informatics careers Sample List of Health Informatics Occupations Career Exploration Research Summary handout 	 Choose the video clip(s) you wish to show about health informatics careers and have available online Print/photocopy the Sample List of Health Informatics Occupations and Career Exploration Research Summary handout – one for each participant 	30-90 minutes
REVIEW	• Career Exploration K-W-L handout	 Have the <i>Career Exploration K-W-L</i> handouts available Contact local businesses for setting up a field trip 	5-10 minutes

Lesson - A Day in the Life of a Health Informatics Professional

FOCUS: K-W-L Activity

10 minutes

Purpose:

There are many different fields that health informatics professionals can work within. Some of these include clinical account managers, data quality managers, medical coders, patient account managers, risk managers and many more. This lesson will help your students become more aware of what breadth/variety of skills and education they need to work in this area. Students may be unaware of the many opportunities that are available to them if they wish to follow this career path.

Materials:

• Career Exploration K-W-L handout

Facilitation Steps:

1. Begin by defining what the health informatics pathway is. Share this definition with the class:

Careers in the health informatics pathway include many 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 patient data and information, financial information and computer applications related to healthcare processes and procedures.

Based on an increasing reliance on electronic information, the demand for these workers will remain high.

- 2. Divide the class into pairs to work together. Make a photocopy for each pair of the *Career Exploration K-W-L* handout. Explain the purpose of the activity, distribute the handout and give pairs five minutes to complete it.
- 3. After five minutes, call the class back together. Ask each pair to share one thing they already know about health informatics occupations and one thing they'd like to learn about this career pathway. Write these on a master list on a white board or similar item. Continue calling upon each pair until everyone has had a chance to contribute to the K and W class chart.

Career Exploration K-W-L

Directions: With your partner, complete the "K" and "W" columns, saving the "L" column for later in the lesson. In the "K" column, identify what you already know about health informatics occupations. In the "W" column, write down what you would like to learn about a potential career as a health informatics professional.

K	W	L

Lesson - A Day in the Life of a Health Informatics Professional

LEARN: Research Project

30-90 minutes

Purpose:

The purpose of this activity is to have participants take a closer look at health informatics as a pathway. Participants will research one specific field of occupation and prepare a class presentation.

Materials:

- Library and internet resources
- Sample List of Health Informatics Occupations
- Career Exploration Research Summary handout

Facilitation Steps:

1. To learn more about health informatics as a career, watch a short career video on YouTube. Here are a few suggestions, or you can keyword search "health informatics":

https://www.youtube.com/watch?v=bMt6Nm40 5T8

https://www.youtube.com/watch?v=pzS--PaGC9o

https://www.youtube.com/watch?v=rQsJmRg_ZO0

- 2. Review the list of fields that are part of health informatics from the sample list. Have each student choose of the careers to explore further. Depending on how many participants are in the class you can decide whether to allow multiple students to research the same field.
- 3. Give students the *Career Exploration Research Summary* handout. Tell them that they can use the internet or other sources in the library for their research. Here are a few helpful websites:

- <u>www.bls.gov</u>
- <u>http://www.bls.gov/ooh/</u>
- <u>www.careerinfonet.org</u>
- <u>www.careervoyages.gov</u>
- <u>http://careerplanning.about.com/od/occupat</u> <u>ions/a/car</u>
- <u>http://www.myplan.com/careers/index.php</u> <u>eer_briefs.htm</u>
- <u>http://www.onetonline.org/find/career?c=10</u> <u>&g=Go</u>
- 4. Give students one or two class periods to complete their research. You can also assign this as homework. Students should prepare a short five-minute presentation about this career including the information on the summary sheet.
- 5. Have each student present their chosen health informatics field to the group.
- 6. Here is a suggested grading rubric for the class presentation:

30 points – Completed all information on the *Career Exploration Research Summary* handout

20 points - Prepared for the presentation

20 points – Presentation content was clear, concise and gave a good understanding of the chosen career

20 points – Demonstrated the ability to think critically, taking information from other sources to create something new

10 points – Demonstrated time management skills by delivering a well-planned five minutes presentation

Sample List of Health Informatics Occupations

Admitting Clerk	Medical Historian
Applied Researcher	Medical Illustrator
Compliance Technician	Medical Information Technologist
Clinical Account Manager	Medical Librarian
Clinical Account Technician	Medical Transcriptionist
Clinical Data Specialist	Patient Account Manager
Community Services Specialists	Patient Account Technician
Data Quality Manager	Patient Advocate
Epidemiologist	Patient Information Coordinator
Ethicist	Project Manager
Health Educator	Public Health Educator
Health Information Mgmt. Administrator	Quality Management Specialist
Health Information Mgmt. Technician	Quality Data Analyst
Healthcare Access Manager	Research and Decision Support Specialist
Healthcare Administrator	Reimbursement Specialist
Healthcare Finance Informatician	Risk Manager
Information Privacy Officer	Unit Coordinator
Managed Care Contract Analyst	Utilization Manager
Medical Coder	Utilization Review Manager

Career Exploration Research Summary

Identify and research a health informatics career in your chosen field. Complete this worksheet for your health informatics career choice. Possible sources for information include your school library, public library, Bureau of Labor Statistics website, Occupational Outlook Handbook website and other career-related websites on the internet.

Career name:
Degree or licenses required:
Length of time to complete training or earn degrees:
Average starting salary:
Job outlook:
Short job description:
Skills a person should have to be successful in this career:
How does this job involve health information and data?

Lesson - A Day in the Life of a Health Informatics Professional

REVIEW: What have you learned...?

5-10 minutes

Purpose:

To have participants review what they have learned about career opportunities relating to the health informatics pathway.

Materials:

• Career Exploration K-W-L handout

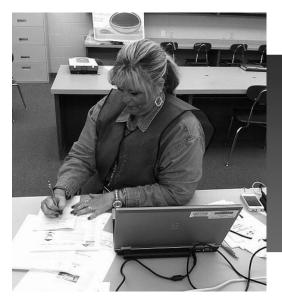
Facilitation Steps:

- 1. Have students pair up with the person they worked with at the beginning of the lesson to complete the K-W sections of the handout.
- 2. Have students complete the "L" column on the handout, identifying things they have learned about health informatics. Give students five minutes to complete this task.
- 3. After five minutes, call the class back together.

Ask each pair to share one thing they learned about health informatics as a career option. Write these on a master list on a white board or similar item. Continue calling upon each pair until everyone has had a chance to contribute to the "L" class chart.

Extension Activity: Contact local health informatics professionals and ask if you could take a field trip to their place of business to see what the work environment is like for health informatics employees, to be able to ask employees questions about their job and to observe professionals in action if possible.

Lesson - Exploring a Career in Support Services



Lesson Overview

In this lesson, participants will be introduced to the Support Services career pathway. Participants will gain greater knowledge of what it takes to become employed in related occupations.

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify the tasks that are typical for support services professions
- Research and identify the qualifications, including education and training that is required to become an employee in a variety of related support services occupations
- Write a clearly written cover letter

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	 Support services video clips Support Services Sample List of Occupations handout 	 Choose the video clip(s) you wish to show about the Support Services Pathway and have available online Print/photocopy the Support Services Sample List of Occupations handout- one per participant 	10 minutes
LEARN	 Library and internet access Support Services Pathway Education and Training Plan handout 	1. Print/photocopy the Support Services Pathway Education and Training Plan handout – one per participant	30-90 minutes
REVIEW	 Cover Letter Format handout Job listings for a support services position Cover Letter Assessment Rubric 	1. Have the <i>Cover Letter Format</i> handouts available – one per student	60-90 minutes

FOCUS: How do you ensure a high quality support services staff?

10 minutes

Purpose:

The support services pathway includes occupations that interact with patients or the public to provide a therapeutic environment for the delivery of health care. It includes technical and professional careers. Participants will be introduced to the important role that these career opportunities play in quality health care.

Materials:

- Support services video clips
- Support Services Sample List of Occupations handout

Facilitation Steps:

1. Begin by sharing this information with students:

This pathway applies to occupations or functions involving direct or indirect patients and other client's care that create a therapeutic environment for providing that care. Supportive Services offer a full range of career opportunities from entry level to management and include both technical and business/professional careers.

Salaries vary depending on the specific occupation you choose within this pathway.

- 2. Show a short video, introducing this pathway. Go to YouTube and use keywords, "support services pathway" or similar. Here are links to a few examples:
 - https://www.youtube.com/watch?v=mW_R 5wr3mVE
 - https://www.youtube.com/watch?v=oOg9N Vb4eWw
- 3. Share the *Support Services Sample List of Occupations* with students. Ask for any impressions of these types of jobs. Are there any on the list that are a surprise or are there any that they don't recognize?

Support Services Sample List of Occupations

Animal Behaviorist	Health Advocate
Biomedical/Clinical Engineer	Hospital Maintenance Engineer
Biomedical/Clinical Technician	Industrial Hygienist
Clinical Simulator Technician	Interpreter
Central Service Manager	Martial, Couple, Family Counselor/Therapist
Central Service Technician	Materials Manager
Community Health Worker	Medical Health Counselor
Dietary Manager	Mortician/ Funeral Director
Dietetic Technician	Nurse Educator
Environmental Health Advocate	Occupational Health Nurse
Environmental Health Practitioner	Occupational Health & Safety Expert
Environmental Services/Specialist	Social Worker
Facilities Manager	Transport Technician
Food Safety Specialist	

Lesson - Exploring a Career in Support Services

LEARN: Research Project

30-90 minutes

Purpose:

The purpose of this activity is to have participants take a closer look at what it takes to become a healthcare support services professional. Students will put together an education and training plan for a support services occupation of their choice

Materials:

- Library and internet access
- Support Services Pathway Education and Training Plan handout

Facilitation Steps:

- 1. Tell students that they are each going to complete a short research project about the required qualifications for becoming a support services employee in a hospital or clinic setting.
- 2. Give students the *Support Services Inspector Pathway Education and Training Plan* handout. Tell them that they can use the internet or other sources in the library for their research. Here are a few helpful websites:
 - <u>http://www.bls.gov/ooh/</u>
 - <u>www.careerinfonet.org</u>
 - <u>www.careervoyages.gov</u>
 - <u>http://careerplanning.about.com/od/occupat</u> <u>ions/a/car</u> <u>http://www.myplan.com/careers/index.php</u> eer_briefs.htm
 - <u>http://www.onetonline.org/find/career?c=10</u> <u>&g=Go</u>
- 3. Give students one class period to complete their research. You can also assign this as homework.

Support Services Pathway Education and Training Plan

Scenario: You have decided to choose a career that falls within the Support Services Pathway. You must put together a plan that will help you meet all education and training requirements needed for this occupation. You will start your plan for high school, then through college and any additional certifications or exams you will need to take. The goal is to successfully be hired in this support services occupation of choice.

Recommended High School Courses	
Higher Education:	
Name one degree	
that you could get	
and name three	
schools in your state	
that you could attend	
to obtain that	
degree.	
Work Experience: List two jobs that would help you get experience	
List any national or state associations relating this occupation	

Required certification exam(s) for becoming a worker in this area	
Optional endorsements you can obtain	
Explain any recertification requirements that exist, if any	

Lesson - Exploring a Career in Support Services

REVIEW: Writing a Cover Letter

60-90 minutes

Purpose:

Students will use what they have learned about what it takes to pursue the support services occupation of their choosing, to write a cover letter applying for that position.

Materials:

- Cover Letter Format handout
- Job listing for a support services position
- Cover Letter Assessment Rubric

Facilitation Steps:

- 1. Introduce business letters. Tell students that an important skill in the job application process is knowing how to write a proper cover letter.
- 2. Give each student the *Cover Letter Format* handout. Review the standard parts of a cover letter with students:
 - Heading
 - Date
 - Inside Address
 - Subject
 - Salutation
 - Body Paragraphs

Special Note: The body paragraphs should describe what you have to offer the employer. Convince the reader that they should grant you an interview. Make a strong connection between your abilities and their needs. Mention specifically how your education, skills and experience (create a work history that you know would be appropriate) match the job you are applying for. Try to support each statement you make with a piece of evidence.

- Closing and Signature
- Enclosure

3. Have students research and find a real job listing for a job within the support services pathway. This is the position they should be applying for with the cover letter they write.

After each student has completed an initial draft of their cover letter, they should have another peer edit their draft. Peer editors should follow the template and make sure that each part is included in the draft, along with checking on spelling and grammar.

4. Have students prepare the final cover letter and turn it in as part of their grade for this lesson. Use the attached *Cover Letter Assessment Rubric* for your convenience.

Cover Letter Format

When writing a cover letter, follow the format below.

Heading – Your Address	7
Name	
Street Address City, State, ZIP	
Date	Skip 1
Inside Address Mr./Mrs./Ms./Dr. Full name of Recipient	Skip 2
Job Title of Recipient (if applicable) Name of the Company/Organization (if applicable) Street Address	
City, State. ZIP	Skip 1
Subject:	
Salutation (Dear Ms./Mrs./Mr. and Last Name and a colon at the end)	Skip 1 Skip 1
Body Paragraphs This is the content of the letter. The paragraphs should be single spaced with one line skipped between each paragraph.	
Body Paragraph 1	
Body Paragraph 2	
Body Paragraph 3	Oltin 4
Closing (Sincerely,)	Skip 1
	Skip 3
Your Typed Name (Handwritten Signature Above) Your Typed Title	
Enclosure Use this if your letter includes another document other than the letter itself. If it is more than one, you would type "Enclosures."	Skip 1
	4

Cover Letter Assessment Rubric

Tania	1	2	3	4
Topic (Weight)	1	2	3	4
Return Address &	 Return address of letterhead is mis Date is missing. 4 or more spellir capitalization, or 	sing. letterhead is missing some information. ng, Date is there but	 Return address or letterhead is complete & accurate. Date is complete & positioned correctly. 	 Return address or letterhead is complete & accurate. Date is complete & positioned correctly.
Date	punctuation erro	ors. 3 spelling, capitalization, or punctuation errors.	 1-2 spelling, capitalization, or punctuation errors. 	 No spelling, capitalization, or punctuation errors.
Inside	 Inside address is missing. 	missing information.	 Inside address is complete & accurate. 	 Inside address is complete & accurate.
Address	 Salutation is mis Subject line is missing. 	sing. Salutation is inappropriate. Subject line	 Salutation is appropriate but incomplete. 	 Salutation is appropriate & complete.
& Salutation	More than 3 spe capitalization, or punctuation error	Iling, information is misleading. ors. I 3 spelling, capitalization, or	 A subject line needed or added correctly. 1 - 2 spelling, capitalization, or 	 A subject line needed or added correctly. No spelling, capitalization, or
	No organization pattern is appared	punctuation errors. Organization is not appropriate to the	punctuation errors. Organization is appropriate to the	 punctuation errors. Organization is appropriate to the
Content Organization	 Paragraph order not follow sugge format. 	does writer's purpose. sted Paragraph order is close to the	 writer's purpose. Paragraph order is close to the 	writer's purpose. Paragraph order follows the suggested
& Accuracy	Message has end missing or incorr information to be ineffective in me the writer's goal.	et information are missing or incorrect.	suggested model. One piece of information is missing or incorrect.	model. Message is complete and correct.
Closing, Signature, &	More than two p are missing or	ieces Two pieces are missing or inaccurate	 One piece is missing or inaccurate. 	 Closing is appropriate. Written & typed
other End Matter	inaccurate.			signatures are present. Reference initials & enclosure reminder are included if needed.
Word Choice	 Word choice is unprofessional. 	 Word choice is inappropriate for audience. 	 Word choice is mostly appropriate for audience. 	 Word choice is appropriate for audience.
		 Writer sometimes uses action verbs. 	 Writer uses action verbs. 	 Writer uses action verbs.
		Too much use of passive voice.	 Use of passive voice ONLY as needed. 	 Use of passive voice ONLY as needed.
Sentences Fluency,	 More than 2 sen fragments. Message is lost i 	fragments.	 Some variation in sentence length. One fragment. 	 Complete sentences of varying length. Paragraph divisions
Paragraphs, & Mechanics	poor construction Paragraphs do n	n. underdeveloped. ot D Awkward paragraph	 Paragraph divisions are somewhat 	are effective. Number of
a mechanics	follow suggested format. Spelling,	the message. 3-4 spelling,	 effective. Main purpose of the message is clear. 	paragraphs fits suggested format. Main purpose of the
	capitalization, or punctuation erro make message		 1-2 spelling, capitalization, or punctuation errors. 	 message is clear. No spelling, capitalization, or
	unclear. Grammar & usagerrors makes	usage errors.	 1-2 grammar & usage errors. 	 punctuation errors. Grammar & usage are correct.
Source: http://rubistar.4	message unclear	r		

Source: http://rubistar.4teachers.org 7/6/03

Lesson - Looking into a Career in Biotechnology Research and Development



Lesson Overview

In this lesson, participants will be introduced careers in the biotechnology research and development pathway. Participants will research a variety of information regarding work in areas such as biochemistry, forensic pathologist, genetic counselor, pharmacologist and more, considering whether any of these is of personal interest.

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify the types of occupations that fall within the biotechnology research and development pathway
- Research and identify the qualifications, working conditions, job duties, advancement opportunities and occupational outlook

Lesson at a Glance

Activity	Materials	Preparation	Approximate class time
FOCUS	• Biotechnology research and development pathway occupations video clips	 Choose the video clip(s) you wish to show about biotechnology research and development-related careers and have available online 	10 minutes
LEARN	 Library and internet access Biotechnology R&D Sample List of Occupations Biotechnology R&D Scavenger Hunt handout 	1. Print/photocopy the <i>Biotechnology</i> <i>Research and Development Pathway</i> handout – one for each pair	30-90 minutes
REVIEW	• Biotechnology research and development job listings	1. Have sample biotechnology research and development pathway related job listings available for students	10 minutes

Lesson - Looking into a Career in Biotechnology Research and Development

FOCUS: What is the Biotechnology R&D Pathway?

10 minutes

Purpose:

Working in biotechnology research and development may offer career opportunities that are unknown to many students. This activity will introduce students to biotechnology research and development pathway careers.

Materials:

• Biotechnology research and development pathway occupations video clips

Facilitation Steps:

1. Begin by sharing this information with students:

Choose a career that utilizes advancements in science and technology to augment treatment and diagnostic capabilities in health care.

Research and development is one of the five health care pathways. It encompasses a broad spectrum of health care careers each of which use advancements in science and technology to improve health care. Careers in R&D lay the foundation for which an effective health care system is made possible. Without time, money and resources poured into this sector, health care would be at a standstill.

If you want to play a role in developing the latest advancements in health care, whether it be through science, research and development, biotechnology discoveries, or both, there is a career in this pathway waiting for you. Examples of jobs in this sector include, but are not limited to, biomedical engineers, biomedical chemists, lab technicians, biostatisticians, toxicologists and pharmaceutical scientists.

In the area of research and development, you will find that opportunities exist for individuals with all levels of education and experience.

- 2. Show a short video, if possible, about the biotechnology research and development pathway. Go to YouTube and use keywords to search. Here are links to a few examples:
 - <u>https://www.youtube.com/watch?v=gEQIW</u> <u>GRwGX4</u>
 - <u>https://www.youtube.com/watch?v=ACGHB</u> 7DmzOo
 - <u>https://www.youtube.com/watch?v=v-</u> <u>90nhBlaUM</u>
 - <u>http://mhscp.marietta-</u> <u>city.org/biotechnology-r-d/18-career-</u> <u>clusters/index.php</u>
- 3. Tell students that today they are going to learn more about this interesting career pathway health science career cluster.

Lesson - Looking into a Career in Biotechnology Research and Development

LEARN: Scavenger Hunt

30-90 minutes

Purpose:

The purpose of this activity is to have participants work in pairs to discover various facts about the careers in the biotechnology research and development pathway. Each pair will share their findings to enable others to learn more about these interesting occupations.

Materials:

- Library and internet access
- Biotechnology R&D Scavenger Hunt handout
- Biotechnology R&D Sample List of Occupations

Facilitation Steps:

- 1. Give students the *Biotechnology Research and Development Scavenger Hunt* handout.
- 2. Divide the class into pairs of students. Depending on the number of students, assign each pair one occupation within the biotechnology research and development pathway to research until all questions have been answered or as many as possible in the time given. Give each pair the *Biotechnology R&D Sample List of Occupations* to choose occupations from.
- 3. Give students 10-15 minutes on the internet to research and find answers to the questions. Students should write down the answers and be ready to share them.
- 4. Call the class back together. Have each pair share the results of their research.

Biotechnology R&D Scavenger Hunt

Each pair should be assigned one biotechnology-related occupation to research. Do your research on-line to find the answers to the questions you have been given below. Good Luck! Possible sources to consider could Bureau of Labor Statistics website, Occupational Outlook Handbook website, college websites from biotech programs, other career-related websites on the internet.

Occupation assigned: _____

- 1. Define this occupation. What is it? Give a short description.
- 2. What degree or education and training is required?
- 3. What licenses or certifications are required, if any?
- 4. What is the average length of time it takes to complete training or earn degrees?
- 5. What is the average starting salary?
- 6. What is the average workday like in terms of hours?
- 7. What is the projected job outlook for in the next decade?
- 8. What tasks would you include in job description for this occupation?
- 9. What skills should a person have to be successful in this career?
- 10. What is the work environment like?
- 11. What equipment is used on the job, if any?
- 12. What are the rewards or benefits of this career?
- 13. What are the opportunities for advancement?
- 14. Is this occupation available locally (in your city, in your state)?

Biotechnology R&D Sample List of Occupations

Biochemist	Medical Editor/Writer
Bioinformatics Scientist	Microbiologist
Biomedical Chemist	Molecular Biologist
Biomedical Manufacturing Technician	Nurse Researcher
Biostatistician	Packaging Technician
Cancer Registrar	Patent Lawyer
Cell Biologist	Pharmaceutical/Clinical Project Manager
Clinical Data Management Specialist	Pharmaceutical Sales Representative
Clinical Pharmacologist	Pharmaceutical Scientist
Clinical Trials Monitor	Pharmacokineticist
Clinical Trials Research Coordinator	Pharmacologist
Crime Scene Investigator	Product Safety Scientist
Diagnostic Molecular Scientist	Process Development Scientist
Forensic Biologist	Processing Technician
Forensic Chemist	Quality Assurance Technician
Forensic Odontologist	Quality Control Technician
Forensic Pathologist	Regulatory Affairs Specialist
Genetic Counselor	Research Assistant
Geneticist-Lab Assistant	Research Scientist
Lab Technician	Toxicologist

Lesson - Looking into a Career in Biotechnology Research and Development

REVIEW: What have you learned...

10 minutes

Purpose:

To review what participants have learned about career opportunities relating to the Biotechnology Research and Development pathway.

Materials:

• Biotechnology research and development job listings

Facilitation Steps:

- 1. Give each student a few minutes to find a real job listing for an occupation that falls under the biotechnology research and development pathway.
- 2. Have students share their listings. Is there anything in the listing that surprises them? Are the qualifications similar to what they learned about in the scavenger hunt exercise? Do the job duties line up with their understanding of what these workers do? Is the pay range what they expected to find?