

# PROGRAM MANUAL

Project SCORE is funded by:





Project SCORE (Student-Centered Outcomes Research Experience) is an NIH-funded project at the University of Mississippi. This project is a team effort and all of the individuals below have actively participated in the development and implementation of the project.

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# Table of Contents

01

Introduction

02

Icebreaker Activities 03

Physical Activities

04

Mindfulness Activities 05

Curriculum

06

Program Resources

07

Evaluation Resources



Introduction

# INTRODUCTION



THE UNIVERSITY OF MISSISSIPPI

# Introduction



Overview of Project SCORE

YouthParticipatoryAction Research

Use of this manual

# **Overview of Project SCORE**

Project SCORE (student-centered outcomes research experience) is an NIH-funded year-long informal public health education program and mentored research experience utilizing a youth participatory action research (YPAR) approach and near-peer mentors (NPMs) to increase science engagement, interest in college participation, and contribute to a diverse and community-engaged health sciences pipeline.

#### **Project SCORE aims to:**

**AIM 1:** Captivate interest of underrepresented high school students using their real-time challenges of negotiating health threats like COVID-19 and recruit them to participate in a year-long YPAR afterschool public health-focused program & mentored research experience led by NPMs.

**AIM 2:** Recruit, train, and mentor a diverse group of health sciences graduate students to serve as near-peer mentors, preparing these students to incorporate principles of community engagement in research.

**AIM 3:** Cultivate college and career awareness among high school students in areas related to public health, especially social and biobehavioral research, increase science engagement, and explicitly support matriculation into STEM college programs.

**AIM 4:** Develop a student-centered health behavior & promotion agenda addressing student-identified needs.

#### The mission of Project SCORE is:

As a comprehensive science enrichment program, we engage with students in participatory educational and research experiences in public health disciplines. Project SCORE aims to engage, educate, and mentor students to participate in the health sciences.



#### Introduction

# Youth Participatory Action Research

Few studies include the perspectives of youth in health research, even though research has demonstrated that centering patients' needs is an effective method to improve health-related outcomes. Project SCORE seeks to address this issue by utilizing a **Youth Participatory Action Research (YPAR)** approach.

YPAR is a research methodology that engages youth in research that is relevant to their lives and empowers them to become change agents in their schools and communities. Building from participatory action research, YPAR shares similarities with other engagement approaches and focuses on:

- collaboration with individuals, communities, and community groups in the research process
- production of knowledge for the purpose of improving health and wellbeing
- promotion of increased individual, community, and organizational capacity, and
- producing connections to practice and action plans

Including youth perspectives through YPAR has been shown to result in positive outcomes for youth in leadership capabilities, academic and career development, social relationships, communication skills, and positive health behaviors.

YPAR offers an approach to engage youth to develop a health behavior and promotion research agenda that is directly responsive to their needs. This approach moves from merely consulting youth to involving and partnering with them, increasing the likelihood that research efforts will result in effective interventions.



## **Use of This Manual**

This manual provides resources and curriculum content for Project SCORE. The intended audience is community and educational groups that seek to offer an informal afterschool program to engage and interest students in the health sciences. It is meant to be adapted and tailored to meet the needs of the group implementing the program and the youth engaged in the program.

Each session is designed to include an icebreaker activity, a physical activity, a mindfulness activity, and a lesson. Implementation teams have the flexibility to select any icebreaker, physical activity, and mindfulness activity that they want to implement each session. Repeating activities is fine! If time or staff/participant interest does not warrant inclusion of one of the activities (e.g., no need for an icebreaker), then skip it! Each session has learning objectives, alignment with Next Generation Science Standards, description of the time and materials required, lesson plans, and related resources. Each session is designed to be approximately 2 hours in length.

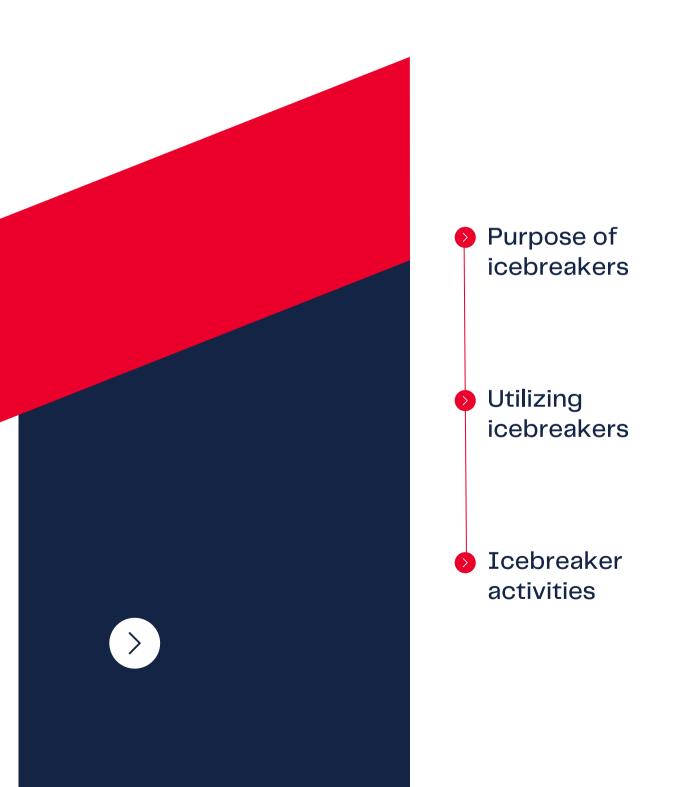
Preparation for each session includes:

- Select activities and lesson
- Gather and prepare materials needed for those activities/lesson
- Assign facilitator roles
- Review and prepare to facilitate sessions

This manual also includes program resources, such as recruitment materials, sign in sheets, staff training suggestions, and participant certificates, as well as evaluation resources.



# ICEBREAKER ACTIVITIES



## Purpose of icebreakers

Icebreakers are fun activities that help people get to know each other in an enjoyable, low-stress way. These short activities can facilitate introductions, help build connections among participants, and provide a mechanism to get participants talking with each other. Icebreakers can also be used to acquaint participants with content of what is going to be covered in a lesson. Starting off each session with an icebreaker provides a way to get the participants talking and engaging with one another and the staff facilitating the session.



# **Utilizing icebreakers**

Plan an ice breaker to start each session. Select an icebreaker based on multiple factors, including:

- how well the individuals know each other
- how much time you have
- the physical space you are working in
- how comfortable staff are facilitating the activity
- the materials you have available
- whether you need the icebreaker to set the tone for or provide some baseline knowledge or thinking about the lesson content that will follow

Once you have selected an icebreaker, gather and prepare your supplies. It is important that a facilitator is identified and prepared to lead the activity. Participants will often groan about starting an icebreaker, but enthusiasm and encouragement from the facilitator and staff can help engage participants. Facilitators should be attentive to how the activity is going and adjust timing and the activity as needed.

Icebreakers can be used multiple times. Groups sometimes find an activity that they like and it can be fun to bring it back into the rotation. Adapt activities in any way that is appropriate for your group. The examples that follow are not exhaustive. Feel free to use any icebreaker that is appropriate for your group, setting, space, and resources!



## **Icebreaker: Starburst Shuffle**

Useful for:

- People who do not know each other well
- Moving around

Time:

10-15 minutes

Materials:

- Envelopes to hold Starbursts (could also use baggies, cups, etc.)
- Starbursts or other individually wrapped candies of a variety of colors
- Starburst Shuffle Handout

Preparation:

- Count out envelopes so you have one for every participant.
- Put one of each color Starburst into each envelope.
- Make copies of the Starburst Shuffle Handout (you need one copy for each participant).
- Identify a staff member to be the facilitator.

- Provide directions to the group:
  - We're going to play a game called Starburst Shuffle. This game will help us get to know each other. Each of you will get an envelope with several different colored Starbursts in it. You will also get a handout with questions. Everyone will get up and start trading Starbursts. The goal is to get all of the same color of Starbursts in your envelope, but both people must answer the question assigned to that color before making the exchange.
  - Here's an example: I am collecting yellow Starbursts. I will give you one orange Starburst for a yellow one. I'll answer the yellow question and you have to answer the orange question as well.
  - The first person to collect all of the same color of Starbursts 'wins' the game.
- Optional: everyone can eat the Starbursts at the end of the game.





### **Handout: Starburst Shuffle**

#### **Starburst Color Questions**

**RED:** You have your own late night talk show, who do you invite as your first guest?

YELLOW: What is one way you are in control of your health and one way you are not?

PINK: You have to sing karaoke, what song do you pick?

**ORANGE:** If a movie was made of your life what genre would it be, who would play you?

#### Goal: Collect all of the same color Starbursts

How to reach the goal:

- 1. Each person has a bag with one of each color of Starbursts in it.
- 2. Start trading Starbursts!

To trade, both people must answer the question assigned to that color before making the exchange. For example: I am collecting ORANGE Starbursts and I will give you one YELLOW Starburst for an ORANGE Starburst. Before we trade, I must answer the ORANGE question: "If a movie was made of your life, what genre would it be? Who would play you?" You must answer the YELLOW question: "What is one way you are in control of your health and one way you are not?"

3. The first person to collect all of the same color Starbursts wins the game.

# **Icebreaker: Telephone Game**

Useful for:

- Flexible on time can make shorter or longer
- Can adapt to relate to lesson content
- Can be done relatively quietly

Time:

5+ minutes

Materials:

None needed

Preparation:

- Consider the size of the group and decide how many teams you will break the group into.
- Identify one staff member as the person who will start the game.
- Come up with prompts. Consider using prompts related to the content (e.g., "High blood pressure has no symptoms.") Prepare several prompts!

- Depending on group size, you can either do this activity as a whole group, or break the group into two or more groups and play as a competition.
- Depending on time, you can have multiple prompts. If so, start with an easy one and then move to more complicated prompts.
- Tell all participants
  - We're going to play a game called the Telephone Game. Some of you may also have heard this called Whisper Down the Lane.
  - Everyone get in a line (or a circle, or 2+ lines if doing a competition).
  - I am going to whisper something in the first person's ear. They are going to then whisper it in the ear of the person next to them, who will then pass it on until it reaches the last person in the group. That person will then say out loud what they heard and we will see how close it is to what I told the first person. (If doing a competition, you can see which team is closest to the original prompt.)



# **Icebreaker: Scribble Drawing**

Useful for:

- Quiet, low movement activity
- Need a space in which students can draw on paper
- Participants who will be respectful of each other

Time:

10-15 minutes

Materials:

- Blank paper to draw on need one sheet per participant
- Markers, crayons, or colored pencils enough for all participants

Preparation:

- Count out paper so you have one sheet per participant
- Identify a staff member to facilitate the activity.

- Provide directions to the group:
  - Everyone take one piece of paper and a marker/pencil/crayon
  - When I say 'go' you are going to scribble on the paper until I say stop.
- Say 'Go!' and after 5-10 seconds say 'Stop!'
- Provide directions to the group:
  - Now, trade papers with someone.
  - [Once they have traded] Take the scribble and try to create a picture out of it. Let's spend about 5 minutes working on this.
- Let participants have as much time as you have for this activity. When ready to wrap up, encourage discussion to address:
  - how each one of them used their own perspectives and creativity to create positive change
  - how creative thinking is important
  - how something that starts as nothing special (or a problem) can be transformed into something interesting or useful



# **Icebreaker: Swimming to Flying**

Useful for:

- People who do not know each other well
- Moving around

Time:

10-15 minutes

Materials:

None needed

Preparation:

 Identify a staff leader to prepare to facilitate the activity.

- Provide directions to the group:
  - We're going to play a game called Swimming to Flying. Each of you is a fish. You are going to 'swim' around the room and when you encounter another fish, stop and play rock/paper/scissors with that fish. The winner of the game becomes a frog. The other person stays a fish. The fish swims away and looks for another fish to play with. The frog hops away and finds another frog to play with. The winner of a game between two frogs becomes a bird. Birds fly around watching the rest of the games. The game will be over when there is only one fish, one frog, and a bunch of birds.



### **Icebreaker: Birds of a Feather**

Useful for:

- Getting to know each other or learning more about each other
- Not a lot of movement, but a lot of small group talking

Time:

10-15 minutes

Materials:

- Pens/pencils
- Birds of a Feather Handout

Preparation:

- Make copies of the Birds of a Feather Handout (you need one copy for each group, but it is helpful to give one to each participant)
- Identify a staff member to facilitate the activity
- Consider how large a group you expect and plan groups/group sizes. Consider groups of about 3 people who don't know each other well.

- Provide directions to the group:
  - We're going to play a game called Birds of a Feather. I'm going to break you up into small groups. You are going to find as many things you all have in common as possible. Only one person needs to write the list, so the person with the earliest birthday in the year should do this. Let's get into groups now (give directions about how you decided to set up groups).
- Wait until participants are in groups, then hand out pens/pencils and handouts.
- Provide directions to the group:
  - Do not start until I say go. Once we start, you will have 7 minutes (change based on time available) to come up with as many things you ALL have in common as you can.
  - (Start timer) Go!
  - (When time is up) Ok stop!
- Ask groups to report how many they come up with.
   Can ask each group to share something interesting they learned they all have in common.





## **Handout: Birds of a Feather**

#### Birds of a Feather ... Flock Together!

When the timer starts, start to talk about things ALL the members of your group may have in common. For example, were you all born in June? Do you all like strawberry ice cream? Do you all have a sister? Write down as many things as you come up with that you all have in common ice cream? Do you all have a sister? Write down as many things as you come up with that you all have in common.

Things we have in common.... (turn the page over & write on back if needed!)

## **Icebreaker: Super Selfies**

Useful for:

- Once people are acquainted and you want them to get to know more about each other
- When you need a quiet activity and have space for participants to draw

Time:

10-15 minutes

Materials:

- Blank paper to draw on need one sheet per participant
- Markers, crayons, or colored pencils enough for all participants

Preparation:

- Count out paper so you have one sheet per participant
- Identify a staff member to facilitate the activity.

- Provide directions to the group:
  - Everyone take one piece of paper and markers/pencils/crayons
  - Find a place where you can sit and draw
  - I want you to think of a super power you wish you had. Now, draw yourself as superhero. We'll spend about 5 to 7 minutes drawing. Then, we will come back together and share our self-portraits and describe your super power.
- After 5 to 7 minutes, pay attention to how the participants are doing and wrap up sooner if they are done their self-portraits, call the group back together.
- Ask for a volunteer to share their drawing and describe their super power. Continuing having each participant share until all that want to share have had a turn.



## **Icebreaker: Beachball Toss**

Useful for:

- People who do not know each other well
- Moving around

Time:

10-15 minutes

Materials:

 Beachball - blown up with prompts written all over the ball

Preparation:

- Blow up beachball
- Write prompts all over the ball with a marker that will not smear. Prompts can be getting to know you facts (e.g., what is your favorite food) or prompts about the lesson topic for the day (e.g., what does health mean to you)
- Identify a staff member to facilitate the activity

- Provide directions to the group:
  - We're going to play a game to get to know each other. I'm going to toss the ball to someone and they are going to read a question out loud and then answer it. After they answer, they toss the ball to another person. Remember - be gentle! Don't throw the ball hard.
- Remind the participants to toss it to someone who has not gotten a chance to answer a question yet. Play at least until everyone has had a turn.



# **Icebreaker: Quick Line Up**

Useful for:

- People who do not know each other well
- Moving around

Time:

10-15 minutes

Materials:

None needed

Preparation:

- Identify a staff member to facilitate the activity
- Select several characteristics to use in the activity

- Organize the participants into two (or more depending on the size of the group) groups
- Provide directions to the group:
  - I'm going to call out something and you have to talk in your group so that you can line up in order based on that characteristic. For example, if I call out 'height' you are going to line up from shortest to tallest.
- Call out a characteristic and wait for each group to organize themselves. Potential characteristics:
  - Height shortest to tallest
  - Birth month January to December
  - Birth day of the month 1 to 31
  - Number of brothers least to most
  - Number of sisters least to most



# PHYSICAL ACTIVITIES

# Physical Activities



Purpose of physical activities

Utilizing physical activities

Physical activities

# Purpose of physical activities

Participants in an afterschool program often arrive tired from a day of sitting and learning. Encouraging some physical activity allows students to relax, get some movement, and prepare to transition to a new learning environment. This models a healthy way to manage stress and transitions in a day. Starting off each session with physical activity also provides a way to get the participants talking and engaging with one another and with the staff facilitating the session.



# **Utilizing physical activities**

Plan a physical activity to engage in before starting a lesson. Select a physical activity based on multiple factors, including:

- the range of physical abilities in the group
- how much time you have
- whether you can go outside or if you need an indoor activity
- how comfortable staff are facilitating the activity
- the materials you have available
- if you want to use physical activity as part of the lesson (e.g., recall questions and have a game with that includes movement)

Once you have selected a physical activity, gather and prepare your supplies. It is important that a facilitator(s) is identified and that the facilitator is prepared to lead the activity. Be aware of the needs of all participants and staff and select and adapt activities as appropriate to ensure full participation is possible for all. Facilitators should be attentive to how the activity is going and adjust timing and the activity as needed. If going outside, safety is priority. Consider all factors and prepare accordingly (e.g., don't forget sunscreen!).

Physical activities can be used multiple times. Groups sometimes find an activity that they like and it can be fun to bring it back into the rotation. Adapt activities in any way that is appropriate for your group.



# **Physical Activity: Walking**

Useful for:

- Relaxed, low structure activity
- Informal conversations

Time:

10-20minutes

Materials:

- Safe walking location can be indoors or outdoors
- Outdoor walks require sufficient staff to safely escort students (e.g., at least two staff - one in front of group, one at back to ensure no participants are lost/left behind)
- Mobile phone at least one staff member should carry a phone in case of emergency
- Any safety supplies for the location (e.g., sunscreen, reflective crossing vest)

Preparation:

- Plan route and staffing
- Be aware of any health / safety /ability concerns

- Provide directions to the group. Include:
  - Planned route
  - Safety expectations stay with group
  - Address any needs/concerns



# Physical Activity: Ultimate Ninja

Useful for:

- When you have a space that is large enough for the players to form an unobstructed circle
- Participants who are willing to gently 'hit' each others hands

Time:

10 minutes

Materials:

Indoor or outdoor unobstructed space

Preparation:

• Identify a staff member to be lead player

- Provide directions to the group:
  - Let's get into a circle, leave some elbow room between you and the person next to you. Just keep your hands resting in front of you (demonstrate by resting hands on front of hips/thighs).
  - I am the lead player for this first round. When I say "ULTIMATE' you will all say 'NINJA' and jump into a Ninia pose.
  - Once you land in your pose, everyone will stay frozen. I'll then try to hit another player's hand in one swift motion. Once I do that, I have to freeze in the position I'm in at the end of the attack. If I hit another player's hand, that player losing their hand, if they lose both hands they are out of the game. If I miss, that player gets to reset in a ninja pose.
  - We will go around the circle taking turns 'attacking'. Remember to only try to hit the person's hand and to not hit hard.
  - The game is over when there is only one player left.



# Physical Activity: 3-6-9 Clap

Useful for:

- Relatively quiet and low movement game
- Groups who can count!

Time:

10 minutes

Materials:

None needed

Preparation:

Identify a staff member to facilitate the game

- Provide directions to the group:
  - We're going to play a counting game called 3-6-9. for this game, you cannot say 3, 6, or 9 or any number containing 3, 6, or 9. Instead of saying a number with a 3, 6, or 9 in it, you clap when it is your turn.
  - When it's your turn, if you say a 3, 6, or 9 instead of clapping - you're out! If you clap, you stay in and the next person says out loud the next number.
  - Example: 1, 2, clap, 4, 5, clap, 7,8, clap, 10, 11, 12, clap...
  - Let's get in a circle.
  - Point to a person and tell them to start by saying 'One' and then tell the next person to say 'Two' but the third person claps because it is a 3.
  - When you get to the 30s, 60s, and 90s, participants should clap for each because they contain a 3, 6, or 9.
  - You will slowly eliminate people as they make a mistake. The last person who has not made a mistake is the winner!



# **Physical Activity: Burn Game**

**Useful for:** 

- When you have space for the group to get in a large circle
- Some movement and speedy action

Time:

10-15minutes

Materials:

 A ball large enough to be passed around (e.g., soccer ball, beach ball)

Preparation:

• Identify a staff member to facilitate the game

- Provide directions to the group:
  - We're going to play an active game called the Burn Game.
  - Let's all get in a circle.
  - Pick one person to be the first person to sit in the center.
  - Hand the ball to a person standing in the circle.
  - [Person in the middle] is going to close their eyes and silently count to 20. While they are counting we are going to pass the ball from person to person. When they reach 20, they are going to you "Burn!" Whoever is holding the ball when they say 'Burn" is out.
  - When you are out, you sit down with our legs straight out in front of you.
  - When the game starts back up again, the person passing the ball must step over your legs CAREFULLY in order to pass the ball to the next person.
  - It will get frantic when several people in a row are out and players have to step over multiple people to get rid of the ball as quickly as they can.
  - Remind everyone to be careful not to step on others as they step/jump over them.



# **Physical Activity: Yoga**

Useful for:

- Relaxing activity that calms participants
- When you have a staff member who feels comfortable leading a yoga session

Time:

10-15minutes

Materials:

- Space for everyone to lie down
- Yoga mats or towels
- A lesson plan OR a TV/Screen and laptop to play a video

Preparation:

- Identify a staff member to lead this activity
- Review yoga resources and plan a set of movements
   OR select and review a video to show
- Practice the set of movements and how to talk participants through them OR prepare to play video

Yoga Resources (these are examples, other resources may be used):

Yoga Ed.

https://www.youtube.com/c/Yogaed https://www.youtube.com/watch?v=6kJgTouHHeE

Yoga with Adriene

https://www.youtube.com/watch?v=H0ZqRJWd\_sg https://www.youtube.com/watch?v=ZK2XBduF84l https://www.youtube.com/watch?v=7kgZnJqzNaU https://www.youtube.com/watch?v=Td6zFtZPkJ4

New School Yoga <a href="https://www.youtube.com/c/NewSchoolYoga">https://www.youtube.com/c/NewSchoolYoga</a>

- Provide directions to the group:
  - We're going to do yoga. Grab a mat/towel and find a space to roll it out and be able to lie down on the mat. During the set of movements we need to be quiet so we can listen to the guidance and so we don't disturb each other.
  - Provide guidance either as you lead movements or direct attention to screen



# MINDFULNESS ACTIVITIES

# Mindfulness Activities



Purpose of mindfulness activities

Utilizing mindfulness activities

Mindfulness activities

#### Mindfulness

# Purpose of mindfulness activities

Integrating mindfulness allows students to focus on their emotional health and well-being for a few moments before engaging in a new learning environment. The practice helps students transition from their school setting into their afterschool informal learning environment. Many benefits can be achieved by practicing mindfulness, including regulating your emotions, managing stress, improving academic performance, higher self-efficacy, and learning to relax your mind and body. When mindfulness is practiced, it allows us to disengage from the constant thinking, judging, planning, and worrying many of us do all day. Mindfulness allows the brain to move into a relaxation response which can lower our heart rate and slow our respiratory system leading to clearer thinking so the brain is ready to take in new information and process it in a balanced way. As with anything, the more mindfulness is practiced, the easier it is to have available when you are overstimulated with thoughts, emotions, and or worries. By offering mindfulness as part of the daily schedule, the hope is to help the students reduce stress and build confidence in Project SCORE and outside of the program.



#### Mindfulness

# **Utilizing mindfulness**

As part of the session, a mindfulness activity can be added. There are videos of each activity that can be watched for reference on our website, https://pharmacy.olemiss.edu/score/. The mindfulness activities do build on each other to help build the concepts along the way for the students to develop an understanding of how mindfulness should feel and how each exercise can be used. However, they can be used independently if the students already have a concept of mindfulness. It takes time to understand how the breath should feel or what happens in our mind as we breathe, so practicing each activity for a couple of weeks before introducing another activity is best.

Select a mindfulness activity and do it after the physical activity. This will help to re-focus the students for the session. It could also be added to the end of a lesson as a reflection time.

Encourage participants to practice mindfulness outside of Project SCORE and ask them about it during this part of the lesson. The second week of practicing the activity would be a great time to ask a participant if they would like to lead the mindfulness activity. Remind them which one they are doing and give them the sheet to reference. This will help build leadership skills and allow peer-to-peer guidance.



Mindfulness

# Mindfulness: Simple Breath

Useful for:

- Helping to connect to your body and how your breath feels in your body
- Helps bring focus and clarity to the mind

Time:

5-10 minutes

Preparation:

- Watch video of Simple Breath: https://pharmacy.olemiss.edu/score/mindfulnessvideos/
- Practice the breath yourself to feel comfortable with doing it.

- Provide directions to the group:
  - Simple Breath can be done anywhere; sitting, standing, lying down, in the classroom, on the bus, outside, or while trying to go to bed
  - We are going to practice Simple Breathing sitting down today, but the concepts are the same no matter where you are. Sit up nice and tall; think of a string running down your spine and pulling it up from your head to lengthen your spine. Keeping your shoulders down.
  - This will give your lungs and diaphragm lots of space to take simple, easy, deep, slow breaths.
  - Now, you may close your eyes or look down at your lap if that is comfortable for you.
  - Inhale nice and slow through your nose, feeling your lungs and belly fill with air.
  - Exhale through your mouth nice and slow, taking time to inhale and exhale at the same slow rate.
  - We will do this three times together as I guide you.
     Breathe in...Breathe out...Breathe in...Breathe out...Breathe in...Breathe Out...
  - Slowly open your eyes, if they were closed, and take a natural breath.
- When you breathe into your belly, taking slow, controlled breaths allows your heart rate to come down, your nervous system to calm, and your brain to refocus.



Mindfulness

# **Mindfulness: Counting Breath**

Useful for:

- Helping to connect to your body and how your breath feels in your body
- Brings calm and focus

Time:

5-10 minutes

Preparation:

- Watch video of Counting Breath: https://pharmacy.olemiss.edu/score/mindfulnessvideos/
- Practice the breath yourself to feel comfortable with doing it.

Facilitation:

- Provide directions to the group:
  - Counting breath can be done anywhere; sitting, standing, lying down, in the classroom, on the bus, outside, or while trying to go to bed
  - We are going to practice Counting Breathing sitting down today, but the concepts are the same no matter where you are. Sit up nice and tall; think of a string running down your spine and pulling it up from your head to lengthen your spine. Keeping your shoulders down.
  - This will give your lungs and diaphragm lots of space to take simple, easy, slow breaths.
  - Now, you may close your eyes or look down at your lap if that is comfortable for you.
  - Take a simple breath inhaling through your nose and out through your mouth. Now you will follow my count as we breathe in to 4, hold for 2, and then exhale to 6.
  - We will repeat this three times as I guide you.
     Breathe in 1...2...3...4 Hold 1...2...Breathe out
     1...2...3...4...5...6. (repeat three times).
  - Slowly open your eyes, if they were closed, and take a natural breath
- The timing can be adjusted; you can shorten the length if there is any struggle. You can extend the exhale as you adapt to this type of breathing. It is the exhale that signals to your brain/nervous system that you are okay.



Mindfulness

# **Mindfulness: Anchor Breathing**

Useful for:

Time:

Preparation:

Facilitation:

- Helping to connect to your body and how your breath feels in your body
- Helps bring focus

#### 5-10 minutes

- Watch video of Anchor Breathing: https://pharmacy.olemiss.edu/score/mindfulness-videos/
- Practice the breath yourself to feel comfortable with doing it.
  - Provide directions to the group:
    - Anchor Breathing can be done anywhere; sitting, standing, lying down, in the classroom, on the bus, outside, or while trying to go to bed
    - We are going to practice Anchor Breathing standing up today, but the concepts are the same no matter where you are. Stand up nice and tall; imagine your feet connecting to the ground, grounding you in your spot. Think of a string running down your spine and pulling it up from your head to lengthen your spine. Keeping your shoulders down.
    - This will give your lungs and diaphragm lots of space to take simple, easy, slow breaths.
    - Now, you may close your eyes if that is comfortable for you or look down at your feet.
    - Place one hand on your belly and one on your heart or both on your belly if that is more comfortable. Inhale nice and slow through your nose, feeling your lungs and belly fill with air. (your should feel your belly move as the air comes in and out of your body)
    - We will do this three times together as I guide you, but you will also say this quietly to yourself. Breathe in...Breathe out...Breathe in...Breathe out...Breathe in...Breathe Out...
    - Slowly open your eyes, if they were closed, and take a natural breath
  - You are allowing your mind to clear the never-ending todo list and focus on the motion of the breath by saying breath in/breath out and feeling it with your hands. You are creating an anchor in your mind/body with your breath movement.



# **Mindfulness: Box Breath**

Useful for:

- Helping to connect to your body and how your breath feels in your body
- Helps bring calmness and relaxation, helps reduce your anxiety

Time:

5-10 minutes

Preparation:

- Watch video of Box Breath: https://pharmacy.olemiss.edu/score/mindfulnessvideos/
- Practice the breath yourself to feel comfortable with doing it.

• Provide directions to the group:

- Box Breathing can be done anywhere; sitting, standing, lying down, in the classroom, on the bus, outside, or while experiencing anxiety
- We are going to practice Box Breathing sitting down today, but the concepts are the same no matter where you are. Sit up nice and tall; think of a string running down your spine and pulling it up from your head to lengthen your spine. Keeping your shoulders down.
- This will give your lungs and diaphragm lots of space to take simple, easy, slow breaths.
- We will do this with our eyes open today so you can focus on your hand. You will trace a box along one palm of your hand with a finger of the opposite hand.
- Inhale slowly as you trace from the bottom of your thumb up to your pointer, breathe out as you move your finger across the base of your fingers, and breathe in as you draw a line from the base of your pinky finger to the bottom of your hand, breathe out as you draw a line back to the base of your thumb creating a box. We are going to do this three times together as I guide you.
- Take a natural breath
- This practice brings in the other concepts we have learned, anchoring and counting. As you get more comfortable with this practice, you can hold your breath with the horizontal lines

Facilitation:



Mindfulness

# Mindfulness: Waves Breathing

Useful for:

- Helping to connect to your body and how your breath feels in your body
- Wakens the body, relieves tension and helps bring focus

Time:

Preparation:

Facilitation:

#### 5-10 minutes

- Watch video of Waves Breath: https://pharmacy.olemiss.edu/score/mindfulnessvideos/
- Practice the breath yourself to feel comfortable with doing it.
- Provide directions to the group:
  - Waves Breathing can be done sitting or standing.
     You need more room with this than the other breaths we have been doing.
  - We are going to practice Waves Breathing standing up today, but the concepts are the same no matter where you are. Stand up nice and tall; think of a string running down your spine and pulling it up from your head to lengthen your spine. Keeping your shoulders down.
  - Place your arms straight down by your sides. As you inhale, bring your arms over your head to meet above your head; as you exhale through your mouth with a "hahhh" sound, bring your hands straight down in front of you to meet your thighs.
  - Now, you may close your eyes if that is comfortable for you or gaze down at the ground.
  - We will do this three times together as I guide you. Breathe in, arms up...Breathe out, arms down...Breathe in, arms up...Breathe out, arms down...Breathe in, arms up...Breathe Out, arms down...
  - Slowly open your eyes, if they were closed, and take a natural breath
- This movement helps your body refocus, awaken, and bring you back to the present. This is great to do as a break when studying or just feeling tired.





# **CURRICULUM**



- Purpose and overview of curriculum
- Curriculum implementation guidance
- Lessons

# Purpose and Overview of Curriculum

The Project SCORE curriculum is meant to achieve the project's overall objectives of introducing high school students to public health principles, exposing students to career options in the health sciences, developing public health research skills, developing a teen-centered health research agenda, and developing health-related research and education projects.

Each lesson has learning objectives and activities designed to meet those objectives. While the curriculum is designed to build knowledge and skills over time, it is not necessary to implement the lessons in the order they are presented here.

#### The sessions include:

- Community building orientation to the program
- Introduction to Public Health
- What is epidemiology?
- Careers in the Health Sciences
- Introduction to Health Literacy
- Introduction to Health Disparities
- How to Develop Research Questions
- Developing a Student-Centered Research Agenda
- Introduction to Research Methods and Ethics
- Introduction to Health Education & Health Communication
- Research Project Guide
- Health Education Project Guide
- Presentations and Celebration

After completion of the lessons, the students are prepared to select a topic and develop either a research project or a health education project based on the student-centered research agenda they developed. The projects can be done across multiple sessions or could be completed independently. The guides help participants plan and execute the projects. Participants can present their projects at a final session.



# **Curriculum Implementation Guidance**

This curriculum was designed to be used in an afterschool informal science education program. The curriculum is designed to introduce concepts of public health, the scientific method, health science careers, and to develop and engage in student-driven health-related research. The curriculum is structured in a manner that the lessons do build upon each other. However, programs could choose to implement only some of the lessons, offer them in a different order, or adapt them to fit the setting, participants, and resources available.

To prepare to implement each lesson, select an icebreaker activity, a physical activity, and a mindfulness activity. Gather any materials needed for those activities, identify who will lead each activity, and prepare to implement the activities. Each lesson has learning objectives, materials needed, and preparation steps. It is important to identify who will lead each part of the lesson and to prepare ahead of time. As time permits, a wrap-up and reflection appropriate to the lesson and participants' needs is a valuable way to end each lesson.

When implementing lessons, it is important to be flexible and responsive to the participants and setting. Each session should be driven by the learning objectives and the interests of the participants. Program staff are encouraged to engage with participants and to follow their curiosity and interests. Each lesson has scripted guidance for implementation (*italicized language is to be read out loud - feel free to adapt as this is just a guide*), but program staff can adapt as they implement the lesson. The overall goal of a program like Project SCORE is to engage, interest, and excite participants about the health sciences. Have fun and enjoy learning with the participants!



# **Lesson 1: Community Building**

#### Learning Objectives:

- Understand the structure, components, and requirements of Project SCORE
- Gain familiarity with one another
- Establish agreements/ground rules
- Establish weekly meeting schedule
- Understand how to mitigate risk from health challenges by making a Corsi-Rosenthal (CR) box

#### Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Binders/journals
- Pens/pencils/markers
- Large sticky pad

- Icebreaker materials
- Physical activity materials
- CR handout copies
- Fan
- 4 filters
- Duct tape
- Scissors

#### Preparation:

- Select icebreaker activity
- Select physical activity
- Follow the Mindfulness order
- Watch video on how to create a Corsi-Rosenthal Box
- Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Make copies of CR handout
- · Gather and pack all materials for travel to site



### Lesson 1: Community Building - part 1 of 2

- **Welcome!** Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Icebreaker activity
- ACTIVITY: Physical activity (may skip this activity the first week)
- ACTIVITY: Mindfulness activity (may skip this activity the first week)
- ACTIVITY: Introduce Project SCORE
  - Introduce all SCORE staff
  - Describe what SCORE stands for (Student-Centered Outcomes Research Experience)
  - Describe why we are doing this project to address two issues:
    - To get more people interested in careers in the health sciences
    - To develop a health research agenda that is driven by teens
  - o Describe the project goals participants will:
    - learn about careers in the health sciences
    - learn about public health and health research
    - develop research questions about health
    - develop research projects or health promotion materials related to the questions you develop
    - to build community meet mentors
  - Logistics
    - This project is funded by NIH
    - Explain how participants will be paid
    - Discuss meeting time/schedule across fall and spring
    - Staff near peer mentors, faculty/staff
    - Summer week on campus
    - Community partner sites
  - Review weekly meeting structure
    - Each week will look the same sign in, snack, icebreaker, physical activity, mindfulness activity, and lesson. We'll wrap up with some reflection, signing out, and receiving payment for the week.

Ask if anyone has questions and answer any questions

### **Lesson 1: Community Building - part 2 of 2**

- ACTIVITY: Establishing a group agreement
  - Put a large sticky pad page on the wall and write SCORE Team Agreement on the top
  - In order for us to have an enjoyable and productive time together, we need to establish some mutual agreements about how we will treat each other and act while together. What are things we could agree upon to be respectful of each other and help us make this time meaningful?
  - Prompt and ask about: air pods, phones, gossiping, cursing, etc.
  - Write agreements on pad
  - When everyone is happy with the agreements, ask the participants AND the staff to sign the page. Bring this page to all future sessions and put it up on a wall.
- ACTIVITY: Establishing a call back
  - We are going to do a lot of activities in which we break up into groups or work on things that could get loud and we want to develop a way to get everyone's attention - sort of like a whistle. Teachers usually refer to these as 'call backs'. What would you like to use? Let's come up with a few and pick one that we can use.
- ACTIVITY: Build a Corsi-Rosenthal (CR) Box
  - What are things that we can do individually to keep ourselves safe from airborne viruses like COVID-19? (prompt for vaccines, masks, stay home when sick, wash hands)
  - What are things that can be done at a group level? (prompt for policies, clean the air)
  - We can take control of our own safety from any airborne infection or
    pollutant by making something to clean the air. This makes everyone safer
    without them having to do anything on their own. You may have heard of a
    HEPA filter. Today we are going to make our own with easy to get things it's called a Corsi-Rosenthal Box, named after the engineers who came up
    with it.
  - Handout CR directions
  - Break up into groups/assign tasks, build CR box



## **Lesson 1: Community Building**

# **Handout: Corsi-Rosenthal Box**

### **Affordable Air Filtration**

### What is a Corsi-Rosenthal (CR) Box?

A homemade air filtration device that cleans air, improves air quality, and reduces transmission of airborne viruses.

#### How does a Corsi-Rosenthal Box work?

It takes in air through filters, which trap pollutants, pushes the air out through the top fan, and mixes and redistributes indoor air. For optimal performance, it should be placed a few feet away from anything else.

### What materials do you need to make a Corsi-Rosenthal Box?

You can purchase all of the materials at a big box store. You need:

- a box fan and it's cardboard box
- 4 air filters
- duct tape
- scissors

### Learn more about Corsi-Rosenthal Boxes!

- https://www.youtube.com/watch?v=hluH-2naozl
- https://engineering.ucdavis.edu/news/science-action-how-buildcorsi-rosenthal-box
- https://cleanaircrew.org/box-fan-filters/

### Risk mitigation is not limited to air!

Clean water is also a challenge for many. Check out this homemade water filter:

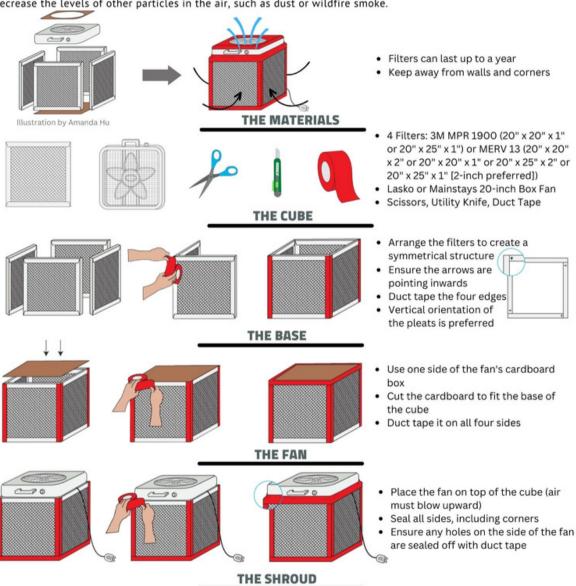
https://www.h2odistributors.com/global/pdf/info-emergency-water-filter.pdf

## **Lesson 1: Community Building**

# **Handout: Corsi-Rosenthal Box**

#### HOW TO BUILD A CORSI-ROSENTHAL BOX

The Corsi-Rosenthal Box is an affordable DIY air-cleaning system made with simple materials found in hardware stores. The box fan pulls air through the filters on the sides and blows out clean air. It is proven to reduce indoor exposure to airborne particles, including those containing the virus that causes COVID-19. The box can also decrease the levels of other particles in the air, such as dust or wildfire smoke.









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- · Cut the other cardboard sheet to fit the top of the fan
- · Cut a circular hole (Diameter: 15" for Lasko and 16" for Mainstays)
- Place the shroud on the fan and tape it on all four sides
- The shroud increases efficiency and decreases the noise level

Illustrator: Marija Mladenović Creator: Shiven Taneja

# Lesson 2: Introduction to Public Health

# Learning Objectives:

- Describe public health and differentiate it from individual health
- Describe major achievements in public health
- Describe health promotion and prevention

#### Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Binders/journals
- Pens/pencils/markers
- Agreements poster
- Public health services handout copies
- Icebreaker materials
- Physical activity materials
- Equipment to show a video
- Delivering the Goods game
- Delivering the Goods handout copies

#### Preparation:

- Select icebreaker activity
- Select physical activity
- Follow the Mindfulness order
- Watch video on public health
- Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Make copies of Delivering the Goods handout
- Make copies of Delivering the Goods cards and cut them out
- Learn how to play Delivering the Goods
- · Make copies of public health services handout
- Gather and pack all materials for travel to site



### Lesson 2: Public Health - part 1 of 2

- **Welcome!** Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Icebreaker activity
- **ACTIVITY:** Physical activity
- ACTIVITY: Mindfulness activity
- ACTIVITY: What is public health
  - What comes to mind when you think of the word 'health?
  - What about public health? What does the 'public' in public health mean? How is that different than personal health? (prompt for health of all/large group vs health of individual)
  - Health is not having illness or injury, whether it be physical or mental. To be healthy is not just no sickness, but it means that you are doing well.
  - Public health is about the population's health and wellbeing. It can be about the health of everyone around the globe, the country, or the community. It is always about the health of the GROUP.
  - What are examples of things that impact public health?
     (prompt for clean water, clean air, having healthcare nearby)
  - Let's watch a video to learn a little more about public health.
    - Play American Public Health Association "What is Public Health" Video: https://www.youtube.com/watch?v=ig2cnOLFBR4&t=6s
  - Handout Public Health Services handout.
  - This handout shows 20 essential public health services. Do any of these surprise you? (engage in discussion driven by student questions)



### Lesson 2: Public Health - part 2 of 2

- ACTIVITY: Delivering the Goods game
  - Now that we've learned about health both individual health and public health, we are going to play a game called Delivering the Goods.
  - We are going to break into small groups and complete 1-6 on the worksheet. Once we have completed question 6, each group will pick three "Things that happen to an aid Mission" cards and complete questions 7 and 8.
  - After everyone has completed the worksheet, bring the group back together for a discussion of the challenged and how they had to adapt their plans.

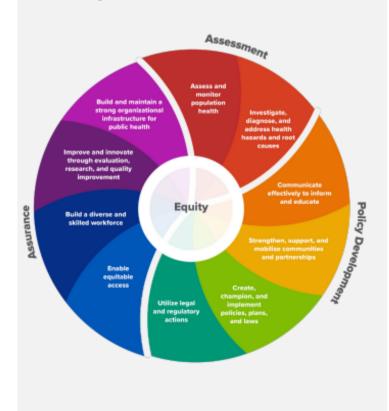
SOURCE: Delivering the Goods is a game developed by Rx for Survival—A Global Health Challenge™ which is a Co-Production of the WGBH/NOVA Science Unit and Vulcan Productions, Inc. Produced in association with Johns Hopkins Bloomberg School of Public Health. ™/© WGBH Educational Foundation and Vulcan Productions, Inc. All third party trademarks are owned by their respective owners and used with permission. Major funding for Rx for Survival—A Global Health Challenge is provided by the Bill & Melinda Gates Foundation and The Merck Company Foundation.

# **Handout: Public Health Services**

# THE 10 ESSENTIAL PUBLIC HEALTH SERVICES

To protect and promote the health of all people in all communities

The 10 Essential Public Health Services provide a framework for public health to protect and promote the health of all people in all communities. To achieve equity, the Essential Public Health Services actively promote policies, systems, and overall community conditions that enable optimal health for all and seek to remove systemic and structural barriers that have resulted in health inequities. Such barriers include poverty, racism, gender discrimination, ableism, and other forms of oppression. Everyone should have a fair and just opportunity to achieve optimal health and well-being.



#### ESSENTIAL PUBLIC HEALTH SERVICE #1

Assess and monitor population health status, factors that influence health, and community needs and assets

#### ESSENTIAL PUBLIC HEALTH SERVICE #2

Investigate, diagnose, and address health problems and hazards affecting the population

#### ESSENTIAL PUBLIC HEALTH SERVICE #3

Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it

#### ESSENTIAL PUBLIC HEALTH SERVICE #4

Strengthen, support, and mobilize communities and partnerships to improve health

#### ESSENTIAL PUBLIC HEALTH SERVICE #5

Create, champion, and implement policies, plans, and laws that impact health

#### ESSENTIAL PUBLIC HEALTH SERVICE #6

Utilize legal and regulatory actions designed to improve and protect the public's health

#### ESSENTIAL PUBLIC HEALTH SERVICE #7

Assure an effective system that enables equitable access to the individual services and care needed to be healthy

#### ESSENTIAL PUBLIC HEALTH SERVICE #8

Build and support a diverse and skilled public health workforce

#### **ESSENTIAL PUBLIC HEALTH SERVICE #9**

Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement

#### **ESSENTIAL PUBLIC HEALTH SERVICE #10**

Build and maintain a strong organizational infrastructure for public health

Created 2020

# **Handout: Delivering the Goods**

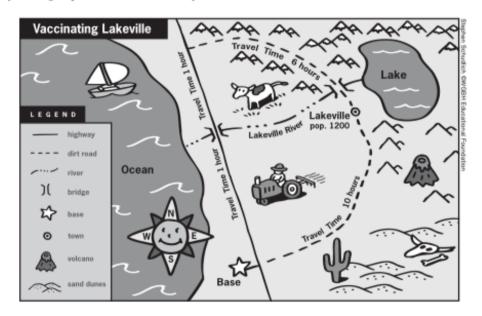


# Delivering the Goods



O Riders for Health

Influenza (the flu) has made people sick since ancient times. Some strains are mild and make people sick for a week. Some strains are deadly. An estimated 30 million people died as a result of the 1918 flu epidemic. Fortunately, flu vaccines can protect people against the flu. Yet, a major challenge is getting people the vaccine they need. You manage a team of motorcycle-riding healthcare workers, similar to the "Riders for Health" featured in the program. There is an outbreak of a virulent, highly contagious flu near the town of Lakeville. You must vaccinate all the residents before they get sick and spread the disease further—you don't want this local outbreak to turn into an epidemic. Yet, your program has limited funds. In this activity, you will try to design a plan that immunizes everyone in a reasonable amount of time and at an affordable cost.



1. Complete the table about the two possible routes from Base to Lakeville.

ROUTE	TIME TO TRAVEL TO LAKEVILLE	ADVANTAGES	DISADVANTAGES
Highway north to dirt road			
Dirt road through the desert			

What is the population of Lakeville?





# **Handout: Delivering The Goods**

		riders will you need?			
in Lakeville as a grou	p. Each rider can vacc	e number of riders from qu inate 40 people per hour. A on?	At this	rate, how m	
At this point, how mu	ich does the plan cost	after paying for the coole	rs and	motorcycles?	?
ITEM	COST PER ITEM	QUANTITY	тс	TAL	
Motorcycles	\$5,000 each		\$		
Cooler with vaccines	\$20 each		\$		
		Grand Total	\$		
Outline your plan bel	ow.				
<ul> <li>Our route will be</li> </ul>					
We will use	riders and this p	lan will cost \$		DID YOU KNO	ow?
hours.  You are on your way to Lakeville. Pick three cards. These describe situations you face on the mission. List the events and indicate how much time and money they add or subtract from your original estimates.					
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# Handout: Things That Happen to an Aide Mission Cards

#### THINGS THAT HAPPEN TO AN AID MISSION Activity Cards

Half of the people in Lakeville believe their traditional medicines can successfully stop a flu outbreak. They do not wish to be vaccinated. Convincing them adds a 24 hours.

Floods have washed out the bridges. Add six hours for every bridge crossed.

There are already some trained community workers in Lakeville. With their help, you reduce the time you need to vaccinate everyone by two hours. A militia has attacked Lakeville. Most of the population has fled across the border by the time you arrive. In addition, the militia takes some of your supplies and equipment. As a result, your plan takes a 100 hours longer and replacing the doses and equipment costs \$5,000.

The rainy season has made the dirt roads muddy. Add five hours to your travel time. The highway is repaved and the motorcycles can drive faster. If you took the highway, subtract one hour from your travel time.

You have a leak in your gas tank. Fixing it adds two hours to your trip. You have mechanical problems with a motorcycle. Add eight hours to do the repairs.

Lakeville's leaders demand a \$1,000 payment before giving you access to their town. Since the last official census, Lakeville's population has grown by 100. Add the time it takes to return to base and bring the extra doses back to Lakeville. Also, add \$10 for the cost of the extra vaccines.

# Handout: Things That Happen to an Aide Mission Cards

When you arrive in Lakeville, a festival is taking place. The townspeople are all at the festival, making it easy to immunize everyone. Subtract two hours from your immunization time. Last year, a child in Lakeville got very sick after receiving a vaccine. Now, half the people in Lakeville refuse to be vaccinated. You send out health educators ahead of your mission to reassure the population.

This costs you \$3,000.

Lakeville just built a new clinic, making it easier to immunize the area. Subtract two hours from your immunization time. The temperature was much higher than expected during your trip. While you are in Lakeville, the ice in three coolers melts. Add \$60 for the cost of the new vaccines. Also add the number of hours it takes to get the replacement coolers and bring them back to Lakeville.

One night, the refrigerator at the home base breaks down, spoiling 500 doses. Replacing everything costs \$500. You have arrived at planting time. It takes people longer to get to the clinic where you are giving the flu shots. Add 24 hours to your vaccination time.

A snowstorm blows through the northern mountain range, making the dirt road through the mountains impassable. If you planned to take this route, you will have to turn around and take the other route. This adds 12 hours to your travel time.

A sandstorm rages in the desert around the road south of Lakeville. If you planned to take this route, add five hours to your travel time.

A volcano erupts near Lakeville.

The ash from the eruption
lowers visibility, adding three
hours to your travel time.

Your motorcycle gets a flat tire. Add an hour to your travel time.

# Lesson 3: What is Epidemiology?

#### Learning Objectives:

- Define epidemiology
- Understand what an epidemiologist does
- Explore epidemiological methods

#### Materials <u>Nee</u>ded:

- Name tags
- Sign in sheet
- Snacks/waters
- Pens/pencils/markers
- Binders/journals
- Agreements poster
- · Icebreaker materials
- Physical activity materials
- Epidemiology handout
- Ipads/computers

#### Preparation:

- Select icebreaker activity
- Select physical activity
- Follow the Mindfulness order
- Make sure there is internet and computer access
- Assign staff roles for all lesson components
- Make copies of Epidemiology handout
- Review Outbreak Game





## **Lesson 3: What is Epidemiology - part 1 of 3**

• **Welcome!** Informal - sign in, get name tag, get snack, informal interactions until ready for group activities

• ACTIVITY: Icebreaker

• ACTIVITY: Physical activity

• ACTIVITY: Mindfulness activity

• ACTIVITY: What is epidemiology?

- Who remembers last week when we talked about public health? Do you remember what we said public health is?
  - Prompt: It's about protecting populations and communities from illnesses, diseases and expanding their lifetime and quality of life.
- o Does anyone know what an epidemic is?
  - Prompt: an epidemic is when there is unexpectedly large number of cases of an illness, specific health-related behavior, or event in a particular population.
- Does anyone know what we call it when the epidemic spreads across the world?
  - Prompt: pandemic an example of a pandemic is COVID-19
- Now that we know the word epidemic, can anyone take a guess at what epidemiology is?
  - Prompt if needed: I'll give you a hint any word that ends with "ology" means "the study of" so Epidemiology is the study of.... patterns and determinants of health and disease.

### **Lesson 3: What is Epidemiology - part 2 of 3**

- **ACTIVITY:** What is epidemiology? (continued)
  - Epidemiology is a subset of public health.
  - It is the study of the patterns and determinants of health and disease
  - Epidemiology looks for clues in patterns to identify the causes of illness.
  - Epidemiology investigates infectious diseases, but it can also be used to understand risks related to chronic diseases such as diabetes and high blood pressure,
  - Epidemiology also studies occupational hazards-for example, some jobs may expose workers to harmful conditions such as asbestos,
  - Epidemiology examines environmental factors that impact health - for example, pollution and asthma
  - Handout the Epidemiology handout and tell participants they can keep this to remember what epidemiology is.
- ACTIVITY: What is an epidemiologist?
  - Now that we know what epidemiology is, what do you think you call the people who do epidemiology as a career?
    - Prompt: The people who study / do epidemiology
  - They collect information and data to understand how many people are affected by the disease, how they become sick, and where they live. Their main concern is to understand how to prevent disease and determine effectiveness of prevention efforts.
  - Sometimes epidemiologists are called disease hunters.
  - Next, we are going to be epidemiologists. We are going to play a game to solve an outbreak of a disease.



## Lesson 3: What is Epidemiology - part 3 of 3

- ACTIVITY: Solve the Outbreak Game
  - We are going to break up into groups of two.
  - Each group needs a computer or tablet.
  - You are going to go to this website and complete two outbreak activities.
    - <u>https://www.cdc.gov/mobile/applications/sto/web-app.html</u>
  - After everyone is finished with their two cases, regroup and ask:
    - Which cases did everyone do?
    - What are some challenges that came up?
    - What did you learn from this activity?

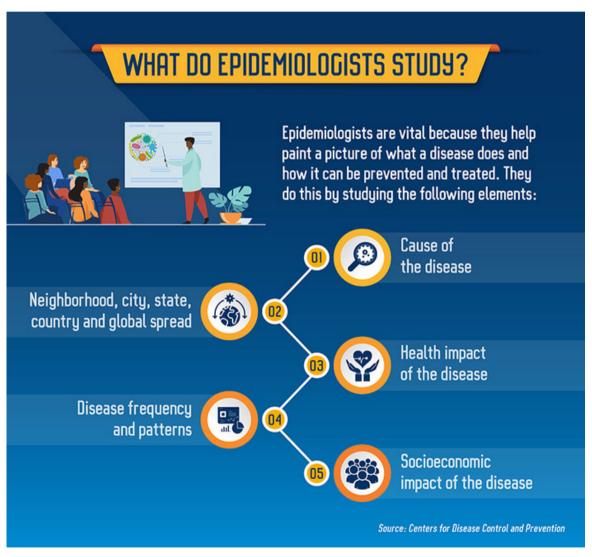




## **Lesson 3: What is Epidemiology**

# **Handout: Epidemiology**

According to the World Health Organization Epidemiology is the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems.



Source: https://onlinedegrees.unr.edu/blog/epidemiology-vs-biostatistics/

# Lesson 4: Careers in the Health Sciences

# Learning Objectives:

- Explore career options in health sciences
- Describe careers in health sciences
- Understand the educational requirements for health sciences careers

# Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Binders/journals
- Pens/pencils/markers
- Agreements poster
- Research the Career handout

- Icebreaker materials
- Physical activity materials
- Large sticky pad
- Guest health professionals
- Health Sciences Guests handout

#### Preparation:

- Prior to lesson reach out to health science professionals to come share their field with the students, providing details about time and location
- Familiarize yourself with different health science fields and careers
- Select icebreaker
- Select physical activity
- Follow the Mindfulness order
- Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Make copies of Research the Career handout
- Make copies of Health Sciences Guests handout
- Gather and pack all materials for travel to site



## Lesson 4: Careers in Health Sciences- part 1 of 3

- **Welcome!** Informal sign in, get name tag, get snack, informal interactions until ready for group activities
  - o Prepare to welcome guests provide them with a name tag

ACTIVITY: Icebreaker activity

• ACTIVITY: Physical activity

• ACTIVITY: Mindfulness activity

- ACTIVITY: Careers in Health Sciences Introduction
  - Today we are going to learn about careers in the health sciences. First, we are going to talk about careers in this area and then we are going to have some guests who are in careers in the health sciences.
  - Can you name some careers in health sciences? (have students call out careers, write on sticky paper/whiteboard)
  - What do you think a [name a health sciences career] does in a normal day? (repeat with a few health sciences careers)
  - How do you think you get into a career in health sciences?
  - Some careers in public health focus on math and statistics while others fall into the realm of social sciences. Still others may result in jobs in public relations, marketing or community outreach.
  - If time permits, assign each student a health science career and have them look up the educational requirements, job description, and salary range for the career.
    - Handout the Health Sciences Careers handout.
    - Have them share with the group what they learn.

### **Lesson 4: Careers in Health Sciences - part 2 of 3**

- ACTIVITY: Careers in Health Sciences Introduction (continued)
  - o A person who has a job in public health might:
    - Monitor health status to identify and solve community health problems.
    - Diagnose and investigate health problems and health hazards in the community.
    - Inform, educate, and empower people about health issues.
    - Mobilize community partnerships and action to identify and solve health problems.
    - Develop policies and plans that support individual and community health efforts.
    - Enforce laws and regulations that protect health and ensure safety.
    - Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
    - Assure competent public and personal healthcare workforce.
    - Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
    - Research for new insights and innovative solutions to health problems.

### **Lesson 4: Careers in Health Sciences - part 3 of 3**

- ACTIVITY: Health Science Professional Round Table
  - Today we get to meet different professionals from a few of the fields we just discussed.
  - Welcome our guests who have come to share their careers and experiences with us.
  - o Have professionals share their name and field
  - Once everyone has been introduced, ask the professionals to sit at separate tables
  - Now we are going to break up into small groups so you can spend several minutes with each guest. You have your notebooks/binders - feel free to take any notes.
  - Break participants into small groups and have them split up and go to the various professionals.
  - Determine how long each group can spend with each professional such that they can rotate and meet with each professional.
  - Set a timer, have students rotate after timer goes off.
     Repeat until they have visited with each professional.
  - Once completed, thank the professionals for their time.
  - After this session, send thank you notes to the professionals



## **Lesson 4: Careers in Health Sciences**

# **Handout: Research the Career**

Job Title	
Job Description	
Job Requirements	
Required Degree	
Required Years of Schooling	
Annual Salary in Mississippi	



## **Lesson 4: Careers in Health Sciences**

# **Handout: Health Sciences Guests**

Questions to ask the guests as you rotate

Name	
Job Title	
What is your favorite thing about your job?	
What does your job look like day-to- day?	
What is the education and training needed for your job?	
Why did you pick this career?	
Any advice you would give to a high school student interested in your field?	

# **Lesson 5: Health Literacy**

#### Learning Objectives:

- Understand health literacy
- Identify credible sources of health information
- Apply the concept of health literacy and analyze how it relates to health behavior

#### Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Binders/journals
- Pens/pencils/markers
- Agreements poster
- Large sticky pad

- Icebreaker materials
- Physical activity materials
- Ipads/computers
- Trust It or Trash It handout copies
- Different snack packaging for activity (not all snack size)

#### Preparation:

- Select icebreaker
- Select physical activity
- Follow the Mindfulness order
- Make copies of "Trust it or Trash it" handout
- Find 2 videos or websites to view as whole group practice
- Write nutrition label questions on sticky pads
- Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Gather and pack all materials for travel to site



### Lesson 5: Health Literacy-part 1 of 3

 Welcome! Informal - sign in, get name tag, get snack, informal interactions until ready for group activities

• ACTIVITY: Icebreaker activity

• ACTIVITY: Physical activity

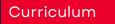
• ACTIVITY: Mindfulness activity

ACTIVITY: Trust It or Trash It

- We can get our health information from many different places, where are some of the places you get health information from?
- Some of you said the internet, do you think that everything you read, see, or hear about health on the internet is accurate?
  - There is a lot of information on the internet and not all of it is true. You have to be an educated consumer of information when it comes to health information.
- Let's take a look at a couple of videos together to see if we can decide if we should trust it or trash it before we do our activity.
  - Have two videos ready to play from two different sources (YouTube, Instagram, Facebook, Twitter, news outlets)
- Now we are going to break up into small groups and look at some websites and decide if we should "Trust it or Trash It" using the guidance on the handout.
- Distribute handout.
- Once all groups have completed this activity, gather everyone back together to talk about what they saw and how they decided to 'Trust it' or 'Trash it' for each video.

### **Lesson 5: Health Literacy- part 2 of 3**

- ACTIVITY: Health Literacy Nutrition Labels
  - Have you ever looked at the back of a snack you were eating and seen this label? \*Hold up a snack and show the group
  - What is this label? What does it tell us?
    - It's a nutrition label and they are required to be available for all packaged foods. The Food and Drug Administration, the FDA, oversees nutrition labeling to make sure we all have correct information about the nutritional value of our food so we can make healthier eating choices. The FDA makes sure the nutrition labels are all uniform, which means they have information on the same facts regardless of whether you are eating a candy bar or a granola bar.
  - We are going to look at nutrition labels for common snacks.
     We will work in groups of 2 and each group will get a snack package. We have sticky pads up with questions and we want you to rotate around to each sticky pad and write the answer to the question based on the nutrition label on your snack.
    - Put each of these questions on a separate sticky pad page and hang them up around the room:
      - How many servings are in your snack?
      - How many calories are in a serving?
      - If you eat the entire snack how many calories will you eat?
      - If you usually eat 2,500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving?
      - Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, if you stop eating this snack, how many grams of saturated fat would you be consuming each day?



## **Lesson 5: Health Literacy- part 3 of 3**

- ACTIVITY: Health Literacy Nutrition Labels (Continued)
  - Were there any surprises? Did you know there are sometimes more than 1 serving in your snack size? Reading these labels is part of being health literate about nutrition.



## **Lesson 5: Health Literacy**

# **Handout: Trust It or Trash It?**

## Can you trust it? Evaluating information you find online

There is a lot of information on the internet and not all of it is true! You have to be an educated consumer of information when it comes to health information. Here are some things to consider when evaluating online health information:

#### Question: Who runs the website?

- Government? Nonprofit? Educational organization? An individual?
   HINT: look at the ending of the website address (www.olemiss.EDU)
- Look for an 'About us' section on the website
- Does the site have an editorial board or any evidence that the information is reviewed by experts before it is posted?

#### Question: Who pays for the site?

- Beware of bias the source of funding can affect content!
- Advertisements should be labeled as ads
- Consider what do the website owners want to accomplish? Why did they create this website?

### Question: What kind of evidence is presented?

- What evidence is the information based on?
- Are the facts and figures referenced? Are the references sources that make sense, e.g., are the actual expert sources?
- Are opinions clearly separated from facts?
- Does the site rely on testimonials?

## When evaluating health information, use the **CRAAP** test:

**Currency** - When was the information posted? Is it old information?

**Relevance** - Does the information relate directly to your topic?

**<u>Authority</u>** - Who is the author/publisher/sponsor of the information?

**Accuracy** - Is the information supported by evidence?

**Purpose** - Why has this information been posted?



# **Lesson 5: Health Literacy**

# **Handout: Trust it or Trash It?**

Explore the health information presented on these websites. What should you do with the information presented on each website?

Should you TRUST it or TRASH it?

Website to check out	TRUST it or TRASH it?	Why?
www.heart.org		
www.ovaprima.org		
www.ehso.com		
www.epa.gov/lead		
www.health.com		
www.en.wikipedia.org		
www.naturalnews.co m		
www.healthyfoodhouse. com		
www.mayoclinic.org		

#### Learning Objectives:

- Understand definition of and terminology about health disparities
- Understand and consider the causes of and impact of health disparities
- Investigate and discuss the causes of and impact of health disparities in the local community
- Identify potential solutions to minimize health disparities in the local community

# Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Binders/journals
- Pens/pencils/markers
- Agreements poster
- Icebreaker materials
- Physical activity materials
- Large sticky pad
- Health Disparities handout
- SDOH game

#### Preparation:

- Select icebreaker consider a beach ball activity with questions about how does neighborhood, diet, healthcare access, what in the neighborhood influences health
- Select physical activity
- · Follow the mindfulness order
- Familiarize yourself with the SDOH game review slides, watch videos
- Assign staff roles for all lesson components
- Make copies of Health Disparities handouts
- Make copies of icebreaker materials if needed
- Gather and pack all materials for travel to site





## Lesson 6: Health Disparities – part 1 of 2

- Welcome! Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Icebreaker
- **ACTIVITY:** Physical activity
- ACTIVITY: Mindfulness activity
- ACTIVITY: What are Health Disparities?
  - We have talked about health, who can tell me what health means? Who knows what the word disparities means? What do you think health disparities are?
    - CDC definition: "preventable differences in burden, disease, injury, violence, or optimal health experience by social disadvantaged groups, populations, communities
    - Prompt for discussion of health disparities
  - Have you ever heard the term "social determinants of health"?
     What do you think it means?
    - Prompt for conditions related to where we are born, live, learn, work that affect our health. These can be economic and social policies, climate change, racism, social norms, just to name a few.

## **Lesson 6: Health Disparities- part 2 of 2**

- Let's learn about Social Determinants of Health. We're going to learn about some factors that are social determinants of health. We'll get into small groups and look up how the social determinant you have impacts health. Take notes on the handout and we'll share back with the larger group.
  - Break students into small groups and distribute handouts, ensuring that every disparity is covered
  - Distribute devices for internet access
  - When finished, have students share out what they learned and discuss health disparities and social determinants of health
- ACTIVITY: Social Determinants of Health Game
  - We are going to play a game called The Last Straw. We will play this game in teams.
    - Facilitators need to have reviewed the slides and watched the videos prior to the lesson so they are prepared to lead the game.
    - The slides, videos, and information about this game can be found at: www.thelaststraw.ca/resources

#### NOTE!

If you do not have the SDOH game or do not feel comfortable facilitating the game, utilize the Health Disparities handouts instead.



# **Handout: Health Disparities Handout**

## How does **COMMUNITY SAFETY** impact health?

Find three ways that community safety can impact health and describe how this could be different based on a factor such as where you live, your race, or another social factor.

Ways COMMUNITY SAFETY can impact health:	How could this differ based on social factors?



# **Handout: Health Disparities Handout**

How does the **HEALTHCARE SYSTEM** impact health?

Find three ways that the healthcare system can impact health and describe how this could be different based on a factor such as where you live, your race, or another social factor.

Ways the HEALTHCARE SYSTEM can impact health:	How could this differ based on social factors?



# **Handout: Health Disparities Handout**

How does the EDUCATION SYSTEM impact health?

Find three ways that the education system can impact health and describe how this could be different based on a factor such as where you live, your race, or another social factor.

Ways the EDUCATION SYSTEM can impact health:	How could this differ based on social factors?



# Lesson 6: Health Disparities Handout: Health Disparities Handout

## How does the **FOOD SYSTEM** impact health?

Find three ways that the food system can impact health and describe how this could be different based on a factor such as where you live, your race, or another social factor.

Ways the FOOD SYSTEM can impact health:	How could this differ based on social factors?



# **Handout: Health Disparities Handout**

## How does the **ECONOMIC STATUS** impact health?

Find three ways that one's economic statusstem can impact health and describe how this could be different based on a factor such as where you live, your race, or another social factor.

Ways ECONOMIC STATUS can impact health:	How could this differ based on social factors?



# **Handout: Health Disparities Handout**

# How does the **NEIGHBORHOOD/PHYSICAL ENVIRONMENT** impact health?

Find three ways that the neighborhood/physical environment can impact health and describe how this could be different based on a factor such as where you live, your race, or another social factor.

Ways NEIGHBORHOOD/ PHYSICAL ENVIRONMENT can impact health:	How could this differ based on social factors?

#### Curriculum

# Lesson 7: Introduction to Research and the Scientific Method

# Learning Objectives:

- · Define research
- Understand and be able to use the scientific method
- · Learn to apply the scientific method

#### Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Binders/journals
- Pens/pencils/markers
- Agreements poster
- Icebreaker materials
- Physical activity materials
- · Large sticky pad
- Scientific Method handout

#### Preparation:

- Select icebreaker
- Select physical activity
- Follow the mindfulness order
- Assign staff roles for all lesson components
- Make copies of Scientific Method handout
- Familiarize yourself with Research Methods
- Gather and pack all materials for travel to site





## **Lesson 7: Research Methods- part 1 of 3**

- **Welcome!** Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Icebreaker
- ACTIVITY: Physical activity
- ACTIVITY: Mindfulness activity
- ACTIVITY: Scientific Research Methods
  - Today we are going to talk about the scientific method and research. First, let's brainstorm what the word "research" means to you for the next 5 minutes and then we'll get back together and share our thoughts. After five minutes, each team will report their answers to the whole group.
    - Break up the students into small groups and have them go to boards/pads/easels and brainstorm what research means.
    - When ready, gather students back together and share ideas
  - Who thinks they know what methods means?
    - Take a few answers and then move on.
  - If we put research and methods together, we have Research Methods which are the strategies, processes, and techniques used to collect data or evidence to investigate a question. Remember that research is a systematic process of investigation – systematic means there is an order and an established process to follow.

## **Lesson 7: Research Methods- part 2 of 3**

- ACTIVITY: Practice the Scientific Method Part 1
  - Do you remember anything about the scientific method?
     Prompt to remind students that it includes:
    - Make an observation
    - Ask a question
    - Make a prediction hypothesis
    - Test the hypothesis
    - Analyze findings and reach a conclusion
    - Share your results
  - Let's apply the scientific method with the example of teen vaping.
    - As a group go through each step of the scientific method. writing on a board/pad with easel. Have someone write what is said for each of the following:
      - Observation what do we observe about teen vaping?
      - Formulate a question about teen vaping
      - Develop a hypothesis- make a predicted response to the question
      - Test the prediction what methods could we use to test this prediction?
      - How could we share the results?

# **Lesson 7: Research Methods- part 3 of 3**

- ACTIVITY: Practice the Scientific Method Part 2
  - o Pass out handout and pens/pencils as directions are given
  - As we just talked about, there are several steps in the scientific method. Let's get into small groups and practice applying the scientific method with an example.
  - Here's our observation:
    - "Teens who get regular physical activity are less likely to be depressed than teens who do not get regular physical activity."
  - o Break participants into small groups
  - Work in your group to use the scientific method to explore this observation. Use the handout as a guide and write down our ideas. When everyone is done, we will get back together and discuss as a group.
  - When all groups are done, gather and share out responses.
     Discuss similarities and differences among what the groups came up with in response to the observation.





# **Lesson 7: Research Methods**

# **Handout: Scientific Method**

OBSERVATION	"Teens who get regular physical activity are less likely to be depressed than teens who do not get regular physical activity."
QUESTION	
PREDICTION (HYPOTHESIS)	
HOW TO TEST THIS HYPOTHESIS (RESEARCH METHOD)	
WHAT KIND OF DATA WOULD YOU COLLECT / HOW WOULD YOU ANALYZE IT?	
HOW COULD YOU SHARE THIS INFORMATION ?	

#### Curriculum

# Lesson 8: Developing Research Questions

# Learning Objectives:

- Describe Action Research
- Describe the value of youth participation in research
- Generate teen health topics
- Understand the components of a good research question
- Develop health-related research questions

#### Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Binders/journals
- Pens/pencils/markers
- Agreements poster
- Icebreaker materials
- Physical activity materials
- Large stick pad
- Action Research handout copies
- Good Research
   Questions handout

#### Preparation:

- Select icebreaker
- Select physical activity
- Follow the Mindfulness order
- Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Make copies of Action Research handout
- Make copies of Good Research Questions handout
- On a sticky paper write a title "Action vs Traditional Research" then create two subheadings "Similarities" and "Differences" with a line down the middle, on a separate sticky note put F.I.N.E.R. on the top
- Gather and pack all materials for travel to site



## Lesson 8: Research Questions- part 1 of 4

- Welcome! Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Icebreaker
- ACTIVITY: Physical activity
- ACTIVITY: Mindfulness activity
- ACTIVITY: Action Research Introduction
  - Who remembers when we talked about the scientific method and research last week? (respond to responses with encouragement, re-framing/re-defining as necessary)
    - Key concepts to remind the students of if they don't call them out:
      - Research is a systematic investigation (systematic means that there is an order and an established process to follow)
      - Scientific method:
        - o Observe and identify a problem
        - Formulate a question
        - Develop a hypothesis
        - Test the prediction
        - Analyze the findings and form a conclusion
        - Communicate the results

# **Lesson 8: Research Questions- part 2 of 4**

- ACTIVITY: Action Research Introduction (Continued)
  - Today we are going to learn about a specific kind of research called "ACTION RESEARCH." In action research, there is another step – we take action on what we learned so after we form a conclusion, we ACT on that information.
    - Distribute the Action Research Handout
    - Go through the action research handout line by line, highlighting the differences
  - What is an example of ways that research can effect social change? Project SCORE is a special kind of action research – Youth Participatory Action Research –because YOU are participating in doing the action research. We are going to help you develop research questions that address issues that teens care about.
- ACTIVITY: What Matters to Teen Health?
  - Now that we've talked about why YOUR input matters when it comes to research, let's brainstorm things that matter to teens about health. There are no right or wrong answers.
  - This is just all the topics that you think are important to health. Think of as many as you can. Once we have these, we are going to put them all together. They will then help us do the next activity, develop research questions about some of these topics.

# **Lesson 8: Research Questions- part 3 of 4**

- ACTIVITY: What Matters to Teen Health? (Continued)
  - Break into small groups. Have a SCORE staff with each group. Have a large sticky pad and marker to write their ideas down.
  - The topics/ideas don't have to be detailed, but they should provide any detail they want to ensure others understand their thoughts. Write down any topic, doesn't have to be in the form of a question. Once everyone is done brainstorming, bring the whole group back together and have them report out. Put the topics in a central location for all of the participants to see.
- ACTIVITY: What Makes a Good Research Question?
  - Write on board/large sticky pad FINER for all to see
  - Now that we have health topics that interest you, we are going to talk about how to turn them into research questions. Identifying topics was the first step in the scientific method observation. The second step is to develop a question. A research question has a few parts:
  - First, it describes a relationship between 2 or more variables.
     For example, does eating more ice cream make you taller?
     What are the two variables? (ice cream and height)
  - Second, it's a question either something we don't know or something we want to know more about.

## **Lesson 8: Research Questions- part 4 of 4**

- ACTIVITY: What Makes a Good Research Question? (continued)
  - Handout the Good Research Questions handout
  - We can also use the FINER criteria to think about research questions. FINER stands for (write each word on board/sticky pad as you present)
    - Feasible (Is it doable?)
    - Interesting (Is it interesting? Would someone care? We are never going to spend a lot of time studying paper cuts!)
    - Novel (Is it something new, something we don't know?)
    - Ethical (Is it right to study this? Would it be right to study whether not feeding babies impacts their health?)
    - **R**elevant (Do the results matter?)
  - Now that we know a little bit about research questions, we are going to practice developing research questions and examining the questions you developed. You can develop a question about any health-related topic that interest you. Let's get into small groups to do this using the handout.
  - Break up into small groups and be sure participants have paper/pen to write with. SCORE staff can help groups formulate their questions and apply the FINER criteria to their questions, adjusting as necessary. Remember that the goal of SCORE is for the participants to develop questions, so staff are there to guide and support, but not to re-write the questions for the participants.
  - When everyone is ready and happy with their question, come back together as a group to share the research questions and discuss the process of developing the questions.



# **Handout: Action Research**

	ACTION RESEARCH	TRADITIONAL RESEARCH
PURPOSE	To answer a research question, educate, and effect social change.	To answer a research question.
EXPERTISE	Comes from the research subjects, patients, or participants	Comes from the researchers.
AUDIENCE	The community of which the participants and research are a part.	For scientific, academic, and/or professional communities.
METHODS	Observation, document collection, interviews, focus groups, surveys, journals.	Observation, document collection, interviews, focus groups, surveys, journals.

### Key aspects of ACTION RESEARCH...

- Figuring out the problem together people experience things differently and may see different things as the problem.
- Getting more information about the problem as a group when everyone looks at things from their unique perspectives, you get a more accurate picture.
- Putting the information together and evaluating it to see if it makes sense.
- Deciding where you want to make a difference.
- Using the information to make something better advocacy works better in a group.
- Evaluating the information together to see what the next steps are.



# **Handout: Good Research Questions**

A research question

- Describes a relationship between 2 or more variables that can be examined or tested
- Is stated clearly in question form
- Is clearly described all of the words are understandable, the terms used are clear, the specific group of people is identified

We can also evaluate a research question using the FINER criteria. Is the research question:

- Feasible
- Interesting
- Novel
- Ethical
- Relevant

#### **Example Question:**

Where do teens struggling with emotional or mental health issues turn to in school for support?



# **Handout: Good Research Questions**

**Example Question:** Where do teens struggling with emotional or mental health issues turn to in school for support?

RESEARCH QUESTION CRITERIA	Does this question meet this criteria?
INTERESTING: Is this a question? What do you think the question is asking? Would exploring this be interesting?	The question is trying to figure out what sorts of people, services, resources teens use when they are struggling with depression. Teens are interested in mental health and would want to know about how to get support.
Do you understand all of the words or phrases used?	What does the question mean by "support? What exactly does "emotional or mental health issues" mean?
<b>FEASIBLE</b> : Does the question only look at one issue, topic, or idea? Does it describe the relationship between 2 or more variables? Could you research this?	One topic: – mental health Variables: emotional/mental health AND support at school We could survey students, document school resources - could be researched
Is the question about a specific group of people?	Teens with emotional/mental health issues - is this all teens?
<b>RELEVANT:</b> How important is this to my community?	A lot of teens struggle with emotional issues so it's important to know what's out there and what's missing.
NOVEL: Is this something everyone already knows about?	While school provides lists of services, it's not clear what everyone uses.
<b>ETHICAL:</b> Would there by anyone harmed by studying this topic?	Would we need to identify people with emotional/mental health issues to figure out what services they use? How could we do that without revealing their struggles?



# **Handout: Good Research Questions**

## **YOUR Research Question:**

RESEARCH QUESTION CRITERIA	Does this question meet this criteria?
INTERESTING: Is this a question? What do you think the question is asking? Would exploring this be interesting?	
Do you understand all of the words or phrases used?	
<b>FEASIBLE</b> : Does the question only look at one issue, topic, or idea? Does it describe the relationship between 2 or more variables? Could you research this?	
Is the question about a specific group of people?	
<b>RELEVANT:</b> How important is this to my community?	
<b>NOVEL:</b> Is this something everyone already knows about?	
<b>ETHICAL:</b> Would there by anyone harmed by studying this topic?	

#### Curriculum

# Lesson 9: Developing a Student-Centered Research Agenda

# Learning Objectives:

- Review Action Research
- Review the value of youth participation in research
- Review Research Methods
- Review Research Ouestions
- Develop research agenda

#### Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Binders/journals
- Icebreaker materials
- Physical activity materials
- Pens/pencils/markers

- Agreements poster
- Large sticky pad
- Copies of Identification of the Issue Handout
- Research Questions developed by students

#### Preparation:

- Select icebreaker
- Select physical activity
- Follow the Mindfulness order
- · Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Make copies of Identification of the Issue Handout
- Gather and pack all materials for travel to site





## Lesson 9: Research Agenda- part 1 of 3

 Welcome! Informal - sign in, get name tag, get snack, informal interactions until ready for group activities

ACTIVITY: Icebreaker

• ACTIVITY: Physical activity

ACTIVITY: Mindfulness activity

- ACTIVITY: Recap of Fall and Preview of Spring
  - Ask who remembers what SCORE stands for?
    - Student- Centered Outcome Research Experience
  - Ask students to call out different things we talked about/learned in the fall
  - Go over logistics and agreements and see if there are any changes. Ask if they want a new callback for the spring
  - o Refresh their memory of the daily schedule
  - Go over lesson topics for the spring
  - Who remembers when we talked about Action Research in the Fall? (respond to responses with encouragement, reframing/re-defining as necessary)
    - EXPLAIN: Action research is research that aims to make a difference!
  - Who remembers when we talked about participatory research?
    - EXPLAIN: Participatory research is research that is done with and by individuals that are impacted by the research
  - Why is it important to include teens in developing research questions and conducting research about topics that affect teens?

## Lesson 9: Research Agenda-part 2 of 3

- ACTIVITY: Recap of Fall and Preview of Spring(Continued)
  - Okay, now who remembers when we talked about research questions? Do you remember the criteria that can help us develop good research questions? (FINER criteria) - put up the FINER criteria on sticky pad/board
    - Feasible (is it doable)
    - Interesting (is it interesting? Would someone care? We are never going to spend a lot of time studying papercuts!)
    - Novel (is it something new, something we don't know)
    - Ethical (is it right to study this? Would it be right to study whether or not feeding babies impacts their height?)
    - Relevant Do the results matter?
  - Hang up their research questions.
- ACTIVITY: Research Agenda
  - Remember last time we were all together you thought about research topics and developed research questions?
     We have the topics and questions on the wall. Now that we've discussed everything we have learned so far, let's build a research agenda.
  - What is a research agenda?
    - EXPLAIN: It's a plan, a roadmap of issues and ideas that you plan to study.
  - This is what we will use guide your projects. We have the research questions you developed in the past.

## Lesson 9: Research Agenda-part 3 of 3

- ACTIVITY: Research Agenda (continued)
  - Let's get into groups based on topics that interested you and talk through these questions. The goal is to have a research agenda by the end of today. We'll use the Identification of the Issue Handout to help us improve the research questions.
    - Handout the Identification of the Issue Handout.
    - Break into small groups. Organize groups by the topic are areas they are interested in exploring based on the previously identified research questions.
    - Go through the handout and help the students develop a research agenda.
  - Once everyone is done, bring the whole group back together and have them report out.
  - When they present their research agenda, probe for further description if anything is not clear.





# **Lesson 9: Research Agenda**

# **Handout: Identification of the Issue**

**YOUR Research Question:** 

What is the issue?	
Why is it an issue?	
Who are the people affected by the issue?	
What could be some problems with doing this research?	
What could be some benefits of doing this research?	
How would you study this? (which research methods would you use?)	

#### Curriculum

# **Lesson 10: Research Methods** and **Ethics**

Learning Objectiv<u>es:</u>

- Describe research methods
- Describe the benefits and challenges of four research methods that can be used to gather information.
- Describe research ethics

Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Icebreaker materials
- Physical activity materials
- Pens/pencils/markers
- Binders/journals
- Agreements poster
- Large sticky pad
- Copies of Station information
- Copies of Methods Chart handout
- Ethics Handout

Preparation:

- Select icebreaker
- Select physical activity
- Follow the Mindfulness order
- Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Make copies of Station information
- Make copies of Methods Chart Handout
- Make copies of Ethics Handout
- Gather and pack all materials for travel to site





## Lesson 10: Research Methods and Ethics-part 1 of 4

- Welcome! Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Icebreaker
- ACTIVITY: Physical activity
- ACTIVITY: Mindfulness activity
- ACTIVITY: Introduction of Social/Behavioral Research Methods
  - Who remembers what we talked about last week?
    - Prompt to recall what ACTION RESEARCH is
    - Prompt to recall brainstorming about what HEALTH TOPICS
       MATTER TO TEENS
    - Prompt to recall that we DEVELOPED RESEARCH QUESTIONS
  - Does anyone know what research methods are? (ask them to describe it)
    - EXPLAIN Research methods are the methods or tools we use to answer a research question.
  - Today we are going to learn about the kinds of research methods we use in social and behavioral research. Social and behavioral research is different from other kinds of research, like medical research.

## Lesson 10: Research Methods and Ethics-part 2 of 4

- ACTIVITY: Introduction of Social/Behavioral Research Methods (Continued)
  - If we draw your blood to see if you have an infection, is that social/behavioral research or clinical research?
  - ASK: What kind of research method was used? (blood assay)
  - ASK: If we ask you to complete a survey about your stress level, is that social/behavioral research or clinical research?
  - ASK: What kind of research method was used? (survey)
  - Let's take a look at the questions you developed last week and think about how we might answer them. Let's look at the first question. How might we do a research project to learn more about this?
  - After a good discussion ...We are going to learn about a few different kinds of research methods we use in the social and behavioral sciences.
  - Now, we are going to get into small groups and learn about different research methods. Each station has a method, and you will go from station to station to learn about the methods. You will spend five minutes at each station.
  - o As you go to each station, fill in the Methods Chart Handout.
    - Have station leaders go to the stations:
      - SURVEYS
      - INTERVIEWS/FOCUS GROUPS
      - PHOTO VOICE/OBSERVATION
      - MAPPING
    - Break students up into groups. Have students go to their first stations (it does not matter what order they enter the stations). Stay at each station for 5 minutes, and have a timekeeper announce the rotations.

## **Lesson 10: Research Methods and Ethics- part 3 of 4**

- ACTIVITY: Introduction to research ethics
  - Now that we've learned about research methods, we are going to learn about research ethics next.
  - What do you think we mean when we say research has to be done in an ethical manner? (Could use beach ball - throw to a student to answer)
  - After a good discussion... EXPLAIN There are three ethical principles that guide research conducted with humans
    - Respect for persons individuals should be treated as independent agents; they get to make decisions for themselves
    - Beneficence people should not be exposed to harm or unnecessary risk, and benefits should be maximized
    - Justice all procedures should be fair and equitable, and the distribution of costs and benefits should be fair
  - We follow these ethical principles in research by never engaging in research without getting approval from an Institutional Review Board or IRB. The way we get approval from an IRB is that we write up what we plan to do in detail, submit it to this board, and they review it. The IRB is made up of both experts in research and community members. They review our research plan to see if it meets the ethical principles. Important things they look for are things like are we making sure participants complete informed consent, a document that makes sure the participants know what they are agreeing to, and understand the risks and benefits.

## Lesson 10: Research Methods and Ethics-part 4 of 4

- ACTIVITY: Introduction to research ethics (continued)
  - The IRB also looks at whether we have procedures in place to keep the information we collect either anonymous (no names attached) or confidential (we have names, but we keep them protected). The IRB will also weigh the risks and benefits of the research. It's important to know that we never conduct human subjects research without approval from the IRB.
  - Now, we are going to get into small groups and talk through some ethical issues in research
    - Get into small groups and discuss each case (if time allows; do all of the cases in each group or assign each group 1 of the cases to work it out on the sticky pad/board.
    - Distribute Research Ethics Handout.
  - Regroup and discuss the cases





#### **Lesson 10: Research Methods and Ethics**

# **Handout: STATION: Mapping**

#### **Materials Needed:**

• Computer connect to the internet

#### Lesson

Describe mapping and its uses. Mapping is used:

- To locate items or people in space and in relationship to one another;
- To look at the physical environment of places or items;
- To understand resource distribution;
- To analyze groups, intersections, or boundaries;
- To analyze distance between points

#### **Activity**

- 1. Geographic information Systems (GIS) allows us to create interactive maps and maps for data analysis.
- 2. Google maps is a GIS technology.
- 3. Map grocery stores in local community. How far is a grocery store from the program location.
- 4. Discuss how distance between grocery store and location affects community and their health.
- 5. Brainstorm what else could be analyzed with mapping.



# **Handout: STATION: Interviews/Focus Groups**

#### **Materials Needed:**

• Paper for students to write interview questions

#### Lesson

What are interviews and focus groups?

- These are methods in which we talk to people, asking them to talk about topics or answer questions.
- Interviews are usually with just one person whereas focus groups are a small group of people.
- These methods can give you a lot of information about how people feel about a subject. You can get a lot of detail about a topic with interviews and focus groups.
- Interviews can be unstructured or semi-structured. Unstructured interviews use questions that are broad in scope and the interviewer develops some of the questions as the interview is occurring. This is most useful if you are exploring something new and don't know what to ask.
- Semi-structured interviews have specific, pre-determined questions. These are useful when you want to focus on a specific topic and ask questions about it. Still have flexibility to add or alter questions.
- Focus groups are interviews with small groups of people, usually 6-8
  people. You write questions ahead of time, just like a semi-structured
  interview.
- The data from these methods is the text, what people said. You analyze it by looking for commonalities and differences and organizing the data to describe what you heard across the interviews.

## **Activity**

- 1. Develop a semi-structured interview guide to explore teen's dietary choices.
- 2. Conduct a VERY brief interview or focus group about teen's challenges with getting enough sleep. Questions/prompts:
  - a.Let's start by talking about your sleep. Do you feel like you get enough sleep? Do you think most teens get enough sleep?
  - b. What are barriers to teens getting enough sleep?
  - c. What could help teens get enough sleep?



# **Handout: STATION: Photovoice and Observations**

#### **Materials Needed:**

• Computer connect to the internet

#### Lesson

- Observation is seeing and documenting what is happening in an environment related to your topic of interest.
- We can do it with our eyes and ear, and writing it down
- We can record it with sound, video, and/or photographs
- How we do it depends on our purpose
- Observation is a kind of qualitative research method. It provides deep understanding and context, not numbers, to describe something.
- Goal is to observe critically and systematically.
- Observational research methods have three different purposes:
  - To collect and present data
  - To describe context
  - To convey messages (positive and negative)
- Observations are from the perspective of the person recording the observation. There could be other perspectives.
- One particular kind of observation is called Photovoice. Participants take
  photos of things in their environment that are connected to their topic of
  interest. They then write a caption for the photograph to describe why they
  thought this image was important.

## Activity

- 1. Show photos from cancer\_in\_appalachia Instagram account.
- 2. What does the photo convey? What message do you think the photographer is trying to get across?
- 3. What sort of information can you gather from a photo that you can't from other research methods?



# Handout: STATION: Surveys

#### **Materials Needed:**

• Options: paper to write survey questions or computer

#### Lesson

#### What is a survey?

- Written set of questions used to gather information on a particular topic.
- We can do surveys on paper or on computers.
- One of the quickest ways to get information from a large number of people.
- We can get summary data about a group for example, 30% of the students in 9th great report that strawberry is their favorite flavor of ice cream.
- Survey directions need to be clear, including whether the survey is anonymous or not.
- Questions can be open-ended which allows respondents to write their individual responses to a question. However, it is harder to analyze this kind of data. An example open-ended question is "Describe your qualifications for the position of point guard."
- Questions can be 'forced-choice', requiring respondents to pick an answer from a list provided. An example of a forced-choice question is "I am highly qualified to be a point guard." YES or NO.

## **Activity**

Options- this could be done on paper or it could be done in Google Forms

- 1. Develop a survey to examine dietary habits and/or preferences of teens.
  - a. Write the directions for the survey.
  - b. Write at least ONE open-ended question and three forced-choice questions.
- 2. Discuss how you would summarize the data based on the questions developed.



# **Handout: Methods Chart**

	Mapping	Survey	Photovoice/ Observation	Interview/ Focus Groups
Notes about this methods				
What type of info is this good for?				
Pros				
Cons				



# **Handout: Ethics Cases**

## Research Ethics

Allyson J. Weseley, EdD Roslyn High School, Roslyn Heights, NY

All research involves ethical considerations. Such concerns do not mean that the research is unethical but rather that the researcher must do whatever she or he can to minimize ethical risks. Institutional review boards (IRBs) look over research proposals to safeguard participants and researchers. There are few hard-and-fast rules about what is and is not acceptable. IRBs generally engage in a kind of cost-benefit analysis.

#### Common ethical concerns include:

#### 1. Informed consent

- People should not be forced to be into research.
- People have the right to withdraw from the research at any time with no penalty.
- There should be informed consent. If deception is involved, there should be a debriefing.
- To consent, people must be told something about the purpose of the research.

#### Anonymity/confidentiality

 The source of the data should be anonymous or kept confidential to protect people's privacy.

#### 3. Long-term harm

 While it is acceptable to cause people minor discomfort during the research, no lasting physical or psychological harm should result from their participation.





# **Handout: Ethics Cases**

#### Instructions:

Imagine you have been assigned the task of sitting on an Institutional review board (IRB) and have been asked to consider the following research proposals. Each proposal involves ethical issues. Read each proposal and answer the questions below.

## **Proposal One**

Tyrone wants to study the impact of watching sexually suggestive/explicit television on people's attitudes toward sex. He plans to test ninth graders because he believes they are still young enough to be highly impressionable. He will solicit volunteers 10 come after school. Half will be assigned to watch one hour of sexually explicit clips from a cable TV show, while the other half will view an hour of clips from the same show that deals with nonsexual topics. After watching the TV shows, all participants will fill out a questionnaire about their attitudes toward sex.

## **Questions:**

- What additional information might you want to know about the study in order to decide whether or not it should be approved?
- What are the benefits that might result from this research? What are the potential harms?
- If you were on an IRB reviewing this proposal, what would your recommendation be?



# **Handout: Ethics Cases**

## **Proposal Two**

Priya is interested in whether listening to music while working out makes people exercise harder. She plans to ask college students to come to the

gym and run on a treadmill for half an hour either while listening to music or in silence. The dependent measure will be the number of miles run in

that time period.

## **Questions:**

- 1. What additional information might you want to know about the study in order to decide whether or not it should be approved?
- 2. What are the benefits that might result from this research? What are the potential harms?
- 3. If you were on an IRB reviewing this proposal, what would your recommendation be?

## **Proposal Three**

Charlotte wants to research the effect of labeling students (gifted vs. struggling) on their achievement in second grade. She proposes that students in an elementary school's second grade be divided into reading groups in which ability levels (as determined by previous test scores) are evenly mixed. One group will be told they are gifted readers, another group will be told that they are struggling readers, and a third group will be told nothing at all. Charlotte theorizes that by the end of the second-grade year, the

students in the •gifted" level group will outperform those in the "struggling" group on the same reading test.

# **Questions:**

- 1. What additional information might you want to know about the study in order to decide whether or not it should be approved?
- 2. What are the benefits that might result from this research? What are the potential harms?
- 3. If you were on an IRB reviewing this proposal, what would your recommendation be?

### Curriculum

# Lesson 11: Health Education & Health Communication

# Learning Objectives:

- Define Health Education
- Define Health Communication
- Design Health Education & Health Communication activities

### Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Icebreaker materials
- Physical activity materials
- Pens/pencils/markers
- Agreements poster
- Large sticky pad
- Ipads/computers
- Kahoot
- Kahoot Question sheet
- Communication Chart Handout and Instructor's Guide

## Preparation:

- Select icebreaker
- Select physical activity
- Follow the Mindfulness order
- Copies of Communication Chart
- Set up Kahoot ahead of time and bring sheet for instructor
- Gather and pack all materials for travel to site



# Lesson 11: Health Education/ Communication-part 1 of 3

- **Welcome!** Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Icebreaker
- ACTIVITY: Physical activity
- ACTIVITY: Mindfulness activity
- ACTIVITY: Health Education Kahoot
  - Use SCORE's Kahoot account
    - To login: https://play.kahoot.it/v2/lobby?quizId=3b079d47-6d88-4ad0-bd27-0ebb7a716c35
    - (find login info in Box > Check social media info)
    - Show game on screen/projector
  - We're going to play a Kahoot to introduce ideas about health education. (Pass out iPads or have them use their phones to play) After each question, we'll talk about it.
    - EXPLAIN: Join the game by going to https://kahoot.it/ or going to the app, then type in the code on the screen to join the game
    - Refer to Kahoot handout for questions/answers
- ACTIVITY: Health Communication
  - Now that we know a little bit about what health education is, we're going talk about how to communicate health information, which is DOING health education.
  - What does it mean to communicate?

## **Lesson 11: Health Education/ Communication- part 2 of 3**

- ACTIVITY: Health Communication (continued)
  - Prompt and be sure to discuss that communication includes -
    - sharing information
    - there are at least two parties involved in communication (the one who is giving information and the one who is receiving)
    - can be visual, auditory, written
    - Think about your audience to whom are you communicating?
    - Accurate and does not give the wrong information or confuse others
  - Health communication is about sharing a message about health. There are four key components to health communication plan:
    - 1. What is the topic or message you want to communicate?
    - 2. To whom do you want to communicate this message? Who is your <u>target audience</u>?
    - 3. What is the <u>goal of your communication</u>? Are you trying to raise awareness, change behavior ...?
    - 4. What <u>method</u> to you want to use to communicate this message?
- ACTIVITY: Examining health communication examples at stations
  - Now, we will move around the stations and look at some health communication messages. At each station, go through the questions on the station worksheet.
    - Break students into small groups and hand out iPads
    - Hand out health communication worksheet
    - Put out communication station sheets



## **Lesson 11: Health Education/ Communication- part 3 of 3**

Links for health communication examples:

Infographic: https://www.chconline.org/resourcelibrary/five-tips-to-help-teens-cope-with-stress/teen-mental-healht-first-aid\_stresstips\_infographic-624/ (Primary)

YouTube: Affirmations Part 1 - Believe In Yourself | Doggyland Kids Songs & Nursery Rhymes by Snoop Dogg (Primary)

What is mental health? (Secondary)

Instagram reel: <a href="https://www.instagram.com/reel/Ciik7v-uYID/?igshid=ZmMyNmFmZTc%3D">https://www.instagram.com/reel/Ciik7v-uYID/?igshid=ZmMyNmFmZTc%3D</a> (Primary)

Commercial: <a href="mailto:Making Menthol Black">Making Menthol Black</a> (Primary)

The Facts About Vapes Are Scary Enough | The Real Cost (Secondary)

**Questions to ask at stations:** 

- What makes this an effective health communication message?
- What could be done differently to make it better?

# **Handout: Kahoot Questions**

What is health education is	A. A strategy for implementing health promotion and disease prevention programs B. Promotes health and prevents disease, disability, and premature death C. Both  Elaborate: It is a social science that draws from the biological, environmental, psychological, physical and medical sciences to promote health and prevent disease, disability and premature death through education-driven voluntary behavior change activities
What is the purpose of health education?	A. To influence the health behavior of individuals and communities B. To change perception C. To help the president with decisions D. I don't know  Elaborate: The purpose is to To influence the health behavior of individuals and communities as well as the living and working conditions that influence their health (the entire answer couldn't fit on the Kahoot, so it stopped after communities)
What are some examples of health education?	A. Shopping     B. Courses     C. Workshops     D. Both B & C  Elaborate: Other examples include     Lectures     Pamphlets     Webinars
Are YouTube short videos on brushing your teeth with apple cider vinegar examples of health education?	<ul> <li>A. Yes</li> <li>B. No</li> <li>C. Maybe</li> </ul>



# **Handout: Kahoot Questions**

5.	Instagram reels are examples of health education.	• True • False
6.	What are examples of health education at the community level?	A. Dentist brushing teeth     B. Trying on clothes     C. Mechanic changing a flat tire     D. Advertisements on tv about flu vaccinations
7.	How do we practice health education?	<ul> <li>A. Planning learning activities that increase participants' knowledge</li> <li>B. By learning the information</li> <li>C. Presenting information</li> <li>D. By listening to our peers</li> <li>All of the above</li> </ul>
8.	What is the overall goal of health education?	A. To become president     B. To grow ice     C. To prevent health problems, protect our health, & manage health problems     D. I can't remember

#### References:

https://www.kent.edu/ehhs/hs/hedp

https://www.cdc.gov/healthyyouth/health-education/index.htm



# **Handout: Communication Chart**

	Instagram Reel	YouTube	Infographic	Commerial
What is the topic or message being communicated?				
Who is the target audience?				
What is the goal of the communication? Is it trying to raise awareness, change behavior?				
What method is being used to communicate this message?				



# **Handout: Communication Chart**

***Answer Sheet***	Instagram Reel	YouTube	Infographic	Commerial
What is the topic or message being communicated?	How to have a healthy relationship with food	Believing in yourself and using words of affirmation	Stress/Stress coping mechanisms	Systematic targeting of menthol cigarettes in Black communities
Who is the target audience?	Kids and teens	Children	Teens	Black communities
What is the goal of the communication? Is it trying to raise awareness, change behavior?	Raise awareness of what it means to have a healthy relationship with food—  Change behavior by providing actionable steps	The goal is to implement behavior of using "words of affirmation" to help improve ones' mental health	Teach teens how to cope with stress	Raise awareness of "big tobaccos" practices and exploitation of Black communities
What method is being used to communicate this message?	Visual and Audio *She is in the video talking *She also has closed captions on so people can read *Picture of key points	Music Video- catchy song Students could write their own song about health	Visual communication  Using different colors, graphics, photos of people to draw attention	Visual/Video & Audio *Narration throughout *Use of words on the screen to hit home and main points.

## Curriculum

# Lesson 12: Selecting a Research or Health Education Project

Learning
Objectives:

- Identify a research or health education topic/question of interest
- Compare and contrast a health education or a research project and select one to complete
- Compare and contrast the benefits and challenges of team vs individual projects and select a modality

Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Icebreaker materials
- Physical activity materials
- Pens/pencils/markers
- Agreements poster

- Research Questions Handout
- Project Selection Handout
- Health Education Project Handout
- Research Project Handout

Preparation:

- Select icebreaker
- Select physical activity
- Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Create Research Questions Handout (with all RQs students developed) and make copies
- Make copies of Project Selection Handout
- Make copies of health education and research project handouts
- Gather and pack all materials for travel to site





# Lesson 12: Selecting a Project - part 1 of 1

- **Welcome!** Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Icebreaker
- ACTIVITY: Physical activity
- ACTIVITY: Mindfulness activity
- ACTIVITY: Selecting a project
  - Ask who remembers the research questions we created?
    - Distribute Student Research Questions Handout
  - EXPLAIN: Today we are going to begin your projects. You will pick a research topic and then decide if you want to do a research project OR a health education project about the topic.
  - Handout the Project Selection Handout and the project handouts.
  - Students can work on projects independently or in small groups.
  - o Allow students to break up and decide what they want to do.
  - Facilitators can help students make decisions.
  - Students complete the Project Selection Handout



# **Lesson 12: Selecting a Project**

# **Handout: Project Selection**

SCORE Student Scholar Name:	
Project Topic:	
Project Modality (research project or health education project)	
Project Staff: (team / individual)	
If team, list other team members:	



## **Health Communication Plan**

Successful communication has a clear strategy!

A **communication plan** documents the strategy and serves as a guide to help you establish:

- your <u>objective</u> What are you trying to accomplish?
- your target audience To whom do you want to communicate?
- your key message What do you want them to know?
- the <u>tools</u> you are going to use Infographic? Video? Newsletter?
- your timeline What's the timeline for this communication project?

	TINACLINIC
	TIMELINE
Date	Action
	☐ Select topic
	☐ Determine if you are working individually or with a
	team
	<ul> <li>Develop communication plan</li> </ul>
	☐ Conduct research (to write objectives, identify target
	audience, identify message(s))
	☐ Write objective(s)
	☐ Select target audience
	☐ Identify key messages
	☐ Select tools
	☐ Develop communication product — draft
	☐ Develop communication product – polish draft
	<ul> <li>Develop presentation</li> </ul>
	☐ Practice presentation
	☐ Present project

OBJECTIVE		
What is the topic or issue you want to communicate about?		
Why is this an <u>important issue</u> to communicate about?		
Conduct research to find evidence to answer these questions!		
Have 1-3 supporting pieces of evidence from trusted sources for each.		
How big is the problem?		
Is there evidence that this problem impacts a particular group more than		
others? Who does it impact the most?		
How <u>serious</u> is the problem?		

What do we know that can be done to either prevent or help fix this issue?
Now that you have done this research, what is your <u>objective(s)</u> ? What is the
goal of this communication?
(Examples: to educate teens about the importance of sleep; to demonstrate how to effectively
brush your teeth; to convince teens to not vape)
TARGET AUDIENCE
Who is your target audience? Why?
(Examples: My target audience is all teens, but especially those that XXX because they would
benefit from learning XXX; My target is 7-10 year olds because they are learning to take care
of their health, including their teeth)

<b>KEY MESSAGES</b>		
What are the mos	t important messages you want to share?	
<ul> <li>These supports your communication objective</li> </ul>		
<ul> <li>Think of up to 3 main points you want the audience to remember</li> </ul>		
Need to be s	short, clear, easy to understand, based on facts (not how you feel!)	
Key Message:		
Key Message:		
Key Wessage.		
Key Message:		
	TOOLS	
=	to share your message? What is your method?	
, , , , , , , , , , , , , , , , , , , ,	ic, video, newsletter article, or some other communication tool – be sure we	
have the resources)		

DEVELOP COMMUNICATION PRODUCT
What are your talking points?
These are developed from your key messages. They help you explain your topic.
Tell a story!
<ul> <li>Begin with an attention-grabbing lead/headline</li> </ul>
<ul> <li>Teach and Inspire- share what you know</li> </ul>
FINAL STEP: Create your communication piece!
This is different for every project. Design your infographic, script and record your
video, etc.

Each team will present their project.

Presentations will be two slides PLUS the communication product. See example presentation: <a href="https://tinyurl.com/SCORE-HealthEd">https://tinyurl.com/SCORE-HealthEd</a>



## **Research Project Plan**

Successful research projects have a good plan!

A **research plan** serves as a guide to help you establish:

- Your <u>question</u> what are you interested in learning about?
- your <u>objective</u> What are you trying to accomplish?
- your <u>methods</u> how are you going to answer your question?
- your results how will you summarize and report your results?
- your <u>timeline</u> what's the timeline for this research project?

TIMELINE		
Date	Action	
	☐ Select topic and research question	
	☐ Determine if you are working individually or with a	
	team	
	☐ Conduct research (to write objectives, identify what	
	population you are interested in, and select methods)	
	☐ Write objective(s)	
	☐ Select methods	
	☐ Select target population	
	□ Develop data collection strategy	
	☐ Develop data collection tools	
	☐ Collect data (over the next week)	
	☐ Analyze data/findings	
	☐ Summarize data/findings	
	□ Develop presentation	
	☐ Practice presentation	
	☐ Present project	

OBJECTIVE		
What is the topic or issue you want to do research about?		
Why is this an <u>important issue</u> to study?		
Conduct research to find evidence to answer these questions!		
Have 1-3 supporting pieces of evidence from trusted sources for each.		
How big is the problem?		
Is there evidence that this problem impacts a particular group more than		
others? Who does it impact the most?		
How <u>serious</u> is the problem?		
<u> </u>		

What do we know that can be done to either prevent or help	o fix this issue?
Now that you have done this research, what is your objective goal of this research study? "This study aims to"  (Examples: to learn what teens know about the importance of sleep; to exproducts are being marketed in your community; to describe what kind of teems are looking for on social media)	explore how vaping

RESEARCH METHODS			
Your research question can be answered in many ways!			
How do you want to study this issue? What tools can you use? What population			
do you want to focus on?			
Method (e.g., interview, photovoice, mapping, survey)			
Tools (e.g., questionnaire, interview guide, mapping tools)			
Population (e.g., teens, stores, parents) Be specific!			

# **DATA COLLECTION STRATEGY**

How do you plan to collect your data? In person .... online? How will you identify participants, locations, etc.?

Design your data collection tool:

#### Surveys

- Directions- The directions should be at the top of your survey and should be clear and specific.
- Ex. "Please select one answer choice for each question below."
- Ex. "Please rate the following questions on a scale of 1-5, with 5 being strongly agree and 1 being strongly disagree."
- Ex. "Please check all that apply"
- Questions- Questions should be created to only ask one question at a time.
   Refrain from using "and" and "or" in your questions. Questions should <u>NOT</u> ask about personal or identifiable information like name, school, mental health status, email address, phone numbers, or income.
- Ex. On a scale of 1-5 with 5 being strongly agree and 1 being strongly disagree, how much do you agree that eating an apple at day keeps the doctor away.
- Ex. Do you believe apples are beneficial to your health?
- Response options- Response options should answer only the question being asked.
- Yes
- No
- Not Sure
- •
- Sometimes
- Often
- Always
- Never
- \_\_\_\_\_
- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

Design your data collection tool:

#### **Interviews**

- Introductory script- This is what you are going to say when you begin an interview. The purpose of the script is to introduce the topic of the interview and let the person you are interviewing know what is happening.
- Ex. First, let me begin by thanking you for taking the time to talk with me today. My name is (name) and I am here to talk with you about your experience eating apples. Let me give you an outline of what's going to happen. I am going to ask you a series of questions. We want to hear your perspective and there are no right or wrong answers. If at any point you want to take a break or stop the interview, please let me know. Any questions before we begin?
- Questions- Questions should be open-ended, so no questions that can be answered by a simple yes or no.
- Ex. Can you please tell me about the first time you remember eating an apple?
- Ex. Can you tell me about your favorite kind of apples and why?
- How to record responses- Response should NOT contain any identifiable information. Recorded responses should be a snapshot of the answers given by person being interviewed. Take notes while the person is talking, but try to keep engaged in the conversation!
- Ex. An interviewee responds, "The first time I had any fruit it was an apple and I was in Mrs. Jenkins 2<sup>nd</sup> grade class. My friend Jennifer Thomas handed me the apple and it has been my favorite fruit ever since because I got to eat apples with my best friend. The taste of apples has always made be happy!"
- The recorded response could be, "Apples were eaten for the first time in school and with best friend. Apples were the first fruit they ever ate.

Design your data collection tool:

### **Photovoice and Observation:**

- Observation is seeing and documenting what is happening in an environment related to your topic of interest.
- We can record it with sound, video, and/or photographs
- How we do it depends on our purpose
- Observation is a kind of qualitative research method. It provides deep understanding and context, not numbers, to describe something.
- Goal is to observe critically and systematically.
- Observational research methods have three different purposes:
  - To collect and present data
  - To describe context
  - To convey messages (positive and negative)
- Observations are from the perspective of the person recording the observation. Remember there could be other perspectives.

**Photo Voice:** A picture is worth a thousands words.

One particular kind of observation is called Photovoice. Participants take photos of things in their environment that are connected to their topic of interest. They then write a caption for the photograph to describe why they thought this image was important.

Check out the Instagram account cancer\_in\_appalachia as an example of a photo voice project

When taking photos, don't take photos of people's faces. You need their permission to do that.

Design your data collection tool:

Mapping: Can help us locate items or people in space and in relation to one another, analyze intersections or boundaries, and determine the distance between things.

Ex. How accessible are vaping products to students in our community? Locate your school on a map and then add a layer to show all of the vape shops near the school.

To conduct a mapping project you must:

- Select and use to learn a mapping program (e.g., Google Maps)
- Identify an area to map
- Identify at least two data points to map
- Determine what you are mapping visual display of locations? Distances?

SUMMARIZING RESULTS	
How will you summarize your data?	

Each team will present their project.

Presentations will be three slides (title slide, background and methods, results).

See example presentation: <a href="https://tinyurl.com/SCORE-Research">https://tinyurl.com/SCORE-Research</a>

## Curriculum

# Lessons 13–16: Research or Health Communication Project

## Learning Objectives:

- Plan a research or health communication project
- Execute a research or health communication project
- Collaborate with mentors for support to complete project
- Present project

### Materials Needed:

- Name tags
- Sign in sheet
- Snacks/waters
- Icebreaker materials
- Physical activity materials
- Pens/pencils/markers
- · Agreements poster

- Student project materials
- Resources/materials needed to complete projects

## Preparation:

- Select icebreaker
- Select physical activity
- Assign staff roles for all lesson components
- Make copies of icebreaker materials if needed
- Review projects and determine any needed supplies/resources
- On presentation week, prepare method of presentations
- Gather and pack all materials for travel to site

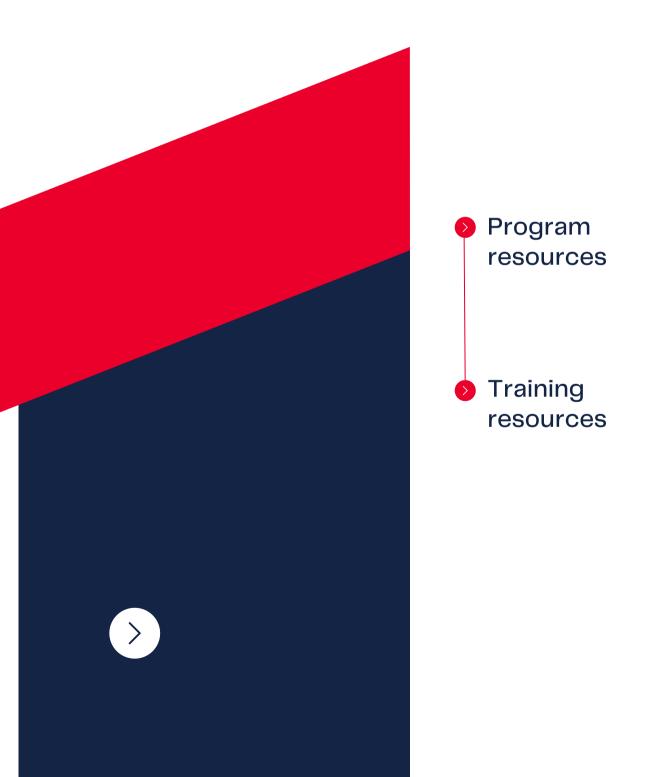


# Lessons 13-16 Completing a Project - part 1 of 1

- **Welcome!** Informal sign in, get name tag, get snack, informal interactions until ready for group activities
- ACTIVITY: Physical activity
- ACTIVITY: Mindfulness activity
- **ACTIVITY:** Projects
  - For the remainder of the program, students work on their projects. Facilitators support and mentor projects, provide resources, identify additional mentors as needed.
  - The final day of the program, students present their projects.
     Invite their friends/family/community and plan a celebration!
  - Distribute program completion certificates
  - As interested/appropriate, support students pursuing future efforts with their projects (e.g., science fairs, connecting with community groups who could implement health communication messages).

# PROGRAM RESOURCES

# Program Resources

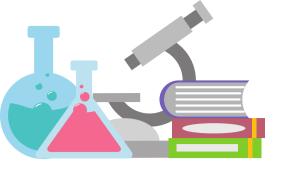


#### **Program Resources**

There are a variety of documents that may be helpful when implementing a program like Project SCORE. Here are example documents that can be used as models, adapted, and modified:

- Recruitment flyer
- Sign in sheet
- SCORE Scholar Certificate
- SCORE Fellow Certificate
- Recruitment presentation
- Table of contents and resources for a student participant workbook
- Session debrief record
- Protection of minors card
- Example summer campus camp schedule





# ATTENTION FRESHMAN-JUNIORS ARE YOU INTERESTED IN HEALTH SCIENCES?

#### **Come Learn About Project SCORE!**

 Attend a weekly after-school meeting starting September 13th

#### **Participants Will Receive:**

- Stipends for attending each session
- Snacks and supplies
- Free summer camp
- Opportunity to receive gift cards for completing surveys ... and more!

\*\* Summer Camp dates will be shared in the Spring

#### Interested?



#### **Apply Here:**





Name	SIGN IN:	SIGN OUT:	TIME OUT:



## Project SCORE Scholar OUTSTANDING ACHIEVEMENT

*May 2022* 

Marie Barnard, Ph.D. Allison Ford-Wade, Ph.D. Murrell Godfrey, Ph.D. Project SCORE Faculty Saara Nasruddin, Pharm.D.

Melissa Presley, B.S.

Tess Johnson, M.S.

Project SCORE Graduate Student Research Fellows



## Project SCORE Fellow OUTSTANDING ACHIEVEMENT

2022-2023

#### Melissa Presley

Marie Barnard, Ph.D. Allison Ford-Wade, Ph.D. Murrell Godfrey, Ph.D. Project SCORE Faculty Caroline Compretta, Ph.D.
Erin Dehon, Ph.D.
Rob Rockhold, Ph.D.
Project SCORE Faculty

# SCI ROJECT

THE UNIVERSITY OF MISSISSIPPI

Informational Meeting
August 28, 2023
Boys & Girls Club

# What is Project SCORE?



- STUDENT-CENTERED OUTCOMES RESEARCH EXPERIENCE
- MENTORED BY PUBLIC HEALTH, PHARMACY, AND OTHER UM STUDENTS THROUGHOUT THE YEAR
- STUDENTS WILL SHARE THEIR PERSPECTIVES ON WHAT'S IMPORTANT TO THEIR COMMUNITY ABOUT HEALTH
- PARTICIPATE IN WORKSHOPS RELATED TO PUBLIC HEALTH

DEVELOP RESEARCH
 QUESTIONS, DEVELOP HEALTH
 EDUCATION MATERIALS, AND,
 IF INTERESTED, CONDUCT
 RESEARCH PROJECTS RELATED
 TO HEALTH

# What will they learn?

## Fall Sept. 13-Nov. 8th

- ·SESSION 1: COMMUNITY BUILDING
- ·SESSION 2: INTRO TO PUBLIC HEALTH
- ·SESSION 3: WHAT IS EPIDEMIOLOGY?
- ·SESSION 4: CAREERS IN THE HEALTH
- SCIENCES
- ·SESSION 5: INTRO TO HEALTH LITERACY
- ·SESSION 6: INTRO TO HEALTH DISPARITIES
- ·SESSION 7: HOW TO DEVELOP A RESEARCH
- QUESTION
- ·SESSION 8: DEVELOPING A STUDENT-
- CENTERED RESEARCH AGENDA

### Spring Jan 17th-March 6th

- ·SESSION 1: REVIEW FROM THE FALL
- ·SESSION 2: INTRO TO RESEARCH METHODS
- **ETHICS**
- ·SESSION 3: INTRO TO HEALTH
- ED/COMMUNICATION
- ·SESSION 4: RESEARCH PROJECT GUIDE/
- HEALTH EDUCATION PROJECT GUIDE
- ·SESSION 5: PROJECT WORK DAY
- ·SESSION 6: PROJECT WORK DAY
- ·SESSION 7: PROJECT WORK DAY
- ·SESSION 8: PRESENTATIONS/CLOSING
- CEREMONY

## Session Schedule

#### ARRIVE, GET SETTLED

The students will get snacks, sign in and then we will do some little physical activity and take a couple breaths together to let go of their school day.

#### **PROGRAM**

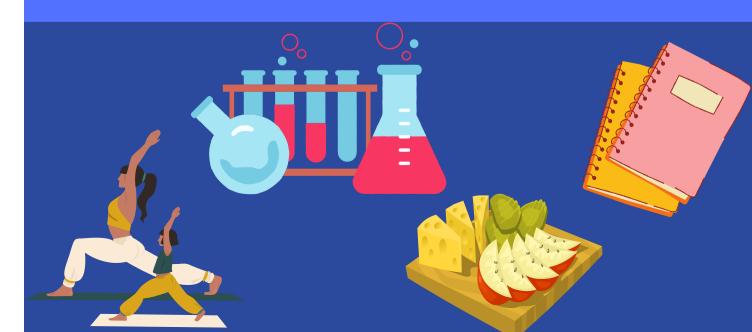
Each session, we will focus on different areas of the health sciences with hands on learning opportunities.

#### WRAP UP

We will end our day together with a recap of the day, things to know for next time, and then time to reflect on their day.

#### **Each Day:**

- ·4:30-4:40 Walk/Yoga
- ·4:40-4:50 Snack/Breathing
- ·4:50-5:30 Lesson
- •5:30-5:45 Reflection/ Wrap Up: Planning for next week/Pay for the week before



2

2



# Summer Camp

- In the spring, we will meet and discuss the 1 week summer camp.
  - Free camp on UM campus
  - Students will get a college experience
  - Produce a project to share with families
  - O Much, much more!

# What do we need from you?

#### **STUDENTS**

Be committed to coming to the sessions ready to interact and engage. Be willing to try something new, work with others, and respect the rules of the club and Project SCORE.

#### PARENTS/GUARDIANS

Support your student by picking them up on Wednesdays after 5:45 pm. Engaging with them about what they are learning.

#### WHAT YOU WILL GET?

Knowledge and understanding of the health sciences, a product you can be proud of and use for your personal portfolio, and \$20 a session!

### Contact Us



Dr. Marie Barnard and Tess Johnson



projectscore@olemiss.edu



https://pharmacy.olemiss.edu/score/



**UMprojectscore** 





### SCORE Scholar 2023-2024

Name:



Project SCORE is funded by:





Project SCORE (Student-Centered Outcomes Research Experience) is an NIH-funded project at the University of Mississippi. This project is a team effort and all of the individuals below have actively participated in the development and implementation of the project.

#### **Investigators**

Marie Barnard, Ph.D. - Principal Investigator
Caroline Compretta, Ph.D.
Erin Dehon, Ph.D.
Allison Ford-Wade, Ph.D.
Murrell Godfrey, Ph.D.
Robin Rockhold, Ph.D.

#### **Research Staff & SCORE Scholars**

Elizabeth Gordineer, B.S.
Tess Johnson, M.S.
Saara Nasruddin, Pharm.D., M.S.
Melissa Presley, M.P.H
Wesley Sparkmon, M.P.H, Ph.D.
Breanna Wade, M.S.
Quest Whalen, M.S.
Ashley Jones-White, Ph.D.

#### **Funding Acknowledgement:**

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#### Introduction

### Youth Participatory Action Research

Few studies include the perspectives of youth in health research, even though research has demonstrated that centering patients' needs is an effective method to improve health-related outcomes. Project SCORE seeks to address this issue by utilizing a **Youth Participatory Action Research (YPAR)** approach.

YPAR is a research methodology that engages youth in research that is relevant to their lives and empowers them to become change agents in their schools and communities. Building from participatory action research, YPAR shares similarities with other engagement approaches and focuses on:

- collaboration with individuals, communities, and community groups in the research process
- production of knowledge for the purpose of improving health and wellbeing
- promotion of increased individual, community, and organizational capacity, and
- producing connections to practice and action plans

Including youth perspectives through YPAR has been shown to result in positive outcomes for youth in leadership capabilities, academic and career development, social relationships, communication skills, and positive health behaviors.

YPAR offers an approach to engage youth to develop a health behavior and promotion research agenda that is directly responsive to their needs. This approach moves from merely consulting youth to involving and partnering with them, increasing the likelihood that research efforts will result in effective interventions.



Introduction

#### **Welcome to Project SCORE**

We are excited to have you as part of our 2023/2024 SCORE Scholars. We will spend the year getting to know each other, working in the world of health sciences, and working towards a research project. We hope you find your time with Project SCORE meaningful and of value.

Below is the schedule for the school year and the daily schedule:

#### Fall Sept. 13-Nov. 8th

SESSION 1: COMMUNITY BUILDING

SESSION 2: INTRO TO PUBLIC HEALTH

SESSION 3: WHAT IS EPIDEMIOLOGY?

SESSION 4: CAREERS IN THE HEALTH

SCIENCES

SESSION 5: INTRO TO HEALTH LITERACY

SESSION 6: INTRO TO HEALTH

DISPARITIES

·SESSION 7: HOW TO DEVELOP A

RESEARCH QUESTION

·SESSION 8: DEVELOPING A STUDENT-

CENTERED RESEARCH AGENDA

#### Spring Jan 17th-March 6th

SESSION 1: REVIEW FROM THE FALL

SESSION 2: INTRO TO RESEARCH

METHODS ETHICS

SESSION 3: INTRO TO HEALTH

ED/COMMUNICATION

·SESSION 4: RESEARCH PROJECT GUIDE/

HEALTH EDUCATION PROJECT GUIDE

·SESSION 5: PROJECT WORK DAY

SESSION 6: PROJECT WORK DAY

·SESSION 7: PROJECT WORK DAY

SESSION 8: PRESENTATIONS/CLOSING

CEREMONY

#### Daily Schedule

·4:30-4:40 Walk/Yoga
·4:40-4:50 Snack/Breathing
·4:50-5:30 Lesson
·5:30-5:45 Reflection/ Wrap Up:
Planning for next week/Pay for the
week before





#### **How to Contact Project SCORE**

#### Marie Barnard, Ph.D.

Pharmacy Administration

Associate Professor of Pharmacy Administration and Research Associate

Professor in the Research Institute of Pharmaceutical Sciences

Office: 234 Faser

University, MS 38677 Email: <u>mbarnard@olemiss.edu</u>

#### Allison Ford-Wade, Ph.D.

Health, Exercise Sci & Recreation Mgmt

Interim Chair of Health, Exercise Science, and Recreation Management, Associate Dean of Community Engagement, and Professor of Health, Exercise Science, and Recreation Management

Office: 215 Turner

University, MS 38677 Email: ford@olemiss.edu

#### Murrell Godfrey, Ph.D.

Graduate School

Assistant Dean of Diversity, Equity, and Inclusion and Associate Professor of Chemistry

Office: 115 Coulter Hall

University, MS 38677 Email: mgodfrey@olemiss.edu

#### Tess Johnson, M.S.

Pharmacy Administration Research Associate Office: 217B Faser

University, MS 38677 Email: <u>tfjohns1@olemiss.edu</u>

#### **Project SCORE Website:**

https://pharmacy.olemiss.edu/score/

#### **Social Media:**

UM\_projectscore





#### **Project SCORE Agreements**



#### **A Mindfulness Guide**

Learning to practice Mindfulness allows you to focus on emotional health and well-being for a few moments. The practice can help transition from one setting to the next, such as school, into an afterschool informal learning environment. Many benefits can be achieved by practicing mindfulness, including regulating your emotions, managing stress, improving academic performance, higher self-efficacy, and learning to relax your mind and body. The more you learn to use your breath and practice it regularly, the more it allows you to disengage from the constant thinking, judging, planning, and worrying many of us do all day. Mindfulness allows the brain to move into a relaxation response, which can lower our heart rate and slow our respiratory system, leading to clearer thinking so the brain is ready to take in new information and process it in a balanced way. As with anything, the more mindfulness is practiced, the easier it is to have available when you are overstimulated with thoughts, emotions, and or worries. By offering mindfulness as part of the daily schedule, the hope is to help the students reduce stress and build confidence in Project SCORE and outside of the program.

Here are a few tips when working on breathing/mindfulness practice:

- Any body is a Mindfulness body
- Remember this is your practice
- You can close your eyes or leave them open as long as you graze down or away from the rest of the group
- Relax your shoulders away from your ears, wiggle your fingers if you need help releasing tension
- Practice taking deep breaths into your belly instead of short, shallow breaths in your chest





#### **SESSION DEBRIEF MEETING**

This meeting and documentation serves two purposes:

1) as an implementation fidelity check/documentation; and 2) provides insights for program improvements

Session number and title/topic	
Date of debrief meeting:	
Attendees of debrief meeting:	
Special notes	
(anything that impacted the	
session):	
Total HIGH SCHOOL student	
attendees for session:	
Names of SCORE staff attendees for session:	
Key Takeaways:	
ney lakeaways.	
General Feedback of the	
session:	
Review of each part of the	Session – note what worked/didn't work/needs adjustment/highlights
Activity:	
GETTING STARTED	
Activity:	
PHYSICAL ACTIVITY	
Activity:	
BREATHING EXERCISE	
Activity:	
ICEBREAKER	
Activity:	
SESSION ACTIVITY 1	
Activity:	
<b>SESSION ACTIVITY 2</b>	
Activity:	
REFLECTION	
Activity:	
WRAP UP	



To ensure appropriate supervision of minors who are on campus or involved in university-sponsored programs, follow these helpful tips:

- Do NOT have one-on-one contact with minors.
- If you suspect that a minor has been abused or neglected, state law requires that you call the Mississippi Department of Human Services and University Police Department immediately.
- SEE SOMETHING, SAY SOMETHING

It is **YOUR DUTY** to report to the Title IX Coordinator anything that gives rise to concern for the health or safety of a minor.

#### **CALL**

Mississippi Department of Human Services Abuse Hotline **1-800-222-8000** 

University Police Department (662) 915-7234

Title IX Coordinator

(662) 915-7045

For more information, visit: http://www.olemiss.edu/depts/affirmative\_action



#### Summer Camp at University of Mississippi June 4-9, 2023

#### Sunday, June 4, 2023

2-3:30pm Arrive at the University of Mississippi for check in, move into residence hall Luckyday

4-4:30pm Orientation with Outreach, students are required,

parents/guardians are welcome Lamar Hall Room 129

5:30-6:30pm Dinner (organized by Outreach staff) for students RC-South Dining Hall 7:00pm Welcome Activities (organized by Outreach staff) RC-South Entrance Archway

10:00pm Curfew: Return to residence hall for the night

#### Monday, June 5, 2023

7-7:45am Breakfast- Luckyday

8:15am Meet SCORE Staff at the steps of Coulter Hall

9-10 Solving Crimes with Chemistry – STEM lab activity- Coulter Hall

10:30-12 School of Applied Sciences Activities- Turner Center

12-1 Lunch- Luckday

1:15-2:30 Activity with Dr. Castel Sweet Lamar Hall 519 3:00-3:45 Admissions and Financial Aid information session

4-4:45 Chemistry with Dr. Godfrey Coulter Hall 5:00-9:30 Dinner- Rebel Market and Outreach Activities

#### Tuesday, June 6, 2023

7-7:45am Breakfast- Luckyday

8:30am Meet SCORE Staff at the steps of Coulter Hall

9-10 Solving Crimes with Chemistry – STEM lab activity Coulter Hall

10:30-12:00 School of Pharmacy lab activities Faser Hall

12:00-12:45 Lunch- Luckyday

12:45-1:45 Mental Health: Yoga and make mindful jars 2:00-4 Nutrition lab tour and activities Lenoir Hall

Oxford Community Farmers' Market, Community Garden- Meet at Union

4:30-6:30 Adventures in Nutrition: Cooking dinner with ingredients from Farmers' Market- Lenoir Hall

7:00 Outreach activities and then return to residence hall for night

#### Wednesday, June 7, 2023

7-7:45am Breakfast- Luckyday 8:30am Depart for Memphis 10:0-2:00 Memphis Zoo (lunch at zoo)

3:30-4:00 Return to Oxford

5:00-9:30 Dinner- Rebel Market and Outreach Activities

#### Thursday, June 8, 2023

7-7:45am Breakfast- Luckyday

8:30am Meet SCORE Staff at the steps of Coulter Hall

9-10 Solving Crimes with Chemistry – STEM lab activity- Coulter Hall

10:15-12:45 Junior Disease Detectives- TCRC 3056

1-2:30 Career exploration luncheon with UM Faculty/Staff/Students- Lenoir Dining

2:45-4:30 South Campus Recreation Center: Basketball, Climbing Wall

5:00-9:30 Dinner- Rebel Market and Outreach Activities

#### Friday, June 9, 2023

7-7:45am Breakfast - Luckyday

8:30am Meet SCORE Staff at the steps of Coulter Hall

9-10 Solving Crimes with Chemistry – STEM lab activity

10:15-11:45 Athletic training tour- Gillom

11:45-12:45 Lunch- Luckyday

1-3:00 Presentations and wrap up

3pm Check out of Camp

#### **Training Resources**

Project SCORE staff training incorporates a variety of activities to provide faculty, staff, and near peer mentors with the knowledge, skills, and abilities to be successful in their roles. The training also includes certification required by the University of Mississippi and the community partners. Because the goals of Project SCORE include professional development and mentoring for all involved, a mentoring model is used to provide support and guidance to the students at every level involved in the project.

The training goals for near peer mentors are to provide the training to support success in the role, as well as to provide mentorship to develop as a professional. Training and development activities include:

- 1. Orientation to Project SCORE goals and activities
- 2. Orientation to employee role (e.g., tasks, pay, hours, eRA Commons ID)
- 3. University of Mississippi required Training in the Protection of Minors
- 4. CITI Training
- 5. What does it mean to be a mentor roles, responsibilities, boundaries
- 6. Review of curriculum
- 7. Primer on Community-Based Research
- 8. Classroom management techniques
- 9. Working with diverse populations
- 10. Research ethics
- 11. Mental Health First Aid
- 12. Faculty mentor meetings meetings at least once per semester with an assigned mentor from participating faculty
- 13. Complete an Individual Development Plan

Training Timeline: SCORE Research Fellows must complete activities 1 through 5 before working with any high school students. Other trainings will be completed throughout the year.

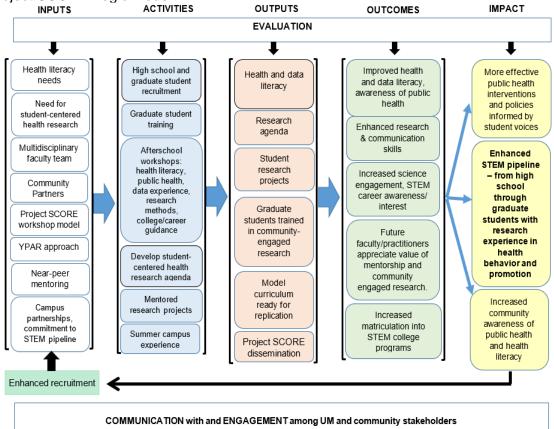


# EVALUATION RESOURCES

# **Evaluation Resources**

- Overview of Project SCORE evaluation
- Project SCORE logic model
- Evaluation instruments

Figure 4. Project SCORE Logic Model

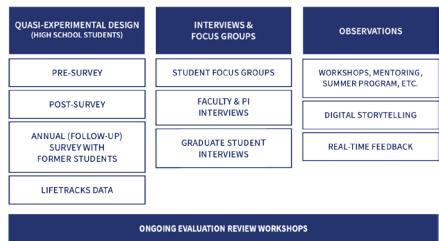


- **5A.** *Evaluation overview:* External evaluation activities for the Project SCORE program will be conducted by Dr. Mason and the Center for Research Evaluation (CERE). The purpose of this proposed evaluation is threefold: (1) to provide feedback on program implementation so it can be used for ongoing adaptation and improvement throughout the life of the program, (2) to provide evidence on short- and long-term student outcomes for accountability purposes, and (3) to contribute to the broader literature about the relationship between YPAR and students' engagement in STEM (generally) and public health (specifically).
- **5B.** *Evaluation questions:* To that end, evaluation activities will focus on the following three evaluation questions: (1) What is the quality of design and how well was it implemented? (2) To what extent is there data to provide evidence on short- and long-term student outcomes for accountability purposes, and (3) To what extent is there evidence that programs grounded in YPAR practices can build student interest and engagement in STEM and public health careers?

**5C.** *Evaluation design:* In pursuit of these goals, CERE proposes a multi-phase mixed methods design that combines a range of quantitative and qualitative measures. Applying this approach, CERE will be able to

capture both the quantitative data needed to test specific outcomes, while also using qualitative data to capture the richness and complexity of student and faculty experiences. Proposed evaluation elements are in Figure 5.

**5D.** *Quasi-experimental design:* To address evaluation questions 2 and 3, CERE will conduct a quasi-experimental design (QED) that compares student-level outcomes among high-school students who do and do not participate in Project SCORE. As part of the QED, all participating Project SCORE high-school



#### **SCORE Pre-Assessment 2022-23**

Start of Block: Introduction Q18 **Evaluation of Project SCORE** Investigator: Marie Barnard, Ph.D., Department of Pharmacy Administration 234 Faser Hall, The University of Mississippi (662) 915-1946 **Description:** The purpose of this research project is to evaluate Project SCORE. Cost and Payments: It will take you approximately thirty minutes to complete this survey. You will be provided a \$15 gift card upon completion of the survey. Risks and Benefits: This survey will ask you about your career interests, engagement in science, and about Project SCORE. We do not think that there are any risks associated with participating in this evaluation study. Confidentiality: We will ask you to provide your name on the survey so that we can match your information with surveys you make have taken previously or may take in the future. We will not share your information with anyone and we will not report any identifiable information. All results will be reported at the group level only. Right to Withdraw: You do not have to take part in this study and you may stop participation at any time. If you start the study and decide that you do not want to finish, all you have to do is to close the survey. You may skip any questions you prefer not to answer. IRB Approval: This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482 or irb@olemiss.edu. Statement of Consent: I have read and understand the above information. By completing the survey/interview I consent to participate in the study. Q12 Your Name (first and last): **End of Block: Introduction** 

**Start of Block: Engagement** 

Q2 Please read each statement carefully and choose the answer that best fits you. There are NO right or wrong answers.

-	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I try hard to do well in this program. (1)	0	0	0	0	0
In this program, I work as hard as I can. (2)	0	0	$\circ$	0	0
When I'm in this program, I participate in discussions. (3)	0	0	0	0	0
I pay attention in this program. (4)	0	0	0	0	0
When I'm in this program, I listen very carefully. (5)	0	0	$\circ$	0	0
Page Break -					

Page 2 of 20

Q4 Please read each statement carefully and choose the answer that best fits you. There are NO right or wrong answers.

Ç	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
When I'm in this program, I feel good. (1)	0	0	0	0	0
When we work on something in this program, I feel interested. (2)	0	0	0	0	0
This program is fun. (3)	0	$\circ$	$\circ$	$\circ$	$\circ$
I enjoy learning new things in this program. (4)	0	0	0	0	$\circ$
When we work on something in this program, I get involved.	0	0	0	0	0
Page Break -					

Page 3 of 20

Q5 Please read each statement carefully and choose the answer that best fits you. There are NO right or wrong answers.

_	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)		
When I work on things in this program, I try to connect what I'm learning with my own experiences.  (1)	0	0	0	0	0		
I try to make all the different ideas fit together and make sense when I work on things in this program. (2)	0	0		0			
When doing work for this program, I try to related what I'm learning to what I already know. (3)	0	0		0			
I make up my own examples to help me understand the important concepts from this program. (4)	0	0		0			
End of Block:	End of Block: Engagement						

#### Start of Block: Sense of Belonging

#### Q16 Please indicate how you feel about each item.

	NO! (1)	no (2)	yes (3)	YES! (4)
I feel comfortable at the program. (1)	0	0	0	0
I am part of the program. (2)	$\circ$	$\circ$	$\circ$	$\circ$
I am committed to the program. (3)	$\circ$	$\circ$	0	0
I am supported at the program. (4)	$\circ$	$\circ$	0	0
I am accepted at the program. (5)	0	0	0	0

**End of Block: Sense of Belonging** 

Start of Block: Biology Self-Efficacy Generalizing to Other Sci Courses & Analyzing Data

Q17 Please indicate your response to each item.

	TOTALLY CONFIDENT that you can do the task (1)	VERY CONFIDENT you can do the task (2)	FAIRLY CONFIDENT you can do the task (3)	ONLY A LITTLE CONFIDENT you can do the task (4)	NOT TA ALL CONFIDENT you can do the task (5)
How confident are you that you will be successful in this program?	0	0	0	0	0
How confident are you that you will be successful in another science program? (2)	0	0	0	0	
How confident are you that you would be successful in a science course? (3)	0	0	0	0	0
How confident are you that you could analyze a set of data (i.e., look at the relationships between variables)? (4)	0	0			
How confident are you that you could tutor another student in a science course? (5)	0	0	0	0	0
How confident are you that you could ask a meaningful question that could be	0	0	0	0	0

answered experimentally? (6)				
How confident are you that you could explain something that you learned in this program to another person? (7)	0	0	0	0
How confident are you that you could use a scientific approach to solve a problem at home? (8)	0	0	0	0

End of Block: Biology Self-Efficacy Generalizing to Other Sci Courses & Analyzing Data

**Start of Block: Career Interest Questionnaire** 

Q9 Select your level of agreement with each statement to indicate how you feel:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I would like to have a career in science. (1)	0	0	0	0	0
My family is interested in the science courses I take. (2)	0	0	0	0	0
I would enjoy a career in science. (3)	0	0	$\circ$	0	0
My family has encouraged me to study science. (4)	0	0	0	0	0
I will make it into a good college and major in an area needed for a career in science. (5)	0	0		0	0
I will graduate with a college degree in a major area needed for a career in science. (6)	0	0	0	0	0
I will have a successful professional career and make substantial scientific contributions.	0	0		0	
I will get a job in a science-	0	0	0	0	0

related area. (8)					
Some day when I tell others about my career, they will respect me for doing scientific work. (9)	0	0		0	0
A career in science would enable me to work with others in meaningful ways. (10)	0	0	0	0	0
Scientists make a meaningful difference in the world. (11)	0				0
Having a career in science would be challenging.	0		0	0	0
Page Break -					

#### Q10 Please indicate your level of agreement with each statement:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I expect to pursue a college education in health science (i.e., medicine, nursing, pharmacy, dentistry) (1)	0	0	0	0	0
I expect to pursue education in allied health (i.e., dental hygienist, x-ray technician) (2)	0	0	0	0	0
I expect to pursue a college education to become a medical/scientific researcher (3)	0	0	0	0	0
Page Break ——					

Page 10 of 20

## Q11 Indicate your level of interest in pursuing a career in each of the following areas:

	Not interested at all (1)	Slightly interested (2)	Moderately interested (3)	Very interested (4)	Extremely interested (5)
Interest in pursuing a career in health (1)	0	0	0	0	0
Interest in pursuing a career in science (2)	0	0	0	0	0
Interest in pursuing a career in medicine (3)	0	0	0	0	0
Interest in pursuing a career in reserach (4)	0	0	0	0	0
Dogo Produ					

Page Break ————

**Start of Block: Health Literacy Assessment Scale** 

Q6 Please read each statement carefully and choose the answer that best fits you. There are no right or wrong answers.

	Rarely (1)	Sometimes (2)	Often (3)	Always (4)
How often is it easy for you to ask your doctor questions about your health? (1)	0	0	0	0
How often does your doctor understand what you mean when you ask him or her a question about your health? (2)	0	0	0	0
How often can you easily describe a health problem you have to your doctor? (3)	0	0	0	0
How often does your doctor seem to understand when you answer a question he or she asks? (4)	0	0	0	0
How often do you understand the answers your doctor gives to your questions? (5)	0	0	0	0
How often do you get confused because you find different information about the same health topic? (6)	0	0	0	0
How often do you get confused when your doctor tells you about taking a medicine? (7)	0	0	0	0
How often do you get confused when your doctor tells you about possible side effects from a medicine or treatment? (8)	0	0	0	0
How often do you get confused when your doctor tells you about test results, like results of an x-ray? (9)	0	0	0	0
about test results, like results of	O	O	O	

Q15 Please read each statement carefully and choose the answer that best fits you. There are no right or wrong answers.

Rarely (1)	Sometimes (2)	Often (3)	Always (4)
0	0	0	0
0	0		
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	
	Rarely (1)	Rarely (1) Sometimes (2)	Rarely (1) Sometimes (2) Often (3)

**End of Block: Health Literacy Assessment Scale** 

**Start of Block: Public Health Awareness** 

Q50 Next, we would like to learn about your thoughts as they relate to public health.
Page Break ————————————————————————————————————

Q50a In your own words, what is public health?
Q50b List three possible careers in public health. If you can't think of three, please write, 'I don' know.'
O Public health career #1 (1)
O Public health career #2 (2)
O Public health career #3 (3)
Page Break ————————————————————————————————————

Q50c How much do you know about public health?
○ I have never heard of public health (1)
I have heard of public health but only know very little about it (2)
O Neutral (3)
○ I have heard of public health and know some about it (4)
I know a great deal about public health (5)
End of Block: Public Health Awareness
Start of Block: Public Health and Communication Skills
Q51 Now we would like to learn a little about your communication skills. There are no right or wrong answers, we just want to learn how confident you are when you write and/or talk about science.
Page Break

Q51a How confident are you that you could write or talk about science projects in the following ways?

,	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
After reading an article about a science experiment, I could write a summary of its main points. (1)	0	0	0	0	0
After watching a television documentary about scientific research, I could explain its main ideas to another person. (2)				0	0
After listening to a lecture about some scientific topic, I could write a summary of its main points. (3)				0	0
After listening to a lecture about some scientific topic, I could explain its main ideas to another person. (4)	0			0	

I could critique a laboratory report written by another student. (5)	0	0	0	0	0				
End of Block: P	End of Block: Public Health and Communication Skills								
Start of Block: I	Demographics								
Q60 Thank you f to know you little	•	•		•	•				
Page Break —									

Q60a How old are you today?	
Q60b Which of the following best describes your gender?	
○ Male (1)	
○ Female (2)	
Other (3)	
O Prefer not to reply (4)	
Page Break ————————————————————————————————————	

Q60c What school do you attend?
Q60d Which of the following best classifies your race/ethnicity?
○ White (1)
O Black or African American (2)
O Hispanic or Latina (3)
Asian or Pacific Islander (4)
American Indian, Alaskan Native or Native Hawaiian (5)
O Biracial or Multiracial (6)
Other (7)
End of Block: Demographics
Start of Block: Email
Q60e What is your email address? (We only ask for your email address to help us match your information to surveys you may have taken or to surveys you may take in the future).
End of Block: Email

## SCORE Post-Assessment 2022-23

Start of Block: Introduction

Q19

Please take a few minutes to complete this survey about Project SCORE

Your input is important!

\_\_\_\_\_

Q20

**Evaluation of Project SCORE** 

**Investigator:** Marie Barnard, Ph.D., Department of Pharmacy Administration

234 Faser Hall, The University of Mississippi

(662) 915-1946

**Description:** The purpose of this research project is to evaluate Project SCORE.

**Cost and Payments:** It will take you approximately thirty minutes to complete this survey. You will be provided a \$15 gift card upon completion of the survey.

**Risks and Benefits:** This survey will ask you about your career interests, engagement in science, and about Project SCORE. We do not think that there are any risks associated with participating in this evaluation study.

**Confidentiality:** We will ask you to provide your name on the survey so that we can match your information with surveys you make have taken previously or may take in the future. We will not share your information with anyone and we will not report any identifiable information. All results will be reported at the group level only.

**Right to Withdraw:** You do not have to take part in this study and you may stop participation at any time. If you start the study and decide that you do not want to finish, all you have to do is to close the survey. You may skip any questions you prefer not to answer.

**IRB Approval:** This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482 or irb@olemiss.edu.

**Statement of Consent:** I have read and understand the above information. By completing the survey/interview I consent to participate in the study.

Q12 Your Nar	ne (first and last):		
Page Break			

# Q22 Please indicate your level of agreement with the following statements about your experience in Project SCORE:

	Strongly disagree (20)	Somewhat disagree (21)	Neither agree nor disagree (22)	Somewhat agree (23)	Strongly agree (24)
Project SCORE helped prepare me for future academic success. (2)	0	0	0	0	0
I learned new things about science that I did not know before I participated. (5)	0	0	0	0	0
This program increased my interest in science. (7)	0	0	0	0	0
This program increased my interest in majoring in science in college. (8)	0	0	0	0	0
This program increased my interest in a career in science. (9)	0	0	0	0	0
I learned new things about how to be successful in school that I did not know before I participated. (6)	0	0	0	0	0
Overall, I found Project SCORE to be valuable. (3)	0	0	0	0	0
I would recommend Project SCORE to my peers. (4)	0	0	0	0	0

Q24 What is the most important thing you will take away from SCORE?	
Q26 What could be done to make Project SCORE better in the future?	
Page Break	

Q41 Tell us abou	ut any accomplis	shments/awards	you achieved/re	ceived during th	e school yea
End of Block: II	ntroduction				
Start of Block:	Engagement				
Q2 Please read NO right or wron		carefully and ch	oose the answer	that best fits yo	ou. There are
ne ngiker we	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
y hard to do well this program. (1)	0	0	0	0	0
this program, I		$\circ$	0	$\circ$	$\circ$
can. (2)					
can. (2) Vhen I'm in this program, I participate in	0	0	$\circ$	0	0
Vhen I'm in this program, I	0	0	0	0	0

Q4 Please read each statement carefully and choose the answer that best fits you. There are NO right or wrong answers.

-	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
When I'm in this program, I feel good.	0	0	0	0	0
When we work on something in this program, I feel interested.	0	0	0	0	0
This program is fun. (3)	0	$\circ$	$\circ$	$\circ$	$\circ$
I enjoy learning new things in this program. (4)	0	0	0	0	0
When we work on something in this program, I get involved. (5)	0	0	0	0	0

Page Break ———

Page 6 of 27

Q5 Please read each statement carefully and choose the answer that best fits you. There are NO right or wrong answers.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
When I work on things in this program, I try to connect what I'm learning with my own experiences.  (1)	0	0	0	0	0
I try to make all the different ideas fit together and make sense when I work on things in this program. (2)	0			0	
When doing work for this program, I try to related what I'm learning to what I already know. (3)	0				
I make up my own examples to help me understand the important concepts from this program. (4)					

**End of Block: Engagement** 

Page 7 of 27

### Start of Block: Sense of Belonging

Q16 Please indicate how you feel about each item.

	NO! (1)	no (2)	yes (3)	YES! (4)
I feel comfortable at the program. (1)	0	0	0	0
I am part of the program. (2)	$\circ$	$\circ$	$\circ$	$\circ$
I am committed to the program. (3)	0	0	$\circ$	$\circ$
I am supported at the program. (4)	0	0	$\circ$	0
I am accepted at the program. (5)	0	$\circ$	$\circ$	0

**End of Block: Sense of Belonging** 

Start of Block: Biology Self-Efficacy Generalizing to Other Sci Courses & Analyzing Data

Q17 Please indicate your response to each item.

	TOTALLY CONFIDE NT that you can do the task (1)	VERY CONFIDENT you can do the task (2)	FAIRLY CONFIDENT you can do the task (3)	ONLY A LITTLE CONFIDENT you can do the task (4)	NOT TA ALL CONFIDENT you can do the task (5)
How confident are you that you will be successful in this program? (1)	0	0	0	0	0
How confident are you that you will be successful in another science program? (2)	0	0	0	0	0
How confident are you that you would be successful in a science course? (3)	0	0	0	0	$\circ$
How confident are you that you could analyze a set of data (i.e., look at the relationships between variables)? (4)	0	0	0	0	0
How confident are you that you could tutor another student in a science course? (5)	0	0	0	0	$\circ$
How confident are you that you could ask a meaningful question that could be answered experimentally? (6)	0	0	0	0	0
How confident are you that you could explain something that you learned in this program to another person? (7)	0	0	0	0	0
How confident are you that you could use a scientific approach to solve a problem at home? (8)	0	0	0	0	0

End of Block: Biology Self-Efficacy Generalizing to Other Sci Courses & Analyzing Data

### **Start of Block: Career Interest Questionnaire**

## Q9 Select your level of agreement with each statement to indicate how you feel:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I would like to have a career in science. (1)	0	0	0	0	0
My family is interested in the science courses I take. (2)	0	$\circ$	$\circ$	$\circ$	$\circ$
I would enjoy a career in science. (3)	0	$\circ$	$\circ$	$\circ$	$\circ$
My family has encouraged me to study science. (4)	0	$\circ$	$\circ$	$\circ$	$\circ$
I will make it into a good college and major in an area needed for a career in science. (5)	0	$\circ$	$\circ$	$\circ$	$\circ$
I will graduate with a college degree in a major area needed for a career in science. (6)	0	$\circ$	0	0	$\circ$
I will have a successful professional career and make substantial scientific contributions. (7)	0	0	$\circ$	0	0
I will get a job in a science- related area. (8)	0	$\circ$	$\circ$	$\circ$	$\circ$
Some day when I tell others about my career, they will respect me for doing scientific work. (9)	0	0	0	0	0
A career in science would enable me to work with others in meaningful ways. (10)	0	$\circ$	0	0	$\circ$
Scientists make a meaningful difference in the world. (11)	0	$\circ$	$\circ$	$\circ$	$\circ$
Having a career in science would be challenging. (12)	0	0	0	0	0
Page Break					

## Q10 Please indicate your level of agreement with each statement:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I expect to pursue a college education in health science (i.e., medicine, nursing, pharmacy, dentistry) (1)	0	0	0	0	0
I expect to pursue education in allied health (i.e., dental hygienist, x-ray technician) (2)	0	0	0	0	0
I expect to pursue a college education to become a medical/scientific researcher (3)	0	0			0
Page Break ——					

## Q11 Indicate your level of interest in pursuing a career in each of the following areas:

	Not interested at all (1)	Slightly interested (2)	Moderately interested (3)	Very interested (4)	Extremely interested (5)
Interest in pursuing a career in health (1)	0	0	0	0	0
Interest in pursuing a career in science (2)	0	0	0	0	0
Interest in pursuing a career in medicine (3)	0	0	0	0	0
Interest in pursuing a career in reserach (4)	0	0	0	0	0

**Start of Block: Health Literacy Assessment Scale** 

Q6 Please read each statement carefully and choose the answer that best fits you. There are no right or wrong answers.

	Rarely (1)	Sometimes (2)	Often (3)	Always (4)
How often is it easy for you to ask your doctor questions about your health? (1)	0	0	0	0
How often does your doctor understand what you mean when you ask him or her a question about your health? (2)	0	0	0	0
How often can you easily describe a health problem you have to your doctor? (3)	0	0	0	0
How often does your doctor seem to understand when you answer a question he or she asks? (4)	0	$\circ$	$\circ$	0
How often do you understand the answers your doctor gives to your questions? (5)	0	$\circ$	$\circ$	0
How often do you get confused because you find different information about the same health topic? (6)	0	0	0	0
How often do you get confused when your doctor tells you about taking a medicine? (7)	0	$\circ$	$\circ$	$\circ$
How often do you get confused when your doctor tells you about possible side effects from a medicine or treatment? (8)	0	0	$\circ$	0
How often do you get confused			$\bigcirc$	$\circ$

Q15 Please read each statement carefully and choose the answer that best fits you. There are no right or wrong answers.

	Rarely (1)	Sometimes (2)	Often (3)	Always (4)
How often do you get confused when reading instructions for medicine?	0	0	0	0
How often do you have problems learning about an illness or health topic because of difficulty understanding the written information you get? (2)	0	0	0	0
How often do you think the forms you complete at your doctor's office are confusing? (3)	0	0	$\circ$	0
How often are you confused by health information that has a lot of numbers and statistics?  (4)	0	0	0	0
When you talk to people other than your doctor about health issues, how often are you confused by what they tell you? (5)	0	0	0	0
When reading brochures or handouts about health issues, how often do you need someone to help you read them? (6)	0	0	0	0
End of Block: Health Litera	cy Asses	sment Scale		
Start of Block: Public Healt	h Awaren	ness		
Q50 Next, we would like to le	arn about	your thoughts as the	ey relate to public	health.
Page Break ————				

Q50a In your own words, what is public health?	
Q50b List three possible careers in public health. If you can't think of three, please write, 'I don'	 't
know.'	-
O Public health career #1 (1)	
O Public health career #2 (2)	
O Public health career #3 (3)	
Page Break	

Q50c How much do you know about public health?
○ I have never heard of public health (1)
I have heard of public health but only know very little about it (2)
O Neutral (3)
○ I have heard of public health and know some about it (4)
I know a great deal about public health (5)
End of Block: Public Health Awareness
Start of Block: Public Health and Communication Skills
Q51 Now we would like to learn a little about your communication skills. There are no right or wrong answers, we just want to learn how confident you are when you write and/or talk about science.
Page Break —

Q51a How confident are you that you could write or talk about science projects in the following ways?

·	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
After reading an article about a science experiment, I could write a summary of its main points. (1)	0	0	0	0	0
After watching a television documentary about scientific research, I could explain its main ideas to another person. (2)	0		0	0	0
After listening to a lecture about some scientific topic, I could write a summary of its main points.  (3)	0			0	0
After listening to a lecture about some scientific topic, I could explain its main ideas to another person. (4)	0			0	
I could critique a laboratory report written by another student. (5)	0	0	0	0	0

**End of Block: Public Health and Communication Skills** 

**Start of Block: Project SCORE Activities** 

Q52 We are almost done. Next, we would like to learn about some fo the Project SCORE activities you have done. So think back to when you started with the program and let us know what you have done.
Page Break ————————————————————————————————————

## Q52a Which of the following activities have you participated in with Project SCORE over the last 12 months?

	Yes, I participated in this activity (1)	No, I have not participated in this activity (0)	I don't remember (99)
After-school health literacy workshop (1)	0	0	0
After-school public health workshop (2)	0	$\circ$	0
After-school research methods workshop (3)	0	0	0
College/career guidance (4)	0	$\circ$	$\circ$
Mentored research project (5)	0	$\circ$	$\circ$
Summer campus experience (6)			
Page Break ———			

Page 20 of 27

#### Q53 How much did these activities increase your interest in a career in science?

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = After-school health literacy workshop [ Yes, I participated in this activity ]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = After-school public health workshop [Yes, I participated in this activity]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = After-school research methods workshop [Yes, I participated in this activity]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = College/career guidance [Yes, I participated in this activity]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = Mentored research project [Yes, I participated in this activity]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = Summer campus experience [Yes, I participated in this activity]

	Not at all (1)	A little (2)	Neutral (3)	Somewhat (4)	A great deal (5)
Display This Choice:  If Which of the following activities have you participated in with Project SCORE over the last 12 mo =  After-school health literacy workshop [ Yes, I participated in this activity ]  After-school health literacy workshop (1)	0	0			
Display This Choice:  If Which of the following activities have you participated in with Project SCORE over the last 12 mo =  After-school public health workshop [ Yes, I participated in this activity ]	0	0	0	0	
After-school public health workshop (2)  Display This Choice:  If Which of the following activities have you participated in with Project SCORE over the last 12 mo = After-school research methods workshop [ Yes, I participated in this activity ]  After-school research methods workshop (3)		0			

Display This Choice:  If Which of the following activities have you participated in with Project SCORE over the last 12 mo =  College/career guidance [Yes, I participated in this activity]  College/career guidance (4)	0	0			0
If Which of the following activities have you participated in with Project SCORE over the last 12 mo = Mentored research project [ Yes, I participated in this activity ]  Mentored research project (5)	0	0	0		
Display This Choice:  If Which of the following activities have you participated in with Project SCORE over the last 12 mo =  Summer campus experience [ Yes, I participated in this activity ]  Summer campus experience (6)	0			0	
 Page Break  —					

#### Q54 Do you think Project SCORE should keep or change this activity in the future?

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = After-school health literacy workshop [ Yes, I participated in this activity ]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = After-school public health workshop [Yes, I participated in this activity]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = After-school research methods workshop [Yes, I participated in this activity]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = College/career guidance [Yes, I participated in this activity]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = Mentored research project [Yes, I participated in this activity]

#### Display This Choice:

If Which of the following activities have you participated in with Project SCORE over the last 12 mo... = Summer campus experience [Yes, I participated in this activity]

change (1)	change (2)	Neutral (3)	Maybe keep (4)	Definitely keep (5)
		0	0	0
		0		0
		0	0	

Display This Choice:  If Which of the following activities have you participated in with Project SCORE over the last 12 mo = College/career guidance [ Yes, I participated in this activity ]  College/career guidance (4)			0	
Display This Choice:  If Which of the following activities have you participated in with Project SCORE over the last 12 mo = Mentored research project [ Yes, I participated in this activity ]  Mentored research project (5)	0		0	0
Display This Choice:  If Which of the following activities have you participated in with Project SCORE over the last 12 mo = Summer campus experience [Yes, I participated in this activity]  Summer campus experience (6)	0		0	
End of Block: P	roject SCORE Ac	tivities		

**Start of Block: Research Mentor** 

trust my research mentor. (2)  feel like I can talk to my research mentor about my esearch goals. (3)  y research mentor ovides me helpful feedback. (4)  y research mentor supports my esearch goals. (5)  End of Block: Research Mentor  Start of Block: Email  Q60 Thank you for your time today, we are almost done. In this last question, please provide	trust my research mentor. (2)  feel like I can talk to my research mentor about my esearch goals. (3)  y research mentor rovides me helpful feedback. (4)  y research mentor supports my esearch goals. (5)  End of Block: Research Mentor  Start of Block: Email  Q60 Thank you for your time today, we are almost done. In this last question, please provide your email so we can match this survey with previous surveys and/or future surveys you may		Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
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