A Guide to NCCOR's Student Hub

BUILDING EVIDENCE AND ADVANCING PRACTICE TO REDUCE CHILDHOOD OBESITY

✳NCCOR

NCCOR's Student Hub features a variety of free tools and resources that can help public health and nutrition graduate students succeed with their coursework and research.

This guide introduces the tools that can be found on the Student Hub and, through detailed case studies, offers step-by-step guidance on how students can incorporate the tools into research and evaluation projects.

✳ NCCOR

ABOUT NCCOR

As a partnership of major funders addressing childhood obesity and health—including the CDC, NIH, RWJF, and USDA—NCCOR builds evidence and advances practice to reduce childhood obesity in the United States, creating a healthier future for all children, their families, and communities

WHAT ARE
NCCOR's tools?

NCCOR develops tools and resources that support students, researchers, evaluation scientists, and practitioners to enhance their effectiveness, efficiency, and impact. The following tools are most relevant to students. To learn about other NCCOR tools, check out the Guide to NCCOR's Research Tools.

NEW TOOL

OPUS Learning Guides

The **OPUS Learning Guides** are designed to help professors, students, and early career researchers incorporate lessons from NCCOR's Obesity-Related Policy, Systems, and Environmental Research in the U.S. (OPUS) workshop series into their classroom and applied research projects. Visit nccor.org/student-hub/#opus.

The guides cover topics, such as:

→ Applying Rigorous Designs to the Evaluation of PSE Interventions

→ Planning and Engaging Across Sectors and Settings for Policy, Systems, and Environmental (PSE) Interventions

→ Systems Approaches to Obesity Prevention

→ And more!

Measures Registry Resource Suite

The **Measures Registry Resource Suite** encompasses three tools relevant to childhood obesity research and evaluation. Visit nccor.org/nccor-tools/mrresourcesuite/.

→ The Measures Registry is a searchable database of nearly 1,400 diet and physical activity measures relevant to childhood obesity research. nccor.org/nccor-tools/measures/

→ The Measures Registry User Guides walk users through the process of using the Measures Registry to select appropriate measures. nccor.org/nccor-tools/mruserguides/

→ The Measures Registry Learning Modules highlight key concepts from the four domain-specific Measures Registry User Guides in 5 to 15-minute videos. nccor.org/nccor-tools/measures-registry-learning-modules/

Youth Compendium of Physical Activities

The **Youth Compendium of Physical Activities** provides a list of 196 common activities in which youth participate and the estimated energy cost associated with each activity. Visit nccor.org/nccor-tools/youthcompendium/.

The Youth Compendium provides energy cost values for:

→ Sedentary activities, such as lying down or watching TV

→ Standing, doing household chores, and playing active video games

→ Playing and participating in games and sports activities
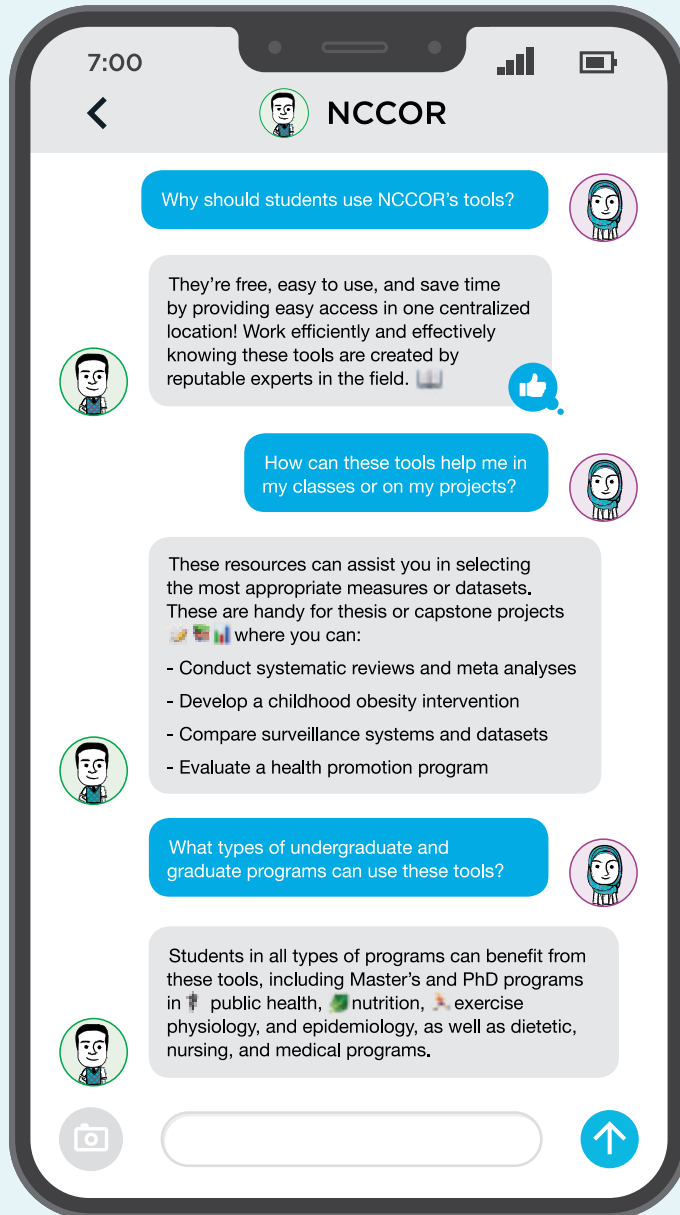
→ Walking and running

Catalogue of Surveillance Systems

NCCOR's **Catalogue of Surveillance Systems** provides easy to navigate, one-stop access to over 100 publicly available datasets relevant to childhood obesity research and evaluation. Visit nccor.org/nccor-tools/catalogue/.

Datasets profiled in the Catalogue include information on obesity-related topics:

→ Health behaviors, outcomes, and determinants

→ Policies and environmental factors

Phone chat with NCCOR:

Why should students use NCCOR's tools?

They're free, easy to use, and save time by providing easy access in one centralized location! Work efficiently and effectively knowing these tools are created by reputable experts in the field. 📖

How can these tools help me in my classes or on my projects?

These resources can assist you in selecting the most appropriate measures or datasets. These are handy for thesis or capstone projects 🧪📊📈 where you can:
- Conduct systematic reviews and meta analyses
- Develop a childhood obesity intervention
- Compare surveillance systems and datasets
- Evaluate a health promotion program

What types of undergraduate and graduate programs can use these tools?

Students in all types of programs can benefit from these tools, including Master's and PhD programs in 🎓 public health, 🥗 nutrition, 🏃 exercise physiology, and epidemiology, as well as dietetic, nursing, and medical programs.

OPUS Learning Guides

STUDENT CASE STUDY

Applying Design Thinking to a School Wellness Intervention

BACKGROUND

For your summer practicum, you start working with a city health department that is preparing to implement a new school wellness policy throughout the local school district. The policy will outline specific goals for nutrition promotion and education, physical activity, and other school-based activities that promote student wellness. Your team has decided to apply design thinking when developing the policy, a people-centered approach to problem-solving and innovation that focuses on possible solutions to a problem rather than the problem itself.

CONSIDERATIONS

As part of the design thinking process, your team must first identify ways to meaningfully engage local partners in co-designing the wellness policy. Co-designing interventions with the community gives them a strong sense of ownership and empowerment, and can help your team more effectively tailor the policy to the community's needs. You have been tasked with identifying a tool that can be used to gather community input, ultimately allowing families to shape the policy that will directly impact their schools.

HOW TO USE THE OPUS LEARNING GUIDES

1. Open the Learning Guide titled, "A Design Thinking Approach to Community Engagement to Promote Public Health Intervention Sustainability."

2. Read through the SPARCS case study and reflect on which of the referenced tools would best support your team in co-designing a wellness policy with local parents: ecosystem mapping, directed storytelling, or impact/effort matrices.

3. Watch the keynote video, review the slides, and discuss the reflection questions with your team to spark conversation around who the right local partners are and how you will engage them in co-designing the school wellness policy.

4. Remember that this is an iterative process. Revisit the Learning Guide, keynote presentation, and slides regularly as you continue to work with the community.

Measures Registry Resource Suite

STUDENT CASE STUDY

Evaluating the Impacts of a Produce Prescription Program on Overweight and Obesity Among Pediatric Patients

BACKGROUND

For your capstone project, you and a team of MPH students started working with a clinic that recently adopted a produce prescription program. Your team is tasked to evaluate the program. Before implementing the program, the clinic wants to develop an evaluation plan to demonstrate the effectiveness of the program on improving patients' diet. Which measures should your team select for this evaluation?

CONSIDERATIONS

One key consideration is the limited resource availability at this community clinic. The pediatricians are already limited to short patient visit times, and the clinic staff does not have extra time or financial resources to support a lengthy evaluation. Another consideration is how to best measure changes in diet among pediatric patients. Some children will be too young to report on their food intake, and parents will be responsible for accurately reporting their child's behaviors. Children who can report their own behaviors may be limited by reading comprehension level, attention span, or inaccurate recall and reporting.

HOW TO USE THE MEASURES REGISTRY

1. To narrow down potential choices, your team selects "Individual Dietary Behavior" from the Measures Registry filter options.

2. Since the evaluation will take place at the clinic during patient visits, you enter "clinic" into the search box to further narrow the available tools.

3. Considering the limited patient visit time, your team decides to select "Questionnaire" to find a short questionnaire that can be administered in-person.

To accommodate the range in both patient ages and abilities to accurately complete a questionnaire, your team opts for a questionnaire that a family member or caregiver can complete for the patient. Based on these criteria, the "Key Eating Behavior Survey" and "HABITS Questionnaire" would both be useful for rapidly assessing dietary habits. Ultimately your team selects the "HABITS Questionnaire" (Wright et al. 2012) since this measure has validity and reliability estimates, is only 19 items, was developed specifically for use in a clinical setting to measure weight-related dietary habits, and is available directly in the Measures Registry.

Youth Compendium of Physical Activities

STUDENT CASE STUDY

Evaluating Caloric Expenditure of an Afterschool Program

BACKGROUND

As a part of your practicum course, you are working with a local afterschool program to evaluate physical activity programming and make recommendations. The program includes 30 minutes of free time where the children can choose from several activities including basketball, soccer, jump rope, dance, and computer time. You would like to know the average number of calories the children use during free time so you can learn to what extent the program helps children reach the recommended amount of daily physical activity. You use the Youth Compendium of Physical Activities to report which activities were associated with higher METy values.

CONSIDERATIONS

To determine total calorie expenditure, you first need to calculate the Basal Metabolic Rate (BMR) which is a function of weight and sex. You use the CDC growth charts to determine the 50th percentile weight of an 11-year-old male and female.

HOW TO USE THE YOUTH COMPENDIUM

1. Open the Youth Compendium of Physical Activities and click on the green "Search the Compendium" box.

2. From the top navigation, select "METy Values (Smoothed)."

3. Use the search box to look up the METy for each activity and find the following for ages 10–12:

Basketball	6.2 METy
Soccer	5.6 METy
Jump rope	7.1 METy
Dance	4.1 METy
Computer work	1.5 METy

4. To calculate total energy expenditure, select "How to Access & Use These Data" from the top navigation. This page provides the equations to calculate BMR and total energy costs.

5. After comparing the values, you report to your class the activities associated with higher METy values.

Catalogue of Surveillance Systems

STUDENT CASE STUDY

Implementation of State Laws Governing School-based Nutrition and Physical Activity

BACKGROUND

You are interested in the association between state laws regulating school-based nutrition and physical activity and actual school practices. For your capstone project, you want to investigate if schools report nutrition and physical activity related practices more frequently in states with laws requiring such practices.

CONSIDERATIONS

1 What data do you need to answer this question?

You will need two sets of data because you are searching for an association between two different factors. One dataset should have information regarding state laws and the other should have information regarding school practices. You will need to identify datasets with common geocodes (state identifiers) to link both sets of data.

2 How do you ensure you're comparing the same thing?

You are aware that state legislation requiring nutrition education time might manifest itself in several ways, and the laws may differ by grade level. The schools may

have specific courses related to nutrition and/or a requirement for nutrition education. You will need to confirm that what the schools are reporting matches the legislation.

3 What about policy lag, (i.e., the time it takes for a policy to be implemented fully)?

You decide you must account for this time difference when linking state law data to school practice-related data.

HOW TO USE THE CATALOGUE OF SURVEILLANCE SYSTEMS

After weighing your considerations, you are now ready to use the Catalogue. Go to nccor.org/nccor-tools/catalogue/.

1 Filter the database by selecting "macro/policy" level and "state" scope. This will narrow the surveillance systems to a more manageable number.

2 Compare the surveillance systems by selecting several systems and clicking "Compare."

3 Select one system to see an overview including key variables measures, the population, and geocodes. For this project you've decided to use data from "Classification of Laws Associated with School Students (C.L.A.S.S.)", which provides information on laws related to diet and physical activity, coded by school level and geocoded on a state level.

4 Reset the filters, this time selecting "school" level and "state" scope. From the results, you decide to use the "School Health Profiles."

This dataset provides information related to middle and high school diet and physical activity and geocodes on a state level.

5 Now that you have both datasets, you're able to compare laws and the school health profiles. You're now ready to do your analysis to see if there are any trends accounting for the considerations listed above (e.g., policy lag time).

Additional Resources

Sign up for the NCCOR Student Hub!

Our quarterly student e-newsletter connects you to free tools and resources that can support your schoolwork and research! Each newsletter shares information about childhood obesity resources and events.

nccor.org/e-newsletter/ *(Be sure to select student!)*

Connect & Explore Webinars

NCCOR connects the field to emerging issues and findings through the Connect & Explore webinar series. Nationally acclaimed experts are featured on each webinar to discuss current issues in childhood obesity research. The interactive series attracts participants from across the country, offering an opportunity to engage in dialogue with leading experts in the field, ask questions, and understand the nuances of research, policy, and evaluation.

nccor.org/webinars/

DO YOU WANT TO BE FEATURED IN NCCOR'S STUDENT MATERIALS?

Tell us how you have used our resources and you might see your work in our case studies, webinars, or the student hub!

✉ **NCCOR@fhi360.org**

NCCOR brings together four of the nation's leading research funders:

Centers for Disease Control and Prevention (CDC)

National Institutes of Health (NIH)

Robert Wood Johnson Foundation (RWJF)

U.S. Department of Agriculture (USDA)

www.nccor.org

October 2025