Nutrition Education Design System Worksheets

Before you design any nutrition education intervention, whether it is a few sessions or a larger program with several components, it is important to determine your intervention focus and identify your intended primary audience. When those have been determined, you will need detailed information on the behaviors and practices that contribute to the issue or problem you have selected as your intervention focus. Step 1 worksheets will help you conduct assessments to obtain the information you will need.

Think of yourself as a detective as you work through these worksheets. You are trying to find out as much as you can to determine which core behaviors or behavioral goals will be the targets for your educational session(s) or entire program.

The information you collect may be quite brief or extensive, depending on the scope and duration of your intervention, and will vary by category. At the end of the Step 1 worksheets, you should have products for Steps 1A, 1B, and 1C as follows:

Step 1A: Health / food issues or needs (one or two) and primary intended audience for the nutrition education intervention. Examples are "overweight in teenagers" or "low rates of breastfeeding in a low-income audience."

Step 1B: High-priority behaviors contributing to the selected issues. A set of one to a few nutrition-related behaviors or community practices that contribute to the health issue(s) that you identified.

Step 1C: Statement of the behavioral or action goals for your educational session(s) or program. The behavioral or action goals describe the purpose or behavioral outcomes for your session(s) or program in terms of behaviors or community practices.

Use these worksheets as guides to help you identify behavioral goals for your educational session. Cite information sources as appropriate (e.g., journal article, government report, observation, interview) used in the worksheet in a bibliography at the end of this step. Electronic versions of these worksheets are available at http://nutrition.jbpub.com/education/2e. If you are unable to access the worksheets electronically, you can write onto this blank worksheet or create a text document that uses the same flow of information.

Step 1A: Issues and intended audience

Describe the demographics of your audience (e.g., age, subgroup, ethnicity) and the location of the site.

Investigate possible issues of concern for your audience. Remember, *issues* are: health problems such as diabetes and obesity, food system problems such as excessive energy use and pollution from overprocessed food and food waste, and social problems such as hunger, food access and social justice.

What does research tell you?

What do policy documents tell you?

What does the organization or audience tell you?

Decide the key issue for your educational session(s) or program. Reflect on all the issues you identified above and choose one issue. Base your choice on greatest need, whether education can help, importance to the audience, and importance to the organization.

Step 1B: Contributing behaviors or practices

Investigate the behaviors that contribute to your chosen issue. Remember, behaviors are what people eat and what physical and sedentary activities people do.

What does research and monitoring (e.g. NHANES data tell you?

What do dietary guidelines (e.g. MyPlate, American Cancer Association guidelines) tell you?

What does the organization or audience you will work with tell you?

Identify up to 4 key problem behaviors. Problem behaviors are those that will make the *issue* you decided on worse.

|	
1.	2.
3.	4.

Step 1B: Contributing behaviors or practices

Copy the key problem behaviors or practices into the first column of the table below. For each problem behavior, reflect on the following factors and comment on them in the box provided so as to help you identify the specific problem behavior(s) to focus on in your educational session(s) or program.

Problem Behavior	How **important** is this behavior in addressing the health issue or other issue of concern? How **modifiable** is this behavior by educational means? How **feasible** is changing this behavior given the time allotted? How **desirable** is changing this behavior from the audience's point of view? How **measurable** is change in this behavior?

What problem behavior(s) will you focus on? (choose one or two of the above and write it/them in the box below)

Step 1C: Behavioral goal(s)

State your behavioral goal(s) for the educational session(s) or program. Rewrite the behavior(s) you identified above as the positive behavior you would like your audience to achieve as a result of your session. For example, if your problem behavior is "not eating enough fruits and vegetables," the behavioral goal could be, "participants will eat five servings of fruits and vegetables a day."
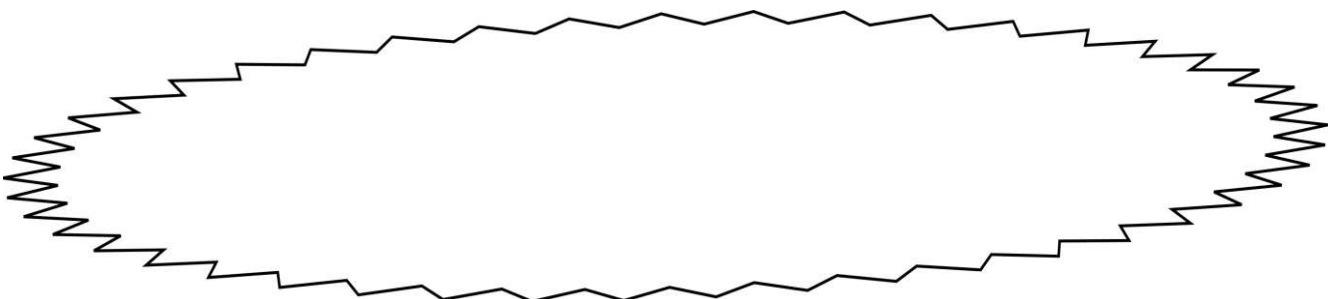
References

In Step 2, you will find out as much as possible about why audience members make the food and activity choices they do as well as what might motivate, facilitate, and support them to take on the goal behaviors. Theory provides you with the framework to ask the questions and organize the answers.

At the end of the Step 2 worksheets, you should have the following products for Steps 2A, 2B, 2C, 2D, and 2E:

Step 2A: Description of the sociocultural environment in which your audience lives.

Step 2B: List of current behaviors, practices, policies, and environmental factors that are *assets* for the audience's achievement of the goal behaviors.

Step 2C: List of thoughts, feelings, and skills that reflect the audience's motivation for and ability to achieve the goal behaviors or community practices. These are the determinants or mediators of the goal behavior(s)

Step 2D: List of potential actions that can provide environment and policy supports for the audience's achievement of the goal behaviors.

Step 2E: Description of audience characteristics and list of resource considerations that will help you plan the practical aspects of your educational session.

Use these worksheets as guides to help you identify the personal mediators and environmental determinants of change. Cite information sources in the text and add references to the bibliography at the end of the step. Electronic versions of these worksheets are available at http://nutrition.jbpub.com/education/2e/. If you are unable to access the worksheets electronically, you can write onto this blank worksheet or create a text document that uses the same flow of information.

Step 2A: Audience's sociocultural environment

Describe the social and cultural environment of the audience with respect to your goal behaviors. Consider the following questions: What is their life stage (e.g., teen, senior, mother), and how does this stage influence their eating and activity patterns? What is their living situation, and how does this influence their eating and activity patterns? What are the cultural beliefs that influence their eating and activity patterns? How does their lifestyle (e.g., work, family, recreation, social obligations) influence their ability to make healthy food and activity choices? How do their religious beliefs influence their eating and activity patterns?

Step 2B: Individual and community assets

Identify existing or current behaviors, practices, environmental factors, and policies that support the goal behavior(s) for your educational session.

Current individual behaviors and community practices that support the behavioral goal	Current environmental factors and policies that support the behavioral goal

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Step 2C: Potential personal mediators

Find out about your audience's thoughts and feelings related to the goal behavior and identify the motivational determinants or mediators from psychosocial theories to which they correspond. You may use information from the audience itself as well as the research literature to complete this step.

What does the audience indicate will motivate them to do the goal behavior?	What psychosocial mediator(s) does this address?
Ex: Teenaged girls say they would eat fruits and vegetables if they tasted good	outcome expectations
Ex: Teenaged girls say they would eat fruits and vegetables at school if it were perceived as "cool"	social norms

Step 2C: Potential personal mediators

Find out about your audience's knowledge and skills related to the goal behavior and identify the facilitating mediators from theory. You may use information from the audience itself as well as the research literature to complete this step.

What knowledge and skills does your audience need to do the goal behavior?	What mediator(s) does this address?
Ex: Teenaged girls say they would eat more fruits and vegetables if they knew how to prepare tasty snacks with them	food preparation skills
Ex: Teenaged girls say they would eat more fruits and vegetables if they received a daily reminder message on their phones	self-monitoring

Step 2D: Environmental/policy supports

Find out how you could change the environmental and policy supporting factors listed below to facilitate your intended audience in performing your goal behaviors. You may use information from the audience itself as well as the research literature to complete this step.

What changes need to be made in policy or the environment to support the goal behavior?	What type of environmental support is this?
Ex: Corner stores sell fruits and vegetables instead of just candy and chips	food environment
Ex: Fruits and vegetables made less expensive than packaged snacks in school cafeteria	organizational food policy

Step 2E: Audience and resources

Add details about your audience that are important for delivering your educational session. You may use information from the audience itself as well as the research literature to complete this step.

Audience trait	Description
Educational level or schooling	
Physical and cognitive developmental level and ability (children only)	
Literacy and numeracy skills	
Preferred learning style	
Special needs	
Emotional needs	
Social needs	

Describe the resources available for your educational session.

Educational session resources	Available resources
Time	
Space	
Equipment	
General administrative support	

References

In Step 3, you lay out the theoretical and philosophical basis for your nutrition education educational session. Addi tionally, you identify the components that will make up your educational session.

At the end of the Step 3 worksheets, you should have the following products:

Step 3A: Your conceptual model for the session(s) based on theory

Step 3B: Statement of personal philosophy of nutrition education

Step 3C: Statement of personal perspective on nutrition content and issues

Step 3D: List of educational session components

Use the provided worksheets as a guide to help you select your theory model and describe your philo sophy. Electronic versions of these worksheets are available at http://nutrition.jbpub.com/education/2e/. If you are unable to access the worksheets electronically, you can write onto this blank worksheet or create a text document that uses the same flow o f information.

Step 3A: Conceptual Model Based on Theory

List the theory or theories that will guide your educational session. Look back at the motivational and knowledge and skills determinants or mediators of change you identified in STEP 2 and review the theories presented in chapters 4 and 5. Choose an existing theory, or combine elements from different theories to form an integrated theory-based model.

Draw a diagram of your theory model, including the determinants or mediators of behavior change you will address and how they relate to one another and your goal behavior.

Step 3B: Statement of Personal Philosophy

Describe your philosophy of nutrition education.

Step 3C: Perspectives on nutrition content and issues

Provide your perspective on nutrition content and issues relevant to the behavioral goal.

Step 3D: Program components

List and/or diagram the components of your program. You may have only one -- group education -- or you may have more than one. For example, in addition to lessons you might have newsletters, point of purchase information and activities to change policy and/or the food and activity environment: these are additional components.

In Step 4, you will translate behavioral theory into the objectives that you need to guide the design of educational experiences and environmental-policy support activities..

If you plan on providing only ONE group session, skip this step.

At the end of the Step 4 worksheets, you will have the following product:

Step 4:   A set of general objectives for all your educational sessions **as a group** if you plan to have a series of sessions related to the same issue. You will also have an additional set of environmental support objectives if you have more than one component. These sets of objectives will form the basis of your evaluation plan in Step 6.

Use the provided worksheets as a guide to help you write educational and support objectives rooted in your theory model from Step 3. Electronic versions of these worksheets are available at http://nutrition.jbpub.com/education/2e. If you are unable to access the worksheet electronically, you can write onto this blank worksheet or create a text document that uses the same flow of information.

Step 4: Nutrition education session and environmental objectives

Restate your behavioral goal here.

Using the key mediators or determinants from your theory model, write general educational objectives for your series of sessions. If you have additional components, develop objectives for your key environmental support activities directed at your behavioral goal.

Mediator from your theory model	Corresponding general educational objective
Environmental support activity to help achieve your behavioral goal	**Corresponding environmental support objective**

In Step 5, you will create objectives for (1) the educational plans you will use for individual level components and (2) environmental supports plans for environmental/policy components, if these are part of your program..

These pages of the Step 5 worksheets are devoted to designing educational plans for activities directed at individual-level components Generally, the primary individual-level component consists of one or more group sessions. (You can also use these worksheets to design other individual-level components, such as newsletters and media-related activities.)

You should have **one** educational plan for **each** group session you design (or newsletter or other component directed at individuals).

At the end of the Step 5 worksheets for the individual-level components, you will have the following products:

Step 5A: General objectives for each educational session or series of sessions directed at the same behavioral goal. These will form the basis of your evaluation plan in Step 6.

Step 5B: An overall design plan for the session in the form of a matrix that links mediators, objectives, and activities

Step 5C: A narrative educational plan that translates the matrix into a form ready for teaching or presenting

Use these worksheets as an organizational guide to help you design your educational plan and translate theory mediators into educational activities. Electronic versions of these worksheets are available at http://nutrition.jbpub.com/education/2e. If you are unable to access the worksheet electronically, you can write onto this blank worksheet or create a text document that uses the same flow of information.

Step 5A: Session objectives

Session title: _____

Behavioral Goal (restated from above): _____

General educational objective(s) addressed in this session (3-4): (These may include one or more of those in Step 4). **These will form the basis for your evaluation plan.**

_____

_____

_____

_____

Step 5B: Designing the educational plan: matrix format

Design your educational (or lesson) plan in matrix format. In this format you have a row for each activity in your session. The columns help you think through the details to be sure the activities flow and have the potential to change your behavioral goal.

- **Column 1–Events of Instruction (EoI):** Sessions work best when they are sequenced to: (A) gain **attention**, (S) present **stimulus** or new material, (G) provide **guidance** and practice, and (C) apply and **close**. As you create activities, revise the order of your activities so that the session flows through these events of instruction.

- **Column 2–Mediators:** Be sure that all mediators or determinants in your theory model (Step 3) are addressed at least once during your session or series of sessions directed at the same behavior.

- **Column 3–Specific objectives:** These are specific objectives for each activity. They are what you want your participants to "get" from this activity. That is, what **participants** will think (head), feel (heart) or do (hand) differently as a result of this activity (**not what you will do**). The specific objectives, when taken together, will help you meet your general objectives listed above. For many of your mediators you will probably have more than one activity, and therefore more than one specific objective.

- **Column 4–Learning Doman:** Identify the learning domain and level for each objective (C for cognitive, A for Affective, P for psychomotor).

- C**olumn 5–Description of activities:** In this column describe the specific activities you will do to achieve the specific objectives. Be sure to make the activities interesting and meaningful to your audience. As appropriate put in the content you will cover. For example, if you are having the participants list benefits of shopping at a farmers' market, then list some of the benefits in this box.

Step 5B: Designing the educational plan: matrix format

EoI	Mediator	Specific objective *Participants will be able to:*	Learning domain	Description of activity

Step 5C: Educational plan

Write a narrative educational plan, based on your design matrix, that you will actually use to deliver your session.
Think of a catchy title that will be meaningful to your audience. Make sure that activities are sequenced based on order of
instruction. For each educational activity create a heading with a title and the mediator(s) addressed. Then write a detailed
procedure for the activity. It is customary to place an overview or outline of activities and a materials list at the beginni ng of
the teaching plan.

Overview of Content

Materials

Procedure

These pages of the Step 5 worksheets are devoted to designing the environmental supports plan for the environmental/ policy components if you have these as part of your program. Generally, the environmental/policy components consist of activities directed at changes that impact one or more facets of the environment or policy as these relate to your program's behavioral goals.

If your program does not have any environmental/ policy components, skip Steps 5D and 5E.

You should have **one** support plan for **each** environmental/policy component you stated in Step 3.

At the end of the Step 5 worksheets for the environmental/policy components, you will have the following products:

    Step 5D: General support objectives for each environmental or policy component.

    Step 5E: A matrix that links mediators /supporting factors, objectives, and activities to help you design your support plan.

Use these worksheets as an organizational guide to help you design your environmental support plan and translate theory mediators into environmental and policy change activities. Electronic versions of these worksheets are available at http://nutrition.jbpub.com/education/2e. If you are unable to access the worksheets electronically, you can write onto this blank worksheet or create a text document that uses the same flow of information.

Step 5D: General support objectives

Re-state program goal behavior(s): _____

Support component from Step 3 (e.g school environment): _____

Write the general support objectives

Mediator / environment or policy supporting factor (e.g school meals, wellness policy) from Step 2D	General support objective

Step 5E: Designing the support plan: matrix format

Design your support plan in matrix format. Write specific objectives for the mediators or environmental /policy influencing factors in your theory model (Step 3). Then describe the strategies or activities you will use to address the mediator or environmental /policy influencing factors.

Mediator /supporting factor	Specific support objective*	Activities to achieve environmental /policy support objectives
* Use your findings about the changes that could be made in your audience's environment (Step 2D) for each category to guide your writing of the specific objectives		

In Step 6, you plan the evaluation for your educational session. The outcomes are for the psychosocial mediators from your theory model, the goal behaviors, and the selected health issues/other concerns. You will also evaluate changes in food environment–policy supports.

At the conclusion of the Step 6 worksheets, you will have the following products:

Step 6A: Diagram of conceptual framework for evaluation

Step 6B: Indicators of, and measures for, evaluating individual level changes (such as improvements in psychosocial mediators or determinants, behaviors, and health outcomes/other issue of concern)

Step 6C: Indicators of, and measures for, evaluating environment-policy support activities

Use the provided worksheets as a guide to plan your evaluation. Electronic versions of these worksheets are available at http:// nutrition.jbpub.com/education/2e/. If you are unable to access the worksheets electronically, you can write onto this blank worksheet or create a text document that uses the same flow of information.

Step 6A: Conceptual framework for program evaluation

Diagram the conceptual framework that will guide your evaluation. This can be very simple if you have only one component such as one or more educational sessions. The framework will be more complex if you have several components

Step 6B: Evaluation plan for individual level component

How will you know whether you have achieved the outcomes for your individual level component such as group session(s)? State indicators you will use to determine whether the selected mediator-based educational objectives, behavioral goal(s) and health or other issue outcome(s) have been achieved. Then identify potential measures/instruments to assess the achievement of these outcomes. You may use the research literature to find a validated measure or you may create your own measure.

Mediator/ determinant	General educational objectives (from Step 4 or 5A)	Indicator(s) of achievement	Measures/instrument(s)

Behavioral goal(s)	Indicator(s) of achievement	Measures/instruments

Step 6B: Evaluation plan for individual level component

Outcomes for health issue or other issue of concern	Indicator of achievement	Measures/instruments

Step 6C: Evaluation plan for environmental/policy supports component

State indicators of achievement for the selected environmental/policy support activities designed to accompany your educational session(s) if these were part of your program. Then identify potential measures/instruments to assess the achievement of these outcomes. You may use the research literature to find a validated measure or you may create your own measure.

Skip this step if your program does not have any environment/ policy component.

Environmental support outcomes	Indicator of achievement (general support objectives)	Measures/instruments

References