Hypothesis Development

Objective: To identify the factors (independent variables) that influences the chosen topic (dependent variable) and develops hypotheses about the relationships between them.

Time: 50 minutes

Materials: “Factors Influencing the Issue” Handout, Flipchart, Construction paper, and Markers

Source: Participatory Action Research: Curriculum for Empowering Youth

Enroll: Ask students to write their answers to the following questions:
- What do you think is the main cause (independent variable) of the issue (dependent variable) that we have identified? Why?

Do/Experience:
There are a number of things that influence the issue you have selected to research. Divide the class into smaller groups of 3-5 and have each group fill out the “Factors Influencing the Issue” handout.

Have the groups share their results.

List all of the causes (independent variables) identified on a flip chart

Process: From the list of causes, which causes are the most important?
How does each cause influence the issue?
Was it difficult to explain the relationship between the cause and the issue?

Label: Our issue is the dependent variable, and the causes are the independent variables. Our hypotheses are the explanations of the relationship between the cause and the issue.

The diagram below illustrates the linking of the cause to the issue through hypotheses that explain the relationship.
Demonstrate: Through consensus, have youth identify three to five causes that are the most important. Depending on the time and staff and youth resources you have, it is best to keep the model as simple as possible. Have the group decide on a hypothesis, or the way that each independent variable influences the dependent variable.

Once you have finalized your research model, you should have youth reproduce it and place it on the wall of your meeting room. Use construction paper cut into a square to represent the issue (dependent variable), circles to represent the causes (independent variables), and strips (hypotheses of the relationships between the two). Make sure that youth write the words in marker so it is large enough to be read from anywhere in your meeting room. You will find that you need to refer to it frequently during the rest of the project.

Review: Is there a cause that you think affects the most people? Which one? Why?
FACTORS INFLUENCING THE ISSUE

Your task is to brainstorm a list of things that you think influence ____________________________ (the issue or dependent variable). Make sure each cause is clearly different from the others. Put the reasons why each of the causes is important in the second column.

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<tr>
<th>Cause (Independent Variable):</th>
<th>Hypotheses: Reason/Explanation for the cause</th>
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