Activity: Problem Tree: Investigating Causes and Effects







Students will learn more about the issue they are tackling as they apply what they have learned, along with their critical thinking skills, to consider the causes and effects of the problem presented through the issue.

Have students look at the problem tree graphic organizer, which helps guide students in thinking about and articulating the issue as a problem, and then going further by breaking down the causes and effects of the problem. This is necessary before exploring steps needed to address the problem, as it allows students to consider the depth and even the breadth of an issue. Display a larger version of this graphic organizer, perhaps projected on to a screen, and explain the three sections.

Begin at the center of the tree with the problem.

- **Problem:** The issue that is being examined. Because it is not as apparent as the effects, the core problem itself sometimes takes longer to identify. Then go to the roots, which is the investigation of the causes.
- **Causes:** Issues, situations, factors, or phenomena that have led to the problem. Prompt exploration of causes by asking, "Why does the problem exist?" Encourage students to think about the "causes of causes" — the multiple layers of factors that contribute to a problem. Repeat this exercise and think further about the causes of the next levels of causes.

And finally to the leaves, which explore the effects.

▶ Effects: Results created by the problem. As with causes, encourage students to explore multi-layered effects, or "effects of effects." At first, this part of the issue may appear to be easy to tackle, but without addressing the root cause, only addressing the effects is like trimming leaves and branches — they grow back quickly. Students should also consider the multi-layered effects, or "effects of effects" that can arise when a problem goes unaddressed. Students should always ask: "then what happens?" The more students drill into the effects, the more they will deepen their critical thinking and analysis.

Now have students look at the problem tree graphic organizer. Guide students in thinking through the process of cause and effect. Use a simplified, non-issue related example first, such as:

- Problem: I am often late getting to school.
- ▶ Cause: Perhaps I did not hear my alarm or got distracted as I was getting ready.
- ▶ Effect: I am missing instruction, falling behind, and feeling frustrated, etc.

If desired, use the issue of clean water as an issuebased example to guide students through the Problem Tree.

- Problem: Families lack reasonable access to clean and safe water.
- Causes: Continuing to use reasonable access to clean water as an example, you might prompt exploration of causes by asking, "What are some of the factors hindering reasonable access to clean water?" For example, if students suggest a cause is that there are no sustainable sources of clean water in the community, ask students to then think further about what causes lack of access to clean water. Answers can include that the nearest water source is the contaminated river two miles away.
- ▶ Effects: For example, if students suggest an effect is children are sick from waterborne diseases, ask them to identify the result of that effect, one of which could be students missing school due to illness. Next, they should ask what the effects are of students missing school.

Now shift the discussion to the issue at hand, and help students brainstorm what they already know about their issue. You may want to complete the Problem Tree to model filling it out by providing at least two levels for each root cause and effect in the graphic organizer.

Then, have students work with a partner to fill out their own graphic organizers.

Have students build their own problem trees by using the graphic organizer and adding causes, starting from the base of the tree to the tips of the roots and moving from larger concepts to more specific sub-topics. Make sure the students understand that their problem tree should have a dual focus on both the local and global scope of the access to education issue. Students should then do the same with impacts, starting from base of branches to the tips of the leaves and moving from large impacts to more specific topics.

Look for this activity online at WE.org/ap/problemtree.

