Evaluating the Impact

Did the youth participating in the 4-HCCS small engines activities change as a result of their experiences? Did they learn new skills? Do they now have more confidence with several important life skills such as communicating with others, presenting information, explaining concepts and speaking extemporaneously? The following evaluation has been prepared for your use. The Success Indicator for each activity in each guide is listed. Simply note the youth's skill level **PRIOR** to the activity and **AFTER** the activity. Begin each indicator with **"Youth have the ability to…"**

1 - To a great extent
2 - Somewhat
3 - Not at all

Overall Small Engine Curriculum Outcomes

Youth have the ability to…	Before	After		Before	After
Make good decisions	1 2 3	1 2 3	Describe how a small engine works	1 2 3	1 2 3
Communicate with others	1 2 3	1 2 3	Maintain a small engine	1 2 3	1 2 3
Plan and organize	1 2 3	1 2 3	Troubleshoot small engine problems	1 2 3	1 2 3
Solve problems	1 2 3	1 2 3	Tear down and rebuild a small engine	1 2 3	1 2 3
Accept responsibility	1 2 3	1 2 3	Investigate careers that involve engines	1 2 3	1 2 3

Level 1—*Crank It Up!*	Before	After
Name external parts of a lawnmower	1 2 3	1 2 3
Start an engine	1 2 3	1 2 3
Identify tools used for maintenance and repair of small engines	1 2 3	1 2 3
Identify parts of an engine	1 2 3	1 2 3
Identify different oil grades	1 2 3	1 2 3
Describe the importance of clean oil filters	1 2 3	1 2 3
Demonstrate how moving air cools	1 2 3	1 2 3
Demonstrate spark plug maintenance	1 2 3	1 2 3
Service an air cleaner on a small engine	1 2 3	1 2 3
Identify safety labels	1 2 3	1 2 3
Describe safe clothing to wear when working with small engines	1 2 3	1 2 3
Identify the job a machine does	1 2 3	1 2 3
Conduct an interview	1 2 3	1 2 3
Evaluate the best tool to purchase for the job	1 2 3	1 2 3

Level 2—*Warm It Up!*	Before	After
Classify types of engines	1 2 3	1 2 3
Identify internal small engine parts	1 2 3	1 2 3
Identify specialty tools	1 2 3	1 2 3
Calculate the size of an engine	1 2 3	1 2 3
Perform a compression test and compute compression ratio	1 2 3	1 2 3
Adjust a carburetor	1 2 3	1 2 3
Disassemble a small engine	1 2 3	1 2 3
Prepare a small engine for storage	1 2 3	1 2 3
Research the effects of changing sprockets	1 2 3	1 2 3
Determine the best direction to mow grass based on the center of gravity	1 2 3	1 2 3
Demonstrate how different cuts affect grass health	1 2 3	1 2 3
Select small engine parts wisely	1 2 3	1 2 3
Decide whether to start a small business	1 2 3	1 2 3

Level 3—*Tune It Up!*	Before	After
Match engine sounds to problems and adjustments	1 2 3	1 2 3
Identify and use diagnostic tools	1 2 3	1 2 3
Demonstrate how to tear down an engine's air and fuel system	1 2 3	1 2 3
Demonstrate how to assemble an engine's air and fuel system	1 2 3	1 2 3
Demonstrate how to tear down an engine's electrical system	1 2 3	1 2 3
Help someone assemble an engine's electrical system	1 2 3	1 2 3
Demonstrate how to tear down an engine base	1 2 3	1 2 3
Demonstrate how to assemble an engine base	1 2 3	1 2 3
Sharpen a lawnmower blade	1 2 3	1 2 3
Research information about small engine design	1 2 3	1 2 3
Research local small engine machine laws and regulations	1 2 3	1 2 3
Select a new small engine	1 2 3	1 2 3
Select the best machine for the money	1 2 3	1 2 3
Decide whether or not to start a small business	1 2 3	1 2 3

Helper's Guide	Before	After
Plan a one-year program of group small engine activities	1 2 3	1 2 3
Plan and conduct a small engine project tour	1 2 3	1 2 3
Plan, conduct, and participate in a small engine skillathon	1 2 3	1 2 3
Plan, conduct, and participate in a Small Engines Quiz Bowl	1 2 3	1 2 3
Select and perform a community service project related to small engines	1 2 3	1 2 3
Play Small Engines Bingo	1 2 3	1 2 3
Give a prepared speech or demonstration on small engines	1 2 3	1 2 3
Identify small engine parts	1 2 3	1 2 3
Diagnose engine problems	1 2 3	1 2 3