

Guidelines for Documenting Short, Intermediate and Long-term Outcomes

Overview

The goals of this document are to 1) help WSU Extension educators better understand expectations related to reporting programming outcomes and 2) to enhance the usability of the WORQS system. The following outlines language for describing outcomes and impacts in the WORQS system.

Short Term Outcomes

Short term outcomes consist of evidence that participants in WSU Extension programs have **learned critical skills or knowledge** as a direct result of the program. The most effective means of measuring this is to conduct an assessment of knowledge before and after an event. However, it is acceptable to conduct a retrospective evaluation that asks participants if their knowledge was increased in critical areas. It is important that questions in these surveys be in alignment with program goals and focus on achievement of learning objectives. It is not satisfactory to simply ask questions such as: 'did you learn something?' Finally, some programs may have learning standards tied to completion of continuing education units (CEUs) or other mechanisms that require a final exam. Acceptable performance on a final exam can be used to document learning objectives were met.

Examples of Acceptable Short Term Outcome Statements:

1. Pre- and post-test evaluations indicate that knowledge among participants in 5 key areas related to health promotion increased by 30% as a result of the program. More specifically, knowledge of the importance of *consuming appropriate amounts of fruits and vegetables* increased by 25%, understanding of *acceptable levels of daily exercise* increased by 40%, understanding of how to *interpret food labels* increased by 60%, understanding of healthy *daily caloric intake* increased by 15%, and understanding of the *negative impact of smoking* on individual and family health increased by 10%
2. Based on post-event (retrospective) evaluations, 95% of youth participating in the _____ program indicated that they were better prepared to work together to solve problems; 80% indicated that they better understood differences in how people viewed

issues and solutions; 55% indicated that they were better prepared to assume leadership responsibilities.

3. Based on a comprehensive exam given to participants at the conclusion of the training sessions, 75% demonstrated acquisition of adequate knowledge to effectively direct thinning of timber stands; 50% mastered knowledge necessary to identify 15 major softwood species; 62% could identify bark beetle damage; and 95% could recognize all of the key natural resource organizations supporting forest stewardship in Washington State.

Intermediate-term Outcomes

Intermediate-term outcomes involve proof or reasonable evidence that the **behavior of participants has changed** as a result of WSU Extension programming. This generally involves some form of follow up survey. These post-program surveys are generally done after enough time has elapsed to allow individuals to adequately implement practices. However, there may be opportunities to utilize other information sources such as databases held by schools, agencies, and organizations if the program is designed to do so (see example #3 below). Behavior change is much more likely to occur from the additive effects of multiple activities. Therefore it becomes much more of a program-focused assessment instead of an activity-focused assessment.

Examples of Acceptable Intermediate-Term Outcome Statements:

1. A survey of participants in the _____ program was conducted 6 months after completion of the 10-week curriculum. Response rate was 82%. Among respondents, 25% indicated that they had used information from the program to fire-proof their property; 40% of respondents indicated that they had taken steps described in the program to enhance wildlife habitat; 34% indicated that they had completed management plans in accordance with Washington State Department of Natural Resources regulations.
2. Follow up surveys were conducted with participants in the 4-H Know Your Government Program. Response rate on the online survey was 54%. Among respondents, 80% indicated that they have begun to regularly follow local, state and national political issues and processes; 40% indicated that they had assumed a leadership position in student government or other organizations; 80% indicated that participation in KYG had improved their confidence and ability to communicate in public forums; and 40% indicated that they had engaged in a public service activity within their community.

3. Attendance and academic records were analyzed at five schools in collaboration with respective school administrators. It was determined that youth involved in 4-H Science, Engineering, and Mathematics programs (SET) had 50% fewer absences over a 12-month period. Mean grades in mathematics courses were 10% higher than counterparts (average math GPA = 3.26 for SET students VS 2.93 for non-SET students). Mean grades in science courses (biology, chemistry, physics) were 8% higher for SET students than counterparts (average GPA = 3.15 for SET students VS 2.90 for non-SET students).
4. Fourteen seed venders were contacted in four Palouse counties. Based on sales records, they indicate that 10% of farmers are now using the new WSU Super Wheat. Based on mean seeding rates of 80 pounds per acre, these data suggest that fully 122,000 acres were planted to this variety in 2008.

Long-Term Outcomes (Impacts)

Documentation of the long-term outcomes (also known as impacts) involves proof or reasonable evidence that a change in condition has occurred. For WSU Extension programs we are looking for a positive change in the **economic, social, or environmental well-being of the target audience**. As with intermediate-term outcomes, long-term outcomes most often occur as the result of sustained engagement with the target audience and often involve the efforts of multiple extension educators in collaboration with researchers, partner organizations, etc. Therefore, it is generally difficult (and unnecessary) to separate the impact of a specific activity or the contribution of an individual educator. Additionally, documentation of long-term outcomes generally begins with program design. It is very difficult to assess long-term impacts for programs that are not designed with the 'end in mind.' Documentation of long-term impacts usually involves either direct measurement or reporting of improvement in condition or the use of reputable research that links change in behavior to change in condition.

Examples of Acceptable Long-Term Outcome (Impact) Statements:

1. Based on follow up a follow up survey, it was determined that participants had fireproofed 10,500 acres of private forest land. Additionally, wildlife habitat was improved on 6,500 acres by program participants. Finally, 62 participants indicated that they had begun sustainably harvesting timber off of their properties. These individuals indicated after following the guidelines provided by the program that sales of timber from their properties had increased by a total of \$120,324 in 2008.

2. Surveys of seed sales in the Palouse indicate that 122,000 acres were planted to WSU Super Wheat. Based on research conducted at 14 sites across the region, yields of Super Wheat average 12% higher than conventional varieties with the same inputs. Based on 10-year average yields in the region of 50 BU/acre, application of this new variety will result in 732,000 additional BU of wheat with the same inputs. At \$7.50/BU, this will result in an additional \$5,490,000 in profit for growers in the region annually.
3. The WSU Extension Energy Program recommended five code changes designed to improve energy efficiency of new homes. Three of these recommendations have been added to Washington State building codes. Research conducted by the WSU Extension Energy Program indicates that these three changes will result in a 3% annual saving in energy consumption in new homes. Approximately 140,000 homes are built in Washington State annually. Based on estimates from the Energy Information Administration (EIA), the average cost of energy per household in Washington State was \$1,078 in 2007. Application of new building codes will save owners of new homes \$4,527,600 ($140,000 \times .03 \times \$1,078$) in 2008. It is also estimated that energy savings in the state will increase by approximately \$4.5 million annually under the current energy cost structure due to application of these codes in coming years. Therefore, in five years, estimated annual energy cost savings resulting from these code changes will be approximately \$22,638,000.
4. High school graduates that were enrolled in 4-H in the past year were surveyed (N = 1200). Among this group, 65% (780) indicated plans to attend a college or university in the coming year. This contrasts to 45% in the general population of high school graduates statewide. Therefore, 240 additional youth are expected to attend colleges and universities due to their involvement in 4-H. Recent research (Dumbledorf et al, 2008) indicates that a linear relationship exists between enrollment in colleges and universities and subsequent graduation rates. Based on this research, 58% of those enrolling in colleges and universities are expected to complete a BS or BA degree in 6 years or less. Therefore, an additional 139 youth are expected to graduate with a BS or BA degree as a result of their involvement in 4-H. US Census Bureau data indicate that the current average lifetime income of a person with a BS or BA degree is approximately \$900,000 greater than a person with a high school diploma. Therefore, the economic impact of predicted increased college/university education among former 4-H youth is \$125,280,000 or approximately \$2 million per year.