Measuring the Impact of 4-H

Common Measures 2.0 and the 4-H Thriving Model

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For well over a century, 4-H has contributed to the learning and development of youth in significant ways, positioning 4-H as the largest and enduring youth development organization in the country. Project-based learning and positive youth development have long been the intended outcomes of 4-H, and while individual states have worked to evaluate the impact of 4-H on youth locally, the national 4-H system lacked a clear and unified approach until the introduction of 4-H Common Measures (Lewis, et al., 2015). Further testing and refinement of the initial common measures has led to an inventory of established instruments for use in 4-H programs, now referred to as Common Measures 2.0 (National 4-H Council, 2020). This collection of instruments, and related supports such as data analysis and reporting, has advanced 4-H’s ability to measure the impact of 4-H in selected areas.

The development of the 4-H Thriving Model (Arnold, 2018; Arnold & Gagnon, 2019) advanced the measurement of the impact of 4-H by identifying the processes through which 4-H contributes to the positive development of youth. The 4-H Thriving Model outlines the connection between participation in high quality 4-H programs, the effect of that participation on youth thriving, and how thriving youth, in turn, achieve key developmental outcomes. The 4-H Thriving Model captures the impact of 4-H on youth separately from content focused knowledge, attitudes and behaviors, and thus complements and expands the 4-H Common Measures 2.0 measures to include more in-depth measurements of program quality, youth thriving, and developmental outcomes.

Investments in 4-H Common Measures 2.0 and the 4-H Thriving Model are driven by the aim of measuring the long-term impact of 4-H programs on youth. The purpose of this document is describe the alignment of 4-H Common Measures 2.0 and the 4-H Thriving Model to clarify the evaluation options available to assist the 4-H system in measuring and sharing the impact of 4-H on youth. 

In terms of measureable impact, it is helpful to think of 4-H programs in four parts:
Measuring the 4-H Experience (Developmental Context)

The 4-H Experience is the intentional setting for learning provided for young people in 4-H. Research shows that high quality youth development settings are necessary for programs to have an impact on youth. One way that 4-H has commonly described the ingredients of a high-quality program is through the Essential Elements of 4-H Programs (Kress, 2005). These essential elements are embedded in broader descriptions of youth program quality (Eccles & Gootman, 2002; Smith et al., 2012). Research also show that additional ingredients such as facilitating a young person’s interest or sparks (Benson & Scales, 2011), fostering developmental relationships (Roehlkepartain et al., 2017), and ensuring youth engagement (Weiss, Little, & Bouffard, 2005) are key to creating high quality settings for youth development. In short, how we plan and implement programs in 4-H matters; the goal is to create a high quality developmental context.

Both Common Measures 2.0 and the 4-H Thriving Model Assess 4-H Experience

- **Common Measures 2.0**
  The 4-H Experience Questionnaire
  *This measure focuses on the presence of the Essential Elements: Belonging, mastery, independence and generosity.*

- **4-H Thriving Model**
  The Developmental Context Questionnaire
  *This in-depth measure focuses on Sparks, Developmental Relationships, Program Quality and Youth Engagement*
Measuring Youth Content Outcomes

One of the main goals for 4-H is youth learning in specific content areas, such as science, healthy living, career exploration, and citizenship. Measuring youth learning outcomes is an important first step in determining the impact of 4-H on youth. Outcome measures have largely been the focus of 4-H program evaluation for many years. The suite of 4-H Common Measure 2.0 instruments contains instruments to measure program content outcomes. The Common Measures 2.0 instruments have been carefully developed, refined, and tested by a group of test and measurement scientists in the last few years.

Only Common Measures 2.0 Assess Content Learning

- Common Measures 2.0
  Youth Learning Outcomes Measures
  - Citizenship
  - College and Career Readiness
  - Healthy Living
  - Science

Measuring Positive Youth Development (PYD)

Positive youth development (PYD) is a process, something that takes place over time. It is important to distinguish the process of PYD (what happens when youth develop) from the outcomes of positive development. Measuring program outcomes determines the impact or value of a program. Measuring program processes illuminates how outcomes are achieved, which has implications for program development and improvement. The 4-H Thriving Model highlights this distinction by aligning the process of PYD with that of youth thriving (Benson & Scales; 2009; Search Institute, 2014). As such PYD is not the final developmental outcome of 4-H, but the process through which outcomes are achieved.

Only the 4-H Thriving Model Instrument Assesses the Process of PYD
• The 4-H Thriving Model
  The 4-H Thriving Model measures the process of PYD based on six thriving indicators identified by extensive research by Search Institute (2014) and refined by Arnold and Gagnon (2019).
  o Growth Mindset
  o Openness to Challenge and Discovery
  o Pro-Social Orientation
  o Hopeful Purpose
  o Transcendent Awareness
  o Positive Emotionality
  o Self-Regulation

Measuring Youth Developmental Outcomes
The final aspect of measurement relates to the youth developmental outcomes of 4-H. These outcomes are the broader social-emotional and non-cognitive, skills and abilities that youth participating 4-H program acquire.

*Both Common Measures 2.0 and the 4-H Thriving Model Assess Developmental Outcomes*

• Common Measures 2.0
  Common Measures 2.0 measures developmental outcomes with the *Universal 4-H Instrument*, focusing on two developmental constructs:
  o Personal mindset (character, growth mindset, persistence, decision-making and ethics)
  o Social skills (ability to communicate through multiple methods, value and respect for other cultures)

• The 4-H Thriving Model
  The *4-H Thriving Model Instrument* measures developmental outcomes more extensively, focusing on the following developmental constructs:
  o Academic motivation and success
  o Social competence
  o Personal standards
  o Connection with others
  o Personal responsibility
  o Contribution to others
Summary

The 4-H Common Measures 2.0 instruments, and the instruments related to the 4-H Thriving Model have a made a significant contribution to measuring the impact of 4-H participation on youth. Having the ability to measure all aspects of 4-H, from a young person’s experience to longer-term developmental outcomes helps us tell our story on a much broader scale. Using these instruments can also lead to program improvements through a better understanding of the experiences youth have in 4-H, which in turns helps educators improve and enhance 4-H program settings and the activities that promote learning and thriving.
References


