

A Formative Evaluation of SNAC Clubs in Columbia Public Schools

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INTRODUCTION

Missouri's 4-H Student Nutrition Advisory Council (SNAC) Initiative, developed in collaboration with MU Extension Family Nutrition Education Program, creates 4-H clubs that focus on teaching nutrition in combination with leadership and citizenship skills which are central to 4-H. Modeled after a similar program developed by University of California Cooperative Extension, SNAC clubs reach new youth and families through partnerships with nutrition education programs, schools and other community organizations. Since this is a new program, it is a good time to consider using formative evaluation to capture participant feedback and identify changes that could be considered for the future (Mertens & Wilson, 2019).

During the summer of 2021, our team designed an evaluation proposal for SNAC Clubs that could potentially be implemented in school settings. Our proposal's recommended data collection methods include an existing survey currently used with FNEP programs, open-ended questions added to that survey, document analysis of SNAC social media posts and press releases, interviews with 4-H specialists and SNAC staff, and SNAC program observations. We piloted two of our proposed data collection techniques in the Columbia Public Schools 8th grade SNAC programs during the summer of 2021; open-ended qualitative survey questions and program observations.



8th grade student participants make yogurt parfaits as part of the SNAC Club experience (Picture courtesy of the Columbia Missourian)

METHODS

Data Collection

- 28 SNAC participants completed paper surveys at the conclusion of their 2-week SNAC program experience.
- An undergraduate researcher conducted 18 hours of observations as a complete participant while assisting with SNAC programming.

Data Analysis

We coded this qualitative pilot data using Glaser & Strauss' constant-comparative analysis (Glaser & Strauss, 1967). Results from each level of coding are indicated below:

- Level 1 coding: Units of meaning. We identified 21 unique codes.
- Level 2 coding: Categories (families). We categorized into 5 categories (families of codes).
- Level 3 coding: Meaningful essence. We categorized families of codes into 3 meaningful themes.

To promote trustworthiness and dependability, we maintained an audit trail, used multiple data sources, recorded reflective memos, and engaged with participants over an extended time period.

PRELIMINARY FINDINGS

Three themes emerged from analysis of qualitative survey questions and program observations.

1). Desiring autonomy

SNAC participants desire *"freedom in the kitchen"* and *"time to experiment more."* However, time constraints and large class sizes limit the individual choices students make during SNAC lessons. Observations suggest that some students struggle to use proper safety techniques and self-control in the kitchen. This also limits the autonomy they are given during SNAC programming.

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2). Appreciating active learning

SNAC participants enjoyed the more advanced *"hands-on activities"* such as knife safety. They express a desire to *"use more kitchen tools and do more baking and cooking"*. Participants need to be appropriately challenged in order to stay engaged with lessons. Observations suggest that when participants feel they are doing overly simplified activities, engagement in learning decreases and inappropriate behavior increases. Although hands-on activities are present throughout all lessons, reflection on those activities does not always occur.

3). Knowing nutrition matters

SNAC participants are interested in learning more about nutrition and nutritional science. They suggest, *"Focus more on healthy eating rather than making food."* One participant stated *"Personally, I feel we should have done more with protein and fruit"*. Although instructors refer to MyPlate in each lesson, 8th grade participants sometime ask more advanced questions that instructors struggle to answer. For example, one 8th grade participant asked, *"Why do apples and other fruit turn brown?"*

IMPLICATIONS AND RECOMMENDATIONS

- Consider how intentional reflection and age-appropriate questioning strategies can be built into the curriculum. Both are necessary for highly effective active learning.
- SNAC instructors may benefit from training on how to balance autonomy and safety in the kitchen when working with adolescents.
- Instructors may need additional training to provide deeper information that explains the "why" and "how" of nutrition topics, not just the "what".

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