Developing Extension Lesson Plans: Using a 4-H Youth Development Lesson Plan Template to Strengthen the Rigor and Quality of Research-based 4-H Programs

4-H inspires youth and adults to learn, grow and work together as a catalyst for positive change. 4-H youth learn beneficial cognitive and life skills through community-focused, research-based experiential educational programs. This makes 4-H unique among many other youth-serving programs.

Extension educators provide university research-based information to communities. 4-H Youth Development educators use a variety of program education models to engage youth and volunteers in experiential learning. While subject matter often varies depending upon the audience and stated goals, the mission of the Maryland 4-H program remains the same—to provide a supportive and inclusive setting for all youth to reach their fullest potential in a diverse society.

4-H educators often develop and/or adapt research-based lessons and curricula to facilitate youth development programs. The use of a standardized lesson template can enhance consistency and increase efficiency in delivering quality programs. Additionally, a peer review process can be used to increase the rigor and research-based content of University of Maryland Extension (UME) developed programs. According to National 4-H, curriculum developers nationwide recognize the value of a standard activity template for developing youth development lessons (2016). Williamson (1995) adds that activity templates are a common tool for framing learning and facilitating the experiential process consistently.

In the 4-H Guided Inquiry Activity Template Description, National 4-H (2016) states:

Instructional materials that are systematically designed lead to more intentional adult/child interactions and more predictable learning outcomes. In addition, materials produced consistently increase consumer confidence, provide greater opportunity for adoption, reduce management and production costs, assure quality control, and make it easier for others to be part of the writing process.

This publication describes how educators can use the University of Maryland Extension 4-H Lesson Plan Template to develop lessons that are then submitted for peer review. More specifically, this resource includes:

- Background information related to experiential learning, the 5E Model, and developing lessons for diverse audiences, and
• The “how to” process for submitting your lesson plan for peer review.

UME 4-H Lesson Plan Template Heading Descriptions

TITLE: Have a catchy and descriptive title that captures the facilitator’s attention. Virginia Cooperative Extension, for example, titled their plant and soil curriculum for young children:

Digging Down and Growing Up: A Plant and Soil Curriculum for 5-8 year olds.

Maryland 4-H offers another example, AGsploration: The Science of Maryland Agriculture.

INTENDED AUDIENCE:
Beginning - for members with little or no experience in the content area; elementary grade reading level; ages 8-10 *

Intermediate - for members with 3-5 years’ experience in the content area; middle school reading level; ages 11-13

Advanced - for members with 5 or more years’ experience with the content; high school reading level; ages 14-18

Adult Learner - geared toward adult volunteers.

Youth Development Professional - geared toward 4-H professional and youth development providers.

*Note: Beginning 4-H members may be older but new to the project area. A balance should be made to assure the content is age appropriate to your audience.

LEARNING OBJECTIVES: These are stated as measurable gains in knowledge or attitude. Identify desired results. What do we want learners to know, understand, and be able to do?

SUCCESS INDICATORS: Create a simple 5-10 word statement that describes what the learner does to complete the activity. Start with an action verb. The statement should indicate the skill to be practiced and the subject matter involved, e.g., “Decides between two alternatives to select a product.”

YOUTH-RELATED PRIORITY NEEDS: These are identified in the 2015-2019 UME Strategic Plan and 2015 Maryland 4-H Program restructuring process:
1. Building Community and Civic Engagement
2. Developing Leadership Skills for Life
3. Nurturing Social Empowerment and Resilience
4. Improving College and Workforce Readiness
5. Fostering Exploration and Creativity in Arts and Sciences
6. Promoting Healthy Lifestyles and Self Expression

TIME: Include the time needed to complete the activity.

MATERIALS LIST: Include all materials needed to complete the project. Include optional materials as well.

BACKGROUND: Background information is provided here; not necessarily intended to be shared with learners until after the activity.

ENGAGE: Generate interest in the content and frame the idea.

EXPLORE & EXPERIENCE: Give directions for the learning activity which may include one or two pre-activity steps to build up to the main activity. Provide a means for the youth to show some aspect of their learning. Include what youth does (completes a chart or checklist, describes an experience, keeps records, etc.).

EXPLAIN, SHARE & PROCESS: Provide an opportunity for youth to explain what they learned.
Include questions participants in the activity can answer.

‘Share’ questions should generate data for the process questions. Include questions that ask what was done, how the youth felt, etc. Include some open-ended questions that prompt sharing. Relate the sharing directly to the experience.

‘Process’ questions should inquire about how the experience was carried out and how specific problems were addressed.

EXTEND & GENERALIZE: Include questions that make the experience real for youth in terms of everyday life experiences. Ask questions about the life skill practiced and the content being addressed. Include some open-ended questions that prompt generalizing. Relate the generalizing directly to the experience.

EVALUATE & APPLY: Assess understanding and include questions that ask how the learned skill(s) could be applied to other likely situations.

REFERENCES: Include cited and referenced publications and resources.

APPENDIX: List any supplemental documents (handouts, activity components, etc.) included at the end of the lesson.

The lesson plan template can be found here.

When Developing Lesson Plans, Quality and Relevance for Diverse Audiences is Critical

Some things to keep in mind (Finkbeiner & Braun, 2013; Lipton, 2014):

1. Develop lessons that are grounded in a research-based theoretical foundation.
2. Include clear, measureable learning objectives.
3. Build lessons based on the strengths/assets, needs, and interests of learners.
4. Ideas and principles included in the lesson respect all aspects of diversity and are culturally relevant.
5. Materials are accessible for various literacy levels. Check out these helpful tips for writing for a general audience.
6. Check for proper use of grammar and logical sequence.

Experiential and 5E Learning Models are Frequently Used in 4-H and/or Classroom Setting

Experiential Learning Model

Experiential learning takes place when youth is involved in an activity, looks back at it critically, determines what was useful or important to remember, and uses this information to perform another activity. 4-H activities use a hands-on learning approach to teach both new topics and life skills.

A five-step experiential learning model [Experience, Share, Process, Generalize and Apply] guides the process, turning activities into fun learning experiences.

By following the experiential model, youth learn new topics, practice the elements and principles of design (content skills), as well as learn and develop skills that will last a lifetime. [This is one of the foundational learning approaches of 4-H]. Providing an experience alone does not create “experiential learning.” The activity comes first. The learning comes from the thoughts and ideas created as a result of the experience. (National 4-H, 2011)
The 5E Model

The 5E Instructional Model encourages students to use inquiry and critical thinking and to explore the process of science. The 5Es represent five stages of a sequence for teaching and learning: Engage, Explore, Explain, Extend (or Elaborate), and Evaluate (Bybee, Taylor, Gardner, Van, Scotter, Powell, et al, 2004).

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<thead>
<tr>
<th>The 5E Model</th>
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<tr>
<td><strong>Engage</strong></td>
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<td><strong>Explain</strong></td>
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<td><strong>Elaborate</strong></td>
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<td><strong>Evaluate</strong></td>
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UME Peer Review Process Helps Ensure Quality of Substance and Style

When your lesson plan has been piloted and refined, you are ready for peer review. To submit a lesson plan through the UME peer review process, you will need to:

1. Review the [UME Publication process](#) document.
2. Create a UME peer review account through [Fast Track](#).
3. Identify one internal (UMD) and two external reviewers.
4. Submit your document by selecting the “click here to submit a document’ on Fast Track.
5. Attach your file
6. Include suggested reviewers’ names and email addresses of reviewers in the Comment box after confirming their willingness to review your manuscript.
7. Click submit.
At this point, the managing editor kicks off the review process. You will receive a confirmation email and the managing editor will assign the document to the reviewers you suggested.

Reviewers who accept the request have 21 days to return their comments. Fast Track automatically reminds reviewers after the three-week period if they have not completed their assignment. If a reviewer has not responded after the first reminder (42 days), the managing editor will ask you to provide the name and contact information of another reviewer.

Reviewers will use the following questions to complete the review process:
1. Does the publication manuscript present new and relevant information?
2. Does the author provide correct factual information?
3. Is the contribution of the paper of general interest/timely/significant/etc.?
4. How would you rate the overall content of the paper under review?

If the reviewers indicate that the report should be accepted, the managing editor will provide suggested edits that may be substantial but are meant to elevate the quality and accessibility of all UME publications. The managing editor will send you an acceptance notice through Fast Track. If you have questions about Fast Track, please contact Kathy Lipton at klipton.umd.edu

Additional Lesson Plan Development Resources
- National 4-H Lesson Plan and Curriculum Development
- Iowa 4-H Afterschool Lesson Plan Resources
- Nebraska 4-H Curricula Resources
- Michigan 4-H Curricula Resources
- SCOPE 5E Instructional Model
- The 4-H Experiential Learning Model

References


This publication, Developing Extension Lesson Plans: Using a 4-H Youth Development Lesson Plan Template to Strengthen the Rigor and Quality of Research-based 4H Programs (FS-1060) is a series of publications of the University of Maryland Extension and Maryland 4-H. The information presented has met UME peer review standards, including internal and external technical review. For more information on related publications and programs, visit: https://extension.umd.edu/4-h. Please visit http://extension.umd.edu/ to find out more about Extension programs in Maryland.

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