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Ideas At Work

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Introduction

An evaluation plan is an integral and often a required component of grant proposals to help funding agencies assess if the grants they award are accomplishing their goals (United States Department of Agriculture [USDA] Office of Budget and Program Analysis, 2022; National Science Foundation [NSF], 2023). A well-articulated evaluation plan gives grant reviewers a clear idea of how the proposed outcomes data will be collected, and how that data will serve as logical evidence for the anticipated big picture impact or goals of the project. Grant writers should establish early on a clear linkage between objectives, outputs, outcomes and evidence to show to what extent the objectives have been met. Funders expect a clearly articulated evaluation plan and assign points for that in the overall grant proposal assessment. Most of the Request for Proposals (RFPs) provide guidance on what to include in the evaluation section, but there are instances where this guidance is vague or missing.

A robust evaluation plan can increase the chances of funding by signaling to grant reviewers that the project team is committed to accountability, learning, and improvement (Israel, 2024). Literature within academia, extension, nonprofit, and corporate sectors is replete with best practices for writing grant proposals (e.g., Browning, 2022; O'Neal-McElrath et al., 2019), which include concise writing, clear alignment with funder priorities, involving collaborators early in the process, robust project management plans, and strategies for communication (Donado et al., 2022; United States Department of Agriculture-National Institute of Food and Agriculture [USDA-NIFA], 2023). However, there are no known publications within Cooperative Extension that share the best practices for writing evaluation plans in the proposal stage of project development. In this paper, we share 12 best practices for writing strong evaluation plans in grant proposals.

A strong evaluation plan articulates connections between the proposed project inputs, activities, outputs or products, anticipated outcomes (short- and medium-term) and the impacts (long-term outcomes) reflected in the project logic model. A logic model "is a simplified picture of a program, initiative, or intervention that is a response to a given situation" (Taylor-Powell et al., 2003, p. 11). Examples of logic models from different extension programmatic areas and definitions of the different logic model components can be found in Taylor-Powell et al. (2003) extension publication. An example template for logic model indicator performance tracking can be found in the United States Agency for International Agency (USAID)'s Bureau for Humanitarian Assistance (2021) website.

The best practices shared in this paper are coming from our experience of serving on several grant review panels over the last 25 years to a combined experience of more than 50 years. The panels we have served on include the USDA NIFA, Rural Development, Agricultural Marketing

Service (AMS), and USAID panels. We have also served as Principal Investigators (PIs), Co-PIs, internal evaluators, external evaluators, and evaluation consultants on a variety of grant-funded projects. We have doctoral degrees in agricultural and extension education and environment and resources and have taken evaluation coursework in graduate school and professional development training from professional evaluation societies. Three of the six authors teach extension program development and evaluation courses and offer extension evaluation capacity building training.

Best Practices for Writing Strong Evaluation Plans for Grant Proposals

In this section, we share our best practices for evaluation plans. Examples of these practices in evaluation plans in both real and hypothetical grant-funded Extension programming are summarized in Table 1.

1. Understand how outputs are different from outcomes. Proposals are judged by their likely outcomes and impact, not by their outputs. Outputs are activities conducted (e.g.: research, outreach, education, extension training, workshops, evaluation, etc.) and the products created (e.g.: brochures, blogs, videos, publications, etc.). Outcomes are the changes happening in program participants as a result of the project activities and are directly linked to outputs that influence behavioral change. Detailed guidance on understanding these terms can be found in the logic model training and teaching guide developed by Taylor-Powell and Henert (2008).

2. Clearly differentiate short-, medium-, and long-term outcomes and where needed, operationally define what an outcome means for the context of your study. Short-term outcomes typically relate to learning or skill development and changes in attitudes, aspirations, and perceptions, medium-term outcomes are usually related to behavior change or adoption, and long-term outcomes or impacts are changes happening beyond program participants at a broader societal, environmental, cultural, and economic level in the community. Some Request for Proposals outline what to include under outputs and outcomes. It is very important to describe the level of outcomes because it has an impact on the evaluation budget. For example, if the intended outcomes are medium- to long-term, grant writers need to allocate a significant amount of funds for frequent data collection, follow-up, analysis, etc.

3. Include indicators for every outcome. Indicators are the evidence or information that represent the variables or outcomes you want to measure (Taylor-Powell et al., 2003). An indicator defines how the outcome will be measured and interpreted. Indicator criteria should be direct, specific, useful, practical, adequate, and culturally appropriate (Taylor-Powell et al.).

4. Define "success" for the proposed project. Specify the level of accomplishment in outcomes you anticipate happening as a result of your program, and what success means to program leaders and participants. Collecting baseline data related to anticipated outcomes will enable evaluators to quantify outcome changes at the end of the program.

5. For each outcome, indicate the method you will use to collect data. Having mixed and multiple methods of data collection will help triangulate the findings from different sources and lend more credibility to the findings (Bamberger et al., 2010; Klink et al., 2017;). Selecting

participatory and culturally-responsive data collection methods can enhance trust with evaluation participants and demonstrate a focus on accuracy and usability of evaluation findings to potential funders (Acree & Chouinard, 2019; Cousins, 2003; Koundinya et al., 2020; Suarex-Balcazar & Harper, 2012).

6. Use plausible logic for the connections between short-, medium-, and long-term outcomes. The assumptions and rationale that connect short- and long-term outcomes communicate to funders why those outcomes are likely to occur in the project context. Short-term outcomes should lead to medium-term outcomes, and medium-term outcomes should contribute to long-term outcomes or anticipated impact. *Developing the program logic model based on a Theory of Change* uses existing research literature, extension publications, reports, and experience to explain project rationale. Detailed guidance on Theory of Change and logic models can be found in the logic model guidebook by Knowlton and Phillips (2013).

7. The evaluation budget should be appropriate to the activities and methods you propose to collect outcomes data and develop evaluation reports. We have reviewed several grant proposals where the budget allocated for evaluation was not sufficient to measure beyond the short-term outcomes. Klink et al. (2017) suggest 10% of the total grant budget as appropriate for implementing a comprehensive evaluation plan using mixed and multiple methods. The budget should be commensurate with the design, program expectations, and populations served (United States Office of Management and Budget, n.d.). Further, there is a positive relationship between the outcomes identified and budget allocated. For example, to measure short-term outcomes, a smaller budget may be sufficient, but to measure long-term outcomes, more funds will be necessary.

8. Have both formative and summative evaluation components. Formative evaluation usually involves process evaluation leading to outcome achievement. It is focused on evaluating the project progress, and allows for improvements. In extension programs, formative evaluation can help in finding out the negative and positive factors linked to the program and seeking programmatic changes needed to improve implementation, development of ongoing activity, focusing on content and design of the project, and targeting appropriate areas of change (Jayaratne, 2016). Summative evaluation shows whether the proposed program objectives are met and medium- and long-term outcomes are achieved towards the end of the project. It helps with assessing the value and worth of the program in terms of potential impact and accountability (Klink et al., 2017).

9. Indicate who will be responsible for carrying out each evaluation task. Having an evaluator with appropriate experience to carry out the proposed evaluation plan greatly enhances the chances of funding and subsequent programmatic success (United States Office of Management and Budget, n.d.). We have reviewed several proposals where it was not clear who was responsible for carrying out each task outlined in the evaluation plan and if the evaluator had experience or background in evaluation. From the grant reviewer point of view, having a qualified evaluator on the grant enhances the credibility for evaluation and builds confidence among reviewers on the possibility of accomplishing project goals.

10. Have literature support to show which evaluation framework you are using for the study. Clearly describe the type of evaluation framework you will use and why it is appropriate for the project or participants. Some frameworks that are suitable for extension education and applied research work are participatory evaluation, culturally responsive evaluation, developmental evaluation, and objectives-oriented evaluation.

11. Work with the evaluator from the grant ideation stage. Share the full proposal draft and Request For Proposal with evaluators so they know the big picture and develop an evaluation plan that meaningfully connects all the outcomes. We have reviewed several proposals where the proposed evaluation plan appeared like a set of unrelated tasks that did not seem to be contributing to the proposed impact or long-term outcomes of the project. One of the main reasons contributing to this could be that the evaluator was brought into the team at the last-minute leading to proposal submission.

12. Include a dissemination plan and communication strategy. Many funding agencies require that a plan be developed to disseminate the evaluation findings of the project. Some strategies to do this include development of extension and outreach materials, extension and peer-reviewed publications, conference presentations, and project websites with evaluation products and findings.

Table 1. Best practices for strong evaluation plans and examples of these practices in use for real and hypothetical examples from grant-funded extension programming.

Best practices for writing strong evaluation plans	Examples in practice from extension grant-funded programming
1. Understand how outputs are different from outcomes.	Output: The program participants in a nutrition education training received a brochure on how low sodium foods are good for cardiovascular health. Outcome: 85% of the program participants in a nutrition education training will increase their awareness of low sodium foods from low to high level, as measured on a retrospective post-then-pre survey administered at the end of the training.

2. Clearly differentiate short-, medium-, and long-term outcomes (and operationally define what an outcome means for the context of your study).	Short-term outcomes for a manure management workshop include increased knowledge about soil and optimal spreading conditions for participants. Medium-term outcomes in a community garden program include adoption of routine meal planning with garden vegetables and improved children's nutrition. Long-term outcomes in public health programs include improved community wellbeing and decreased public health costs.
3. Include indicators for every outcome.	An indicator used in a program supporting maternal nutrition can be Body Mass Index below 18.5 Kg/M^2 indicating a healthy reproductive mother (World Health Organization (WHO), 2003). Indicator used in a Master Naturalist training can be the number of program participants self-reporting 'knowledge gain' about wildlife habitat types from before to after attending the training.
4. Define "success" for the proposed project.	In a climate smart agriculture (CSA) extension education program offered by University of California Agriculture and Natural Resources Cooperative Extension CSA team, success was defined as 75% of farmers self-reporting 'knowledge gain' on drought management practices from pre to post training (Ikendi et al., 2023). In this project, needs assessment data were used to determine the level of climate threat and need for education (Ikendi et al., 2024). Needs were prioritized and education programs were implemented, upon which knowledge on every theme was assessed in a retrospective post-then-pre workshop survey.
5. For each outcome, indicate the method you will use to collect data.	In an Extension-based farmer training program focused on conservation agricultural practices and water quality, we might see: Short term outcomes: assessing change in farmer knowledge and perceptions of conservation practices using post-training surveys or feedback activities and participant observation at training sessions. Medium-term outcomes: tracking change in behavior by quantifying farmer participation or leadership in local watershed conservation groups, participation in water quality field days, network analyses to assess changes in information or

	relationships, or interviewing farmers about their use of conservation practices over time. Long-term outcomes: examining changes in community or environment by reviewing longitudinal datasets about acreage enrolled in conservation agriculture grant programs, regional water quality data, oral histories, photographs and document review, or other retrospective analyses.
6. Use plausible logic for the connections between short-, medium-, and long-term outcomes.	Program logic for an environmental education and research center uses place-based learning. Short-term outcomes are related to science literacy, increased environmental awareness, and building confidence. Changes in knowledge and perception lead to medium-term outcomes that increase engagement and build relationships among participants, with the long-term outcome of increased environmental advocacy and empowerment in that community.
7. The evaluation budget should be appropriate to the activities and methods proposed.	Evaluation budget for a multi-site, multi-year curriculum development program for sustainable forest management could include staff time for data collection, analysis, and reporting, travel costs, supplies for facilitation, and payments for participants in focus groups.
8. Have both formative and summative evaluation components.	Formative evaluation in a 4-H program could solicit feedback from youth on the programs that fit their interests, while a summative evaluation determines how those programs influenced youth leadership skills and career development.
9. Indicate who will be responsible for carrying out each evaluation task.	A data collection plan in an animal science program could include training students to interview their peers, surveys of teachers and laboratory technicians developed by the evaluator.
10. Have literature support to show which evaluation framework you are using for the study.	Extension programs working with indigenous communities to host a tribal leadership summit could use culturally appropriate, trauma-informed evaluation methodologies, using holistic and strengths-based frameworks to empower community leaders in evaluation planning and data analysis (Bowman & Taylor-Schiro, 2022).

11. Work with the evaluator from the grant ideation stage.	Evaluator involvement in a proposal to expand citizen scientist water monitoring program strengthens the evaluation plan by providing the evaluator with increased understanding of the organization and its constraints, key terminology or subject area expertise, and adds cohesion between activities.
12. Include a dissemination plan and communication strategy.	Evaluation of a sustainable agricultural research grant program includes a plan to disseminate results on a website hosted by the project, a series of webinars with farmer audiences, a final presentation to project leadership on findings and recommendations and plans for peer-reviewed publications.

Educational Importance and Implications

County extension educators, extension academic and programmatic staff, state level extension specialists, and faculty in academic departments are expected to secure funding to support their research and extension programming. Procuring extramural funding is also a criterion used in faculty and staff merit and promotion reviews. Additionally, robust evaluation plans can strengthen the other sections of a grant proposal, articulating how different project activities will relate to one another and how their effectiveness will be documented cohesively for the overall project. The best practices shared in this paper offer guidance that can improve chances of procuring funding from reputed agencies that fund extension education and research. These best practices are equally applicable for grant proposals outside extension and academic settings.

References

Acree, J., & Chouinard, J. A. (2019). Exploring use and influence in culturally responsive approaches to evaluation: A review of the empirical literature. *American Journal of Evaluation, 41*(2), 201–215. https://doi.org/10.1177/1098214019879505

Bamberger et al. (2010). *Using mixed methods in monitoring and evaluation: Experiences from international development*. World Bank Policy Research Working Paper, #5245. https://ssrn.com/abstract=1578113

Bowman, N., & Taylor-Schiro, E. (2022, October). *Indigenous evaluation 101 guidebook.* Minnesota Department of Education. https://www.wilder.org/sites/default/files/imports/IndigenousEvaluationGuide_Accessible_10-22.pdf

Browning, B. A. (2022). *Grant writing for dummies*. John Wiley & Sons.

Cousins, B. J. (2003). Utilization effects of participatory evaluation. In T, Kellaghan and D. L. Stufflebeam. (Eds.) *International handbook of educational evaluation* (pp. 245–265). Springer.

Donado et al. (2022). *Grant tips & best practices*. Grant Professionals Association. https://grantprofessionals.org/page/granttips

Ikendi et al. (2023, September 18–20). *Communicating climate-smart agriculture to tree nut growers in the San Joaquin Valley of California* (Poster Presentation). Western Region of the American Association for Agricultural Education Conference: The Crossroads of Food, Agriculture and Innovation: Logan Utah, United States. https://www.researchgate.net/publication/374153295

Ikendi et al. (2024). Climate smart agriculture: Assessing needs and perceptions of California's farmers. *Frontiers in Sustainable Food Systems, 8*, 1395547. https://doi.org/10.3389/fsufs.2024.1395547

Israel, Q. (2024, June 29). *How to write a grant evaluation plan* [LinkedIn]. https://www.linkedin.com/pulse/how-write-grant-evaluation-plan-queen-israel-mo3rc#:~:text=Your%20evaluation%20 plan%20should%20 begin,time%2d Bound%20(SMART)

Jayaratne, K. S. U. (2016). Tools for formative evaluation: Gathering the information necessary for program improvement. *The Journal of Extension, 54*(1), #7. https://doi.org/10.34068/joe.54.01.07

Klink et al. (2017). Enhancing interdisciplinary climate change work through comprehensive evaluation. *Climate Risk Management, 15*, 109–125. https://doi.org/10.1016/j.crm.2016.11.003

Knowlton, L. W., & Phillips, C. C. (2013). *The logic model guidebook: Better Strategies for great results*. Sage Publishing.

Koundinya et al. C (2020). Group mapping in a 4-H camp mixed methods evaluation. *Journal of Youth Development 15*(6), 306–325. https://doi.org/10.5195/jyd.2020.891

National Science Foundation (NSF). (2023, April). *Evaluation and assessment capability - evaluation policy*. https://new.nsf.gov/od/oia/eac/evaluation-policy-april-2023

O'Neal-McElrath et al. (2019). *Winning grants step by step: The complete workbook for planning, developing, and writing successful proposals*. John Wiley & Sons.

Suarez-Balcazar, Y., & Harper, G. W. (Eds.). (2012). *Empowerment and participatory evaluation of community interventions: multiple benefits*. Routledge.

Taylor-Powell, E., & Henert, E. (2008) *Developing a logic model: Teaching and training guide*. University of Wisconsin-Extension. https://fyi.extension.wisc.edu/programdevelopment/files/2016/03/lmguidecomplete.pdf

Taylor-Powell, E., Jones, L., & Henert, E. (2003). *Enhancing program performance with logic models*. University of Wisconsin-Extension. https://fyi.extension.wisc.edu/programdevelopment/files/2016/03/lmcourseall.pdf

United States Agency for International Development (USAID) Bureau for Humanitarian Assistance (BHA) (2021, May). *Monitoring and evaluation logical framework and template for indicator performance tracking table*.

United States Department of Agriculture - National Institute of Food and Agriculture (USDA-NIFA) (2023, March). *Fact Sheet: 20 tips for grant writing success*. https://www.nifa.usda.gov/sites/default/files/2022-03/20TipsforGrantWritingSuccess_FactSheet.pdf

United States Department of Agriculture (USDA) Office of Budget and Program Analysis (2022). *U.S. Department of Agriculture Evaluation Policy*.

United States Office of Management and Budget (n.d.). *The Federal Evaluation Toolkit^{BETA}: Budgeting for Evaluation*. https://www.evaluation.gov/evaluation-toolkit/

World Health Organization (WHO). (2003). *Diet, nutrition and the prevention of chronic diseases: Report of a joint WHO/FAO expert consultation* (WHO Technical Report Series No. 916. Geneva: Switzerland. http://health.euroafrica.org/books/dietnutritionwho.pdf