

6-28-2019

How Evaluation Capacity Building Grows Credible and Actionable Evidence for Cooperative Extension Programs

Chelsea Hetherington
Michigan State University Extension, hether13@msu.edu

Cheryl Eschbach
Michigan State University Extension

Courtney Cuthbertson
Michigan State University Extension

Follow this and additional works at: <https://scholarsjunction.msstate.edu/jhse>



Part of the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Hetherington, C., Eschbach, C., & Cuthbertson, C. (2019). How Evaluation Capacity Building Grows Credible and Actionable Evidence for Cooperative Extension Programs. *Journal of Human Sciences and Extension, 7*(2), 10. <https://scholarsjunction.msstate.edu/jhse/vol7/iss2/10>

This Original Research is brought to you for free and open access by Scholars Junction. It has been accepted for inclusion in Journal of Human Sciences and Extension by an authorized editor of Scholars Junction. For more information, please contact scholcomm@msstate.libanswers.com.

How Evaluation Capacity Building Grows Credible and Actionable Evidence for Cooperative Extension Programs

Chelsea Hetherington

Cheryl Eschbach

Courtney Cuthbertson

Michigan State University Extension

Evaluation capacity building (ECB) is an essential element for generating credible and actionable evidence on Extension programs. This paper offers a discussion of ECB efforts in Cooperative Extension and how such efforts enable Extension professionals to collect and use credible and actionable evidence on the quality and impacts of programs. Sufficient investments in ECB, both at the individual and organizational levels, can better equip Extension to advocate for and make changes to programs, advance as a learning organization, and have a more powerful impact on communities. Furthermore, as Extension program stakeholders often have varying perspectives on the credibility of evidence, these perspectives must also be accounted for in efforts to build Extension's evaluation capacity. Intentional investments in ECB efforts provide an opportunity for Extension to further deepen and expand impact, positioning programs to most effectively and positively benefit individuals and communities.

Keywords: evaluation capacity building, credible evidence, evaluation use, evaluation stakeholders

“For apart from inquiry, apart from the praxis, individuals cannot be truly human. Knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world, and with each other.”

—Paulo Freire (1970)

Introduction

The Cooperative Extension Service (Extension) is charged with delivering research-based educational programs that positively benefit individuals and communities. As a result, Extension is expected to provide credible, actionable evidence on the quality and impacts of its programs (Franz & Archibald, 2018; Taylor-Powell & Boyd, 2008). Because stakeholders hold diverse expectations on what constitutes credible and actionable evidence, because Extension staff are not typically experts in program evaluation, and because contexts, conditions, and criteria for

Direct correspondence to Chelsea Hetherington at hether13@msu.edu

demonstrating credible program evidence are complex and changing, evaluation capacity building (ECB) is critical to Extension's organizational and professional development efforts (Taylor-Powell & Boyd, 2008). ECB refers to the intentional efforts to both build and sustain an organization's ability to conduct quality, credible evaluations, including factors such as instrumental evaluation support, evaluation resources, and a broader organizational context that supports meaningful program evaluation (Preskill & Boyle, 2008; Stockdill, Baizerman, & Compton, 2002; Taylor-Powell & Boyd, 2008).

In this paper, we discuss how ECB contributes to the collection and use of credible and actionable evidence of Extension program quality and impacts. By directing efforts towards building organizational evaluation capacity across individual and organizational levels (Taylor-Powell & Boyd, 2008), Extension professionals in all roles can be equipped with the skills needed to collect and interpret *credible* data—that is, data that provide trustworthy, compelling evidence of a program's quality or impact (Donaldson, Christie, & Mark, 2015). Moreover, different aspects of and perspectives about credibility can play a role in impacting ECB efforts (e.g., credibility to communities served, to external funders and policymakers, internally to Extension professionals themselves and program administrators, to the broader university or scientific community). Such differing aspects of credibility should be considered in ECB efforts. Finally, the credibility of evidence collected on Extension programs can be impacted, both positively and negatively, by individual ECB approaches and organizational factors (Preskill & Boyle, 2008; Taylor-Powell & Boyd, 2008).

Background on Evaluation Capacity Building and Credibility in Extension

Different pressures engender the need for credible evidence about Extension programs. The broad mission of Cooperative Extension is to provide research-based educational opportunities to individuals and communities, supporting these individuals and communities in meeting the unique challenges that they experience (Franz & Townson, 2008). This mission underlies the activities and expected outcomes of Extension programming. Extension professionals face the challenge of translating scientific evidence in ways that individuals can use, often with limited resources or tools to assess community needs and program impacts.

Nevertheless, as a public-serving organization that receives funding from federal, state, county, and other sources, having accountability to external stakeholders is a key component of Extension work (Franz & Townson, 2008). The collection and use of credible and actionable evidence are crucial in establishing accountability with these stakeholders and in demonstrating the impact of Extension programs.

At a basic level, organizational reporting and evaluation requirements typically demand that Extension professionals demonstrate to stakeholders that audiences were reached and impacted in the ways designated by the program (Baughman, Boyd, & Franz, 2012). More broadly, Extension programs must demonstrate the relevance and impact of Extension work in ways that

will be credible to stakeholders with distinct needs, interests, and perspectives. Indeed, stakeholders often have varying criteria for what they deem to be credible, trustworthy evidence of a program's impact or quality. Individual standards and interests can drive differences in what is seen as credible by different stakeholder groups. Though these criteria can overlap, Extension programs must balance satisfying demands of credibility to communities served, internal Extension administrators, the broader professional and scientific community, those stakeholders providing funding for programs, and in the delivery of programs to participants, among others. Examples of criteria for each of these program stakeholder groups are shown in Table 1.

Table 1. Criteria for Credibility Among Extension Stakeholder Groups

| Stakeholder Group | Sample Criteria for Credible Evidence |
|-----------------------------------|--|
| Communities served | <ul style="list-style-type: none"> • Programming addresses a need or gap • Satisfactory program delivery • Evidence of program effectiveness (quantitative or qualitative, may vary depending on community) |
| Internal Extension administrators | <ul style="list-style-type: none"> • Outputs, or numbers served • Quantitative evidence of program outcomes • Data-driven program planning |
| Scientific community | <ul style="list-style-type: none"> • Evidence-based programming • Experimental or quasi-experimental designs • Rigorous methods • Scholarly publications • Peer-reviewed conference presentations |
| Program funders | <ul style="list-style-type: none"> • Outputs, or numbers served • Quantitative evidence of program outcomes • Rigorous evaluation methods (may vary depending on the funder) |

Groups may also have differing standards for the varied aspects of credibility that can impact data quality, such as utility, relevance, generalizability, and objectivity (Radhakrishna, Tobin, Brennan, & Thomson, 2012). There may even be variations in what individuals within a specific group will deem credible or trustworthy. Because Extension professionals are charged with translating and disseminating the scientific work of land-grant universities to communities (Franz & Townson, 2008), they must balance meeting the needs of communities in addressing local challenges and the needs of other program stakeholders, while remaining grounded in research- and evidence-based programming (Olson, Welsh, & Perkins, 2015). Indeed, the Extension mission is best served when programs bridge the gap between implementing rigorous research models and meeting local community needs (Fetsch, MacPhee, & Boyer, 2012).

Credibility in Evaluation Capacity Building Efforts

Professional development efforts centered around ECB should serve to better facilitate Extension professionals' understanding of best practices in serving clients, delivering and evaluating educational content, and sharing program quality and outcome metrics with stakeholders. Appropriately delivering effective Extension programs is contingent upon Extension

professionals' capacity to both use and generate credible evidence of the quality and effectiveness of those programs. Extension systems are complex with differing levels of faculty and staff knowledge and experience (Franz & Townson, 2008), with many staff being experts in specific content areas, rather than experts in research methodologies or evaluation processes (Arnold, 2006). As Extension professionals are charged with planning, delivering, and evaluating research-based educational programs that benefit individuals and communities, ensuring that programs are adequately serving those individuals and communities requires a continuous investment in organizational and professional development efforts that support this aim (Taylor-Powell & Boyd, 2008). The size and complexity of Extension work require ECB to design, deliver, and evaluate evidence-based, impactful educational programming, making ECB a key building block in establishing the credibility of evidence supporting Extension programs.

As shown in Table 1, stakeholders' varied notions of credibility relate to ECB in several ways. ECB approaches should help Extension professionals understand these different aspects of credibility in evaluation data. ECB initiatives should incorporate efforts to support Extension professionals to consider and understand perspectives about the credibility of evidence for their specific program stakeholders in planning programs and evaluations. For instance, if an individual Extension professional plans a rigorous, pre-/post-test evaluation of a program to satisfy grant requirements, yet their local county stakeholders are more interested in qualitative narratives around a program's impact, the credibility of those findings will fail to meet the expectations of that local stakeholder group. Given that having evaluation findings that meet stakeholders' evidence needs can be highly motivating for Extension professionals (Guion, Boyd, & Rennekamp, 2007), this is an important dimension to consider and incorporate into ECB initiatives. Extension evaluation specialists can support Extension professionals in generating the most appropriate credible evidence for their specific stakeholder group(s). For instance, in the previous example, an evaluation specialist might advise collecting both pre-/post-test data and qualitative narratives to satisfy the needs and interests of both stakeholder groups.

Evaluation Use and Credibility

The meaningful use of evaluation data can bolster credibility in several ways and should be a focus of efforts to build evaluation capacity. Use of evaluation data can increase the credibility of the evaluation process with Extension professionals (Lamm & Israel, 2013). Use of evaluation data helps Extension professionals see the value of collecting credible evidence and can improve the quality of data that is collected, such that staff become more invested in the quality of the data that they are collecting and using (Baughman et al., 2012). Collecting and using evidence that is methodologically sound enables staff to be confident in using data that reports program impacts or quality, whether using such data to advocate for programs with key stakeholders or making changes to improve programs. Through the use of evaluation data, Extension professionals can better see the value of collecting such evidence, which can improve the organization's future capacity for collecting and using such evidence (Baughman et al., 2012).

Use of evaluation data can also empower Extension professionals to be more fully engaged in the programming process (Patton, 2008). Rather than simply collecting data that are aggregated into statewide outcomes, Extension professionals' own use of evaluation data engages them in intentionally thinking about the information they need to advocate for or make changes to their programs. Such efforts engage Extension professionals in evaluative thinking and can support the creation of an organizational culture of learning (Buckley, Archibald, Hargraves, & Trochim, 2015). ECB efforts will take root in creating a learning culture when staff see evaluation as part of their daily work and a critical component of the program planning and implementation process (Fetterman, 2003; King, 2007).

Meaningful evaluation use can also bolster credibility with stakeholders, establishing the integrity of Extension as an organization that has the capacity to make a difference in the lives of youth, families, and the broader public (Franz, 2015). Collecting and using evaluation data to change and improve programs establishes Extension's integrity as an organization that values continuous improvement and works to refine its educational offerings. When findings are actually used to make changes to or improve a program, program participants see that their voices have been heard on a deeper level. This can increase their stake in the program as well as their view of Extension as a credible provider of educational programs. Thus, use of evaluation data can be a clear asset in using ECB to generate credible evidence about Extension programs.

Evaluation Competencies for Extension Professionals

In seeking to build any organization's capacity to generate and use credible and actionable evidence, one must hone in on the specific competencies required and expected of individual staff. What does an Extension professional need to know in order to credibly deliver and evaluate educational programming? The level and type of competencies required of individual Extension professionals will vary greatly depending on the type of program being evaluated (Franz & Archibald, 2018), the overall organizational structure (Taylor-Powell & Boyd, 2008; Preskill & Boyle, 2008), and Extension stakeholders' perspectives on credibility (Bryson, Patton, & Bowman, 2011; Johnson et al., 2009). For instance, within the framework proposed by Franz and Archibald (2018), ECB efforts will be most successful when they align with the specific educational initiative that the Extension professional is seeking to evaluate. That is, if an Extension professional is engaging in educational programming that entails content transmission, competencies should focus on knowing how to collect credible evidence that measures the program's effectiveness in increasing participants' knowledge and changing their behavior. Similarly, for service-focused efforts, competencies would align more closely with knowing how to assess participant satisfaction with the program.

Competencies expected of individual Extension professionals will also depend greatly on the expectations for their roles within the specific Extension system. For instance, in some Extension systems, Extension professionals with academic appointments are expected to engage in scholarship and publish research-based evidence of their work (Taylor-Powell & Boyd, 2008).

In other Extension systems, Extension professionals meet scholarship expectations in different ways, such as through curriculum creation or securing external grant funding (Franz & Townson, 2008). The presence of expectations for Extension professionals to engage in scholarly research around their programs will shape what ECB efforts look like within that particular Extension system (e.g., the level of rigor needed in data collection plans, the size and scope of projects, the level of data analysis skills needed).

Specific Evaluation Competencies for Extension Work

Extension professionals need a number of general evaluation competencies in order to generate and use credible, actionable evidence. Extension professionals should be able to: 1) use data to assess the needs of the communities they serve, whether through data they themselves collect or data collected by others; 2) develop and implement credible programs to fidelity (i.e., develop and implement programs with a basis in research and/or with some evidence of impact and attend to the necessary implementation criteria); 3) collect credible data (i.e., the types of data that stakeholders see as credible) on the impact, quality, and fidelity of the program; and 4) use acquired data to inform changes to the program and convince stakeholders of the program's value. Specific evaluation competencies within these areas are shown in Table 2.

Table 2. Evaluation Competencies for Generating and Using Credible, Actionable Evidence

| Step in Program Process | Specific Evaluation Competencies |
|--------------------------------------|--|
| 1) Needs assessment | <ul style="list-style-type: none"> • Finding existing data • Collecting new data (e.g., via surveys or focus groups) • Analyzing quantitative and/or qualitative data • Learning and understanding stakeholder perspectives • Interpreting data • Using data to inform decisions |
| 2) Program design and implementation | <ul style="list-style-type: none"> • Developing programs based on stakeholder needs • Creating logic models • Writing program objectives • Assessing a topic's research base • Interpreting the evidence base for existing programs |
| 3) Evaluation data collection | <ul style="list-style-type: none"> • Designing program evaluations • Selecting and designing data collection methods (e.g., survey design) • Collecting data (e.g., via surveys or focus groups) • Considering ethics of evaluation data collection |
| 4) Evaluation use | <ul style="list-style-type: none"> • Analyzing quantitative and/or qualitative data • Interpreting data • Using data to inform decisions • Learning and understanding stakeholder perspectives • Creating and sharing evaluation reports • Interpreting and presenting results to stakeholders |

Admittedly, this ideal list of competencies will not always translate to the realities of Extension programming overall or to every individual Extension program. As noted earlier, the specific competencies most crucial to an individual Extension professional will be directed by the goals of the specific educational program being evaluated (Franz & Archibald, 2018). Still, these remain key competencies for Extension professionals. Though the specific responsibilities of Extension professionals can vary across systems, the demands of Extension work, where Extension professionals should know how to adapt to the needs of communities, deliver credible, quality programs, collect credible program data, and subsequently use that data, require that these competencies be present.

The nature of Extension programs is such that evaluation data is frequently collected and used for reporting, accountability, or persuasive purposes; that is to inform supervisors, funding agencies, legislators, and other stakeholders about the impact of a program (Baughman et al., 2012). As a result, ECB efforts may increasingly focus on competencies that serve this need, such as collecting impact data, while neglecting other competencies, such as collecting data on community needs, strengths, and opportunities.

Extension professionals should be sufficiently trained in all aspects of the program process (Arnold, 2006). This can include trainings around the development and use of logic models to meet community needs, including supporting Extension professionals in identifying specific program outcomes and indicators (Arnold, 2006). This has the added benefit of grounding a subsequent program evaluation in the program's logic model. By including the program development process in ECB efforts, we continue to advance Extension's capacity to deliver credible educational efforts and collect credible evidence of program quality and impacts.

ECB efforts also present an opportunity for administrators to build their own evaluation competencies. Individual Extension administrators can benefit from increased evaluation capacity by advancing their use of data to inform decisions and advocate for programs with key stakeholders. Extension administrators should also understand what is required for Extension professionals to deliver and evaluate quality programs if they are to support Extension program staff in accomplishing this goal. Extension administrators play a key role in making decisions about Extension programs, setting organizational priorities, creating expectations for staff members' programming and evaluation efforts, and advocating for Extension programs with stakeholders. Extension administrators have the ability to influence policies and practices around evaluation at an organizational level, such as through rewarding good evaluation practice or providing staff sufficient time and training to collect and use credible evidence (Boyd, 2009; Silliman, Crinion, & Archibald, 2016). As such, it is essential that those who serve in administrative roles understand the components of the program delivery and evaluation process and how crucial these competencies are to implementing quality programming.

Most crucially, for Extension professionals across all levels and responsibilities, evaluative thinking is an overarching, critical competency (Buckley et al., 2015). Evaluative thinking refers to one's ability to critically reflect on programs, people, and processes for effective change (Buckley et al., 2015). A crucial aspect of ECB in Extension is that it can support Extension professionals in engaging in such critical thinking about evaluation, and particularly in interpreting and weighing the *quality* of evaluation evidence (Preskill & Russ-Eft, 2016). In discussing programs and program evidence data with stakeholders, Extension professionals should be able to adequately interpret program evidence, making evaluative thinking key in advocating for Extension programs.

Assessing and Meeting Community Needs

As noted previously, a key competency in the program development and delivery process is using data to assess the needs of communities and then delivering programming to meet those needs. Beyond assessing and meeting the needs of communities traditionally served by Extension programs, Extension professionals must also be equipped to meet the needs of communities that have traditionally been disenfranchised (and at times, outright excluded) from Extension programs—for instance, black and indigenous communities (e.g., Harris, 2008; Schor, 1986). Extension educational programs cannot take a “one size fits all” approach, assuming that existing programs will meet the needs of, have an impact on, or be credible to all communities. We cannot assume that what is effective or credible in communities we traditionally serve will also be effective or credible in others. Indeed, understanding the cultural or social contexts in an evaluation (e.g., stakeholders' perspectives on credibility, culturally responsive methodologies) is increasingly being recognized as a critical component of the program planning and evaluation process (Centers for Disease Control and Prevention; 2014). Failing to take a cultural or contextual lens in delivering or evaluating programs can threaten the utility, quality, and credibility of said programming and data, and troublingly, can even cause harm to the communities being served (Bowman, Dodge Francis, & Tyndall, 2015). Extension professionals must be equipped with the knowledge and skills to competently serve all of the residents of their communities, not just those who have historically or traditionally been served by Extension. As such, ECB should incorporate efforts focused on developing the skills needed to meet community needs (e.g., training in needs assessments, attending to diverse stakeholder perspectives, culturally relevant evaluation practices).

Barriers to Evaluation Capacity Building on the Path to Credible Evidence

Many factors and the realities of Extension work can compete with ECB efforts and hinder the generation of credible evidence. Extension professionals are frequently asked to accomplish more with less time, fewer resources, and smaller teams; the challenges of finding time to devote to professional development on any topic presents a challenge for Cooperative Extension as a whole (Arnold, 2006). Further, many program staff across disciplines find evaluation to be an intimidating or anxiety-provoking topic (Arnold, 2006; Donaldson, Gooler, & Scriven, 2002),

which may increase their reluctance to learn more about it. Still, when they do engage in professional development opportunities around evaluation, this fear can be ameliorated (Kelsey, 2008).

Some Extension professionals may see the development of skills in program evaluation as a lower priority than other professional development needs (Arnold, 2006). For example, they may see evaluation as someone else's responsibility, might feel they do not have time to engage in evaluation, may not see any personal value to themselves (i.e., intrinsic or extrinsic rewards) for evaluating programs, or might have a certain level of anxiety about engaging in evaluation. Extension professionals might also experience a lack of relative frequency with which they have the opportunity to exercise a diversity of evaluation skills, which might further inhibit learning. For instance, Extension professionals may have frequent opportunities to exercise survey data collection skills using existing survey instruments, while opportunities to actually write and create survey instruments may occur less frequently. Furthermore, the prospect of engaging in a rigorous program evaluation may seem daunting to someone with minimal background in research or evaluation methods, while conducting more cursory evaluations might seem tedious with little payoff. This list of barriers is included not to dissuade from ECB efforts in Extension, but rather to recognize and address these factors when implementing successful ECB initiatives.

Organizational Context and Expectations

For Extension organizations seeking to collect and use credible and actionable evidence of program quality and impacts, ECB is a critical component of organizational development. Beyond individual Extension professionals, the Extension organization as a whole must also provide an organizational context that supports the collection and use of credible evidence. This means that Extension organizational leadership should support, encourage, and reward efforts made by Extension professionals to implement and evaluate programs with credibility (Preskill & Boyle, 2008). Though individual ECB efforts may be successful in developing an individual Extension professional's competencies in the short term (e.g., providing technical assistance or in-service training to a small group of Extension professionals), having a sustained culture that generates credible and actionable evidence hinges on an organizational context that adequately supports ECB and credible, quality program evaluation (Preskill & Boyle, 2008; Taylor-Powell & Boyd, 2008).

An organizational culture that supports learning from credible evidence can subsequently bolster evaluative thinking on an organizational level (Taylor-Powell & Boyd, 2008). Administrative buy-in and organizational support are critical factors in order for ECB efforts with program staff to take root in supporting Extension as a learning organization that both generates and values credible evidence (Boyd, 2009; Preskill & Boyle, 2008; Taylor-Powell & Boyd, 2008). In an organization where administrators endorse and model using evaluation findings, credible and high-quality data will be seen as an organizational priority (Preskill & Boyle, 2008). Even if Extension professionals themselves do not directly use the data they collect, seeing such data

used by the organization (e.g., by colleagues for program improvement or organizationally in marketing programs) can improve morale and increase evaluation capacity.

How Organizations Can Support Evaluation Capacity Building

Extension professionals and programs must have adequate instrumental support for evaluation efforts, including adequate staff devoted to evaluation efforts and adequate financial support for data collection, entry, and analysis (Taylor-Powell & Boyd, 2008). Individual Extension professionals should also have adequate time to devote to planning, collecting, and using credible evidence (Preskill & Boyle, 2008). As in any organization, effectively building evaluation capacity in Extension requires clear expectations for evaluation among Extension professionals (Preskill & Boyle, 2008; Volkov & King, 2007). Individual Extension professionals should be given clear requirements, guidelines, and expectations for evaluation efforts. In order for Extension to successfully build and use quality, credible, and actionable evidence about programs, Extension must remain dedicated to devoting ample time, staff, money, and resources to evaluation capacity building.

Organizationally, evaluation capacity can also be built through the identification, training, and fostering of evaluation champions, or Extension professionals who show an interest in conducting and supporting quality evaluation work (Silliman et al., 2016; Taylor-Powell & Boyd, 2008). By creating a community of evaluation champions, where groups of Extension professionals engage in evaluative thinking, Extension evaluation specialists can create opportunities for professional development with individuals who can share what they have learned with their peers. Extension administrators can also be leveraged as evaluation champions through the support of organizational efforts to build evaluation capacity and generate credible evidence (Boyd, 2009).

Organizations can also support ECB through adequate staffing of Extension evaluation specialists (Taylor-Powell & Boyd, 2008). Evaluation specialists can provide trainings and technical assistance in evaluation, either through face-to-face support or online trainings (Taylor-Powell & Boyd, 2008). If a state Extension organization does not have an evaluation specialist on staff, those organizations can support ECB by having an external evaluator, either an Extension evaluation specialist from another state or from outside of Extension, lead professional development trainings about program evaluation.

Organizations can also develop written and electronic evaluation resources for staff (Taylor-Powell & Boyd, 2008). Online professional development opportunities are especially of interest to Extension professionals (Senyurekli, Dworkin, & Dickinson, 2006), suggesting that Extension would benefit from the use of technology in ECB efforts. In Michigan, Extension evaluation specialists recently collaborated with an Extension instructional design specialist to develop a self-paced, online course on evaluation (Hetherington, Eschbach, Cuthbertson, & Shelle, 2018). With the support of the instructional design specialist, the course was designed to follow best

practices in digital education, including the use of intentionally brief video lectures, interactive activities, and badging to reward participation. Creating a standardized set of modules that can introduce staff to evaluation concepts forms a purposeful, structured socialization into the evaluation process. This is beneficial not only because it saves time that might be taken up by individual staff consultations, but also because it allows incoming staff to be introduced to evaluation concepts in a standardized manner (King, 2007).

Organizations can also support ECB by housing evaluation specialists with content expertise in specific program areas (e.g., an evaluator with expertise in child and youth development being designated to work with 4-H staff). Having an evaluator with content expertise can be an asset to ECB, in that this can increase Extension professionals' own trust and willingness to engage in the evaluation as well as provide expertise in methodologies or measures specific to that content area. Evaluation specialists with content area expertise can evaluate relevant programs with a greater degree of depth than those with content expertise in other areas, which can further create opportunities to engage in scholarship (e.g., publishing evaluating findings in peer-reviewed journals). By designating specific evaluators to work within specific content areas and program teams, this can further support the collection of credible evidence as Extension evaluators provide instrumental support on specific evaluation projects.

Conclusion

Evaluation capacity building (ECB) is a foundational aspect of building credible and actionable evidence about the quality and effectiveness of Extension programs. ECB efforts can bolster Extension professionals' understanding of the program development, implementation, and evaluation processes, thus advancing Extension's ability to generate and use credible evidence. Extension professionals must be equipped to understand how to collect credible evidence about program impacts and to consider varying stakeholder perspectives on what constitutes credible evidence. Complex organizations only reap the benefits of ECB efforts as far as what they put into it, and Extension is no different. When Extension builds its evaluation capacity, it not only builds the capacity to collect high quality data, it also builds the ability to use such data in advocating for and making changes to improve programs, increases the ability to advance as a learning organization, and supports Extension's ability to have a positive impact on individuals and the communities in which they live.

References

- Arnold, M. E. (2006). Developing evaluation capacity in Extension 4-H field faculty: A framework for success. *American Journal of Evaluation*, 27(2), 257–269.
doi:10.1177/1098214006287989

- Baughman, S., Boyd, H. H., & Franz, N. K. (2012). Non-formal educator use of evaluation results. *Evaluation and Program Planning*, 35(3), 329–336. doi:10.1016/j.evalprogplan.2011.11.008.
- Bowman, N. R., Dodge Francis, C., & Tyndall, M. (2015). Culturally responsive indigenous evaluation: A practical approach for evaluating indigenous projects in tribal reservation contexts. In S. Hood, R. Hopson, & H. Frierson (Eds.), *Continuing the journey to reposition culture and cultural context in evaluation theory and practice* (pp. 335–359). Charlotte NC: Information Age Publishing.
- Boyd, H. H. (2009). Practical tips for evaluators and administrators to work together in building evaluation capacity. *Journal of Extension*, 47(2), Article 2IAW1. Retrieved from <https://www.joe.org/joe/2009april/iw1.php>
- Bryson, J. M., Patton, M. Q., & Bowman, R. A. (2011). Working with evaluation stakeholders: A rationale, step-wise approach and toolkit. *Evaluation and Program Planning*, 34(1), 1–12. doi:10.1016/j.evalprogplan.2010.07.001.
- Buckley, J., Archibald, T., Hargraves, M., & Trochim, W. M. (2015). Defining and teaching evaluative thinking: Insights from research on critical thinking. *American Journal of Evaluation*, 36(3), 375–388. doi:10.1177/1098214015581706
- Centers for Disease Control and Prevention. (2014). *Practical strategies for culturally competent evaluation*. Atlanta, GA: US Dept of Health and Human Services. Retrieved from https://www.cdc.gov/dhdsp/docs/cultural_competence_guide.pdf
- Donaldson, S. I., Christie, C. A., & Mark, M. M. (Eds.). (2015). *Credible and actionable evidence: The foundation for rigorous and influential evaluations* (2nd ed.). Thousand Oaks, CA: Sage.
- Donaldson, S. I., Gooler, L. E., & Scriven, M. (2002). Strategies for managing evaluation anxiety: Toward a psychology of program evaluation. *American Journal of Evaluation*, 23(3), 261–273. doi:10.1177/109821400202300303
- Fetsch, R. J., MacPhee, D., & Boyer, L. K. (2012). Evidence-based programming: What is a process an Extension agent can use to evaluate a program's effectiveness. *Journal of Extension*, 50(5), Article 5FEA2. Retrieved from <https://www.joe.org/joe/2012october/a2.php>
- Fetterman, D. (2003). Fetterman-House: A process use distinction and a theory. *New Directions for Evaluation*, 97, 47–52. doi:10.1002/ev.74
- Franz, N. K. (2015). Programming for the public good: Ensuring public value through the Cooperative Extension program development model. *Journal of Human Sciences and Extension*, 3(2), 13–25.
- Franz, N., & Archibald, T. (2018). Four approaches to building Extension program evaluation capacity. *Journal of Extension*, 56(4), Article 4TOT5. Retrieved from <https://joe.org/joe/2018august/tt5.php>

- Franz, N., & Townson, L. (2008). The nature of complex organizations: The case of Cooperative Extension. In M. T. Braverman, M. Engle, M. E. Arnold, & R. A. Rennekamp (Eds.), *Program evaluation in a complex organizational system: Lessons from Cooperative Extension. New Directions for Evaluation*, 120, 5–14. doi:10.1002/ev.272
- Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Continuum Books.
- Guion, L., Boyd, H., & Rennekamp, R. (2007). An exploratory profile of Extension evaluation professionals. *Journal of Extension*, 45(4), Article 4FEA5. Retrieved from <https://www.joe.org/joe/2007august/a5.php>
- Harris, C. V. (2008). "The Extension Service is not an integration agency": The idea of race in the Cooperative Extension Service. *Agricultural History*, 82(2), 193–219. doi:10.3098/ah.2008.82.2.193
- Hetherington, C., Eschbach, C., Cuthbertson, C., & Shelle, G. (2018, November). *Evaluation capacity building in Extension using online instructional technology*. Roundtable presented at the Annual American Evaluation Association Conference, Cleveland, Ohio.
- Johnson, K., Greenseid, L. O., Toal, S. A., King, J. A., Lawrenz, F., & Volkov, B. (2009). Research on evaluation use: A review of the empirical literature from 1986 to 2005. *American Journal of Evaluation*, 30(3), 377–410. doi:10.1177/1098214009341660
- Kelsey, K. D. (2008). Do workshops work for building evaluation capacity among Cooperative Extension Service faculty? *Journal of Extension*, 46(6), Article 6RIB4. Retrieved from <https://www.joe.org/joe/2008december/rb4.php>
- King, J. A. (2007). Developing evaluation capacity through process use. *New Directions for Evaluation*, 116, 45–59. doi:10.1002/ev.242
- Lamm, A. J., & Israel, G. D. (2013). A national examination of Extension professionals' use of evaluation: Does intended use improve effort? *Journal of Human Sciences and Extension*, 1(1), 49–62.
- Olson, J. R., Welsh, J. A., & Perkins, D. F. (2015). Evidence-based programming within Cooperative Extension: How can we maintain program fidelity while adapting to meet local needs? *Journal of Extension*, 53(3), Article 3FEA3. Retrieved from <https://www.joe.org/joe/2015june/a3.php>
- Patton, M. Q. (2008). *Utilization-focused evaluation*. Thousand Oaks, CA: Sage.
- Preskill, H., & Boyle, S. (2008). A multidisciplinary model of evaluation capacity building. *American Journal of Evaluation*, 29(4), 443–459. doi:10.1177/1098214008324182
- Preskill, H., & Russ-Eft, D. (2016). *Building evaluation capacity: 72 activities for teaching and training*. Thousand Oaks, CA: Sage.
- Radhakrishna, R., Tobin, D., Brennan, M., & Thomson, J. (2012). Ensuring data quality in Extension research and evaluation studies. *Journal of Extension*, 50(3), Article 3TOT1. Retrieved from <https://www.joe.org/joe/2012june/tt1.php>
- Schor, J. (1986). The black presence in the US Cooperative Extension Service since 1945: An American quest for service and equity. *Agricultural History*, 60(2), 137–153.

- Senyurekli, A. R., Dworkin, J., & Dickinson, J. (2006). On-line professional development for Extension educators. *Journal of Extension*, 44(3), Article 3RIB1. Retrieved from <https://www.joe.org/joe/2006june/rb1.php>
- Silliman, B., Crinion, P., & Archibald, T. (2016). Evaluation champions: What they need and where they fit in organizational learning. *Journal of Human Sciences and Extension*, 4(3), 22–44.
- Stockdill, S. H., Baizerman, M., & Compton, D. W. (2002). Toward a definition of the ECB process: A conversation with the ECB literature. *New Directions for Evaluation*, 93, 7–26. doi:10.1002/ev.39
- Taylor-Powell, E., & Boyd, H. H. (2008). Evaluation capacity building in complex organizations. *New Directions for Evaluation*, 120, 55–69. doi:10.1002/ev.276
- Volkov, B. B., & King, J. A. (2007). *A checklist for building organizational evaluation capacity*. Retrieved from http://dmeforpeace.org/sites/default/files/Volkov%20and%20King_Checklist%20for%20Building%20Organizational%20Evaluation%20Capacity.pdf

Chelsea Hetherington is an Evaluation and Research Specialist at Michigan State University Extension, specializing in research and evaluation of child and youth development programs.

Cheryl Eschbach is the Director of the Health and Nutrition Institute at Michigan State University Extension. She previously worked as an Evaluation Specialist for MSU Extension programs.

Courtney Cuthbertson is the Community Behavioral Health Specialist at Michigan State University Extension. They previously worked as an Evaluation Specialist for MSU Extension programs.