The Role and Responsibilities of State Specialists

in Agriculture and Natural Resources Extension at the University of Missouri

State specialists are campus-based University of Missouri faculty who hold extension appointments. They provide the link between emerging research information and its application in people's daily lives.

This publication describes the roles and responsibilities of state specialists in the College of Agriculture, Food and Natural Resources (CAFNR). Use this as a reference when designing specific position descriptions, orienting new faculty, assessing programmatic needs, and evaluating the effectiveness of state specialists.

Who are state specialists?

State specialists are faculty members housed within a CAFNR academic unit. A state specialist's academic title typically includes the word "professor." State specialists are hired after a national or international search.

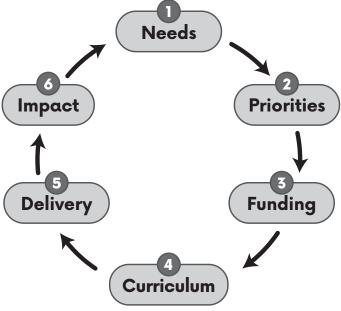
What do they do?

State specialists provide subject matter expertise for Agriculture and Natural Resources (ANR) Extension. They have statewide responsibilities and coverage. They provide programmatic content, curricula and support to regional extension specialists.

How do they do it?

State specialists develop proactive and reactive educational programs within their subject areas. Both types of programming are expected although proactive education efforts are the major work of the state specialist. Proactive programs logically identify and address the areas of greatest need in Missouri. CAFNR state specialists use a six-step developmental process for proactive programming.

State specialists provide the link between emerging research information and its application in people's daily lives.



Six-step developmental process for proactive programming

Step 1. Needs assessment

State specialists thoughtfully assess programmatic needs and current educational gaps within their subject areas. This assessment includes a comprehensive examination of relevant data sources, such as agricultural statistics, demographic data, and producer and industry surveys. State specialists engage all interested stakeholders and invite them — even those with conflicting points of view — to provide input.

Although needs assessment may be a continual process, state specialists document the scholarly methods used and "let the data tell the story." State specialists realize that formal needs assessment encourages ongoing, planned input regarding programmatic needs of stakeholders. (Patrick Robinson and Robin Shepard outline an extension needs assessment model in their February 2011 article in the *Journal of Extension*, available at http://www.joe.org/joe/2011february/a3.php.)

Step 2. Prioritize efforts

State specialists prioritize and focus on educational efforts with the greatest economic, environmental and social impact on Missouri residents. Their efforts focus on programs that are financially feasible, have a

high likelihood of success, foster collaboration with specialists from other disciplines, use the talents of regional specialists, and attract buy-in from the majority of stakeholders.

Step 3. Develop funding sources

State specialists identify, develop and secure short-term and long-term funding to develop, operate and maintain programs. At a minimum, state specialists secure funds for direct costs of travel, materials, marketing, website development, office and technical support, and onsite expenses. Funding sources include agribusinesses, nonprofit commodity groups, cooperating agencies, and internal and external grants. Long-term funding may also be obtained through educational fees.

Step 4. Prepare curriculum

State specialists prepare focused, research-based, interdisciplinary curriculum that aligns with program priorities. State specialists in extension follow the same principles and processes followed by their fellow professors in resident instruction. State specialists build interdisciplinary teams with in-depth training and scholarly expertise to write, develop and revise course materials. Curriculum materials often include print publications, annotated presentations, websites or mobile apps, teaching guides, evaluation instruments, and guidance for hands-on demonstrations. All materials are nonbiased, science-based and audience-appropriate.

State specialists often publish their materials through MU Extension Communications and Marketing. High-quality content contributes income and brings recognition to the university. As faculty, state specialists sometimes also publish content through external professional organizations where an author-publisher arrangement is adopted.

Step 5. Deliver program

The state specialist and team deliver, or teach, the educational program after preparing the curriculum. State specialists use in-service education (ISE) classes to initially train the team of extension specialists who will teach the curriculum. State specialists use ISE classes not only to impart technical information but also to demonstrate how to teach the material. Delivery methods for both the ISE and the curriculum itself can be electronic, one-on-one, focus group, mass media or, commonly, a hybrid of these methodologies. State

specialists use participant evaluations to measure the effectiveness of the teaching program and to establish baselines for documenting its impact.

Step 6. Document impact

State specialists document the social and economic impact of their programs. In most cases, impact is quantitative, for example, the amount of increased farm income or the tons of soil saved or the time participants saved by adopting the practices taught. However, impact can also be qualitative — like many quality-of-life measures. State specialists document impact to demonstrate accountability to Missouri taxpayers. This documented impact also provides evidence of successful teaching to university faculty and administration who review dossiers of state specialists being considered for promotion and tenure.

Key duties

Responsive activities

As engaged education professionals serving Missouri, state specialists promptly and accurately respond to routine or technical information requests. Requests from regional extension specialists should be given priority. In most cases, state specialists should refer requests from the public to regional specialists, allowing engagement at the local level. Lists of regional extension specialists by topic area and location are available online at http://extension.missouri.edu/people.

Crisis and natural disaster preparation

Natural disasters and world markets greatly affect agriculture in Missouri. State specialists serve by coordinating and leading rapid responses to crises caused by such events as flood, drought and pest epidemics. These situations can be challenging as imperfect or incomplete information often makes defining a clear plan of action difficult.

To the extent possible, state specialists anticipate these events and work as a team to quickly educate and provide resources to regional specialists. State specialists are responsible for coordinating among themselves and regional specialists to proactively develop collaborative programs to handle crises. State specialists also lead public response to crises by distributing research-based information through appropriate channels

and technologies, such as telephone calls, the media, websites and social media, and face-to-face meetings.

Leadership and liaison activities

State specialists lead by supporting and mentoring regional specialists. They orient new employees, provide in-service educational opportunities, coordinate and plan activities, convey expectations, help with regional or statewide surveys, and answer questions. State specialists offer support by sponsoring training opportunities related to the Core Competencies for MU Extension Faculty (http://extension.missouri.edu/ corecomp).

State specialists also lead by being the spokespersons for their disciplinary areas. This responsibility includes collaborating with allied agencies, professional organizations, businesses and other interested groups to find solutions to real-world problems. These partnerships provide a vital link to effective extension programming, and state specialists provide an unbiased voice, guided by research-based data, when participating in these activities. State specialists keep regional specialists informed about these activities and issues as they arise. They also share details of projects that may not directly involve the regional specialists but are conducted in counties they serve.

Guiding principles

State specialists work collaboratively with regional specialists and stakeholders to transfer research-based information to the public. Their programs deliberately embrace diversity. State specialists build comprehensive and interdisciplinary programs that begin at the local

level but extend beyond local or regional boundaries to make a national or even global impact.

State specialists remain relevant by keeping abreast of the latest research-based innovations in their disciplines. State specialists with split research and extension appointments use their research programs to create new knowledge and bring that expertise to their program areas. These state specialists integrate their research and extension programs and publish their research findings. All state specialists translate research results by developing innovative curriculum and programs that improve the lives and livelihood of all Missourians.

State specialists expect to troubleshoot issues that emerge from the field on an as-needed basis. In many cases, this troubleshooting requires an interdisciplinary approach to solving problems.

State specialists base their selection of program delivery methods on such considerations as the knowledge being shared and the skills being taught. They consider use of new and emerging technologies in program delivery but do not overlook the impact of one-on-one interaction.

State specialists take active roles in leadership and service within their discipline areas, departments and divisions. Furthermore, state specialists participate in professional development opportunities that allow them to remain current in their respective disciplines and in areas related to their programs.

This publication was developed by Robert Kallenbach, David Patterson, Robert Broz, Craig Roberts, Craig Payne, Scott Brown and Hank Stelzer.



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