Creating Teams Increases Extension Educator Productivity

Abstract
The Garden Team at Washington State University is a transdisciplinary group of faculty, staff, and students with expertise in applied plant and soil sciences and an interest in Extension education. The team's primary mission is to create current, relevant, and peer-reviewed materials as Extension publications for home gardeners. The average yearly Extension publication rate per member increased from 0.03 prior to team formation to 0.85 after team formation. An unexpected benefit emerged when team members acted cooperatively to submit successful competitive grants. These quantifiable measures of productivity benefit both the individual team members and the university in terms of overall competitiveness among land-grant institutions.

Introduction
In 2011, Washington State University (WSU) administrators identified a lack of current, relevant, and peer-reviewed information available to home gardeners in Washington. Due to budget cuts during the previous decade, the number of statewide discipline experts writing such content had fallen sharply. In best case situations, county-based educators stepped in to fill gaps, although their numbers also had been depleted. In worst case situations, specific subject matter areas were lost. With such a large information gap to fill, WSU formed an interdisciplinary group, the Garden Team (GTeam), to strategically address the problem.

The goal of the GTeam is to provide current, relevant, and peer-reviewed information for WSU master gardeners and home gardeners via the web (http://gardening.wsu.edu). As an expectation of their Extension appointments, GTeam members generate content and submit it for double-blind peer-review through FastTrack, the WSU manuscript management and tracking system. Successful submissions are published through WSU's Extension Publications Store (https://pubs.wsu.edu), primarily as PDFs. To ensure that material is automatically updated, content on the gardening web page is directly linked to the publications store.

Here we outline how we formed and structured the Garden Team, discuss both predicted and unexpected benefits, and make recommendations for wider implementation.
Team Formation and Structure

To equitably disperse workload, three faculty members were asked to cochair the effort. In addition to writing content, the cochairs recruited Extension specialists, educators, and other faculty experts to form a transdisciplinary team. As appropriate, last-stage and recently matriculated graduate students also were recruited. By 2015, active team members represented 12 of 39 Washington counties and three of the four WSU research and Extension centers, which collectively represent the state's major population centers.

The cochairs established a SharePoint site for posting materials such as meeting minutes and calendars, photos, manuscript drafts, survey data, and publication spreadsheets. Their ongoing shared duties include managing the budget, arranging yearly face-to-face meetings, facilitating monthly committee web meetings, posting meeting minutes, writing content, tracking team metrics, and serving as liaisons to WSU administrators and the publications unit.

GTeam members established content committees on relevant gardening topics. New committees are formed or existing committees are put on hiatus as necessary. As members join, and later on an annual basis, they self-select for participation in one or more committees on the basis of interest and expertise. Also, goals for metrics (e.g., numbers of peer-reviewed publications, blog entries, electronic mailing list notices) are self-assigned and set early in the calendar year. Active metric tracking and regular web meetings help members plan, discuss, and develop their work on publications and other deadline-driven materials.

Monthly content committee meetings are held via teleconference or through online meeting platforms. Each member provides a status update on the metrics he or she is pursuing that year. Remaining meeting time is dedicated to discussing publication problems, brainstorming solutions, or proposing joint publications within or across committees.

Content is developed in a number of ways. If existing material is available, a discipline expert reviews the literature and updates the material as needed for submission to FastTrack. In some cases, generalist members write initial drafts that specialists later refine, resulting in coauthored publications.

At a yearly 1.5-day meeting, members discuss the previous year's metrics, brainstorm new additions to the gardening web page, solicit partners for grants to fund publication development, and participate in professional development seminars.

As part of an emphasis by WSU Extension Publications on raising publication quality, the cochairs also hosted a GTeam webinar on how to conduct literature searches by using electronic databases and how to use the results to develop client material. The cochairs also developed a set of common Home Garden series publication attributes (i.e., Flesch-Kincaid reading scale grade level of 10.0 or lower, reading ease of 45 or higher, and no more than 20% passive sentences). Although there is some debate on whether client literacy scores can be tied to grade level (Kirsch, Jungblut, Jenkins, & Kolstad, 2002), the cochairs found that authors more easily revised manuscripts when numbers were used in place of subjective reviewer comments such as "make the manuscript easier to read."
To minimize duplication of effort, faculty members broadly share work tips, pertinent data, and effective writing approaches coming out of content committees. When appropriate, short instructional white papers are written as part of a how-to series and posted on SharePoint.

Benefits of Team Formation

Publications

Faculty publishing productivity is a measure of departmental, college, and institutional prestige (Creamer, 1999). Whereas Extension faculty understand this metric, they also are strongly oriented toward delivering practical information to their clients. Until the advent of the GTeam, many Extension faculty members wrote and locally published client material without peer review and separately wrote peer-reviewed articles for professional journals. In other words, they failed to capitalize on the opportunity to write one publication that would both serve their clients and earn formal publishing credit.

Formation of our transdisciplinary team resulted in 65 Home Garden series manuscripts either in peer review or published during 2012–2014. This compares to just four Home Garden series publications during 2009–2011 from the same group of faculty members. The increase in productivity is due to the formation of a structured team environment and the increase in coauthor opportunities. Multiauthor publications help distribute workload, reduce duplication of effort, and generate peer-reviewed publications.

WSU’s reputation also directly benefits from strategies being used by GTeam members. When materials are published independently and without peer review, master gardeners and clients often find conflicting or duplicative information on home gardening and landscaping topics on neighboring counties’ websites. With more county faculty now actively involved in GTeam efforts, overall publication quality is higher.

Esprit de Corps

We have noticed during our annual face-to-face meetings that team members choose to spend free time brainstorming ideas for publications and projects with their colleagues. Many of these faculty members do not see one another more than a few times a year, so our annual team meetings provide an important opportunity to network and feel valued. This scenario is not unusual, and published data support this observation with regard to other face-to-face Extension conferences (Chase & Kuehn, 2010).

Conclusions and Recommendations

Formation of the GTeam significantly helped participating faculty members increase their output of Extension peer-reviewed publications. Using this modestly funded model, other institutions should be able to achieve the same effect. Here we provide recommendations for creating a similar team.

Team Structure
• Select two or three team coleaders.

• Recruit discipline specialists, graduate students, faculty from other institutions, and professionals with appropriate expertise.

• Recruit generalists who enjoy team projects.

**Work Approach**

• Use the indicators of team success (Kelbaugh & Earnest, 2008) in creating and managing teams.

• Promote clear and achievable metrics by requiring each subject-based committee to develop annual goals, either as a group or individually.

• Maintain a single web-based work site.

• Provide discussion time for active collaborations.

• Encourage team members to create subject-based working committees as needed; enable them to self-select committee participation.

• Require committees to meet every 4 to 6 weeks to encourage steady work progress.

• Hold regular leadership meetings to discuss committee progress, identify new client needs, organize annual meetings, and write annual reports.

**Resources Needed**

• Assign at least one team leader on each subject-based committee to take minutes and keep abreast of committee activities.

• Assign one Extension administrator to provide guidance to coleaders and attend the annual face-to-face meeting.

• Fund modest budgets that enable annual face-to-face meetings.

**References**


