

Impacts of Changes to County Educator Position Descriptions on Gender and Educational Diversity

Abstract

For the purposes of more accurately reflecting job duties and increasing diversity, Ohio county agriculture and natural resources educator position descriptions were changed in 2013 to include natural resources as an educational qualification. We examined applicant and hiring data from 3 years before and 3 years after the position description change. Results indicate that the numbers of women applicants and applicants with natural resources degrees increased following the position description change. However, although the percentage of hires with natural resources backgrounds increased, the percentage of female hires decreased sharply. Factors influencing the hiring of county agriculture and natural resources educators need to be examined.

Keywords: [hiring](#), [diversity](#), [agriculture](#), [natural resources](#), [gender](#)

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Introduction

The original intent of the county agriculture educator was to extend knowledge developed at land-grant universities to the individual farmer (Baker, 1939). Historically, the county agriculture educator was male, held an agricultural degree from a respected institution, and had at least 2 years of on-farm experience (Baker, 1939). Today, the job duties for the county agriculture educator have expanded to include supplying information on natural resources to farmers, landowners, gardeners, and businesses in rural and urban areas in addition to information on what are considered traditional agricultural topics (Spiegel & Breece, 2014; West, Drake, & Londo 2009).

Leaders in university extension, like those in other organizations, want to learn how to attract the best applicants (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). One predictor for attracting the best applicants is perceived person-organization fit, a factor mentioned by both recruiters and applicants (Arnold & Place, 2010; Cable & Judge, 1997; Kristof, 1996). In 2013 Extension leaders at Ohio State University (OSU) updated county agriculture and natural resources (ANR) educator position descriptions to include degrees in natural resources and related fields as acceptable academic credentials for the job. The reasons

for making the change were straightforward. First, it is important that the requirements for the position reflect actual job duties, which include teaching responsibilities in both agriculture and natural resources. Second, updating the position descriptions was looked at as a way to potentially increase gender and educational diversity among county ANR educators in OSU Extension (OSUE).

We conducted an investigation to explore the effects of adjusting county ANR Extension educator position descriptions at OSU on the gender and educational diversity of applicants and hires.

Methods

OSUE County Educator Hiring Process

In OSUE, the process for posting a county educator position begins with the OSUE regional directors. The regional directors have administrative responsibilities over county-level personnel in their regions. There are five regions in OSUE. The position description is written by a regional director and sent to the appropriate programmatic assistant director for approval. The goal of this part of the process is to ensure that the position description accurately reflects the educational needs of the county in question with regard to the program area. Once approved, the position description is posted on the OSU Human Resource (OSU-HR) jobs web page for a minimum of 30 days.

Once the position closes, a representative from OSU-HR does an initial screening of all applicants. During this process, applications from individuals who do not meet the minimum qualifications are removed from consideration. For example, county educator positions in Ohio require a master's degree and at least one degree in agriculture, natural resources, or a related field. Candidates without that educational background are automatically removed from the applicant pool. The data we examined related to the pool of applicants emerging from this initial OSU-HR screening.

The applications are sent forward to the first review committee. The committee consists of a representative from OSU-HR, the appropriate regional director and programmatic assistant director, the county Extension director, and one or two additional personnel familiar with the requirements of the position. The initial screening by the committee determines which of the candidates are offered a state-level interview.

The state-level interview committee consists of a representative from OSU-HR, the appropriate programmatic assistant director, and usually a county ANR educator to assist with screening. The goal of the state-level interview is to determine whether the applicant has the appropriate background, experience, and desired qualities to be successful at the county level. Successful candidates from the state-level interviews move on to the county, where they are then interviewed by the regional director, the county Extension director, and a mix of clientele from the county (e.g., landowners, farmers, advisory committee members, master gardeners, commissioners). If the county and regional directors agree on a candidate, the regional director extends the employment offer to that individual. Not all searches end in a hire. If that is the case, the position is typically readvertised and the process starts anew.

Data Collection and Analysis

We collected data for all applicants for OSUE county ANR educator positions from 2011 to 2016 whose applications were still viable following the initial OSU-HR screening. The data were provided by the OSU-HR

service center in the College of Food, Agricultural, and Environmental Science at OSU. Data included the county position applied for, gender and educational background of each applicant, and gender and educational background of the person selected for the position. The position description change to include academic credentials in natural resources or related fields as acceptable academic requirements occurred in late 2013. Therefore, the information provided comprised roughly 3 years of data from before the position description change and 3 years of data from after the change, allowing for comparison. One search in 2013 involved the new position description.

We reviewed the recorded information on applicant genders and academic backgrounds and sorted the applicants by degree (associate of science degree, bachelor of science degree, master of science degree, and doctor of philosophy or other doctoral degree) and by the broad educational categories of agriculture, natural resources, education, and other. We placed agricultural education and agricultural and Extension education degrees, along with other traditional education degrees, in the education category. At OSU, the soil science program is housed in the School of Environment and Natural Resources, but we placed those with soils degrees into the agriculture category. Likewise, we placed those with doctor of veterinary medicine degrees into the agriculture category.

Results

Table 1 shows the numbers of searches, genders of applicants, and genders of hires for the pre-position-description-change period (2011–2013) and post-position-description-change period (2013–2016).

Table 1.

Numbers of Ohio State University Extension County Agriculture and Natural Resources Educator Searches, Gender of Applicants, and Gender of Hires Before Position Description Change, 2011–2013, and After Position Description Change, 2013–2016

Year	No. of searches	Male applicants	Female applicants	Male hires	Female hires	No hires
Before position description change						
2011	6	26	26	2	2	2
2012	16	31	26	4	5	6
2013	11	53	26	4	6	2
Totals	33	110	78 ^a	10	13 ^b	10
After position description change						
2013	1	1	4	0	1	0
2014	7	41	33	4	0	3
2015	11	41	27	7	3	1
2016	12	28	42	4	5	3
Totals	31	111	106 ^a	15	9 ^b	7

^aPercentages of female applicants before and after change were 41.5% and 48.9%,

respectively. bPercentages of female hires before and after change were 56.5% and 37.5%, respectively.

The results indicate that the number of searches before versus after the change were nearly identical, making comparisons possible. The number of applicants for county ANR positions increased by 15% in the 3 years following the position description change. Of particular interest is the approximate 36% increase in the number of female applicants following the position description change as compared to an increase of less than 1% in the number of male applicants. Countering that finding, the percentage of female hires into county ANR positions decreased by 31% during the same period.

All searches ending in no hires were readvertised and were ultimately filled. Information on why there was no hire for a particular search was provided. Typical reasons included perceived lack of fit with the county and lack of the experience and qualifications the county was seeking.

Table 2 shows the genders and educational backgrounds of applicants for OSUE county ANR positions before the position description change (2011–2013) and after the position description change (2013–2016).

Table 2.

Ohio State University Extension County Agriculture and Natural Resources Educator Applicants' Educational Background Summaries Before (2011–2013) Versus After (2013–2016) Position Description Change

Variable	Male				Female			
	AS	BS	MS	PhD	AS	BS	MS	PhD
Agriculture								
Before change	0	55	52	5	0	32	24	4
After change	1	59	47	15	3	30	38	7
% Change	NA	7	-10	200	NA	-6	58	75
Natural resources								
Before change	2	20	10	0	0	8	8	1
After change	0	17	18	3	3	29	26	5
% Change	-100	-15	80	NA	NA	263	225	400
Education								
Before change	0	19	25	2	0	14	18	2
After change	0	28	26	9	0	26	18	4
% Change	0	47	4	350	0	86	0	100
Other								
Before change	0	9	21	2	1	0	12	1
After change	1	19	14	6	6	50	19	3
% Change	NA	111	-33	200	500	NA	58	200

Note. AS = associate of science degree, BS = bachelor of science degree, MS = master of science degree, PhD = doctoral degree.

Male applicant educational backgrounds were more diverse following the position description change, with increases in doctoral degrees in agriculture, master's degrees in natural resources, and bachelor's and doctoral degrees in the category of other educational areas. Female applicant educational backgrounds also were more diverse following the job description change, with the largest increases in all degree levels in natural resources, bachelor's and doctoral degrees in education, and every degree level in the category of other educational areas.

Table 3 shows the genders and educational backgrounds of hires for OSUE county ANR positions before the position description change (2011–2013) and after the position description change (2013–2016).

Table 3.

Ohio State University Extension County Agriculture and Natural Resources Educator Hires' Educational Background Summaries Before (2011–2013) Versus After (2013–2016) Position Description Change

Variable	Male				Female			
	AS	BS	MS	PhD	AS	BS	MS	PhD
Agriculture								
Before change	0	4	5	1	0	9	5	0
After change	0	11	9	0	0	7	8	0
% Change	0	175	80	NA	0	-22	60	0
Natural resources								
Before change	0	0	0	0	0	2	1	0
After change	0	0	0	0	0	4	3	0
% Change	0	0	0	0	0	100	200	0
Education								
Before change	0	3	5	0	0	1	7	2
After change	0	4	4	0	0	0	3	0
% Change	0	33	-20	0	0	-100	-57	-100
Other								
Before change	0	2	0	1	0	1	0	0
After change	2	3	2	1	0	3	1	0
% Change	NA	50	NA	0	0	200	NA	0

Note. AS = associate of science degree, BS = bachelor of science degree, MS = master of science degree, PhD = doctoral degree. Some hires held multiple degrees.

Table 3 illustrates some interesting changes in those hired into county ANR educator positions. For males,

there was an increase in hires having agriculture backgrounds, with minor changes in other subject matter areas. For females, there was an increase in those having master's degrees in agriculture and a large increase in those having bachelor's and master's degrees in natural resources. There was also a sharp decline among female hires with degrees in education.

Discussion

Two reasons for making the change in degree requirements for the county ANR educator positions were to increase the natural resources capacity within OSUE and to increase gender and educational diversity of hires. The adjustment in the position description to include natural resources educational backgrounds appears to have had the intended impact on the number of applicants, both male and female, with educational backgrounds in natural resources. This result was accomplished without affecting the number of applicants possessing agricultural degrees. The number of total applicants increased by 15% following the change in position description, and the number of female applicants increased by 36%.

The position description has triggered more diversely educated females to apply for county educator positions. The educational diversity among hires has increased, as evidenced in the increases in hires holding natural resources and other degrees, especially female hires. There also has been a reduction in the number of candidates applying with education degrees. Nothing in the data explains these decreases. The expected increase in female applicants was observed; however, the expected increase in the number of female hires following the position description change was not achieved. Seevers and Foster (2004) indicated that issues such as male stereotyping and preconceptions about women, acceptance by peers and other males in the agriculture industry, and lack of significant experience are all barriers women face when working in agricultural fields. We think these issues are at play here as well. A few additional factors may have influenced this result, including (a) goodness of fit with the county (many counties still need/want a strong agronomic background), (b) less on-farm experience, (c) less livestock experience, and (d) more conservation focus rather than crop and pest management experience. Regardless, a more thorough study of the issues surrounding the hiring of females into Extension positions nationwide needs to be conducted to provide a clearer understanding of the issues affecting the hiring of females and minorities (Acker, 2006). The issues discussed here may also be more program area oriented, as other program areas within Extension tend to be more comprehensively diverse than ANR (Culp, McKee, & Nestor 2005).

Conclusions

Extension has provided nonformal education programs and materials that have improved lives and communities for more than 100 years (Bowen-Ellzey, Romich, Civittolo, & Davis, 2013). The U.S. population was largely agrarian when Extension was created more than 100 years ago. Today, the exact opposite is true in many parts of the country (West et al., 2009). In addition, there are many demographic changes occurring nationwide which will ultimately affect Extension.

This is a serious issue for Extension nationwide. One of the core values of Extension in any state is embracing diversity of all the people of the state (Safrit, Jones, & Conklin, 1994). It is difficult to say that this is being achieved if our workforce is not representative of the communities in which we work. Another challenge is that although each state has a university-based Extension program, advertising and hiring practices differ greatly across states. A closer look at nationwide statistics on this issue could provide a

more thorough understanding of the situation.

Although limited attention has focused on Extension recruitment advertisements, some postsecondary recruitment researchers have investigated gender differences in job advertisement reactions (e.g., Winter, 1996). In a study of women agriculture teachers in a six-state region, gender bias was viewed as a definite deterrent to women entering the agricultural education profession (Foster, Pikkert, & Husmann, 1991), including Extension (Seevers & Foster, 2004; Tower, Bowen, & Alkadry, 2011).

We recommend that Extension leaders in each state examine their position descriptions, advertising strategies, and hiring practices (Acker, 2006) so as to develop the internal diversity to more effectively work with the growing diversity among traditional and new clientele alike (Schauber & Castania, 2001). Lack of diversity within Extension has become a more serious issue in recent years (Grogan & Eshelman, 1998; McCray, 1994; Schauber & Castania 2001). The internal diversity within Extension needs to be addressed from not only a programming standpoint but also a public relations standpoint. Extension funding comes from federal, state, and local sources. Those state and locally provided funds are dependent, in many cases, on elected officials. If Extension does not have the ability to effectively work with our growing and diversifying communities, how can we expect these same communities to allocate funds for Extension?

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