## Return to Teach Ag: A Missed Opportunity in the SBAE Pipeline?

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Research

# Return to Teach Ag: A Missed Opportunity in the SBAE Pipeline? Introduction

The U.S. continues to face a shortage of qualified school-based agricultural education (SBAE) teachers. Returning teachers (teachers hired with prior teaching experience) are an important source of teacher supply. Studies of returning teachers (all grade levels) have shown they account for 25% to 40% of hires (Broughman & Rollefson, 2000; Cook & Boe, 2007). Beaudin (1995) suggests that experienced teachers are more effective than new teachers. DeAngelis (2013) suggests that female teachers are more likely to leave teaching for family/personal reasons. We see that caregiving as a reason for leaving School-Based Agricultural Education (SBAE) has increased from 3% to 7% (of leavers) over the last decade. In the same time period female teachers increased from 41% to 56% of the SBAE workforce (Lawver et al., 2024) suggesting a connection between teacher gender and leaving for caregiving. Spiess (2016) found in California that female teachers leave at a higher rate than their male counterparts beginning at year 7. Research suggests that female teachers are more likely to leave the workforce, but also more likely to return (DeAngelis, 2013). Reentry is a critical issue for teacher labor markets because reentering teachers expand the teacher supply (Moyer, 2022).

## **Conceptual Framework**

The conceptual framework for the National Supply and Demand (NSD) study (Lawver et al., 2024) identifies factors contributing to SBAE teacher supply and demand. Program completers are one component of the supply side of the model. This research explores SBAE teachers returning as another source of teacher supply.

#### Methods

This study aims to investigate the phenomenon of teachers returning to the school-based agricultural education profession as a potential source of supply to meet the annual demand of school-based agricultural educators. The questions that guided the study include:

- RQ1) What is the allocation of new hires in the Western AAAE region identified as returning teachers?
- RQ2) What is the role of returning teachers in relation to the net shortfall metric as identified by the National Supply and Demand Study (Smith et al., 2025)?
- RQ3) How does the Western AAAE region compare to the national data findings?

The NSD study utilizes a census survey of agricultural education state staff and faculty contacts at teacher preparation programs for agricultural education. The NSD annually collects information on the sources of new hires from state staff. In 2024, a survey question was added to find out how many teachers were returning teaching after a break of one or more years. The frame of the survey included states in the Western Region with state staff (13). The response rate for valid hiring sources was 92%. Data analysis was performed using Microsoft Excel and Microsoft Access.

#### Results

The results are shown in Table 1. On average returning teachers made up nearly 12% of the net new hires. Program completers fill over five times as many positions as returning teachers. Returning teachers make up 1.3% of the total workforce. Four states reported zero returning teachers, and 3 states reported over 20% of hires were returning teachers. Of the 4

reporting zero it is unknown if the data was not available or there were actually no returning teachers. There were substantial differences between the Western Region and the nation as a whole (Table 2).

**Table 1** *Returning Teachers, Net Hires, and Shortfall* 

	Total	Minimum	Maximum	Mean
		State	State	
Teachers	12033	21	1017	280
Net Hires	325	5	117	27
Returning Percent of Net Hires		0%	25.0%	11.7%
Returning Percent of All Teachers		0%	4.5%	1.3%
Net Hires Percent of All Teachers		3.7%	60.9%	11.5%
Net Shortfall	174	4	51	19.3

*Note:* Net hires exclude teachers moving between schools. Net Shortfall is a metric that measures the ability to meet demand with program completers (Lawver et al., 2024).

 Table 2

 Western Region vs. National Data

Region	Returning	Net Hires	Returning	PC/Net	Shortfall	Attrition
	/ Net Hires	/ Teachers	/ Teachers	Hires	Ratio	
Western	11%	16%	2%	40%	9%	7.1%
National	8%	13%	1%	41%	7%	7.0%

*Note:* Shortfall Ratio is the ratio of net shortfall (Demand – Program Completers taking SBAE jobs) to total teachers. Nationally, it includes only 36 states reporting valid data for the net shortfall calculation. 42 states provided the necessary data to calculate attrition.

## **Conclusions/Implications**

There are differences between SBAE and teachers as a whole. Teaching opportunities for specialized SBAE instruction are much more restricted than broader areas of instruction. Many SBAE programs are found in rural areas. Teachers wanting to return to teaching may be bound geographically and not have local opportunities. Grissom and Reininger (2012) found that female teachers are more likely to return in the early years after leaving than men. This gap widened with time. This finding has implications since SBAE teachers are becoming increasingly female (Lawver et al, 2024). Returning SBAE teachers make up a much smaller portion of hires than has been reported in other studies. There are several factors that could explain this such as fewer number of positions, potential re-entry teachers are not sufficiently mobile to move to where jobs are available. We recommend continuing the survey of the returning teachers to establish any trends in this population. The results of this survey suggest that returning teachers are an important source of new hires and are a potential source of additional hires. Moyer (2022) found that about half of teachers reenter teaching within 5 years of leaving. This suggests that recruitment of experienced teachers would be most productive within 5 years of their leaving. Programs to track teachers leaving and encourage these teachers to keep their licensure current could result in additional teacher supply. Collection of additional demographics data on the population of returning agriculture teachers is needed as well as data on length of service break and years of prior service to better define this group.

#### References

- Beaudin, B. Q. (1995). Former teachers who return to public schools: District and teacher characteristics of teachers who return to the districts they left. *Educational Evaluation and Policy Analysis*, 17(4), 462–475. https://doi.org/10.2307/1164438
- Broughman, S. P., & Rollefson, M. R. (2000). *Teacher supply in the United States: Sources of newly hired teachers in public and private schools, 1987-88 to 1993-94*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Cook, L. H., & Boe, E. E. (2007). National trends in the sources of supply of teachers in special and general education. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children, 30*(4), 217-232. https://doi.org/10.1177/088840640703000402
- DeAngelis, K. J. (2013). A Look at Returning Teachers. *Education Policy Analysis Archives*, 21, 13. https://doi.org/10.14507/epaa.v21n13.2013
- Grissom, J. A., & Reininger, M. (2012). Who comes back? A longitudinal analysis of the reentry behavior of exiting teachers. *Education Finance and Policy*, 7(4), 425–454. https://doi.org/10.1162/EDFP a 00075
- Lawver, R. G., Foster, D. D., Smith, A. R., Rogers, A., & Spiess, M., (2024). *Status of the U.S. Supply and Demand for Teachers of Agricultural Education*, 2020-2022. http://aaaeonline.org/Teacher-Supply- and-Demand
- Moyer, A. (2022). Has "Who Comes Back" Changed? Teacher Reentry 2000–2019. Educational Researcher, Vol. 51 No. 8, pp. 544–546. DOI: 10.3102/0013189X221122746
- Smith, A. R., Spiess, M., Foster, D. D., & Lawver, R. G. (2025). National Agricultural Education Supply and Demand Study, 2024 Executive Summary. https://nsd.aaaeonline.org
- Spiess, M. (2016). Gender and Teacher Movement. *American Association for Agricultural Education Conference Proceedings*. Kansas City, MO. Retrieved from: <a href="https://submission.aaaeonline.org/Proceedings.asp?EventID=41">https://submission.aaaeonline.org/Proceedings.asp?EventID=41</a>