

# Understanding The Demand For Agricultural Science Teachers In Texas

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MCNAIR SCHOLARS PROGRAM

## Introduction

Across the state of Texas, there is a need for Agricultural Science teachers in high schools. Sutchter et al., (2016) suggest four main factors contribute to the teacher shortage across all fields of education: 1) a decline in teacher preparation enrollments, 2) district efforts to reduce student-teacher ratios, 3) increases in student enrollment, and 4) high teacher attrition. These factors support prior research by Conneely and Uy (2009) related to career and technical education. They suggested that the discontinuation of teacher education programs, an increase in student enrollment, and a large number of CTE teachers nearing retirement contributed to the crisis in CTE. “Student demand requires more teachers, but teachers are leaving the profession and the opportunities to cultivate new educators are limited as teacher programs are eliminated” (Conneely & Uy, p. 1).

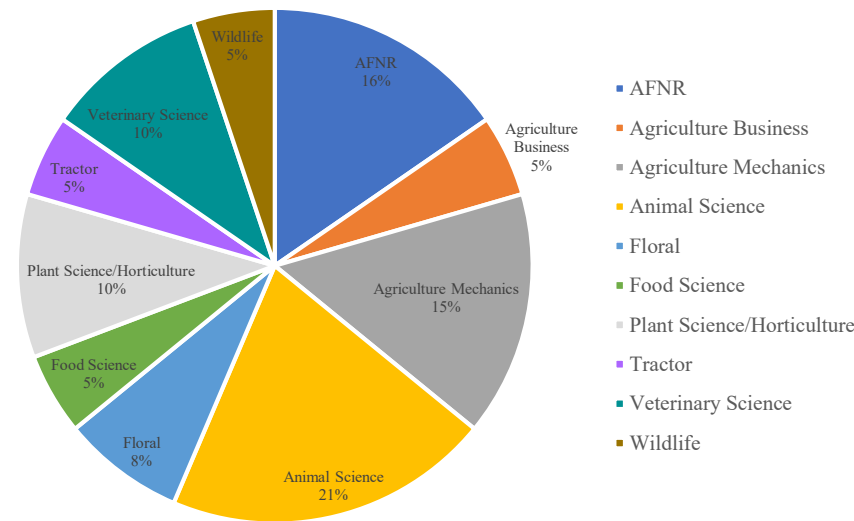
## Methods

This was a non-experimental, descriptive study which focused on agricultural science teachers across the state of Texas. During this summer, openings for agricultural science teacher were being posted on the VATAT website and constantly being retrieved. By collecting the job openings, a trend can be seen on what school districts around the state were looking for when it came to which subject, they wanted an agricultural science teacher to teach. Over 10 weeks, 138 openings were collected.

## Results

Categorizing what the school districts were looking for into 10 main subjects being; AFNR, Ag Business, Ag Mech, Animal Science, Floral, Food Science, Plant Science/ Horticulture, Tractor, Veterinary Science, and Wildlife were used. For each posting, there could have been 1 or more subject needed per school. Out of the 140 openings, Area 5 (Dallas area) had the most openings with 22. Area 2 (El Paso area) had the least opening posted with only 5. Across the state, 21% of the job openings were looking for an animal science teacher, 16% AFNR, 15% agricultural mechanics, 10% plant science/horticulture, etc.

Agricultural Science Teachers Job Openings



## Conclusion

Although not each posted job was recorded, there is a trend that can be seen. The state of Texas needs Agricultural Science teachers. Aside from that, there is a need for Animal Science teachers. SBAE teachers' responsibilities revolve largely around the three-component model of agricultural education (National FFA, 2018), delivering a comprehensive program through “(1) classroom/laboratory instruction (contextual learning), (2) supervised agricultural experience programs (work-based learning), and (3) student leadership organizations (National FFA organization)” (National Council for Agricultural Education, 2012, para. 4). Having the responsibility of supervised agricultural experience programs is a key factor as to why Animal Science is the most subject needed in the state. On top of that, agricultural mechanics falls under a supervised agricultural experience, which shows why most school districts are looking for an agricultural science teacher to teach agricultural mechanics. Texas A&M University-Kingsville Department of Agriculture, Agribusiness, and Environmental Sciences could use this data and better prepare the Agricultural Education majors for what is needed around the state. For instance, more Animal Science and Agricultural Mechanics courses could be added to their degree plan.

## References

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