

Agriscience Fair Jackpot: An Outreach Activity to Attract Science-minded Secondary Agriculture Students to an 1890 Land-grant University

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Introduction/need for innovation or idea

The College of Agriculture at Tennessee State University (TSU) has multiplied on almost every useful metric in the past 8 years; be it student enrollment, research funding, or extension education. Master's student enrollment in Agricultural Sciences, Ph.D. student enrollment, and counties with Extension faculty have all increased substantially. At a fundamental level, TSU has integrated academics with research and Extension; established faculty focus groups to provide intellectual leadership to programs; and created new opportunities for students to get involved in research and outreach. TSU has added numerous faculty and increased partnerships in the state and around the world. However, undergraduate student enrollment is suffering.

To bolster undergraduate enrollment, the College of Agriculture is searching for different ways to play to our strengths as a scholarly community with state-of-the-art research programs staffed with world-class faculty and student capacity. Based on the growing popularity of livestock exhibition jackpots where students compete for cash awards for their animal projects, the TSU College of Agriculture Recruitment Committee hypothesized that a great way to introduce students to our expertise, resources, and talent, and to hopefully attract them to our program was to create an *Agriscience Fair Jackpot*.

Students who love science, would be immersed at a science-heavy College of Agriculture with faculty who are as engaged in STEM as they are. This method of student recruitment seemed to be in line with research findings suggesting that students' academic aspirations were associated with enrollment decisions (Chapman, 1981; Hossler & Gallagher, 1987; Kinzie et al., 2004). Image is also important to college choice, and the committee believed that prospective students would be more likely to enroll (Pampaloni, 2010) if they experienced all we had to offer by visiting campus. Lastly, as mentioned above, the concept of a Jackpot isn't new to agricultural education. Given the competitive nature of agricultural education students and the popularity of jackpots and the Agriscience fair in Tennessee, the innovative idea for an Agriscience Fair Jackpot became a reality.

How it works/methodology/program phases/steps

High school students in 9th through 12th grade were invited to facilities at the TSU farm for an agriscience fair competition with cash prizes and other financial incentives. The Tennessee FFA Advisors and the Tennessee 4-H listservs were utilized for recruitment, and personal contacts were made to stakeholder educational leaders in the Metropolitan Nashville Public Schools. Categories students competed in represented a combination of traditional areas commonly found in the state and national Agriscience Fair with FFA and the concentrations/majors in the College of Agriculture at TSU. The categories were: Animal Sciences, Food & Nutrition Sciences, Environmental Sciences & Natural Resources, Plant Sciences, Agricultural Engineering, and Social Sciences (Ag Ed, Ag Bus, Family Sciences). Using the Tennessee FFA Agriscience Fair rubric, TSU faculty judged projects matching their expertise by interviewing students, and then placing first, second, and third place stickers on the posters at the end of the competition.

Students competed for the following prizes at the Agriscience Fair Jackpot. The first-place project in each of the categories above received \$500. The second-place project received \$250. Students awarded one of the top two projects in each category were promised a seat in the prestigious Summer Apprenticeship Program, a \$1,000 value. The top two students in each category were awarded a Dean's Scholar Internship, a research-based internship that helps students graduate from college debt-free. To receive the Dean's Scholar Internship incentive, students must major in the College of Agriculture and meet certain program eligibility standards. The school with the most student participation received an award too. All participants who registered and presented their research at the jackpot received a t-shirt. Winners were recognized at an awards program immediately following student presentations and judges' final decisions.

Results to date/implications

In the first year we had 92 participants and 74 research projects. The majority of participants were in the 10th grade (34%), followed by those in the 9th (31%), 11th (23%), and 12th (12%) grades. The largest category was Animal Science with 16 (22%) projects, followed by Environmental and Natural Resources Sciences (19%), Plant Sciences (18%), Social Sciences (15%), Food and Nutritional Sciences (14%), Agricultural Engineering (12%), and Biotechnology (1%). Teachers and parents have commented that the jackpot was very well done, exceedingly better than the agriscience fair at the state FFA convention. Students enjoyed having faculty judges who were actually experts in the fields they were researching. Students who had never been to campus were all of sudden asking questions about the potential of them studying at TSU. Faculty members, not normally exposed to secondary agriculture students, were very impressed with the students, and they developed a new awareness of what secondary agriscience produces.

Future plans/advice to others

Following a successful event and lots of positive feedback, there was a snag in getting students their real check in a timely manner. For the 2019 jackpot, we plan to have debit cards already on hand for the prize money. The first rendition of the jackpot was mostly FFA members, and we want to ensure that 4-H participants and homeschool students are also engaged so we will be reaching out to Extension agents and homeschool organizations with an agriscience fair workshop and information about the event. We will also collect data in the next round judging their perceptions of TSU Agriculture as a college choice following the event.

Costs/resources needed

The first resource that is needed for this event is space and facilities. For the inaugural event, 6,000 square foot of space in two buildings was maximized, so the event is being moved to the main campus where nearly every available corridor in the College of Agriculture will be utilized. The second important resource is people power. Nearly 40 faculty and college students were needed to carry out authentic judging and needed administration. Over \$5,000 in cash prizes were given out, and approximately \$500 was stretched for supermarket-catered snacks.

References

Chapman, D. W. (1981). A model of student college choice. *The Journal of Higher Education*, 52(5), 490–505.

Hossler, D., & Gallagher, K. S. (1987). Studying student college choice: A three-phase model and the implications for policymakers. *College and University*, 62(3), 207–221.

Kinzie, J., Palmer, M., Hayek, J., Hossler, D., Jacob, S. A., & Cummings, H. (2004). Fifty years of college choice: Social, political and institutional influences on the decision-making process. Indianapolis, IN: Lumina Foundation for Education.

Pampaloni, A. M. (2010). The influence of organizational image on college selection: What students seek in institutions of higher education? *Journal of Marketing for Higher Education*, 20(1), 19–48.