

**Establishing a Community of Practice for Undergraduate Students Participating
in Agricultural Research and Extension Experiences**

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Need for Innovation

The dynamic world of science and agriculture requires cultivation of future leaders who are prepared to solve complex problems and make cutting-edge scientific discoveries. Public perception of science in America is tenuous. The United States Department of Agriculture's (USDA) Science Blueprint described a communication gap between scientists and nonscientists. We believe this gap could be bridged through coordinated efforts to make scientific discoveries accessible and understandable. The USDA's National Institute of Food and Agriculture (NIFA) provides a solution to lessen the gap through its Research and Extension Experiences for Undergraduates (REEU) program. NIFA program leaders realized that REEU program benefits could be expanded exponentially if agricultural industry stakeholders, including the public, had a greater awareness of the REEU program. Likewise, program participants flatten their learning curves through coordinated, rather than duplicated, efforts. Hence, NIFA issued a call for an Education Coordination Network (ECN) for REEUs.

The purpose of this poster is to describe an innovative idea to establish the REEU-ECN. Three objectives guided our purpose: 1) Establish a secure national network for REEU project directors (PDs), personnel, and participants to facilitate project activities; 2) Enhance collaboration among participants offering communication skills; and 3) Promote awareness of REEUs through public events.

How it Works

We initiated a REEU Community of Practice (CoP) by inviting REEU PDs to serve on a rotating advisory board to help develop communication strategies and professional development workshops and symposiums. The CoP takes advantage of centralized network systems for REEU PDs and participants to interact, collaborate, and inform others about undergraduates' REEU programs. Phases to promote and encourage REEU programs include conducting virtual workshops via the REEU-ECN platform, which is a shared digital clearinghouse that fosters collaboration among multisite users, providing program search functionality, individualized REEU program pages, and for storing project documents. To facilitate the flow of activities, we provide onboarding processes for newly funded REEU PDs. Newly added PDs receive account logins for all collaboration platforms. Secure collaboration spaces (via Microsoft 365 and Teams platforms) allow REEU PDs and participants to interact and share information freely without concerns of data corruption or network breaches. Further, public engagement is encouraged through the REEU-ECN website and its associated social media platforms that amplify PDs' outreach efforts.

Results to Date

To date, we hosted an REEU-ECN Launch Party, marking the official introduction of the National REEU-ECN and bringing together REEU PDs, mentors, and stakeholders to celebrate the initiative's inception. Online network and collaboration spaces were established to facilitate

seamless collaboration among 40+ users, and collaboration continues to flow on Microsoft 365 and Teams platforms. The first annual onboarding process was successfully executed and integrated REEU PDs into the National REEU-ECN. Those PDs received account logins for collaboration platforms, ensuring swift participation and engagement. An engaging logo competition provided REEU students with the opportunity to showcase their creativity and design skills and contribute to helping capture the meaning of REEU-ECN. Additionally, we created an REEU-ECN website (www.reeu.org) to serve as a centralized location for showcasing PD profiles, REEU programs, upcoming events, activities, and highlights. The user-friendly platform provides visitors with valuable insights into the breadth and impact of REEU initiatives. We hosted a few workshops focusing on optimizing internship experiences that provide REEU participants with invaluable insights and strategies for maximizing their learning and professional growth. REEU PD meetings have served as a forum for discussing program management issues, recruitment strategies, innovative outreach, and REEU program promotion to non-REEU postsecondary participants. Consequently, engaging social media platforms have been used to promote all REEU programs, sharing success stories and engaging broader audiences.

Future Plans/Advice to Others

Recommendations include continuous improvement to website and network collaboration spaces based on user feedback, simplify processes to integrate new members swiftly into the REEU network, and increase student participation through creative initiatives like logo competitions. Additionally, we plan to host regular events to ignite community involvement and knowledge exchange, offer diverse development opportunities tailored to participant needs and interests, conduct regular PD meetings to encourage collaboration and strategic planning, and leverage social platforms to amplify program outreach and engagement.

Costs/Resources Needed

External evaluation experience is needed to discover strengths, weaknesses, and areas of improvement. Dr. Jason Peake, a professor in the College of Agricultural and Environmental Sciences at the University of Georgia, has more than 20 years of experience in evaluating agricultural research and education programs, and will evaluate the REEU-ECN. Institutional resources and facilities (~\$43,000/year) such as AgriLife ARC and TAMU's Division of Information Technology provide robust, secure, and reliable IT services. All systems, products, outputs, and functionality were created with complete portability to fulfill transferability plans. Dissemination strategies are shared through stakeholder appropriate formats and at REEU PDs' meetings. Other outlets include annual national meetings such as the American Association for Agricultural Education, American Association for the Advancement of Science, National Communication Association, and the Association of American Colleges and Universities.

References

National REEU-ECN: The FANH Scientists' Network (2023, June 15). USDA(.gov).
<https://portal.nifa.usda.gov/web/crisprojectpages/1030173-national-reeu-ecn-the-fanh-scientists-network.html>