When You Can't do It All: Prioritizing Program offerings in Agricultural Communication

Lauri M. Baker
University of Florida
1408 Sabal Palm Drive
Gainesville, Fl 32611
lauri.m.baker@ufl.edu

Jessica Holt
University of Georgia
jaholt@uga.edu

Dorcas Sunday
University of Florida
dorcassunday@ufl.edu

Heather Young
University of Florida
heather.young@ufl.edu

Introduction/Need for Research

Agricultural communication (AGCOM) originated in the United States and continues to expand nationally and internationally (Dyment et al., 2024; Parrella et al., 2021), making periodic curriculum review essential. Research has emphasized core competencies, course offerings, skills, and foundational theories in aligning curricula with student needs (Atkins et al., 2022; Atkins et al., 2025; Leal, 2016; Lael et al., 2020; Morgan & Rucker, 2013), as well as coursework that supports post-graduation success and industry-valued competencies (Akers, 2000; Cofelt & Smith, 2020; Lael et al., 2019). However, comprehensive reviews identifying priority areas—especially under limited resources—are still lacking. Such reviews, particularly when conducted by individuals familiar with coursework, are important for setting expectations, improving learning (Doerfert & Miller, 2006; Ilkiw et al., 2017), and responding to rapid technological change (Corder & Irlbeck, 2018; Lundy et al., 2022). The purpose of this study was to prioritize areas for AGCOM curriculum development when resources are limited.

Conceptual framework

Previous work on the needs of AGCOM curricula has focused on areas of need from multiple perspectives and then asked about the importance of each area individually. However, resources are limited, and very few programs can make focused improvements across the curriculum or start a new curriculum with all potential course offerings. Thus, the research group wanted participants to prioritize curriculum needs against one another to establish a starting point. The Q-sort activity was prefaced with the stance that all listed items were important, but for the purposes of this study, researchers wanted participants to think about each item and consider if it is *of minor importance*, *important*, or *critically important*, keeping in mind that not all may be possible, particularly if a program is just starting.

Methodology

Researchers explored AGCOM and related discipline literature to identify key items in AGCOM curriculum and refined this to 33 curriculum areas to use as statements in the Q-sort process. The current study is a foundational, pilot study with the goal of broader data collection after this initial process. Researchers recruited original or senior faculty in AGCOM with experience in developing and maintaining AGCOM curriculum to participate in this pilot. Twelve individuals were selected to participate, and seven ultimately completed the Q-sort process. Q-sorts were analyzed using a by-sorts by computing a by-person correlation matrix across 33 statements, and a principal component analysis (PCA) was performed. The unrotated solution was used for eigenvalues and scree inspection; two components were retained, and a varimax rotation was applied to aid interpretation. Factor loading standard errors were estimated as $1/\sqrt{N}$(with $N = 33$), and loadings were considered significant at $p < .01$ if $| \lambda | \geq 2.58/\sqrt{33}$.

Results/findings

We retained two rotated factors to surface nuance, as our study's goals were to pilot and refine. The unrotated diagnostics indicate a dominant consensus component in Factor 1 (EV = 4.05; 57.8%), and Factor 2 is considered an outlier view rather than a typology.

Factor 1: Global, Research-Forward Integration

Defined by six Q-sorts (all $p < .01$), Factor 1 strongly prioritizes engagement with global organizations (S32), undergraduate research opportunities (S23), and a university-wide hub for science communication (S33). It also supports international study abroad (S18), peer-to-peer teaching (S16), and collaboration with policymakers (S25). Conversely, it downranks strong writing skills (S6), visual media skills (S4), project-based assignments (S13), capstones (S21), social media analytics (S7), and internships (S17). Together, these preferences frame a perspective centered on global linkages and institutional infrastructure for science communication, with less emphasis on individual skills or applied project modalities.

Factor 2: Campaigns, Ethics, and Co-curricular Engagement

Defined by one sort, treated as an individual viewpoint, Factor 2 favors student organization involvement (S24), public awareness campaigns (S31), ethics in science communication (S10), plus data visualization (S14), social media analytics (S7), and internships (S17). It downweighs study abroad (S18), oral presentation (S5), reflective practice (S15), policy/economics (S3), field-based learning (S19), and alumni/industry engagement (S28). This profile emphasizes campaign-oriented, practice-forward cocurricular, and professional skillsets supported by ethical frameworks. This profile emphasizes campaign-oriented, practice-forward cocurricular, and professional skillsets supported by ethical frameworks.

Conclusions

Participants generally agreed on the prioritization of the 33 curriculum statements, with only a few individual deviations. One professor at an 1862 land-grant institution with only a bachelor's program showed a unique positive loading, likely due to the narrower program scope compared to peers with broader degree ladders. Another professor at a non-land-grant public institution with minors through PhD/EdD offerings reflected significantly broader laddering. These institutional contexts may influence differing prioritizations, integration with graduate or professional outcomes, portfolio or capstone expectations, and partnerships.

Implications/Recommendations/ Impact on Profession

Caution is warranted when interpreting these pilot results due to the small sample size. Still, strong consensus on Factor 1 may help guide priorities for new programs or for improving efficiency in AGCOM curricula. Programs might emphasize engagement with global organizations (Lamm et al., 2019), undergraduate research opportunities (Stripling & Roberts, 2013), and a university-wide science communication hub (Dudo, 2015), while de-emphasizing strong writing skills (Besley & Tanner, 2011), visual communication, photography and videography skills (Leal et al., 2012), and project-based assignments (Klein et al., 2019). Researchers will refine the instrument based on pilot feedback and collect broader faculty data to clarify how to prioritize resources in the AGCOM curriculum.

References

Akers, C. W. (2000). *High school agricultural communications competencies: A national Delphi study*. Texas Tech University.

Atkins, M., Lawson, K., & Telg, R. (2022). Modernizing high school agricultural communications competencies: A national Delphi study. *Journal of Applied Communications, 106*(4), 1–20. https://doi.org/10.4148/1051-0834.2459

Atkins, M., Telg, R., Lawson, K., & Baker, L.M. (2025). High school agricultural communication competencies: A national Delphi. *Journal of Applied Communications, 109*(2). https://doi.org/10.4148/1051-0834.2582

Brown, S. R. (1986). Q technique and methods: Principles and procedures. In W. D. Berry and M. S. Lewis-Beck (Eds.), *New tools for social scientists: Advances and applications in research methods*, Sage.

Corder, J. & Irlbeck, E. (2018). Agricultural communications skills, abilities and knowledge desired by employers compared to current curriculum: A literary review. Journal of Applied Communications, 59(4), 177–193. https://doi.org/10.5032/jae.2018.04177

Coffelt, T. & Smith, F. (2020). Exemplary and unacceptable workplace communication skills. *Business and Professional Communication Quarterly, 83*(4), 365–384 https://doi.org/10.1177/2329490620946425

Dyment, M., Specht, A., & Buck, E. (2025). New beginnings: Exploring agricultural communications curriculum development in Ontario. *NACTA Journal*, *68*(1). https://doi.org/10.56103/nactaj.v68i1.174

Ilkiw, J. E., Nelson, R. W., Watson, J. L., Conley, A. J., Raybould, H. E., Chigerwe, M., & Boudreaux, K. (2017). Curricular revision and reform: The process, what was important, and lessons learned. *Journal of Veterinary Medical Education*, *44*(3), 480–489. https://doi.org/10.3138/jvme.0316-068R

Leal, A. (2016). Career readiness of agricultural communication baccalaureate graduates: A three-tiered perspective. [Unpublished doctoral dissertation]. University of Florida.

Leal, A., Telg, R. W., Rumble, J. N., Stedman, N. L. P., & Treise, D. (2019). Exploring beyond the obvious: Social skills needed for agricultural communication baccalaureate graduates. *Journal of Applied Communications, 103*(2). https://doi.org/10.4148/1051-0834.2188

Leal, A., Lawson, K. M., Telg, R. W., Rumble, J. N., Stedman, N. L. P., & Treise, D. (2020). Technically speaking: Technical skills needed for agricultural communication baccalaureate graduates. Journal of Applied Communications, 104(3). https://doi.org/10.4148/1051-0834.2339

Lundy, L., Aenlle, J., Rumble, J. (2022). Introduction to agricultural and natural resources communications. In R.W. Telg, T. Irani, K. Kent, & L. Lundy (Eds.). Agricultural and natural resources communications. https://anrcommunications.org/

Parrella, J. A., Spence, J. R., Redwine, T., and Leggette, H. R. (2021). Characterizing viewpoints of scholars in agricultural communications as they relate to research themes in the Journal of Applied Communications: A Q methodological study. *Journal of Applied Communications, 105*(3). https://doi.org/10.4148/1051-0834.2389

Rost, F. (2021). Q-sort methodology: Bridging the divide between qualitative and quantitative. An introduction to an innovative method for psychotherapy research. *Counselling and Psychotherapy Research, 21*(1), 98–106. https://doi.org/10.1002/capr.12367