

Exploring the Applicability of the Science Communication Research Agenda to Agricultural Communications Scholarship

McKenna Bush, B.S.; Jean Parrella, M. S.; Madalynn Kainer, B.S.; Holli Leggette, Ph.D.

Introduction

- 2007-2010 *National Research Agenda (NRA): Agricultural Education and Communication* highlighted four research priorities important to agricultural communications. This agenda did not include specific agricultural communications recommendations (Doerfert, 2011).

- Agricultural communications research is not guided by a research agenda (Irlbeck & Buck, 2017). Developing a discipline specific one could provide much needed direction and help scholars work toward shared goals.

- Agricultural communications, a sub-discipline of science communication, could use the National Academies of Science, Engineering, and Medicine (NASEM) agenda as a guide for research and to unify scholarship (NASEM, 2017).

Research Questions

- 1) How many of the publications that cited the agenda used it to inform the research reported?
- 2) How many of the publications that used the agenda to inform research focused on agriculture, natural resources, and related disciplines?
- 3) How did the identified publications use the agenda to inform the research reported?
- 4) How does the agenda align with the scholarly base of agricultural communications?

Methods

- We conducted a philosophical study to establish a foundation for understanding the use of the NASEM agenda within the agricultural communications profession (Burbles & Warnick, 2006).
- According to Google Scholar on June 14, 2021, 279 publications cited the NASEM research agenda.
- We reviewed each of the publications to determine their use of the NASEM research agenda.
- We included only publications that reported empirical results in English, excluding books, book chapters, editorials, essays, colloquial papers, commentaries, duplicates, and artifacts not in English ($n = 155$).
- From the remaining 124 publications, we excluded publications casually citing the NASEM agenda ($n = 102$).

Findings

- 22 of the 124 empirical publications used the research agenda to inform the research reported, which is the intention of the agenda.
- 39 of the 124 empirical journal articles that cited the agenda focused directly on agriculture or natural resources. However, only 7 used the agenda to inform their research (e.g., sample selection).
- There is a clear overlap between agricultural communications research areas and research priorities identified by the agenda that can advance science communications and all sub-disciplines.

Agricultural Communications Research Themes (Edgar et al, 2009)

- Media relations
- Message framing
- Public perceptions



NASEM Research Recommendations

- Media representations
- Message framing
- Public perceptions

Conclusions & Recommendations

- Few scholar groups ($n = 22$) across science disciplines have used the agenda to inform their research.
- Seven scholar groups used the NASEM agenda in an agriculture-related discipline, two of which were agricultural communications focused.
- The NASEM agenda has applicability to agricultural communications research and scholars in the discipline should use principles and recommendations from the agenda that are relevant in agricultural contexts to guide their work.

References

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