

Building a Virtual Community:

Creation of an Agricultural Education PhD Program's Online Community of Practice

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Introduction

Online delivery of post-secondary education, including graduate degrees, is expanding worldwide. Lee (2020) suggests that a growing number of students choose online graduate programs for convenience and accessibility; to better fit lifestyles where careers and personal lives are already established. The doctorate in agricultural education program at the University of Missouri is delivered fully online to accommodate the needs of working students. Learners in the program reside across the country. Students engage with peers and faculty virtually by participating in interactive, online classes and by meeting virtually with professors to develop and carry out doctoral research. There are many agricultural master programs across the country which follow this same format, as well as undergraduate online classes.

Successful graduate students thrive through persistence, self-regulation, and motivation. These characteristics are even more essential for online learners. Hart (2012) identified several additional factors related to persistence for online degree success, including “a sense of belonging to the learning community” and “increased communication with the instructor” (p.19). Hart (2012) cited evidence showing positive relationships between social connections with peers, and persistence/retention in online degree programs. Social development theory stresses that competence, autonomy, and relatedness impact intrinsic motivation (Ryan & Deci, 2000). Relatedness refers to having a sense of belonging or closeness to people within a social group. A sense of belonging and connection to peers and faculty has been shown to contribute to PhD program retention and satisfaction in both face-to-face and online settings (Lewinski et al., 2017; Rooij et al., 2021).

Doctorate students in agricultural education at the University of Missouri connect with peers and professors through a variety of online platforms in class, including video conferencing, video and written discussion boards, and group projects. A doctoral student community of practice was conceived to strengthen the online learning community and increase the sense of belonging and relatedness for students in all stages of the program outside of the classroom.

How it Works

Community of practices allow individuals to achieve deeper understanding of common topics through regular interaction. The main objective for this community of practice is to increase positive, social interaction among peers and faculty outside of the classroom, while also connecting students with guest professors from across the country. Lewinski et al. (2017) found that positive interactions including “check-ins”, advice, and just being present with peers and faculty aids in student personal and professional growth during graduate studies.

The community of practice is open to doctoral students from all stages in the program along with all program faculty. Monthly meetings began in June 2021 all held through Zoom. Emails are sent out by a PhD student facilitator through an updated list prior to each meeting. Monthly meeting reminders contain a flexible agenda that include topics to be covered, departmental news, shout-outs to peers and faculty or guest speaker biographies.

Students are encouraged to share topics of interests, pose questions to peers and faculty and to simply get to know one another outside of class. Faculty members share departmental news, timely information related to progression in the program, upcoming conferences, and events. Students have been able to share vital information and helpful hints on topics such as time-management, organization, research and comprehensive exams.

The community has evolved by members' contributing individual needs and ideas. Beginning in November 2021, the community of practice began hosting monthly "brown bags" with guest professors from a variety of universities. Guest professors share their backgrounds and perspectives on research and education, provide helpful advice and insights, while provoking thought and discussion.

Results to Date/Implications

The University of Missouri Agricultural Education PhD Community of Practice has virtually connected students and faculty every month from June 2021 through April 2022. The community will be on break for the summer semester, then will reassess needs in the fall, and reshape to meet those needs. Average attendance includes six students and three faculty. Overall, 15 different students have joined at least one virtual meeting. Six professors from outside the university have joined the group to provide valuable insights and assist in building students' professional networks. Student attendance and participation has increased as guest professors began to join, as well as when valuable department information was included on the agenda.

Student interaction has increased outside of the virtual classroom. Students from various stages of the program who have not interacted in class are connecting and consulting with each other through email and text. Several have even met in-person at regional conferences and other events after getting to know each other through the virtual community. Strong faculty involvement in the community of practice meetings has allowed students to feel connected and supported outside of class. The department has noted an increase in IRB applications and abstracts for conference presentations as compared to the year prior. It is not known to what extent this is due to the Community of Practice versus other factors.

Future Plans and Advice

A needs assessment will be conducted in the fall of 2022 to identify strengths, weaknesses, benefits, and challenges of the virtual community. Results will be used to make adjustments to the format as warranted. This idea can be easily replicated by secondary and post-secondary degree programs of all levels with students on virtual or hybrid learning platforms.

Costs and Resources Needed

The cost for this community is free! Resources such as zoom, email and web-based publishing needed for advertising and hosting the meetings are all virtual, which makes this idea easily replicated by any institution for any level of education program. Planning consists of only one to two hours per month, and includes contacting speakers, creating web-flyers, emailing members, and sending follow-up emails. This is a low-cost, using minimal time to plan idea!

References

- Hart, C. (2012). Factors associated with student persistence in an online program of study: A review of the literature. *Journal of Interactive Online Learning*, 11(1), 19–42.
- Kemp, W. C. (2002). Persistence of adult learners in distance education. *The American Journal of Distance Education*, 16(2), 65-81.
- Lee, K. (2020). A phenomenological exploration of the student experience of online PhD students. *International Journal of Doctoral Studies*, 15.
- Lewinski, A. A., Mann, T., Flores, D., Vance, A., Prvu Bettger, J., & Hirschey, R. (2017). Partnership for development: A peer mentorship model for PhD students, *Journal of Professional Nursing*, 33(5), 363-369.
<https://doi.org/10.1016/j.profnurs.2017.03.004>
- Liu, S. Y., Gomez, J., & Yen, C. (2009). Community college online course retention and final grade: Predictability of social presence. *Journal of Interactive Online Learning*, 8(2), 165-182.
- Müller, T. (2008). Persistence of women in online degree-completion programs. *International Review of Research in Open and Distance Learning*, 9(2), 1-18.
- Rooij, E.M., Fokkens-Bruinsma, E, & Jansen E. (2021). Factors that influence PhD candidates' success: The importance of PhD project characteristics, *Studies in Continuing Education*, 43(1), 48-67. <https://doi.org/10.1080/0158037X.2019.1652158>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>