Quintana "Quincy" Clark

""If I can help students enhance their confidence in their ability to academically achieve, I've done my job. Because increased confidence begets motivation."
— Quintana "Quincy" Clark, PhD candidate, Department of Agricultural Sciences Education and Communication

THE STUDENT: While growing up in the San Francisco Bay area, Quincy Clark keenly observed that her elementary school teachers had little to no expectations for her to academically achieve in math or science. Clark is all too aware of the effect that the lack of teacher expectations has on a student's motivation to learn — "It kills it," she says. Now she taps that experience to develop learning tools and methods that instill confidence in students who face adverse, non-inclusive learning environments. She earned a BS in management of information systems at the University of San Francisco. When her husband was recruited to teach engineering at Purdue, Clark decided to earn a master's degree in technology for education before beginning a doctoral program in agricultural sciences education and communication in fall 2016. "My interest is in innovative ways to teach integrated STEM using real-world contexts," she says. "The interdisciplinary nature of agricultural life sciences provides varied and timely problems to solve."

THE RESEARCH: Clark's research focuses on innovative practices for teaching and learning integrated STEM through problem solving with mathematical modeling using cultural and community contexts. She is also investigating STEM learning experiences of underserved middle school students; and the impact STEM intervention/mentoring programs have on enhancing underserved students' preparedness for, and persistence in, upper-level STEM coursework at the secondary and postsecondary levels. Clark calls her research "promoting equity in STEM education by building students' confidence."

RECIPROCAL MENTORING: Clark enthusiastically volunteers to mentor students. She has led mentoring workshops for several STEM intervention programs, including Purdue Bound, the Summer Research Opportunity Program and Mentoring@Purdue Summer Scholars program. She is a graduate research assistant for a National Science Foundation project, "Modeling Agri-Life Sciences through STEM-Integration," the coordinator of research Initiatives for Mentoring@ Purdue and a scholar mentor for the Alliance for Graduate Education and the Professoriate, an NSF initiative aimed at significantly increasing the number of domestic students persisting to doctoral degrees in STEM. As a nontraditional student, Clark was initially worried about not fitting in. She credits her advisor, Levon Esters, associate professor of ASEC, and her peers for their willingness to mentor her. "My network's support has been impactful," she says.

FUTURE PLANS: After graduating in May 2020, Clark plans to remain in academia, where she can continue to improve STEM teaching and learning technologies. She has high aspirations for her future as a faculty member. "I would like to continue my research interests — to investigate the effects of engineering-based tasks through which students solve real-world problems, and how contextual learning impacts their awareness of, attraction to, and retention in STEM." In her spare time, Clark enjoys spending time with family and friends, running and crocheting. She also aspires to pick up gardening again to continue the tradition her grandmother began as an early urban gardener in San Francisco.