Barbara Chamberlin, PhD, New Mexico State University
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EDUCATION & TRAINING

BA 1993	New Mexico State University	Communications Studies
MA 1996	New Mexico State University	Agricultural and Extension Education
PhD 2003	University of Virginia	Educational Technology

RESEARCH & PROFESSIONAL EXPERIENCE

2023–Present	**Department Head**
2020–2023	**Interim Department Head**
2013–2020	**Assistant Department Head**
2013–Present	**Professor**, **Extension Instructional Design and Educational Media Specialist**, Innovative Media, Research & Extension, New Mexico State University (NMSU)
2008–2013	Extension Instructional Design and Educational Media Specialist, **Associate Professor**, New Mexico State University (NMSU)
2003–2008	Extension Instructional Design and Educational Media Specialist, **Assistant Professor**, New Mexico State University (NMSU)
2000–2003	Graduate Assistant, Teaching Assistant: University of Virginia
1994–2000	Multimedia Specialist II, Agricultural Communications, NMSU
1998–2000	Software Development Instructor, NMSU Doña Ana Community College

COURSES TAUGHT

AXED 490: Technology in the Agricultural Workplace (New Mexico State University)
EDLF 703: Developing Educational Computer Games (University of Virginia)
EDUC 589 Technology Infusion in Education (University of Virginia)

SYNERGISTIC ACTIVITIES

1. Learning Games Lab: Direct research in this interdisciplinary lab includes formative review of games in development regarding interface and character design, storyline, and challenge and playability of games. Oversee development of activities for youth game lab participants to inform game developers of trends in gameplay and effectiveness of existing educational games.
2. Development of Media for Target Audience and Math/Science Content: While educational media development under my direction includes a wide variety of audiences and content, recently I have been involved in science and math learning projects for middle school, high school, and college. Additional projects include food safety, nutrition, and financial literacy games, apps and educational tools.
3. Administrative Experience: Serve as interim department head and one of two faculty members in educational media production studio, overseeing instructional design, reporting and facilitation of all grant-funded media development projects.
4. Professional Presentations at National and International Audiences: Each year, I present at numerous professional and academic organizations spanning several disciplines, including

STEM education, food safety outreach, obesity prevention, game and app development, and usability testing. I consult with companies on development and testing of media and apps.

GRANTS RECEIVED

- Co-PI on "Enhancing Nutrition & Dietetics Education with Artificial Intelligence & Virtual Reality Simulations" (USDA-NIFA, 1/1/22–12/31/24).
- Co-PI on "GLEAN (Game Learning to Educate and Advance kNowledge): Transformative Food Safety Training for Farmers Market Vendors" (USDA-NIFA FSOP 07/01/2022–06/30/2025)
- Co-PI on "Advancing 4-H Youth Careers in Food and Agriculture via Biotechnology and STEM" (USDA-NIFA, 11/1/21–10/31/25).
- Co-PI on "Development and Implementation of Innovative Food Safety Training Tools for the Production and Distribution of Microgreens" (USDA-NIFA, 9/1/19-8/31/23).
- Co-PI on "Innovators from Marginalized Communities: Interactive Labs Which Help Students See Themselves in Agricultural Careers." (USDA-NIFA HSI, Oct 21–Sept 26).
- Co-PI on "Don't Wash My Chicken?! Developing Food Safety Messages to Address Consumer Barriers to Safe Food Handling Practices" (USDA-NIFA, 07/01/19–07/14/23).
- Co-PI on "Bridging The Gap: Expanding A HACCP-Based Curriculum To Help Produce Growers Treat Agricultural Water" (USDA-NIFA, 9/30/20–9/29/23).

HONORS & AWARDS

Digital media products developed under my leadership in the Learning Games Lab have received the following awards:

From the Association for Communications Excellence in Agriculture, Natural Resources, and Life and Human Sciences (ACE): 2023 ACE Outstanding Professional Skill Award for Information Technology (Game Over Gopher math games); 2022 ACE Outstanding Professional Skill Award for Information Technology (Foods & Moves Preschool App Suite); 2022 ACE Gold Award for Interactive Media Program (Foods & Moves Preschool App Suite); 2022 ACE Gold Award for Innovative Use of Communication Technology (Unpeeled: Using a Game Jam to Enhance Extension Outreach; ACE Silver Award for Writing for Targeted Audiences (Working Out Loud: Reaching Game Developers With Our Work in Accessibility); 2021 ACE Professional Skill Award for Information Technology (CONSERVE Water Sampling & Water Testing); 2021 ACE Gold Award for Innovative Use of Communications Technology (CONSERVE Water Sampling & Water Testing); 2021 ACE Gold Award for Interactive Multimedia/Web Graphics (Virtual Insect Collection Lab).

From ACSESS: the Alliance of Crop, Soil, and Environmental Science Societies: 2021 Outstanding paper in Natural Sciences Education, awarded to "Impact of multimedia learning tools in agricultural science classes."

From the Association for Communications Excellence in Agriculture, Natural Resources, and Life and Human Sciences (ACE): 2020 ACE Gold Award for Interactive Media Program (Outbreak Squad); 2020 ACE Gold Award for Motion graphics/augmented reality/virtual reality/animation (Irrigation Training Modules)

From the International Serious Play Awards: 2020 Gold for Curse Reverse.

*From the EdTech Award*s: 2020 Finalist (Curse Reverse).

From All Digital School: 2020 Editors' Pick (Math Snacks).

SELECTED PUBLICATIONS

Erikson, L., Hansen, L., Chamberlin, B. A. (2019). A Model for Youth Financial Education in Extension Involving a Game-Based Approach. Journal of Extension, 57(4)

Ulery, A., Muise, A. S., Carroll, K. C., Chamberlin, B., White, L., Martinez, P., Spears, L., Gleason, J. (2020). Impact of multimedia learning tools in agricultural science classes. Natural Sciences Education, 49(1). doi:10.1002/nse2.20011

Cezarotto, M., Chamberlin, B. A. (2021). Towards Accessibility in Educational Games: A Framework for The Design Team. InfoDesign, 18 (3), 102-113.

Engledowl, C., Al-younes, M., Chamberlin, B. A., Stanford, T. B. (2021).Learning acquired from a computer game-based early algebra intervention. School Science and Mathematics, 121, 495–508.

Cezarotto, M., Martinez, P. N., Chamberlin, B. A. (2022). Redesigning for Accessibility: Design Decisions and Compromises in Educational Game Design. International Journal of Serious Games, Vol. 9, No. 1 (2022), 17-33., http://dx.doi.org/10.17083/ijsg.v9i1.469

Shearer, A., Hoover, D., Gleason, J. B., Chamberlin, B. A., Abraham, D., Martinez, P. N., Klein, J., Riser, D., Snider, S., Kniel, K. (2022). Development and Evaluation of Educational Web-based Food Safety Game, Potluck Panic!, Food Protection Trends, 42(2), 113-123. https://doi.org/10.4315/FPT-21-022

Reyes, L.I., Johnson, S.L., Chamberlin, B., Mena, N.Z., Bellows, L.L. (2022). Acceptability of digital apps developed to engage preschoolers in food tasting and physical activity in the home environment. Ann Behav Med, 56 (Suppl 1):S103.

Cezarotto, M., Martinez, P., Chamberlin, B (2022). Developing Inclusive Games: Design Frameworks for Accessibility and Diversity. In B. Soboto (Ed), Game Theory: from theory to practice. ISBN: 978-1-83768-060-3.

Reyes, L.I., Johnson, S.L., Chamberlin, B., Bellows, L.L. (2023). Engaging preschoolers in food tasting and movement activities using mobile apps. Journal of Nutrition Education and Behavior.