CURRICULUM VITAE Justin Szabo, PhD

Academic Preparations

Drake University, School of Education

PhD in Education, 2021

Dissertation: Engaging learners with virtual pedagogy: Virtual reality adoption and the lived

experiences of K-12 educators

Committee: Dr. Robyn Cooper (Chair), Dr. Trent Grundmeyer, Dr. Carol Heaverlo

University of Northern Iowa, College of Education

MAE in Postsecondary Education: Student Affairs, 2013

University of Northern Iowa, Division of Continuing Education & Special Programs

BA in General Studies, 2009

New Mexico State University

National Student Exchange, 2006 – 2007

Professional Experience

Iowa State University, School of Education

Research Scientist, 2021 - Present

Associate Graduate Faculty Status, 2024 – Present

- Collaborate with clients, support institutional research activities, conduct evaluations of academic programs, and contribute data for institutional improvement, policy development, accreditation and technology review
- Apply research and evaluation expertise to deliver a broad spectrum of services related to research, analytic inquiry, and technical consulting
- Provide extensive experience in a variety of research and evaluation focus areas, including
 projects related to climate and diversity; curriculum development; health and well-being;
 personal and social responsibility; social, emotional, and behavioral initiatives; STEM;
 student learning and development; teacher education; and technology
- Design and lead project evaluations and research projects; proposal preparation for externally funded projects; continuous and thoughtful communication with clients, including School of Education faculty and staff; direct supervision of undergraduate and graduate research assistants; mentoring and training for students and staff in specific content or project areas; and dissemination of project evaluation and research results
- Utilize skills in research design and methodology, data analysis, evaluation practices and procedures, data management, and dissemination of evaluative and research findings through evaluation reporting, peer-reviewed research publications, research presentations at professional conferences, and presentation of evaluation findings
- Maintain and update departmental website, outreach, and communication operations
- Teach courses in the School of Education and serve on doctoral dissertation and master's thesis committees

Drake University, School of Education

Doctoral apprentice, 2021

 National Science Foundation and Spencer Foundation grant applications – Proposal for studying virtual reality use in medical professionals training; provided consultation on VR hardware and software for use in the study

Doctoral apprentice, 2020

 Co-taught DOC 360 Learning, Leading, and Technology, a doctoral-level course, with Dr. Robyn Cooper; taught lessons, graded student work, provided expertise and delivered content about emerging instructional technologies

University of Northern Iowa, Division of Continuing Education & Special Programs Assistant Director. 2017 – 2020

- Collaborated with academic departments across campus to schedule, develop, and maintain online and distance courses and programs at the graduate and undergraduate levels
- Managed the Guided Independent Study (GIS) program, including consulting with faculty about course offerings, supervising GIS enrollment staff, and coordinating with Instructional Support Services Manager regarding online course development
- Conducted assessment efforts within the division relating to program and student learning outcomes for interdisciplinary majors, including academic program reviews and Higher Learning Commission site visits
- Served as campus coordinator and voice of National Student Exchange (NSE) through facilitating exchanges for students to attend another college or university in the United States, U.S. territories, and Canada for one or two semesters, worked side by side with assistant NSE coordinator to promote, recruit, and advise students about the possibilities of life outside their comfort zone to build their skillset as future leaders

Coordinator, 2013 – 2017

- Created and maintained eLearning advising portal for General Studies majors, along with digital advisee folder system while continuing to advise prospective and current students
- Worked in partnership with Continuing Education marketing manager to develop NSE promotional efforts including NSE Day, targeted recruitment emails, branding, staff/faculty outreach, and managing the UNI NSE Facebook page to increase program participation and retention
- Created, developed, and maintained OnBase imaging system for GIS program workflow and document storage through a partnership with IT department
- Served on Military & Veteran Student Services Committee, Professional & Scientific (P&S)
 Council, P&S Employee Relations Committee, P&S Communication Committee, Document
 Imaging User Group, Raymond and Genevieve Schlicher Scholarship committee, and as
 NSE Mentor for new coordinators

Support Specialist, 2011 – 2013

- Provided academic advisement to declared and prospective General Studies, Bachelor of Liberal Studies, and Individual Studies students
- Served as Assistant NSE Coordinator; coordinated outgoing/incoming students, and represented NSE at on- and off-campus recruitment events
- Assisted NSE Coordinator with implementing successful program-related tasks
- Processed enrollments and scheduled classes for GIS
- Advised distance students about GIS policies and procedures
- Performed registrar functions for the GIS program and Continuing Education students

Current Research Interests

Virtual reality as an instructional technology Adapting research methods to conduct research within virtual environments Student learning outcome comparisons based on instructional delivery mode (e.g., online asynchronous, online synchronous, on-ground, virtual spaces)

Courses Taught

lowa State University, School of Education

- EDUC 539B Immersive Education: Teaching and Learning in Virtual Reality, a graduatelevel online course focused on the use cases for virtual reality in education, as part of the online Educational Technology graduate program
- RESEV 5520 Basic Educational Statistics, a graduate level online course focused on introducing statistical analyses, including frequencies, t-tests, ANOVAs and correlations
- RESEV 550 Introduction to Educational Research, a graduate-level online course focused on providing students an overview of qualitative and quantitative landscape of educational research

University of Northern Iowa, Curriculum & Instruction Department

 LRNTECH 5110 Developing and Directing Online Learning, a graduate-level online course focused on planning, implementing, and evaluating online learning environments and programs as part of the online Learning Technologies & Instructional Design master's program

University of Northern Iowa, Individual Studies Department

- INDIVSTU 4198 Individual Studies Project: Interdisciplinary Portfolio Development, an undergraduate-level online course for upper-division undergraduate students in the Individual Studies, General Studies, and Bachelor of Liberal Studies programs
 - Facilitated faculty assessment retreats for evaluating departmental student learning outcomes

Drake University, School of Education

 Co-taught DOC 360 Learning, Leading, and Technology, a doctoral-level course, with Dr. Robyn Cooper; taught lessons, graded student work, provided expertise and delivered content about emerging instructional technologies

Selected Evaluation Portfolio

National Science Foundation

Computer Science As Career (CSAC) Scholars Program – S-STEM Track 3, 2023 - Present

• Serve as part of the evaluation team in RISE and at Virginia Tech University to conduct a mixed- methods evaluation. This includes data collected for NSF tracking purposes, a STEM identity and efficacy measurement scale, and interviews with scholars at TAMUC.

Computer Science for All – George Mason University and University of Alabama, 2022 – Present

Serve as primary evaluator to gather the beliefs and experiences of teachers who
implemented the program with their students to make improvements to and gain an
understanding of the challenges encountered in the program through surveys, interviews,
and focus groups. The inter-institutional collaboration and multi-school sample of teachers
provides a glimpse into the similarities and differences among districts within the program.

USM Chemistry Research Experience for Undergraduates – University of Southern Mississippi, 2021 – Present

 Serve as the evaluator of the USM-Chemistry REU, a summer research program on USM's campus in which undergraduate students become active members of interdisciplinary groups and work with faculty members, post-doctoral researchers, graduate students, and industry. Program evaluation includes pre-/post-program surveys for students, faculty, and graduate assistants.

Smart Integrated Farm Network for **R**ural **A**gricultural **C**ommunities (SIRAC) – Iowa State University, University of Missouri, Missouri University of Science and Technology, University of Kentucky, and Iowa Soybean Association, 2021 – 2024

Serve as project evaluator of the SIRAC project, a novel socio-technical platform that will
create a smart and connected farm network through a multi-institutional consortium of
researchers. Involvement includes performing project evaluation through interviews, focus
groups, and surveys to measure progress toward meeting project objectives. Other
evaluation activities include attendance at bi-weekly team meetings and the annual
meeting on ISU's campus.

Biological **M**aterials **a**nd **P**rocesses (BioMaP) Research Experience for Undergraduates – Iowa State University, 2021 – 2023

 Serve as the evaluator of the BioMap REU, a summer research program on ISU's campus in which undergraduate students become active members of interdisciplinary groups and work with faculty members, post-doctoral researchers, graduate students, and industry. Annual evaluation of the program includes pre- and post-program surveys for students, faculty, and graduate assistants.

Launching Aerospace's Underrepresented Students into the Next Chapter-Unmanned Aerial Systems (LAUNCH-UAS) Research Experience for Undergraduates – Iowa State University, 2021 -2023

Served as evaluator for the summer research program on ISU's campus in which
undergraduate students became active members of interdisciplinary groups and worked
with faculty members, post-doctoral researchers, graduate students, and industry. Annual
evaluation of the program included pre- and post-program surveys for students, faculty,
and graduate assistants.

Developing Virtual Content for STEM Career and Technical Education. – Eastern Iowa Community College, 2021 – 2023

Served as evaluator of the development and implementation of virtual training resources
for automotive blower, instrumentation, and lighting systems, as well as for home HVAC
systems. This web-based virtual training utilizes WebGL for the training platform. RISE
conducted surveys, interviews, and focus groups to evaluate the progress made and
hurdles encountered by the development team in meeting their project objectives.

RAPID: Graduate student experiences of support and stress during the COVID-19 pandemic – lowa State University, Montana State University, and Texas A&M Commerce, 2021

 Served as an evaluator for the NSF RAPID grant which looked at graduate student experiences during the COVID-19 Pandemic. The goal of the project was to understand what helps graduate students feel supported during a crisis – both completing their current degree and in their career aspirations. Evaluation activities included focus groups.

U.S. Department of Agriculture

School-based Agricultural Education for All – Iowa Ag Literacy Foundation, 2022 – Present

 Serve as the evaluator for the Supervised Agricultural Education (SAE) for All program, which aims to develop resources and training for teachers to implement and enhance their SAE pedagogy and conduct surveys annually of teachers in the field.

State of Iowa

State of Iowa Governor's STEM Advisory Council – Iowa STEM Monitoring/Scale-Up, 2021 - Present

• Lead evaluation efforts for RISE's component of the statewide evaluation for the Iowa STEM Monitoring Project (ISMP) to measure educator experiences with the Iowa Scale-Up Program in partnership with the University of Northern Iowa's Center for Social and Behavioral Research (CSBR) and Iowa Testing Programs at the University of Iowa.

Iowa Department of Education – Iowa Community College Guided Pathways, 2021 – 2022

 Led efforts to evaluate the lowa Guided Pathways multi-year evaluation to provide feedback to the lowa Department of Education and the 15 community colleges in lowa as they implemented a series of reforms to support student completion. RISE collected data from each participating community college to learn more about their perceived experiences, successes, and challenges related to implementing Guided Pathways on their campuses and their experiences in identifying and working towards goals related to equity and work-based learning.

Iowa State University

Global Perspectives Inventory (GPI), 2021 – Present

 Supervise the operations of the Global Perspective Inventory (GPI) assessment, a student learning and development inventory measuring how students think, view themselves as people with cultural heritage, and relate to others from other cultures, backgrounds and values. The emphasis placed on cognitive, intrapersonal, and interpersonal dimensions provides a holistic approach to assessing learning and development.

Department of Agricultural and Biosystems Engineering (ABE) Senior Exit Evaluation, 2021 – Present

Evaluate the ABE undergraduate program by reaching out to graduating seniors to respond
to exit surveys. Students are specifically asked to respond to a variety of questions related
to their major options, learning outcomes, learning community participation, departmental
facilities, departmental instructors and classes. Students are also asked about the
inclusiveness of the department and how to improve the climate for a diverse body of
students. The results of this evaluation are provided to the department on an annual basis
for departmental planning.

Miller Faculty Fellowship Program: Using 3-D printed terrain models to improve spatial thinking in the geosciences, 2022 – 2023

Served as part of the evaluation team from RISE for the four ISU faculty members who
received a Miller Grant from the ISU Center for Excellence in Teaching and Learning to use
3D printed terrain models and develop and assess map-centric STA exercises for classes,
labs, field trips and the ISU field camp in Wyoming. RISE served as the evaluator for the
educational component of the grant.

Department Enhancement Program, 2021 – 2022

 Conducted the analysis of interview and focus group transcripts for the ISU Department Enhancement Program, which was formed because of ADVANCE, an NSF funded program designed to help to recruit and retain a diverse, highly qualified and cohesive faculty body.

Non-Profit Sector

Youth & Shelter Services (YSS) – Achieving Maximum Potential (AMP), 2021 - 2022

• RISE was hired by YSS to assess the AMP program. The Program & Activity Assessment Tool (PAAT) was modified to measure how much and how well the program provides its members with a learning experience that promotes positive youth development.

Selected Scholarly Works and Presentations

- **Szabo, J.** (2023). VR 4 RL: Everyday uses and practical applications for virtual reality in the classroom. University of Northern Iowa Learning Technologies & Instructional Design master's program residency meeting. Invited Presentation: Cedar Falls, IA.
- **Szabo, J.**, Guhin, A., & Vincent, A. (2022). Iowa Governor's STEM Monitoring 2021-2022 Scale-Up Educator Survey Findings. Presentation: Online via Zoom.
- **Szabo, J.** (2021). Engaging learners with virtual pedagogy: Virtual reality adoption and the lived experiences of K-12 educators. (Publication number 28771272). [Doctoral dissertation, Drake University School of Education]. ProQuest.
- **Szabo, J.** (2020). VR/AR 4 RL: Everyday uses for virtual and augmented reality in the home and workplace of the future. Drake University Learning, Leading & Technology Technology with a Purpose. Presentation: Des Moines, IA.
- **Szabo, J.** (2019). VR 4 RL: Everyday uses for virtual reality in the home and workplace of the future. Drake University Technology and Organizational Leadership Tech Talk. Presentation: Des Moines, IA.
- **Szabo**, **J.** (2019). Coordinating the National Student Exchange at home-tuition-only campuses. Unpublished. Drake University.
- Burford, R. & **Szabo**, **J.** (2019). Working with your outgoing students. National Student Exchange Professional Institute. Presentation: Online via Zoom.
- Cunningham, K., **Szabo, J.**, Kosalka, M., & Howard, C. (2018). Guided Independent Study faculty workshop. University of Northern Iowa.
- **Szabo, J.**, Balazs, N., & Meyer, G. (2018). The end of your comfort zone: Coordinating as NSE alumni. National Student Exchange Annual Placement Conference. Presentation: Myrtle Beach, SC.
- **Szabo, J.**, Berning, M., & Emery, L. (2018). Going the distance: Advising for individual studies majors, continuing education courses, and National Student Exchange. University of Northern Iowa Academic Advising Workshop. Presentation: Cedar Falls, IA.
- **Szabo**, **J.** (2017). Engaging students using embedded rubrics in eLearning. University of Northern Iowa Annual Distance Education Conference. Presentation: Cedar Falls, IA.
- Baham, M., Chrans, L., Dressler, K. & **Szabo, J.**, (2017). NSE Professional Institute: Marketing strategies. National Student Exchange Annual Placement Conference. Presentation: Spokane, WA.
- Ortiz, H., Perez, J., & **Szabo, J.** (2017). Marketing and recruitment webinar. National Student Exchange Webinar Series. Presentation: Online via Zoom.
- **Szabo**, J. (2015) Placement conference address. National Student Exchange Annual Placement Conference. Presentation: Albuquerque, NM.
- **Szabo**, **J.** (2012). Studying the approachability of student affairs professionals based on appearance. Unpublished. University of Northern Iowa.

Szabo. J. (2012). Undecided or multiple curiosities: Assessing interdisciplinary program awareness. Unpublished. University of Northern Iowa.

Szabo. J. (2012). The ivory racetrack: A history of the automobile's impact on college campuses. Unpublished. University of Northern Iowa.

Professional Development, Awards, and Certifications

- Associate Graduate Faculty Status Iowa State University, 2024
- Professional development stipend. Awarded by the UNI Continuing & Distance Education office, 2023
- ISU School of Education Star of Excellence Award, 2022
- Professional development stipend. Awarded by the UNI Continuing & Distance Education office, 2018
- Quality Matters course peer reviewer certification, 2017
- Quality Matters Using Instructional Materials & Technology to Promote Learner Engagement (UMTE) workshop, 2017
- Quality Matters Improving Your Online Course (IYOC) workshop, 2017
- Quality Matters Designing Your Online Course (DYOC) workshop, 2016
- Online course development award. Awarded by the UNI Continuing & Distance Education office, 2015
- Applying the Quality Matters Rubric (APPQMR) workshop, 2015
- Wildland firefighting certification University of Wisconsin, Steven's Point, 2006

Professional Service

- ISU School of Education Awards Committee (2024 Present)
 ISU School of Education Committee for Course Idea Generation (2022 Present)
- ISU School of Education Committee for Educational Technology (2022 Present) ISU School of Education Undergraduate Scholarship Committee (2022 2024)
- UNI Higher Learning Commission accreditation preparation sub-committee: Criterion 4
 Teaching and Learning: Evaluation and Improvement (2019 2020)
- National Student Exchange consortium mentor for new coordinators (2015 2020)
- UNI Raymond and Genevieve Schlicher Scholarship committee (2011 2020)
- UNI Military and Veteran Student Services committee (2013 2020)
- UNI Document Imaging Users Group (2016 2020)
- UNI Up-Close representative for National Student Exchange (2012 2018)
- UNI Professional & Scientific Council elected representative (2015 2017)
- UNI Professional & Scientific Council Employee Relations committee (2015 2017)
- UNI Professional & Scientific Council Communications committee (2015 2017)
- UNI Academic Advising Network (2011 2017)

Student Program of Study Committee Membership

Iowa State University, School of Education

Shristi Shrestha – Master's Thesis Title: *Pre-service teachers' perceived barriers to and enablers for the integration of generative artificial intelligence tools in classrooms.*

Kadir Karakaya – PhD Dissertation Title: In-progress Ozlem Karakaya – PhD Dissertation Title: In-progress

Hardware and Software Experience

Learning Management Systems & Content Creation

Blackboard Learn

Canvas

YouTube Studio

Vegas Movie Studio

Prezi

Video Conferencing

Zoom Webex Teams

Google Meet

VR-Related

VR HMDs: Valve Index, HTC Vive, Oculus Quest

AltspaceVR Engage Spaces

3D Printing

Tinkercad Prusaslicer

Research-Related Software

NVivo SPSS Qualtrics **General Business Software**

Microsoft Windows and

Office Suite

Google Workspace Linux: Mint and Ubuntu

Studio Box

Peoplesoft OnBase Workday Salesforce Basecamp

Asana