

Building Writing and Communication Skills in Undergraduate Researchers

doi: 10.18833/spur/5/4/12

Effective communication of research findings is an essential feature of undergraduate research. It also is one of the most challenging skills for mentors to teach and students to develop. We are pleased to introduce this special issue of *SPUR*, which offers multidisciplinary methods and examples for building writing and communication competencies in undergraduate research experiences.

The assessment article conveys the transformative learning that occurs when students present their research. Research by Kendra Stiwich and Victoria Ross (Vancouver Island University) shows that presenting at campus symposia can foster a sense of belonging at the university. They offer recommendations for adapting showcases of undergraduate research to help students feel supported and valued as members of the campus community.

In the practice section, we feature two articles about incorporating elements of undergraduate research into other evidence-based learning practices. Jing Tian, Yiheng Wang, Yingzhe Lei (Wuhan University), and Chang Ren (Civil Aviation Flight University of China) present a case study about applying principles of inquiry-based learning (IBL) to the design of undergraduate research experiences in geographical information science. The authors explain how China's goals to improve the quality of higher education inspired their efforts to integrate IBL with undergraduate research to encourage students' innovative thinking. Quentin Sedlacek (Southern Methodist University) and Corin Gray, Viviana Vigil, Bethsabe Gonzales, and Corin Slown (California State University, Monterey Bay) show how elements of course-based undergraduate research experiences (CUREs), such as discovery, iteration, and collaboration, can be incorporated into faculty development as well as student learning. They find that the goal of developing CUREs across multiple departments can be attained by structuring faculty learning like a CURE.

The vignettes describe an array of curricular and cocurricular possibilities for students to communicate their research with diverse audiences in various modalities. Emily Sendin (Miami Dade College) outlines a podcasting experience for first-year writing students that connects those

early researchers with campus organizations dedicated to environmentalism and sustainability. Sendin's students research, write, and produce the *Urbanites* podcast on ecological issues affecting local communities. Lorraine S. Wallace and Benjamin R. Templeton (Ohio State University) discuss a visual abstract assignment that teaches medical research communication strategies. They explain how creating graphical summaries of methodologies and findings helps students make their research understandable and engaging for general audiences.

In the next vignette, Natasha Oehlman (California State University, Monterey Bay), Heather Haeger (University of Arizona), Quentin Sedlacek (Southern Methodist University), and Lily Amador (California State University, Monterey Bay) examine how writing reflectively about research contributes to identity development and self-efficacy in students from traditionally underrepresented groups. The authors find that reflective writing and structured peer feedback enhance the high-impact practice of undergraduate research. Ambria C. Crusan and Megan Baumler (St. Catherine's University) describe a collaboration between their nutrition and dietetics students and a community health clinic serving uninsured individuals. Undergraduate researchers developed a nutrition assessment tool to meet the needs of patients in culturally inclusive, just, and ethical ways.

Neal Harmeyer (Purdue University) shares a vignette about undergraduate researchers utilizing materials from university archives and special collections. Students in various courses learn from faculty and archivists how to conduct archival research related to past student life, institutional history, and collections of personal papers and records and then publish their work on course websites. Pheroze Unwalla (University of British Columbia) discusses a Middle East studies research workshop that guides students through the research and writing process, resulting in a conference paper. Unwalla explains that students in the workshop, which is paired with a course in Middle East studies on decolonization, also learn to challenge prevailing power structures and how to create more inclusive practices.

The final vignette by Melissa Pilgrim (University of South Carolina, Upstate) discusses the practice of students giving and receiving constructive feedback in the dissemination stage of research. Pilgrim finds that review processes successfully prepare students to present at conferences and publish in an undergraduate research journal.

The book review of Scott Lanning and Caitlin Gerity's *Concise Guide to Information Literacy*, 3rd edition, by Christine Edwards (University of Central Oklahoma) applauds its clarity, accessibility, and simplicity in presenting complex concepts. Edwards recommends the text as a useful resource for improving information literacy.

This special issue underscores the point that research must be cogently communicated to fulfill its purpose of

advancing human understanding. As part of the research process, undergraduate researchers need to disseminate and circulate their work to diverse audiences of peers, scholars, community members, and other stakeholders. That practice transforms undergraduates into scholars engaged in the exchange of ideas. We are grateful to the authors published in this issue for sharing inspiring practices for guiding undergraduate researchers in the critical endeavors of writing and communication.

Introducing our new Editorial Advisory Board Members



Dr. Belinda Ommering

Dr. Belinda Ommering is currently a senior researcher at HU University of Applied Sciences Utrecht (The Netherlands). After obtaining her BSc in pedagogical sciences and her MSc in child and family studies at Leiden University, she obtained her Ph.D. with distinction at Leiden University Medical Center. The title of her dissertation was “Future physician-scientists: Let’s catch them young! Unravelling the role of motivation for research.” During this period, she was secretary and active member of the national expert group on undergraduate research of the Netherlands Association of Medical Education. Furthermore, she was part of the steering group on research-based learning and contributed to designing undergraduate research courses for medical students by translating her research to practice. She has experience as a research mentor at the undergraduate and postgraduate levels. She has co-authored several papers with undergraduates. In her current position, she is part of the research group that focuses on research methodology and the development of research competence among undergraduates and professionals. Dr. Ommering has published eleven research studies focused on research competence in high-quality journals, including *PlosOne*, *Medical Education*, *BMJ Open*, and *BMC Medical Education*. Furthermore, she published four theoretical and expert view papers in one book chapter and several high-quality journals, including *Studies in Higher Education*, *Medical Teacher*, and *Perspectives on Medical Education*. She is an expert in qualitative research methods, quantitative research methods, and mixed methods.



Dr. Jing Tian

Dr. Jing Tian is a lecturer at the School of Resource and Environmental Science at Wuhan University (China). He received his Ph.D. from Wuhan University working on cartographic generalization and his BS from Wuhan University of Technology. Dr. Tian was a postdoctoral researcher in geography at Wuhan analyzing road network patterns. In 2019, he visited the University of Otago’s Higher Education Development Center where he studied educational research methodology. In his current position he has been a passionate and effective research mentor, co-authoring 40 papers with undergraduate students, many of whom have received significant honors and awards and pursued advanced studies at high-quality academic institutions. Dr. Tian received the Chinese Professionals in Geographic Information System’s Education Excellence award in 2019 for his auspicious contributions. His educational research papers have been published in high-quality peer-reviewed journals including *British Journal of Educational Technology* and the *Journal of Geography in Higher Education*.



Dr. Lorraine Silver Wallace

Dr. Lorraine Silver Wallace is Associate Professor of Biomedical Education & Anatomy at the Ohio State University College of Medicine. Dr. Wallace served as Director of the Office of Undergraduate Research & Creative Inquiry at the Ohio State University. In 2021 she created the College of Medicine’s first course-based undergraduate research experience (CURE) opportunity which has already resulted in five peer-reviewed published research papers. Dr. Wallace previously served on the faculty at the University of Texas at Tyler and the University of Tennessee Graduate School of Medicine. She earned her Ph.D. in Health Promotion and Education from The Ohio State University, her MSc in Health Science from Ball State University, and her BSc in Sociology and Exercise Physiology from Rutgers University—New Brunswick. Dr. Wallace brings a wealth of experience as an author (124 publications) and editor having served as Assistant Editor and Editorial Board member for *Family Medicine*, Deputy Section Editor for *BMC Family Practice*, and Editorial Board member for *American Journal of Health Behavior*.

CONNECTUR

2022 ANNUAL CONFERENCE



CALL FOR SUBMISSION: CONNECTUR

Scholarship and Practice of Undergraduate Research (SPUR)

Submission Deadline: July 15, 2022

Guest Editors: Lisa Gates & Aaron R. Sakulich

Scholarship and Practice of Undergraduate Research (SPUR) is excited to announce a special Winter 22 issue featuring content presented at **CONNECTUR 2022**. All successful submissions must include some form of assessment and should be written so that they are of interest and value to the diverse readership of SPUR. Manuscripts based on all session topics will be considered for inclusion in this themed issue. Note that SPUR does not publish student papers resulting from their engagement in undergraduate research experiences.

This special issue will debut a new manuscript type – SPUR Communication. A Communication is a shorter (~1500 words) report with minimal headings describing new, original experimental research on undergraduate research, scholarship, and creative activity. Communications are intended to provide a vehicle for the communication of preliminary work that the authors intend to continue to develop and for which they plan to submit a full paper at a later date.

Submission Details. Submit your Communication to <https://spur.msubmit.net> by **July 15, 2022**. All invited manuscripts undergo peer review.

Communication Format:

- Title
- Authors & Institution
- Keywords for indexing (up to 6)
- 1,500 words styled with minimal section headings (or none at all)
 - Place the study in the context of the relevant current literature, clearly outlining the gap in the literature that the work is intended to fill, describe the research methodology and results in sufficient detail that interested readers can judge the quality of the work and offer specific conclusions and recommendations appropriate given the limitations of the study.
- No more than three visuals - Figures (preferably 2) + tables (preferably 1)
- References (preferably no more than 10)

Please review SPUR Author Submission Guidelines on the journal website and ensure the communication conforms to the journal's requirements on conflict-of-interest disclosure, data sharing, and institutional review board/ethics committee guidelines.

Prepare your Manuscript files (Word format, language in English (U.S.) to upload as "manuscript file." During submission, provide the names of Name, Email, and Institution of four-to-six experts knowledgeable in your area.

Questions?

Lisa Gates
lgates@middlebury.edu

Aaron R. Sakulich
arsakulich@wpi.edu

CALL FOR PAPERS

Call for Proposals: Undergraduate Research, Scholarship, and Creative Activity Anywhere and Everywhere

Scholarship and Practice of Undergraduate Research (SPUR)

Proposal Deadline: May 2, 2022

Guest Editors: Jennifer Coleman and Shauna Reilly

For this theme issue of *Scholarship and Practice of Undergraduate Research (SPUR)*, 6-8 articles of 2,000–3,500 words each are sought that examine Undergraduate Research, Scholarship, and Creative Activity Anywhere and Everywhere. We are looking for articles that can be inclusive of all students, institutions, disciplines, spaces, and across modalities. 3-5 vignettes of 300 words also are invited that offer succinct, creative approaches to the theme. All successful submissions must include some form of assessment and should be written so that are of interest and value to the diverse readership of SPUR. Topics of interest include the following:

- How can undergraduate research be flexible to meet students wherever they are?
- Is it our responsibility to offer undergraduate research opportunities everywhere and anywhere as a matter of diversity, inclusion, equity, and accessibility?
- What does undergraduate research look like as ‘the new normal’ in a remote environment?
- How can undergraduate research be conducted abroad or away?

Submission Details. Submit a 300- to 500-word prospectus to <https://spur.msubmit.net> by **May 2, 2022**, describing the focus of the proposed article or vignette. Please indicate in the prospectus whether the proposed piece is an article or a vignette. Invited authors will be notified by **May 16, 2022**. All invited manuscripts undergo peer review, and vignettes undergo editorial desk review. Final articles and vignettes will be due **August 1, 2022 (for consideration in the 2023 Spring Issue)**.

Questions?

Jennifer Coleman, guest coeditor
Jennifer.Coleman@wnmu.edu

Shauna Reilly, guest coeditor
reillys3@nku.edu

Call for Proposals: Undergraduate Research, Scholarship, and Creative Activity – Engaging Students for the Common Good

Scholarship and Practice of Undergraduate Research (SPUR)

Proposal Deadline: August 1, 2022

Guest Editors: Michelle Hayford and Rebecca Jones

For this theme issue of *Scholarship and Practice of Undergraduate Research (SPUR)*, 6-8 articles of 2,000–3,500 words each are sought that examine Undergraduate Research, Scholarship, and Creative Activity – Engaging Students for the Common Good. Institutions of higher learning are increasingly aligning mission-driven undergraduate research with collective action on economic, social, environmental, and public health issues. In a time of global uncertainty, undergraduate research that serves the common good is critical to engage citizens and problem solvers. 3-5 vignettes of 300 words also are invited that offer succinct, creative approaches to the theme. All successful submissions must include some form of assessment and should be written to be of interest and value to the diverse readership of SPUR. Topics of interest include the following:

- Examples of undergraduate research experiences in any field that have successfully served the common good, and can serve as models.
- Diverse interpretations and disciplinary or cultural contexts for the “common good” as well as investigations using discipline specific frameworks of the common good.
- Submissions that link the common good to community-engaged learning and demonstrate meaningful undergraduate research experiences that serve collaborators or community members off-campus.
- Projects that explore how tackling difficult, complicated societal issues enable students to develop invaluable life efficacy skills such as resiliency and self-confidence for vocational success in, through, and as a member of a community.

Submission Details. Submit a 300- to 500-word prospectus to <https://spur.msubmit.net> by **August 1, 2022**, describing the focus of the proposed article or vignette. Please indicate in the prospectus whether the proposed piece is an article or a vignette. Invited authors will be notified by **August 15, 2022**. All invited manuscripts undergo peer review, and vignettes undergo editorial desk review. Final articles and vignettes will be due **November 1, 2022 (for consideration in the 2023 Summer Issue)**.

Questions?

Michelle Hayford, guest coeditor
mhayford1@udayton.edu

Rebecca Jones, guest coeditor
rjones22@gmu.edu

Read sample SPUR articles at:
<https://www.cur.org/what/publications/journals/spur/issues/>

