Peter Samuelson Wardrip 156 Race St., Pittsburgh, PA 15218

peterwardrip@gmail.com www.peterwardrip.com

EDUCATION

PhD University of Pittsburgh

Learning Sciences and Policy, 2014 Advisors: Louis Gomez (now at UCLA) Jennifer Russell

Dissertation: Badging to support teaching and learning: An implementation of a school-based badging system

MSc Centre for Human Ecology, Edinburgh, Scotland

Human Ecology, 2004

BS University of Wisconsin-Madison

Latin Education, 1997

PROFESSIONAL EXPERIENCE

Assistant Professor, University of Wisconsin-Madison, 2017-present

Learning Scientist, Children's Museum of Pittsburgh, 2014 – 2017

Visiting Researcher, Learning Research and Development Center, University of Pittsburgh, 2014-present

Visiting Researcher, Human Computer Interaction Institute, Carnegie Mellon University, 2015-present

Adjunct Researcher, RAND Corporation, 2013

Consultant, Carnegie Foundation for the Advancement of Teaching, 2011-2012

Graduate Student Researcher, University of Pittsburgh, Center for Urban Education; Activation Lab; 2008-2014

Researcher Associate, Northwestern University, 2004-2008

Peace Corps Armenia Volunteer, Teacher Trainer, 2001-2003

Latin and ESL Teacher, Bloomington High School South, Bloomington, IN, 1999-2000

Latin and Reading Teacher, Racine Unified School District, Racine, WI, 1997-1998

AWARDS AND HONORS

Fellow, Innovative New Spaces for Practice and Rehearsal in Education (INSPIRE), Teaching Systems Laboratory, MIT, 2018-2019

Fellow, Research + Practice Collaboratory, 2016

DML Design Research Committee Member, 2014-2015

Lifelong Learning Badge Working Group Member, Sprout Fund, 2014-2015

Digital Media and Learning Research Associates Summer Institute Fellow, Microsoft Research and MacArthur Foundation DML Research Hub, 2012.

Selected for Doctoral Colloquium

ACM International Conference on Supporting Group Work 2012 Conference

Doctoral Colloquium Participant

ACM Conference on Computer Supported Cooperative Work Conference, 2012

Summer Fellow, Frameworks Institute, Summer 2011

Member, MacArthur Foundation Emerging Scholars Group, MacArthur Foundation funded group of Emerging Scholars of Digital Media and Learning, organized by James Gee, May 2011-2013

PUBLICATIONS

PEER REVIEWED JOURNAL ARTICLES

Wardrip, P. S., & Herman, P. (2018). 'We're keeping on top of the students': making sense of test data with more informal data in a grade-level instructional team. Teacher Development, 22(1), 31-50.

Wardrip, P.S., & Shapiro, R.B., (eds.). (2016) Digital media and data: Using and designing technologies to support learning in practice. Special issue of Learning, Media, and Technology.

Wardrip, P.S., Abramovich, S., Kim, Y.J., & Bathgate, M. (2016). Taking badges to school: A school-based badge system and its impact on participating teachers. Computers and Education.

Shapiro, R.B. & Wardrip, P.S. (2015). Keeping it real: Understanding analytics in classroom practice. Technology, Instruction, Cognition & Learning.

- Wardrip, P.S., Gomez, K., & Gomez, L.M. (2015). We modify each other's work: The role of literacy work circles in developing professional community. Teacher Development.
- Kwon, S., Wardrip, P.S. & Gomez, L.M. (2014). Co-design of Interdisciplinary Projects as a Mechanism for Building School Capacity. *Improving Schools*. 17(1), 54-71.
- Wardrip, P.S., Abramovich, S., Bathgate, M. & Kim, Y.J. (2014) A schoolbased badging system and interest-based learning: An exploratory case study. International Journal of Learning and Media.
- Herman, P. & Wardrip, P.S. (2012). Teachers harness the power of assessment: Collaborative use of student data gauges performance and guides instruction. Journal of Staff Development, 33(4), 26-29.
- Herman, P. & Wardrip, P. (2012). Reading to Learn: Helping students comprehend readings in science class. The Science Teacher, 79(1), 58-61.
- Wardrip, P.S. & Tobey, J. (2009) How Does Mechanical Weathering Change Rocks? Using Reading-To-Learn Strategies to Serve Science Learning, Science *Scope*, 32 (5)

BOOK CHAPTERS

- Wardrip, P.S. & Ryoo, J. (forthcoming). The Role of Educational Technology in Informal Learning Environments: Making and Tinkering. In Bishop, M.J., Boling, E., Elen, J. & Svihla, V. (Eds.). Handbook of Research on Educational Communications and Technology (5th ed). New York: Springer.
- Wardrip, P.S. & Abramovich, S. (2017). Ask not what you can do for badges, Ask what badges can do for you. In Young, M. & Slota, S. (Eds.) Exploding the Castle: Rethinking How Video Games & Game Mechanics Can Shape the Future of Education. Charlotte, NC: Information Age Publishing.
- Wardrip, P. S. (2016) Response to Hokanson. In Carr-Chellman, A. & Rowland, G. (Eds.). Issues in Technology, Learning and Instructional Design: Classic and Contemporary Debates. New York: Routledge.
- Wardrip, P.S. & Brahms, L. (2016). Making goes to school. In Peppler, K., Halverson, E. & Kafai, Y. (Eds.). Makeology: Makers as Learners (Volume 1). New York, NY: Routledge.
- Abramovich, S., & Wardrip, P.S. (2016). The Impact of Badges on Motivation to Learn. In Muilenburg, L. & Berge, Z. (Eds.) Digital Badges in Education. New York, NY: Routledge.

REPORTS / WHITE PAPERS / NON-PEER REVIEWED

- Brahms, L., & Wardrip, P. S. (2018). Learning Practices of the Museum Art Studio. Report to the Benedum Foundation. Pittsburgh, PA: Children's Museum of Pittsburgh.
- Wardrip, P.S., Evancho, J. & McNamara, A. (2018). Identifying what matters before you measure it. *Phi Delta Kappan*.
- Wardrip, P. S., Brahms, L., Carrigan, T. & Reich, C. (2017) Making and Learning in Museums and Libraries: A Practitioner's Guide and Framework. Institute of Museum and Library Services and Children's Museum of Pittsburgh.
- Wardrip, P.S., Brahms, L., Carrigan, T. & Reich, C. (2017) Making and Learning in Museums and Libraries: A Toolkit. Institute of Museum and Library Services and Children's Museum of Pittsburgh.
- Brahms, L., & Wardrip, P. S. (2017). Crowdfunding to Support Making in Schools: A Toolkit. Children's Museum of Pittsburgh in partnership with MakerEd.
- Brahms, L., & Wardrip, P.S. 2017. "The What, How, and Why of Making." Teaching Young Children 10 (3): 16–17.
- Brahms, L., Wardrip, P.S., Bresson, L.M., & King, M. 2017. "Create Problems for Your Preschoolers, Don't Solve Them! The Learning Practices of Making in Your Interest Centers." Teaching Young Children 10 (4): 12–15.
- Louw, M. & Wardrip, P. S. (2017). Remake Learning Research Landscape Analysis: Stewarding Future-Forward Innovative Teaching & Learning with Research. A report to the Grable Foundation.
- Brahms, L., Wardrip, P.S., Bresson, L.M., & King, M. 2017. "Create Problems for Your Preschoolers, Don't Solve Them! The Learning Practices of Making in Your Interest Centers." Teaching Young Children 10 (4): 12–15.
- Brahms, L. & Wardrip, P.S. (Summer 2016). Making Engages People. Hand to *Hand.* Association of Children's Museums. 1-2, 12-13.
- Wardrip, P.S. Brahms, L., Reich, C. & Carrigan, T. (2016). Supporting Learning in Museum Makerspaces: A National Framework. *Museum*, Sept/Oct. p. 18-24.
- Brahms, L. & Wardrip, P.S. (2016). Learning practices of making. *Teaching* Young Children, 9(6).
- Brahms, L. & Wardrip, P.S. (2016). Making with young learners: An introduction. Teaching Young Children, 9(5)

Brahms, L. & Wardrip, P.S. (2014). Learning Practices of Making: An Evolving Framework. A White Paper released by the Children's Museum of Pittsburgh with support from IMLS and the Sprout Fund.

Arvizu, S, Santo, R., Arena, D, Wardrip, P.S., Johnson, B., Simon, A & Kendall-Taylor, N. (2012) Where is the DML on the Education Reform Agenda? An Advocacy Field Report. A Joint Research Project Between the FrameWorks Institute and the DML Emerging Scholars. FrameWorks Institute.

MANUSCRIPTS UNDER REVIEW

Wardrip, P.S. & Brahms, L. (revise and resubmit). Supporting Learning in Museum Makerspaces: A National Framework. Journal of Museum Education

Abramovich, S. & Wardrip, P.S. (under review). Can Digital Badges support Religious Identity? British Journal of Religious Education.

Shapiro, R.B. & Wardrip, P.S. (under review). Teachers reasoning about students' understanding: Teachers learning formative instruction by design. Educational Technology Research & Development.

MANUSCRIPTS IN PREPARATION

Wardrip, PS., Akiva, T., McNamara, A. & Brahms, L. Building toward implementation paths of digital badges.

Wardrip, PS., Brahms, L., & McNamara, A. Building capacity for seeing: codesign of measurement tools with museum educators.

Wardrip, PS. & , Evancho, J.. Values-based Assessment: Teacher learning through evidence-based design.

SELECTED PEER REVIEWED PRESENTATIONS

Wardrip, P.S. (2018). Assessment and Evaluation of Engagement in Museum Makerspaces: Some Considerations. Annual conference of ECSITE: European Network of Science Centres and Museums. Geneva, Switzerland.

Wardrip, P.S. (2018). Agency by Design Pittsburgh: Exploring Protocols to Build Community. Presentation at the Connected Learning Summit. Cambridge, MA.

Wardrip, P.S. & Brahms, L. (2018). Assessment of Learning and Engagement through Making in Informal Learning Settings. Fourth Annual Maker Ed Convening, San. Jose, CA.

Heroman, C., Wardrip, PS., King, M. & Baker, C. (2017). Making, tinkering and makerspaces: What you need to know about makerspaces and how teachers

- are using them in their classrooms. NAEYC Professional Learning Institute, San Francisco, Calif.
- Bonnette, R., Crowley, K., Wardrip, PS. & Brahms, L. (2017). Making is in the Mindset: How a Makerspace can support at-risk youth. Structured Poster Session at the Annual Meeting of AERA, San Antonio, TX.
- McNamara, A., Akiva, T., Wardrip, PS, & Brahms, L. (2017). The Interactivity of Learning through Making. Roundtable Session at the Annual Meeting of AERA, San Antonio, TX.
- Brahms, L., Wardrip, P. S., & McNamara, A. (2017, July). *Making* Observations: Identifying Evidence of Learning in Makerspaces. In 30th Annual Visitor Studies Association Conference, Columbus, Ohio.
- Pattison, S., Brahms, L., Crowley, K., Wardrip, P.S., Akiva, T. & McNamara, A. (2016). Facilitation of Making as a Learning Process: Reflective Practice and Theory Building. Paper presentation in the session, Approaches to Video Analysis: Studying learning and catalyzing reflection at the Annual Meeting of the Visitor Studies Association, Boston, MA.
- Wardrip, P.S., Brahms, L. & Reich, C. (2016). A Framework to Support Learning in Library and Museum Makerspaces. Annual Meeting of the American Alliance of Museums, Washington, DC.
- Wardrip, P.S., Akiva, T., McNamara, A. & Brahms, L. (2016). From Big Hype to Hard Work: Understanding Educator Implementation of Digital Badges. Annual Meeting of the American Educational Research Association, Washington, DC.
- Wardrip, P. S., & Brahms, L. (2015, June). Learning practices of making: developing a framework for design. In Proceedings of the 14th international conference on interaction design and children (pp. 375-378). ACM.
- Wardrip, P.S., & Brahms, L. (2015). *Making Goes to School*. Paper presentation at Annual Meeting of the American Educational Research Association, Chicago, IL.
- **Wardrip, P.S.** & Ahn, J. (2015). Blended Learning in K-12 Education: What do we really have, and where do we go. Paper presentation at Annual Meeting of the American Educational Research Association, Chicago, IL.
- Carrigan, T. & Wardrip, P.S., & Brahms, L. (2015). Making and Learning in Museums and Libraries: An Emerging Framework. Annual Meeting of the New Media Consortium, Washington, DC.
- **Wardrip, P.S.** & Carrigan, T. (2015). *Making and Learning: An Emerging* Framework for Museums and Libraries. Conversation Starter at the Annual

- American Library Association Convention, San Francisco, CA
- Wardrip, P.S. & Brahms, L. (2014). Mobile MakeShop: Preliminary findings from two school sites. Poster presentation at Fablearn: Conference on Creativity and Digital Fabrication in Education. Stanford, Ca.
- Crowley, K., Schunn, C., Bathgate, M.E., Kehoe, S., Louw, M., & **Wardrip, P.S.** (2014). Designing for activation: Building STEM learning pathways for Pittsburgh's youth. Paper presentation at the symposium: STEM Learning Ecosystems at the NARST annual conference, Pittsburgh, PA.
- Abramovich, S., Wardrip, P.S., Bathgate, M.E., & Kim, Y.J. (2014). The maturation of a badge system to support interest based learning: A case study. Talk to be presented at the symposium: Innovating Education Practice through Digital Badges: Recent Research, Current Practices, and Future Directions at the American Education Research Association (AERA) annual conference, Philadelphia, PA
- Herman, P. & Wardrip, P.S. (2013). Toward a Theory of Data-Informed Instructional Practice: How might data use matter? Paper presentation at Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Wardrip, P.S., Abramovich, S., Bathgate, M. & Kim, Y.J. (2013). Power-ups and soft skills: An exploratory study of a school-based badging system. Roundtable paper presentation at Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Wardrip, P.S. & Herman, P. (2013). Clipboards and Checklists: An exploratory case of one teacher's analog data-informed practice. Symposium paper presentation at Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Abramovich, S., Wardrip, P.S., Kim, Y.J., Higoshi, R., Bathgate, M. (2013) Gamification and learning: Does education need some "stinkin' badges?" Panel presentation at PAX East, Boston, MA.
- Kim, Y.J., Wardrip, P.S., Stokes, B; Ingram-Goble, A. Almond, R., Gee, J. (2012). ECDemocratized: A democratization of assessment. Symposium paper presentation at the Games, Learning and Society Conference, Madison, WI
- Dolle, J., Wardrip, P.S., Russell, J.L., Gomez, L.M., & Bryk, A.S. (2012). *The* power of improvement networks to transform educational inquiry: A preliminary exploration. Poster presentation at the International Conference of the Learning Sciences, Sydney, Australia.

- Herman, P., Wardrip, P.S. & Zywica, J. (2012). Motivation in the learning sciences: Connecting to practice by design. Paper presentation for the International Conference for the Learning Sciences, Sidney, Australia
- Wardrip, P.S., Herman, P., Kessler, A. & Cooper, B. (2012). Exploring frames of data for engagement: How educators frame data for instruction. Roundtable paper presentation at the Annual Meeting of the American Educational Research Association., Vancouver, BC.
- Herman, P., Perkins, K, Wardrip, P.S. (2012). Reading Comprehension Strategies in High School Science Classrooms: Evidence That Improving Students' Reading-to-Learn Competencies Increases Science Achievement. Poster presentation at the Annual Meeting of the American Educational Research Association, Vancouver, BC.
- Herman, P., Perkins, K., Wardrip, P.S. (2012). Supporting reading in high school science: Evidence that strategy instruction increases science achievement. Paper presentation for the National Association for Research on Science Teaching, Indianapolis, Ind.
- Ingram-Goble, A., Shapiro, B., Stokes, B., Kim, Y.J. & Wardrip, P.S. (2012). A design to change assessment: Evidence centered design & demoratizing assessment. Paper presentation for Digital Media and Learning Conference, San Francisco, Ca.
- Wardrip, P.S. (2012). Collective capabilities: building a theory of coordinated collective action in a networked improvement community. Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work, p. 355-358.
- Shapiro, R.B. & Wardrip, P.S. (2011). Interactive Representations of Student Activity to Inform Teacher Collaborations: Results from a Formative Exploration. Paper presentation for the International Conference on Computer Supported Collaborative Learning, Hong Kong.
- Wardrip, P.S., Herman, P., Gomez, L.M. & Greeno, J.G. (2011) Knowing more about students' backstories: Rich data for instruction. Round-table paper presentation for the annual meeting of the American Educational Research Association, New Orleans, LA
- **Wardrip, P.S.** & Gomez, L.M. (2011) Who are they talking to?: Student social networks as actionable data for teachers. Paper presentation for the annual meeting of the American Educational Research Association, New Orleans, LA
- Shapiro, R.B. & Wardrip, P.S. Formative Instruction by Design. (2010) Poster presentation accepted for the bi-annual meeting of the International Conference of the Learning Sciences, Chicago, IL
- Wardrip, P.S (2009) Building Professional Learning Communities: Coming Together Around Common Practice, Symposium paper presented at the annual meeting of the American Educational Research Association, San Diego, CA

- Wardrip, P.S. & Gomez, L.M. (2009, April) Literacy in the Content Areas as an Organizational Problem. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Kwon, S., Wardrip, P.S. & Gomez, L.M. (2008, June) Co-design of Interdisciplinary Projects as a Mechanism for School Capacity and Teacher Professional Community Growth, Paper presentation accepted for the bi-annual meeting of the International Conference of the Learning Sciences, Netherlands
- Wardrip, P.S. (2008, March) More Than Heavy Lifting: The Role of Project Based Learning in the Development of Professional Community. Roundtable paper presented at the annual meeting of the American Educational Research Association, New York, NY

CONFERENCE WORKSHOPS

- Brahms, L., Wardrip, P.S., & McNamara, A. (2017) Making Connections: Facilitating Learning Through Making. In 30 th Annual Visitor Studies Association Conference, Columbus, Ohio.
- Chang, S., Wardrip, P.S., & Koffler, K. (2017). Workshop: National Toolkit for Sustaining Making in Learning. In Fablearn Conference, Stanford, Calif.
- Kim, YJ, Rosenheck, L., Parker, J. & Wardrip, PS. (2017). MetaRubric: Assessment Design for Maker Educators. In Fablearn Conference, Stanford, Calif.
- Brahms, L., Wardrip, P.S. & Regalla, L. (2015). Making as a Learning Process: Principles of Practice and Design. Association of Science and Technology Centers Annual Conference, Montreal, Quebec
- Brahms, L., Wardrip, P.S. & Regalla, L. (2014). Making as a Learning Process: Principles of Practice and Design. Fablearn: Digital Fabrication in Education, Palo Alto, CA.
- Lin, P., Roque, R., Wardrip, P.S., Ahn, J., & Shapiro, R.B. (2014). Designing futures for peer 2 peer learning @CSCW. Computer Supported Cooperative Work annual meeting, Baltimore, MD.
- Wardrip, P.S., Shapiro, R.B., Forte, A., Maroulis, S., Brennan, K., Roque, R. (2013). CSCW and Education: Viewing education as a site of work practice. Computer Supported Cooperative Work annual meeting, San Antonio, TX.

GRANTS

PI, NSF EAGER - Enhanced learning through making by way of personalized content for animation and fabrication, National Science Foundation, 2017-2019,

Co-PI, IMLS National Leadership Grant: Making Observations: Building an Evaluation Tool for Making as a Learning Process, Institute of Museum and Library Services, 2016-2019,

Research Lead, Making Spaces: Expanding Maker Education Across the Country, Partnership between Children's Museum of Pittsburgh and Maker Ed, Funded by Google, 2016-2017,

PI, Evaluation of Pittsburgh Urban Teaching Corps / Teacher Career Pathways, Propel Schools Foundation, 2016-2017,

PI, Next Generation Learning Formative Evaluation, Opportunity Education Foundation, 2016,.

PI, AERA Research Conference Grant, American Educational Researchers Association, 2015,

Co-PI, City of Learning Research Grant, Sprout Fund, 2015,

Co-PI, Remake Learning Research Landscape Analysis, Remake Learning Council, 2015,

PI, Next Generation Learning Workshop Formative Evaluation, Opportunity Education Foundation, 2015,

Co-PI, Badge Initiative Research Program, funded by the Covenant Foundation, March 2012 – September 2013; Co-PI,

PI, University of Pittsburgh Student Research Grant, 2009;

TEACHING

University of Pittsburgh: Co-Instructor for *Issues on Accountability and Testing for School Leaders* online course, Spring 2011 *Literacy in Science Education Modules*, Fall 2013

University of Wisconsin-Madison

C&I 606: Critical Perspectives on Digital Media in Education

C&I 975: Museums and Education C&I 209: Digital Media and Literacy C&I 975: Formative Assessment Design

C&I 713: Technology Integration for Teachers and Learners

SERVICE

JOURNAL REVIEWING

Urban Education
The Information Society

Technology, Knowledge & Learning Computers and Education

CONFERENCE REVIEWING

Computer Supported Collaborative Learning Computer Supported Cooperative Work Games, Learning & Society Hawaii International Conference on System Sciences International Conference for the Learning Sciences Computer Human Interaction (CHI) National Association for Research on Science Teaching American Educational Research Association Fablearn

GRANT REVIEWING

National Science Foundation

US Department of Education: Promise Neighborhoods, i3; Race to the Top; Charter Schools Program; Teacher Quality Partnership Corporation for National and Community Service: Americorps; US Department of Labor; State Departments of Education (Illinois, Florida, New York, Oklahoma, Oregon, Arizona), Institute of Museum and Library Services