

# Peter Jacob Rich

Curriculum Vita  
Associate Professor

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## Education/Certifications

<i>Doctor of Philosophy</i> 2007	University of Georgia <i>Instructional Technology</i>
The Interdisciplinary Qualitative Studies Graduate Certificate	Qualitative Inquiry Program University of Georgia
<i>Bachelors of Arts</i> 2001	Brigham Young University <i>Spanish</i>
<i>Teaching English to Speakers of Other Languages (minor)</i>	Brigham Young University

## \*Journal Articles

McDonald, J. K., West, R. E., Rich, P. J., & Pflieger, I. (2018). It's So Wonderful Having Different Majors Working Together": The Development of an Interdisciplinary Design Thinking Minor. *TechTrends*. <https://doi.org/10.1007/s11528-018-0325-2>

Chapman, J. R. & Rich, P. J. (2018) Does educational gamification improve students' motivation? If so, which game elements work best?, *Journal of Education for Business*, 93(7), 315-322, DOI: [10.1080/08832323.2018.1490687](https://doi.org/10.1080/08832323.2018.1490687)

Rich, P. J., Browning, S. F., Perkins, M., Shoop, T., & Yoshikawa, E. (2018). Coding in K-8: International trends in teaching elementary/primary computing. *TechTrends*. <https://doi.org/10.1007/s11528-018-0295-4>

Rich, P. J., Belikov, O. M., Yoshikawa, E., & Perkins, M. (2018). Enablers and Inhibitors to Integrating Computing and Engineering Lessons in Elementary Education. *Journal of Technology and Teacher Education*, 26(3), 437-469. Retrieved from <https://www.learntechlib.org/primary/p/181979/>

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\* Except for *Educational Technology*, which is editorial review, all other journals are peer-reviewed journals.

- McDonald, J. K., Rich, P. J., & Gubler, N. B. (2018). The Perceived Value of Informal, Peer Critique in the Instructional Design Studio. *TechTrends*. doi:10.1007/s11528-018-0302-9
- Fryar, B., Wilcox, B., Hilton, J., & Rich, P. J. (2018). Describing Spiritual Growth in an Online Religious Education Course. *Journal of Research on Christian Education*, 27(1), 56-75. doi:10.1080/10656219.2018.1446851
- Rich, P. J., Jones, B. L., Belikov, O., Yoshikawa, E., & Perkins, M. (2017). The effect of year-long training on elementary teachers' self-efficacy for and beliefs about teaching computing and engineering. *International Journal of Computer Science Education in Schools*. 1(1), DOI: 10.21581/ijcsesv1i1.6
- McMurry, B. L., Rich, P. J., Hartshorn, K. J., Anderson, N. J., & Williams D. D. (2016). Criteria language teachers use when selecting CALL technologies. *Journal of Language Teaching and Learning*. 16(1), 49-65.
- McMurry, B. L., West, R. E., Rich, P. J., Williams, D. D., Anderson, N. J., & Hartshorn, K. J. (2016). Teaching English as a Second or Foreign Language, An Evaluation Framework for CALL. *TESL-EJ*, 20(2).
- Thomas, R., West, R. E., & Rich, P. J. (2016). Benefits, Challenges, and Perceptions of the Multiple Article Dissertation Format in Instructional Technology. *Australasian Journal of Educational Technology*, 32(2). DOI: 10.1472/ajet.2573
- Rich, P. J., Bly, N., & Leatham, K. (2014). Investigating the influence of computer programming on perception and application of mathematical skills. *Journal of Computers in Mathematics and Science Teaching*, 33(1), 103-128.
- Rich, P. J., Leatham, K. R., & Wright, G. A. (2013). Convergent cognition. *Instructional Science*, 41(2), 431-453. doi:10.1007/s11251-012-9240-7?LI=true#page-1
- Rich, P. J., West, R. W. (2012). New technologies, new approaches to evaluating academic productivity. *Educational Technology*, 52(6), 10-13.
- West, R. E., & Rich, P. J. (2012). Rigor, impact and prestige: A proposed framework for evaluating scholarly publications. *Innovative Higher Education*. doi:10.1007/s10755-012-9214-3
- Wright, G., Rich, P. J., & Leatham, K. (2012). How programming fits with technology education curriculum. *Technology and Engineering Teacher*, (April) 3-9.
- Tripp, T., Rich, P. J. (2012). The influence of video analysis on the process of change. *Teaching and Teacher Education*, 28 (5), pp. 728-739. DOI 10.1016/j.tate.2012.01.011

- Rich, P. J. (2012) Inside the black box: Revealing the process in applying a grounded theory analysis, 17(4). *The Qualitative Report*.
- Tripp, T., & Rich, P. J. (2011). Using video to analyze one's own teaching. *The British Journal of Educational Technology*. DOI: 10.1111/j.1467-8535.2011.01234.x
- Markle, T. D., West, R. E., & Rich, P. J. (2011). Beyond transcription: Technology, change, and refinement of method. *Forum: Qualitative Studies*, 12(3)
- Rich, P. J., & Tripp, T. (2011). Ten essential questions educators should ask when using video annotation tools. *TechTrends*, 55(6), 16-24.
- Hilton, J. L., Graham, C. R., Rich, P., & Wiley, D. (2010). Using online technologies to extend a classroom to learners at a distance. *Distance Education*. 33(1).
- Rich, P. J., & Calandra, B., (2010). Video, video, everywhere. Issues and evidence of video analysis in teacher education. *Educational Technology*, 50(1), 3.
- Fadde, P., & Rich, P. J. (2010). Guerrilla video. A new protocol for producing classroom video. *Educational Technology*. 50(1), 4-7.
- West, R. E., Rich, P. J., Shepherd, C.E., Recesso, A., & Hannafin, M. J. (2009). Supporting Induction Teachers' Development Using Performance-Based Video Evidence. *Journal of Technology and Teacher Education*. 17(3).
- Rich, P. J., & Hannafin M. (2009). Making instructional decisions visible: The use of video evidence to assess preservice teachers' practice. *Journal of Computing in Higher Education*, 21(2), pp. 128-145.
- Rich, P. J., & Hannafin, M. (2009). Video Annotation Tools: Technologies for Scaffolding and Structuring Teacher Reflection. *Journal of Teacher Education*, 60(1), 52-67.
- Glazer, E.M., Hannafin, M.J., Polly, A.B., & Rich, P. (2009). Factors and interactions influencing technology integration during situated professional development in an elementary school. *Computers in the Schools*, 26(1), 21-39.
- Rich, P., & Hannafin, M. (2008). Capturing and assessing evidence of student teacher inquiry: A case study. *Teaching and Teacher Education*, 24(6), pp. 1426-1440.
- Rich, P., & Hannafin, M. (2008). Decisions & reasons: Examining preservice teacher decision-making through video self analysis. *Journal of Computing in Higher Education*. 20(1), 62-94.
- Barbour, M., & Rich, P. (2007). Social constructivist e-learning: A case study. *International Electronic Journal for Leadership in Learning*, 11(2)
- Rich, P., Reeves, T. (2006). John Dewey, a significant contributor to the field of educational technology. *Educational Technology*. 46(4).

## **Books & Book Chapters**

- Rich, P. J., & Hodges, C. B. (Eds) (2017). *Emerging Research, Practice and Policy on Computational Thinking*. Springer.
- Rich, P. J., & Langton, M. (2016). Computational thinking: toward a unifying definition. In J. M. Spector, D. Ifenthaler, D. G. Sampson, & P. Isaias (Eds.). *Competencies in Teaching, Learning, and Educational Leadership in the Digital Age*, pp. 229-242. Springer.
- Rich, P. J., West, R. E., & Warr, M. (2015). Innovating How We Teach Collaborative Design Through Studio-based Pedagogy. In M. Orey (Ed.). *Yearbook of Educational Media and Technology Yearbook*, vol. 39, p. 147-163. Springer.
- Rich, P. J. (2015). Games in higher education. In J. M. Spector (Ed.) *The SAGE encyclopedia of Educational Technology*, p. 312-314. SAGE, Los Angeles, USA.
- Calandra, B., & Rich, P. J. (eds.) (2014). *Digital Video for Teacher Education. Research and Practice*. Routledge: New York, NY.
- Rich, P.J. (2014). Examining the role of others in video self-analysis. In B. Calandra & P. J. Rich (Eds.) *Digital video for teacher education. Research and Practice*. Routledge: New York, NY.
- Mardis, M. A., Hoffman, E. S., & Rich, P. J. (2014). Trends and issues in qualitative research methods. In M. J. Bishop, M. J. Spector, & M. D. Merrill (Eds.). *The Handbook of Research on Educational Communications and Technology (4<sup>th</sup> ed)*, 173-193.
- Recesso, A., Hannafin, M. J., Wang, F., Deaton, B., Rich, P. J., & Shepherd, C. (2009). Direct Evidence and the Continuous Evolution of Teacher Practice. In P. Adamy & N. Milman (Eds.), 23-47. *Evaluating Electronic Portfolios in Teacher Education*. Greenwich, CT: Information Age Publishing, Inc.

## **Book Reviews**

- Rich, P. J., & Jones, B. L. (2015). [Review of the book *Connected Code: Why Children Need to Learn Programming* by Y. Kafai & Q. Burke]. *Teachers College Record*, Sept., 2015.

## **Conference Presentations and Proceedings**

- Rich, P. J., & Hu, H. (2019). *Surveying the Landscape: Statewide Data on K-12 CS Education Implementation*. Presentation at the Annual meeting for Research on

Equity and Sustained Participation in Engineering, Computing, & Technology (RESPECT). Minneapolis, MN.

- Rich, P. J. (2018). *Reimagining the Future: Emerging 'Cool' Fields – Episode II: Computational Thinking*. Presentation given at the annual meeting for the Association for Educational Communications and Technology. Kansas City, MO.
- Rich, P. J., Ontiveros, P., & García, D. (31 January 2018). *La importancia de la enseñanza de tecnología en aula*. Webchat hosted by the U.S. Embassy in Bolivia. La Paz, Bolivia.
- Rich, P. J. (30 January 2018). *Conversatorio: La tecnología en aula*. Invited panel discussion at La Universidad San Francisco de Asís. Hosted by the U.S. Embassy in Bolivia. La Paz, Bolivia.
- Rich, P. J. (30 January 2018). *Cómo usar la tecnología en aula*. Invited presentation given at La Universidad Mayor, San Andrés. La Paz, Bolivia.
- Rich, P. J. (30 Jan, 2018). *¿Cómo debe ser la educación del siglo 21?* Invited presentation given at Universidad Privada San Francisco de Asis. La Paz, Bolivia.
- Rich, P. J. (29 Jan, 2018). *Recursos pedagógicos tecnológicos de éxito en aula universitaria*. Invited presentation given at La Universidad Católica, Boliviana “San Pablo.” La Paz, Bolivia.
- Rich, P. J. (26 Jan, 2018). *¿Cómo debe ser la educación del siglo 21?* Invited presentation given at Unifraz. El Alto, Bolivia.
- †Rich, P. J. (2017). *Learning in the 21<sup>st</sup> Century: The 6 Cs*. Presentation given at the annual meeting of the Association for Educational Communications and Technology. Jacksonville, FL.
- Rich, P. J. (2017). *Cultivating 21<sup>st</sup> Century Learning: The 6 Cs*. Invited presentation given at the Sichuan University of Science and Engineering. Zigong, Sichuan, China.
- Rich, P. J., Yoshikawa, E., Belikov, O., Perkins, M., Browning, S., & Shoop, T. (2016). Coding in K-8. Presentation given at the annual meeting for the Association for Educational Communications and Technology. Las Vegas, NV.
- Rich, P. J., Jones, B., Yoshikawa, E., Belikov, O., & Perkins, M. (2016) Supporting Elementary Teachers’ integration of computing and engineering into their teaching. Presentation given at the annual meeting for the Association for Educational Communications and Technology. Las Vegas, NV.
- Sugar, W., Luterbach, K., & Rich, P. J., (2016). An analysis of multimedia production courses in instructional design and technology graduate programs. Presentation

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† Presidential session

- given at the annual meeting for the Association for Educational Communications and Technology. Las Vegas, NV.
- Rich, P. J., Jones, B. L., & Yoshikawa, E. (2015). Teaching Elementary Teachers to Code and Engineer. Paper presented at the annual meeting of the Association for Educational Communications and Technology. Indianapolis, IN.
- \*Chapman, J., & Rich, P. J. (2015). *The Design, Development, and Evaluation of a Gamification Platform for Business Education*. Paper presented at the annual meeting for the Academy of Management. Vancouver, B.C., Canada.
- Rich, P. J., & Chapman, J. (2014). *The design, development, and implementation of a gamified approach to a college-level business course*. Presentation at the annual meeting of the Association for Educational Communications and Technology, Jacksonville, FL.
- Rich, P. J., Langton, M., & South, J. (2014). *Defining computational thinking*. Presentation at the annual meeting of the Association for Educational Communications and Technology, Jacksonville, FL.
- Wright, G., Rich, P., & Lee, R. (2013). *The influence of teaching programming on learning mathematics*. Presentation given at the annual meeting of the Society for Information Technology and Teacher Education. New Orleans, LA.
- Wright, G., Rich, P., & Lee, R. (2013). *Foundational Technological Concepts: A study of the transfer of foundational technological concepts between STEM (science, technology, engineering & mathematics)*. Presentation given at the annual meeting of the Society for Information Technology and Teacher Education. New Orleans, LA.
- Small, T., & Rich, P. J. (2012). Streams of influence: A citation analysis of influence in instructional design and technology. Presentation given at the annual meeting of the *Association for Educational Communications and Technology*. Louisville, KY.
- Lee, R. L., & Rich, P. J. (2012). Bootstrap: The effect of learning a functional programming language on students' understanding of algebraic functions. Presentation to be presented at the annual meeting of the *Association for Educational Communications and Technology*. Louisville, KY.
- Rich, P. J. (2012). Design competitions and award winning instructional products. *Presentation to be given at the annual meeting for Professors of Instructional Design and Technology*. Estes, Park, CO.
- Hoffman, E., Watson, G., Mardis, M., & Rich, P. (2011, November). Teaching qualitative research in educational technology: A panel discussion. *Presentation*

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\* Awarded Best Paper

- given at the annual meeting of the Association for Educational Communications and Technology*. Jacksonville, FL.
- Rich, P., & Bly, N. (2011, November). The perceived effect of computer programming on mathematics. *Paper presented at the annual meeting of the Association for Educational Communications and Technology*. Jacksonville, FL.
- Wright, G., Lee, R., Rich, P. & Leatham, K. (2011). An Analysis of the Influence on Students' Mathematics Skills Participating in the Bootstrap Programming Course. In *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2011* (pp. 986-991). Chesapeake, VA: AACE.
- Rich, P. (2011). Improving teacher questioning strategies through collaborative video self-analysis. In *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2011* (pp. 2482-2489). Chesapeake, VA: AACE.
- Ertmer, P. A., Frick, T. W., Gibbons, A. S., Hannafin, M. J., Hooper, S., Reiser, R. A. & Rich, P. J., & Shen, Y. (2011 November). Preparing students in instructional design and technology to become skilled researchers: Multiple approaches. *Panel presented at the annual meeting of the Association for Educational Communications and Technology*. Jacksonville, FL.
- Rich, P. (2011, June). Conceptual considerations for conducting video self-analysis. Invited Plenary talk. *Third annual conference for the Representation of Mathematics Teaching*. University of Michigan.
- Rich, P. (2010, October). Collaborative self-assessment. *Presentation given at the annual meeting of the Association of Educational Communications and Technology*. Anaheim, CA.
- Rich, P. (2010, October). Video annotation tools: Choosing the right tool for the right job. *Presentation given at the annual meeting of the Association of Educational Communications and Technology*. Anaheim, CA.
- Johnson, M., Tripp, T., Rich, P., & Egbert, D. (2010, June). Seeing is believing: Using video annotation tools to teach and learn. *Presentation given at the annual meeting of Teaching with Technology Idea Exchange*. Salt Lake City, Utah.
- Wright, G. & Rich, P. (2010). How Can Programming Improve Mathematical Self-Efficacy: A Case Study of Teaching 7th and 8th Grade Students Computer Programming. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010* (pp. 2965-2969). Chesapeake, VA: AACE.
- Wright, G. & Rich, P. (2010). Programming Literacy Needs to be a Core Content Standard: A Case Study of Teaching 7th and 8th Grade Students Computer Programming. In J. Sanchez & K. Zhang (Eds.), *Proceedings of World*

*Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2010* (pp. 386-390). Chesapeake, VA: AACE.

- Wright, G., Rich, P. & Leatham, K. (2010). Lateral Transfer: Using Programming to Improve Student Mathematical Comprehension and Ability. In D. Gibson & B. Dodge (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010* (pp. 3529-3532). Chesapeake, VA: AACE.
- Rich, P., & Tripp, T. (2010, May). The process of change: Video feedback in varied contexts. *Presentation given at the annual meeting of the American Educational Research Association*. Denver, Co.
- Rich, P. & Tripp, T. (2010, March). Choosing the Right Video Annotation Tool for the Job: A Conceptual Framework. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010* (pp. 1171-1178). Chesapeake, VA: AACE.
- Wright, G., Rich, P. & Leatham, K. (2010, March). Lateral Transfer: Using Programming to Improve Student Mathematical Comprehension and Ability. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2010* (pp. 3529-3532). Chesapeake, VA: AACE.
- Hannafin, M. J., Rich, P. J., West, R. W., & Polly, D. (2010, March). Design-based research in practice: The video analysis tool. Paper presented at Educational Design Research: Local Change and Global Impact. Athens, GA.
- Wright, G., Rich, P. & Leatham, K. (2009). Teaching Programming to Junior High and High School Students to Improve Mathematical Ability and Self-Efficacy. In T. Bastiaens et al. (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2009* (pp. 782-788). Chesapeake, VA: AACE.
- Wright, G., Rich, P. & Leatham, K. (2009). Convergent Cognition: Improving Mathematical Self-Efficacy and Understanding by Teaching Programming. In I. Gibson et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2009* (pp. 3625-3628). Chesapeake, VA: AACE.
- Rich, P., Wright, G., Bly, N., & Leatham, K. (2009). Convergent Cognition. *Poster presented at the annual meeting of the Association of Educational Communications and Technology*. Louisville, KY.
- Wright, G., Rich, P. (June 2009). Convergent Cognition: Improving STEM Student Mathematical Self-Efficacy and Understanding by Teaching Programming. *Paper presented at the annual ACEE Ed-Media conference*, Honolulu, Hawaii.



- Rich, P., & Tripp, T. (April 2009). Video analysis tools. A conceptual framework. *Paper presented at the annual meeting of the American Educational Research Association*. San Diego, CA.
- Wright, G., Rich, P. (2009). Complementary Cognition: Improving STEM Student Mathematical Self-Efficacy and Understanding by Teaching Programming. *Paper presented at the annual E-Society IADIS conference*, Barcelona, Spain.
- Wright, G., Rich, P., and Anderson, R. (March, 2009). Using Flash Programming to Teach STEM. *Paper presented at the annual meeting of the International Technology Education Association (ITEA)*.
- Wright, G., Rich, P. (March 2009). Convergent Cognition: Improving Mathematical Self-Efficacy and Understanding by Teaching Programming. *Paper presented at the annual Society of Information Technology in Education*, Charleston, SC.
- Rich, P., & Tripp, T. (2008). Systematically Improving Instruction through self, peer, and video analysis. In G. Richards (Ed.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2008* (pp. 3137-3143). Chesapeake, VA: AACE.
- Rich, P. (2008, November). Video, video everywhere: Working with video annotation tools in teacher education. *Paper presented at the annual meeting of the Association of Educational Communications and Technology*. Orlando, FL.
- Rich, P. & Bly, N. (2008, November). Complementary Learning: A new learning paradigm for the 21<sup>st</sup> century. *Poster presented at the annual meeting of the Association of Educational Communications and Technology*. Orlando, FL.
- Rich, P., Recesso, A., Allexaht-Snyder, M., & Hannafin, M. (2007, April). The Use of Video- Based Evidence to Analyze, Act on, and Adapt Preservice Teacher Practice. Paper presented at the annual American Educational Research Association in Chicago, Illinois.
- Shepherd, C., Rich, P., West, R.E., Hannafin, M., & Recesso, A. (2007). Facilitating Mentoring Experiences With Video-Based Portfolios. Paper to be presented at the annual American Educational Research Association in Chicago, Illinois.
- West, R.E., Recesso, A., Hannafin, M., Rich, P., & Shepherd, C. (2007). Evidential Boundaries and the Assessment of Teacher Practices. Paper to be presented at the annual American Educational Research Association in Chicago, Illinois.
- Rich, P., West, R., Recesso, A., Hannafin, M. (2007). The use of video evidence and interpretive lenses to improve instructional decisions among preservice teachers. *Paper presented at the annual meeting for the American Association of Colleges for Teacher Education*. New York, NY.
- Rich, P. & Recesso, A. (2006). *Improving instructional decisions through Evidence-*

- Based Decision Support*. Presentation given at the Association for Educational Communications and Technology International Conference: Dallas, TX.
- Anderson, K., Rich, P. (2006). Presentation given during the Publications Committee Open Meeting at the 2006 Annual Meeting of the American Educational Researcher Association.
- Rich, P. (2005, October). *Following up and following through: what happens after professional development?* Poster presented at the annual College of Education Graduate Student Research Conference. University of Georgia. Athens, Georgia.
- Rich, P., Recesso, A., Shepherd, C., Deaton, B., Wang, F., & Hannafin, M. J. (2005, April). *Improving teacher educator and preservice teacher practices through technology-enhanced evidence-based inquiry*. Paper presented at the American Educational Research Association, Montreal.
- Rich, P., Recesso, A. (2004). Evidence-based Technology Enhanced Alternative Curriculum in Higher Education. *Brief paper presented at the World Conference on E-Learning in Corp., Govt., Health., & Higher Ed.* Issue. 1. pp. 2114-2119. Washington, D.C.
- Barbour, M., & Rich, P. (2004). Social Constructivist E-Learning: A Case Study. *Brief paper presented at the USA World Conference on E-Learning in Corp., Govt., Health., & Higher Ed.*, Issue. 1, pp. 1754-1759. Washington, D.C.
- Shepherd, C. E., Rich, P., Wang, F., Deaton, B., Recesso, A., & Hannafin, M. (2005, April). Technology integration through teacher educator and preservice teacher modeling of evidence-based practices. *Paper presented at the American Educational Research Association annual meeting*, Montreal, Canada.
- Wang, F., Hannafin, M. J., Deaton, B., Shepherd, C., Rich, P., & Recesso, A. (2005). Design and research on learning support tools in the evidence-based inquiry system. *Paper presented at the Annual Meeting of the American Educational Research Association*, Montreal, Canada.
- Recesso, A., Hannafin, M., Wang, Deaton, B., Shepherd, C., & Rich, P. (2005). Evidence Based Inquiry as a Methodology for Continuous Improvement of Practices. Paper presented at the American Educational Research Association Annual Meeting, Montreal.
- Kim, M., Rich, P. & Hannafin, M. (2004). *The challenges of teaching with computer tools: Teacher as facilitators of student learning*. Full paper presented at SITE conference in Atlanta, GA.
- Shepherd, C., Polly, D., Rich, P. & Thomas, G. (2004). *Creating Electronic Portfolios that Facilitate Reflection and Evaluation*. Brief paper presented at the SITE

conference in Atlanta, GA.

Singleton, E., Bleich, L., Orrill, P., Rich, P. & Shepherd, C. (2004). *Technology Integration in Mathematics*. Poster/Demo given at SITE conference in Atlanta, GA.

### **Grants/Reports**

Peters-Burton, E., Cleary, T., Kitsantas, A., Rich, P. J. (2018). Project REVEAL-HS: Fostering Student Computational Thinking in Data Analysis Through Self-Regulated Learning Prompts and Analytics. National Science Foundation. STEM+C Grant. Award: \$4,612,226 (60 months) BYU Portion (\$393,559).

Rich, P. J. (2014). Gaming math: Programming computer games that demonstrate the mathematics in the Utah Common Core. Brigham Young University *Graduate Mentoring Grant*. Award \$5,000.

West, R. E., Rich, P. J., Cantrell, P., & Selfridge, R. (unfunded). EverDay. Developing everyday engineering skills through everyday engineering. *Pathway grant submitted to NSF Informal Science Education program*. Proposed Budget: \$248,202 over 24 months.

Rich, P., Leatham, K., Wright, G., & McCarthy, J. (2011). Bootstrap: Improving mathematical understanding through programmatic animation design. Brigham Young University Mentoring Environment Grant. Award: \$20,000.

Rich, P. J., & Ashton, S. (2010). Foundational Technological Concepts. Brigham Young University Graduate mentoring grant. Award: \$5,000.

Wright, G. & Rich, P. (2009). Complementary Learning. Brigham Young University Mentoring Environment Grant. Award: \$20,000.

Rich, P. (2009). The video analysis consortium: Improving learning through multiple perspectives. McKay School of Education Research Grant. Award: \$10,000.

Rich, P., & Wright, G. (2009). The video analysis consortium: Improving learning through multiple perspectives. Brigham Young University Mentoring Environment Grant. Award: \$20,000.

Rich, P. (2008). Systematically improving instruction through peer and self-analysis. Mentoring Undergraduate Research award. Award total: \$3,000.

Hannafin, M., Orrill, C., & Rich, P. (2007). Fostering Research. National Science Foundation (Award no. IIS-0738462). Contribution (50%).

Recesso, A., Hannafin, M., Rich, P., Deaton, B., Shepherd, C., & Wang, F. (2004). Evidence-based Technology-Enhanced Curriculum in Higher Education. Annual

Report, year 1. Preparing Teachers To use Technology. Contribution (60%).

Orrill, C., Mewborn, D., Beckman, S. (2004-2005). Madison County Mathematics Improvement with Technology. Funding Agency: Georgia's Improving Teacher Quality Program. Funds Received: \$32,697 contribution (5-10%)

Orrill, Chandra; Mewborn, Denise, Beckman-Kazez, Sybilla. (2004-2005) Technology Integration in Mathematics – Richmond County. Funding Agency: Georgia's Improving Teacher Quality Program. Funds Received: \$52,623. Contribution (5-10%)

## **Workshops**

- Rich, P. J. (2018). *Teaching Kids to Code (and Teachers too!)*. Workshop given at the annual meeting of the Association for Educational Communications and Technology. Kansas City, MO.
- Rich, P. J. (2018). Midlothian primary school Sphero workshops (6<sup>th</sup> grade and 3<sup>rd</sup> grade). Edinburgh, Scotland.
- Rich, P. J. (2018, Jan). *El proceso del diseño de la ingeniería*. Workshop given at Pipiripi. La Paz, Bolivia.
- Rich, P. J. (2018, Jan). *Aprender a programar por medio de Scratch y los micro:bit*. Five workshops given at CoWork FIRST LEGO for Bolivian youth and teachers.
- Rich, P. J. (2018, Jan). *Actividades desenchufadas para aprender la programación*. Workshop given at La Universidad Mayor, San Andrés. La Paz, Bolivia.
- Rich, P. J. (2018, Jan). *Actividades desenchufadas para aprender la programación*. Workshop given at Metro Para Juvenil. El Alto, Bolivia.
- Rich, P. J. (2017, November). *Elementary Coding: Preparing Preservice Teachers to Teach Coding*. Workshop given at the annual meeting of the Association for Educational Communications and Technology. Jacksonville, FL.
- Rich, P. J. (2017, April). *The Innovation Design Process*. Invited workshop given at the Sichuan University of Science and Engineering. Zigong, China.
- Rich, P. J. (2016, October). Creating interactive content with Adobe Animate (Flash). Workshop given at the annual meeting for the Association for Educational Communications and Technology. Las Vegas, NV.
- Rich, P. J. (2015, August). Creating Interactive Content with Adobe Edge Animate. Workshop given at the annual meeting of the Association of Educational Communications and Technology.
- Rich, P. J., & Abraham, H. (2011, August). Google documents. Making the most of online tools in the classroom. Workshop given at annual David O. McKay School of Education conference.
- Rich, P. J. (2011, March). Video annotation tools: Choosing the right tool for the job. Workshop given at monthly meeting of the faculty of the David O. McKay School of Education.
- Rich, P. J. (2007, 2008, 2009, 2011, 2012). Controlling website layout and design with cascading stylesheets. Workshop given at the annual meeting of the Association of Educational Communications and Technology.

## **Service**

### *Reviewing*

Educational Technology Research & Development (avg. 3-4 reviews/yr.)  
Journal of Teacher Education (avg. 1-2 reviews/yr.)  
American Educational Research Journal (avg. 1 review/yr.)  
Journal of Computing in Higher Education (avg. 2-3 reviews/yr.)  
Journal of Technology and Teacher Education (avg. 1-2 reviews/yr.)  
Journal of Distance Education (avg. 1 review/yr.)  
American Journal of Evaluation (avg. 1 review/yr.)  
Association for Educational Communications and Technology (avg. 5-8 reviews/yr.)  
American Educational Research Association (avg. 2-4 reviews/yr.)

### *Professional*

Editorial board member, Educational Technology Research & Development (2016-present)  
External reviewer for rank and status dossiers (avg. 1-2x/year)  
Member, Committee for the selection of AECT presidential candidates (2009-2011)  
Vice-president for Communications. (2007-2010). AECT Teacher Education Division.  
Student Editorial Board, Educational Researcher: Research News and Comments.  
(August, 2005 - 2007). Editors: Paul Schutz (schutz@uga.edu) and Sonja Lanehart (lanehart@uga.edu)

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Chair, IP&T online information committee (2016-present)  
Member, David O. McKay School of Education Rank and Status committee (2013-present)  
Co-chair, Committee for the reorganization of CPAS observation instrument (2011-2014)  
Co-chair, David O. McKay School of Education Multicultural Education committee (2009-2012)  
Member, David O. McKay School of Education Educational Preparation Program (2009-2014)  
Member, IP&T strategic planning committee (2012-present)  
Member, IP&T Learning outcomes committee (2011-present)  
Multicultural Education Committee Co-Chair, David O. McKay School of Education  
IP&T Student Organization Faculty Liaison (2007-present)  
Grant and Scholarship allocation committee, department of Instructional Psychology & Technology (2008-2015)