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Eric G. Poitras

EDUCATION

Ph.D., Philosophy (Learning Sciences), McGill University 2010-
Department of Educational and Counselling Psychology 2013
Advisor: Susanne P. Lajoie
M.A., Arts with Honors (Learning Sciences), McGill University 2008-
Department of Educational and Counselling Psychology 2010
Advisor: Susanne P. Lajoie
B.A., Arts with Honors (Psychology), Université de Moncton 2004-
School of Psychology 2008

ACADEMIC POSITIONS

Assistant Professor, Department of Educational Psychology 2014-
University of Utah Present
Programs: Instructional Design and Educational Technology, Learning
Sciences
Postdoctoral Research Fellow, Learning Environments Across 2013-
Disciplines Research Partnership of the Social Sciences and 2014
Humanities Research Council of Canada
McGill University

INDUSTRY EXPERIENCE

Human Factors International Note Taker 2008
Montreal, QC, CA

RESEARCH INTERESTS

Adaptive Instructional Technologies
Augmented Reality for Mobile and Wearable Devices
Educational Data Mining and Learning Analytics
Self-Regulated Learning

GRANTS

GRANTS PENDING FUNDING DECISION

PI: **Eric Poitras**, Co-PIs: Jason Harley, Collaborator: Kirsten Butcher, Kevin
Kee, Susanne Lajoie. *Examining Learning and Engagement with an* 2017
Inquiry-Based Learning Environment Using Three-Dimensional Models of
Dinosaur Bones and Fossils. Learning Environments Across Disciplines
Research Partnership of the Social Sciences and Humanities Research
Council of Canada. U of U Subaward \$6,683.50 US.
PI: **Eric Poitras**, Co-PIs: Nathan Hall, Susanne Lajoie. *Evaluation of an* 2017
Intelligent Web Browser to Foster Pre-Service Teachers' Self-Regulated
Learning Processes and Technological Pedagogical Content Knowledge.

- Learning Environments Across Disciplines Research Partnership of the Social Sciences and Humanities Research Council of Canada. U of U Subaward \$4,332.50 US.
- PI: Sarah K Selling, Co-PIs: Lauren Barth-Cohen, Aaron J Bertram, Jordan M Gerton. *Building Coherence in STEM Learning Opportunities for Pre-Service Elementary Teachers Across Disciplinary Boundaries*. Researcher: **Eric Poitras**. Subcontract NSF IUSE-Exploration & Desig: Institut & Comm Transfer. 5,000\$ US. 2016
- PI: Cynthia Furse, Co-PI: Donna Ziegenfuss. *Bridging the STEM Research2Teaching Gap: A New Faculty-Centered Collaborative Model*. Researcher: **Eric Poitras**. Subcontract NSF IUSE-Exploration & Desig: Institut & Comm Transfer. \$9,000 US. 2016

FUNDED GRANTS

NATIONAL AGENCIES/CENTERS

- PI: Jason Harley, Co-PIs: Andre Grace, Susanne Lajoie. Collaborator: **Eric Poitras**. *Fostering Historical Reasoning, Hope, Empathy, Emotional Engagement and Queer History Awareness with a Mobile Augmented Reality App*. Social Sciences and Humanities Research Council of Canada Insight Development Grant. \$74,952.00 CA. 2016
- PI: Jason Harley, Co-PIs: Susanne Lajoie, **Eric Poitras**. *Fostering Historical Reasoning and Emotional Engagement with Location-Based Augmented Reality and Tour-Guide Prompts: Identifying Design Recommendations for Emerging Educational Technology*. Learning Environments Across Disciplines Research Partnership of the Social Sciences and Humanities Research Council of Canada. \$10,484 CA. 2016
- PI: **Eric Poitras**, Co-PIs: Jason Harley, Collaborator: Kirsten Butcher, Kevin Kee, Susanne Lajoie. *Examining Learning and Engagement with an Inquiry-Based Learning Environment Using Three-Dimensional Models of Dinosaur Bones and Fossils*. Learning Environments Across Disciplines Research Partnership of the Social Sciences and Humanities Research Council of Canada. U of U Subaward \$6,690 US. 2016
- PI: **Eric Poitras**, Co-PIs: Nathan Hall, Susanne Lajoie. *Evaluation of an Intelligent Web Browser to Foster Pre-Service Teachers' Self-Regulated Learning Processes and Technological Pedagogical Content Knowledge*. Learning Environments Across Disciplines Research Partnership of the Social Sciences and Humanities Research Council of Canada. U of U Subaward \$6,690 US. 2016
- PI: Kevin Kee, Co-PIs: **Eric Poitras**, Susanne Lajoie. *Using Augmented Reality to Foster Learning and Engagement of History*. Learning Environments Across Disciplines Research Partnership of the Social Sciences and Humanities Research Council of Canada. \$34,355 CA (U of U Subaward: \$4,864 US). 2015
- PI: Kevin Kee, Co-PIs: **Eric Poitras**, Susanne Lajoie. *Using Augmented Reality to Foster Learning and Engagement of History*. Learning Environments Across Disciplines Research Partnership of the Social Sciences and Humanities Research Council of Canada. \$19,707 CA (U of U Subaward: \$14,290 US). 2014
- PI: Kevin Kee, Co-PIs: **Eric Poitras**, Susanne Lajoie. *Using Augmented Reality to Foster Learning and Engagement of History*. Learning 2013

Environments Across Disciplines Research Partnership of the Social Sciences and Humanities Research Council of Canada. \$9,955 CA.

FOUNDATIONS/NON-PROFITS

- PI: **Eric Poitras**. *The Teacher Professional Development Portal: Training Teachers to Use Instructional Technologies in the Classroom*. Lawrence T. Dee and Janet T. Dee Foundation. \$5,000 US. 2016
- PI: Susanne Lajoie, Co-PIs: **Eric Poitras**, Laura Naismith. *Using Learning Analytics to Assess Clinical Reasoning in an Online Learning Environment*. MedU Research Grant Program. \$25,000 US. 2014-2016
- PI: **Eric Poitras**, Co-PIs: Jeanne Mance Cormier, Aïcha Benimmas. *Développement de matériel didactique pour faciliter l'apprentissage dans le cadre du programme scolaire du Musée acadien de l'Université de Moncton*. The History Education Network (THEN/HIER). \$2,500 CA. 2012

STATE/UNIVERSITY

- PI: **Eric Poitras**. *Using Simulated Learners to Evaluate Adaptive Web-Based Learning Environments*. University of Utah Research Foundation Seed Grant. \$17,344.50 US. 2017
- PI: **Eric Poitras**. *The Teacher Professional Development Portal: An Adaptive Learning Management System Based on User Interaction Processing, Text Mining, and Advanced Tutoring Strategies*. College of Education Faculty Research Grant. \$5,000 US. 2016
- PI: Kirsten Butcher, CoPI: **Eric Poitras**. *Preparing Undergraduates to Write and Communicate Online*. University of Utah Teaching Committee. \$7,000 US. 2016
- PI: **Eric Poitras**, Co-PI: Deborah Threedy. *Fostering 21st Century Skills in Law Students with the FirstYear Online Learning Environment: An Interdisciplinary Research Initiative*. Faculty Research and Creative Grant Proposal. \$5,968 US. 2014
- PI: Gérard Poitras, Co-PIs: **Eric Poitras**, Gabriel Cormier. *Tuteur cognitif pour l'apprentissage des futurs ingénieures et ingénieurs*. Fonds d'Initiatives Pédagogiques, Service d'animation et de soutien à l'enseignement, Université de Moncton. \$4,000 CA. 2011

ACADEMIC HONORS, AWARDS, AND FELLOWSHIPS

- Merit Award from the Department of Educational and Counselling Psychology, McGill University 2012
- Joseph-Armand Bombardier Canada Graduate Doctoral Scholarship 2011
- Wolfe Fellowship in Technology and Literacy 2011
- Joseph-Armand Bombardier Canada Graduate Scholarship 2008

PUBLICATIONS

PEER-REVIEWED PUBLICATIONS

MANUSCRIPTS PENDING PUBLICATION DECISION

- Harley, J. M., Lajoie, S.P., Tressel, T., Jarrell, A., **Poitras, E.**, & Pipe, L. (abstract under review). Leveraging location-based augmented reality and tour-guide prompts to foster historical reasoning and positive emotions. *Learning & Instruction* (special issue).

- Poitras, E.**, Doleck, T., Huang, F., Li, S., Lajoie, S. (submitted). Advancing Teacher Technology Education Using Open-Ended Learning Environments as Research and Training Platforms. *Australian Journal of Educational Technology (Special Issue on Future Directions in TPACK/TPACK Research and Development)*.
- Lajoie, S. P., **Poitras, E.** (in press). Crossing disciplinary boundaries to improve technology rich learning environments. Special issue on Adaptive Learning Technologies. *Teachers College Record*.
- Jang, E., Lajoie, S., Wagner, M., Xu, Z., **Poitras, E.**, Naismith, L. (in press). Person-Oriented Approaches to Profiling Learners in Technology-Rich Learning Environments for Ecological Learner Modeling. *Journal of Educational Computing Research*. [[Online First](#)]
- Poitras, E.**, & Lajoie, S. (in press). The Self-Regulation of Learning in the Social Sciences. To appear in the *Handbook of Self-Regulation of Learning and Performance*.
- Poitras, E.**, Fazeli, N., Doleck, T., Li, S., Huang, F., & Lajoie, S. (accepted). To appear in *Strategies for Deep Learning with Digital Technology: Theories and Practices in Education*.

JOURNAL ARTICLES

- Doleck, T., Jarrell, A., **Poitras, E.**, Chaouachi, M., & Lajoie, S. (2016). A tale of three cases: Examining accuracy, efficiency, and process differences in diagnosing virtual patient cases. *Australian Journal of Educational Technology*, 36(5), 61-76. [[link](#)]
- Poitras, E.**, Naismith, L., Doleck, T., & Lajoie, S. P. (2016). Using learning analytics to identify medical student misconceptions in an online virtual patient environment. *Online Learning*, 20(2). Retrieved from <http://olj.onlinelearningconsortium.org/index.php/olj/article/view/802/211>
- Lee, L., Lajoie, S., **Poitras, E.**, Nkangu, M., & Doleck, T. (2016). Co-regulation and Knowledge Construction in an Online Synchronous Problem Based Learning Setting. *Education and Information Technologies*. [[Online First](#)]. DOI: 10.1007/s10639-016-9509-6.
- Poitras, E.**, Lajoie, S. P., Doleck, T., & Jarrell, A. (2016). Subgroup discovery with user interaction data: An empirically guided approach to improving intelligent tutoring systems. *Educational Technology & Society*, 19(2), 204-214. DOI: 10.1007/s11423-015-9420-7 [[link](#)]
- Harley, J. M., **Poitras, E.**, Jarrell, A., Duffy, M. C., & Lajoie, S. P. (2016). Comparing virtual and location-based augmented reality mobile learning: Emotions and learning outcomes. *Educational Technology Research & Development*, 64(3), 359-388 [[link](#)] DOI: 10.1007/s11423-015-9420-7
- Doleck, T., Basnet, R. B., **Poitras, E.**, Lajoie, S. (2015). Mining learner-system interaction data: Implications for modeling learner behaviors and improving overlay models. *Journal of Computers in Education*, 2(4), 421-447. doi: 10.1007/s40692-015-0040-3 [[link](#)]
- Lajoie, S., Lee, L., **Poitras, E.**, Bassiri, M., Cruz-Panesso, I., Kazemitabar, M., Hmelo-Silver, C., Wiseman, J., Chan, L., Lu, J. (2015). The role of regulation in medical student learning in small groups: Regulating oneself and others' learning and emotions. *Computers and Human Behavior*, 52, 601-616. [[link](#)]
- Lajoie, S., Hmelo-Silver, C., Wiseman, J., Chan, L., Lu, J., Khurana, C., Cruz-Panesso, I., **Poitras, E.**, Kazemitabar, M. (2014). Using online digital tools and video to support international problem-based learning. *The Interdisciplinary Journal of Problem-Based Learning*, 8(2). DOI: 10.7771/1541-5015.1412 [[link](#)]

- Poitras, E., & Lajoie, S.** (2014). Developing an agent-based adaptive system for scaffolding self-regulated inquiry learning in history education. *Educational Technology Research & Development*, 62(3), 335-366. DOI: 10.1007/s11423-014-9338-5 [\[link\]](#)
- Poitras, E., & Lajoie, S.** (2013). A domain-specific account of self-regulated learning: The cognitive and metacognitive activities involved in learning through historical inquiry. *Metacognition and Learning*, 8(3), 213-234. DOI: 10.1007/s11409-013-9104-9 [\[link\]](#)
- Poitras, E., & Trevors, G.** (2012). Deriving empirically-based design guidelines for advanced learning technologies that foster disciplinary comprehension. *Canadian Journal of Learning and Technology*, 38(1), 1-21. (Highlighted in Research Article of the Week section in <http://distance-educator.com>) [\[link\]](#)
- Poitras, E., Lajoie, S., & Hong, Y.-J.** (2012). The design of technology-rich learning environments as metacognitive tools in history education. *Instructional Science*, 40(6), 1033-1061. DOI: 10.1007/s11251-011-9194-1 [\[link\]](#)
- Poitras, G., & Poitras, E.** (2011). A cognitive apprenticeship approach to engineering education: The role of learning styles. *Engineering Education*, 6(1), 62-72. [\[link\]](#)

CHAPTERS

- Poitras, E., & Fazeli, N.** (2016). Mining the Edublogosphere to Enhance Teacher Professional Development. In Shalin Hai-Jew (Ed.), *Social Media Data Extraction and Content Analysis*. IGI Global. [\[link\]](#)
- Poitras, E., Harley, J., Compeau, T., Kee, K., Lajoie, S.** (2016). Augmented Reality in Informal Learning Settings: Leveraging Technology for the Love of History. In R. Zheng & M. K. Gardner (Eds.), *Handbook of Research on Serious Games for Educational Applications*. IGI Global. [\[link\]](#)
- Ranellucci, J., **Poitras, E.**, Bouchet, F., Lajoie, S. P., & Hall, N. C. (2016). Understanding emotional expressions in social media through educational data mining. Chapter submitted to S. Tettegah & R. E. Ferdig (Eds.). *Emotions, Technology, and Social Media: Communication of Feelings for, with and through Digital Media*. Waltham, MA: Elsevier. [\[link\]](#)
- Poitras, E., Lajoie, S. P., Jarrell, A., Doleck, T., & Naismith, L.** (2016). Intelligent Tutoring Systems in the Medical Domain: Fostering Self-Regulatory Skills in Problem-Solving. In R. K. Atkinson (Ed.), *Intelligent Tutoring Systems Structure, Applications, and Challenges*. Nova Science Publishers Series: Education in a Competitive and Globalizing World. [\[link\]](#)
- Lajoie, S. P., & **Poitras, E.** (2015). Problem- and task-centered approaches. In M. Spector (Ed.), *Encyclopedia of Educational Technology*. Thousand Oaks, CA: SAGE. [\[link\]](#)
- Lajoie, S. P., **Poitras, E.**, Doleck, T., Jarrell, A. (2015). Modeling Metacognitive Activities in Medical Problem-Solving with BioWorld. In Peña-Ayala (Ed.), *Metacognition: Fundamentals, Applications, and Trends*. Springer Series: Intelligent Systems Reference Library. [\[link\]](#)
- Poitras, E.** (2015). The MetaHistoReasoning tool: Studying Domain-Specific Metacognitive Activities in an Intelligent System for History. In Peña-Ayala (Ed.), *Metacognition: Fundamentals, Applications, and Trends*. Springer Series: Intelligent Systems Reference Library. [\[link\]](#)
- Lajoie, S. P., & **Poitras, E.** (2014). Macro and micro strategies for metacognition and socially shared regulation in the medical tutoring domain. In Sottolare, R., Graesser, A., Hu, X., & Goldberg, B. (Eds.), *Design Recommendations for Adaptive Intelligent*

- Tutoring Systems: Adaptive Instructional Management (Volume 2)*. Orlando, FL: U.S. Army Research Laboratory. ISBN: 978-0-9893923-3-4 [\[link\]](#)
- Lajoie, S., Naismith, L., **Poitras, E.**, Hong, Y., Panesso-Cruz, I., Ranelluci, J., & Wiseman, J. (2013). Technology rich tools to support self-regulated learning and performance in medicine. In R. Azevedo & V. Aleven (Eds.), *International handbook of metacognition and learning technologies*. Amsterdam: The Netherlands: Springer. [\[link\]](#)
- Poitras, E.**, & Lajoie, S. P. (2013). A three-pronged approach to the design of technology-rich learning environments. In R. Atkinson (Ed.), *Learning Environments: Technologies, Challenges and Impact Assessment*. Hauppauge, NY: Nova Science Publishers, Inc. [\[link\]](#)

CONFERENCE PROCEEDINGS

- Doleck, T., **Poitras, E. G.**, Naismith, L., & Lajoie, S. P. (2016). Detecting Dummy Learner Submitted Annotations in an Online Case Learning Environment. In *Proceedings of the EdMedia: World Conference on Educational Media and Technology 2016*. Vancouver, British Columbia, CA. [\[link\]](#)
- Poitras, E. G.**, & Fazeli, N. (2016). Using an Intelligent Web Browser for Teacher Professional Development: Preliminary Findings from Simulated Learners. In *Proceedings of Society for Information Technology and Teacher Education International Conference 2016* (pp. 3037-3041). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE). [\[link\]](#)
- Doleck, T., Jarrell, A., **Poitras, E.**, Chaouachi, M., & Lajoie, S. P. (2016). Examining Diagnosis Paths: A Process Mining Approach. In *Proceedings of the IEEE International Conference on Computational Intelligence & Communication Technology (IEEE ICICT)*, Los Alamitos, CA: Conference Publishing Services. IEEE. [\[link\]](#)
- Lajoie, S. P., Lee, L., **Poitras, E.**, Hmelo-Silver, C., Hogaboam, P. (2015). Computer Supported Tools for Coregulation: Supporting Teachers and Learners in Problem Based Learning Activities. Regulated Learning in CSCL – Theoretical Progress for Learning Success. In O. Lindwall, P. Häkkinen, T. Koschmann, P. Tchounikine, & S. Ludvigsen (Eds.), *Exploring the Material Conditions of Learning: The Computer Supported Collaborative Learning (CSCL) Conference 2015, Volume 1* (pp. 11-18). Gothenburg, Sweden: The International Society of the Learning Sciences. [\[link\]](#)
- Doleck, T., Jarrell, A., **Poitras, E.**, & Lajoie, S. (2015). Diagnosing Virtual Patient Cases: Gender Differences in Novice Physicians in a Computer Based Learning Environment. In S. Carliner, C. Fulford, & N. Ostashewski (Eds.), *Proceedings of EdMedia: World Conference on Educational Media and Technology 2015* (pp. 666-670). Association for the Advancement of Computing in Education (AACE). Montreal, Canada. [\[link\]](#)
- Doleck, T., Jarrell, A., **Poitras, E.**, & Lajoie, S. (2015). Towards investigating performance differences in clinical reasoning in a technology rich learning environment. *Proceedings of the 17th International Conference on Artificial Intelligence in Education (AIED)* (pp. 566-569). Madrid, Spain. [\[link\]](#)
- Jarrell, A., Doleck, T., **Poitras, E.**, & Lajoie, S. (2015). Learning to diagnose a virtual patient: An investigation of cognitive errors in medical problem solving. *Proceedings of the 17th International Conference on Artificial Intelligence in Education (AIED)* (pp. 176-184). Madrid, Spain. [\[link\]](#)
- Doleck, T., Basnet, R. B., **Poitras, E.**, & Lajoie, S. (2015). Towards examining learners' behaviors in a medical intelligent tutoring system: A hidden markov model approach.

- In *Proceedings of the IEEE International Advance Computing Conference (IACC 2015)*. Bangalore, India. [\[link\]](#)
- Doleck, T., Basnet, R. B., **Poitras, E.**, & Lajoie, S. (2014). Exploring the Link Between Initial and Final Diagnosis in a Medical Intelligent Tutoring System. In *Proceedings of the IEEE International Conference on MOOCs, Innovation and Technology in Education (IEEE MITE)* (pp. 13-16). India : IEEE. [\[link\]](#)
- Doleck, T., Basnet, R. B., **Poitras, E.**, & Lajoie, S. (2014). BioWorldParser : A Suite of Parsers for Leveraging Educational Data Mining Techniques. In *Proceedings of the IEEE International Conference on MOOCs, Innovation and Technology in Education (IEEE MITE)* (pp. 32-35). India : IEEE. [\[link\]](#)
- Doleck, T., Basnet, R. B., **Poitras, E.**, & Lajoie, S. (2014). Augmenting Novice-Expert Overlay Model in an Intelligent Tutoring System : Using Confidence-Weighted Linear Classifiers. In *Proceedings of the IEEE International Conference on Computational Intelligence and Computing Research (IEEE ICCIC)* (pp. 87-90). Tamil Nadu, India. [\[link\]](#)
- Poitras, E.**, Jarrell, A., Doleck, T., & Lajoie, S. (2014). Supporting Diagnostic Reasoning by Modeling Help-Seeking. In *Proceedings of the 9th International Conference on Computer Science & Education (ICCSE 2014)* (pp. 10-14). Vancouver, Canada. [\[link\]](#)
- Poitras, E.**, Doleck, T., Lajoie, S. (2014). Mining Case Summaries in BioWorld. In *Proceedings of the 9th International Conference on Computer Science & Education (ICCSE 2014)* (pp. 6-9). Vancouver, Canada. [\[link\]](#)
- Trevors, G., Muis, K. R., Pekrun, R., Sinatra, G., & **Poitras, E.** (2014). *Epistemic beliefs and emotions predict the source of information recalled from multiple conflicting texts*. In H. Tabbers, E. de Vries, N. Jacobson, B. de Koning, M. van Amelsvoort, J. van der Meij (Eds.), *Proceedings of the Biennial Meeting of the EARLI Special Interest Group 2 Comprehension of Text and Graphics* (p. 11). Rotterdam: Erasmus University. [\[link\]](#)
- Goldberg, B., Sottolare, R., Roll, I., Lajoie, S., **Poitras, E.**, Biswas, G., Segedy, J., Kinnebrew, J., Wiese, E., Long, Y., Aleven, V., Koedinger, K., Winne, P. (2014). Enhancing Self-Regulated Learning through Metacognitively-Aware Intelligent Tutoring Systems. In *Proceedings of the 11th International Conference of the Learning Sciences (ICLS 2014)*. Colorado, USA. [\[link\]](#)
- Lajoie, S., Cruz-Panesso, I., Summerside, C., **Poitras, E.**, Hmelo-Silver, C., Wiseman, J., Lu, J., Chan, L. K., & Kazemitabar, M. (2013). The Role of Interpersonal Interactions in Emotional Regulation in Medical Student Learning. In *Book of abstracts of the European Association for Research on Learning and Instruction (EARLI) 15th Biennial Conference*. Munich, Germany. [\[link\]](#)
- Lajoie, S., **Poitras, E.**, Naismith, L., Summerside, C., Kazemitabar, M., Tressel, T., Lee, L., & Wiseman, J. (2013). Using Process Data to Examine Self-Regulatory Behaviors During Clinical Problem Solving Using Technology. In *Book of abstracts of the European Association for Research on Learning and Instruction (EARLI) 15th Biennial Conference*. Munich, Germany. [\[link\]](#)
- Poitras, G. J., & **Poitras, E.** (2013). Computer based learning software for engineering students. In *Proceedings of the 4th Annual Conference of the Canadian Engineering Education Association (CEEA)*. Montreal, Canada. [\[link\]](#)
- Lajoie, S. P., **Poitras, E.**, Naismith, L., Gauthier, G., Summerside, C., Kazemitabar, M., Tressel, T., Lee, L., & Wiseman, J. (2013). Modelling Domain-Specific Self-Regulatory Activities in Clinical Reasoning. In K. Yacef et al. (Eds.), *International Artificial Intelligence and Education Proceedings* (pp. 632-635). IOS Press: Amsterdam. [\[link\]](#)
- Poitras, E.**, Kee, K., Lajoie, S. P., & Cataldo, D. (2013). Towards Evaluating and Modelling the Impacts of Mobile-Based Augmented Reality Applications on Learning

- and Engagement. In K. Yacef et al. (Eds.), *International Artificial Intelligence and Education Proceedings* (pp. 868-871). IOS Press: Amsterdam. [\[link\]](#)
- Lajoie, S. P., Cruz-Panesso, I., **Poitras, E.**, Kazemitabar, M., Wiseman, J., Chan, L. K., & Hmelo-Silver, C. (2012). Can Technology Foster Emotional Regulation in Medical Students? An International Case Study Approach. In M. Cantoia, B. Colombo, A. Gaggioli, B. Girani De Marco (Eds.), *Proceedings of the 5th Biennial Meeting of the EARLI Special Interest Group 16 METACognition* (p. 148). Milano, Italy. [\[link\]](#)
- Lajoie, S. P., Naismith, L., & **Poitras, E.** (2012). Supporting Metacognitive Processes in Medical Reasoning Using Technology. In M. Cantoia, B. Colombo, A. Gaggioli, B. Girani De Marco (Eds.), *Proceedings of the 5th Biennial Meeting of the EARLI Special Interest Group 16 METACognition* (pp. 47-48). Milano, Italy. [\[link\]](#)
- Poitras, E.**, & Lajoie, S. (2012). The MetaHistoReasoning Tool: A Metacognitive Tool for Fostering Domain-Specific Metacognitive Activities in Learning through Historical Inquiry. In A. Weerasinghe, R. Azevedo, I. Roll, & B. du Boulay (Eds.), *Proceedings of the Workshop on Self-Regulated Learning in Educational Technologies: Supporting, Modelling, Evaluating, and Fostering Metacognition with Computer-Based Learning Environments* (pp. 41-44). Crete, Greece. [\[link\]](#)
- Poitras, E.**, & Lajoie, S. (2012). The MetaHistoReasoning Tool: An Overview of the Training and Inquiry Modules. In A. Weerasinghe, R. Azevedo, I. Roll, & B. du Boulay (Eds.), *Proceedings of the Workshop on Self-Regulated Learning in Educational Technologies: Supporting, Modelling, Evaluating, and Fostering Metacognition with Computer-Based Learning Environments* (pp. 45-47). Crete, Greece. [\[link\]](#)
- Poitras, E.**, Lajoie, S., & Hong, Y.-J. (2012). Using the MetaHistoReasoning Tool Training Module to Facilitate the Acquisition of Domain-Specific Metacognitive Strategies. In S.A. Cerri, W.J. Clancey, G. Papadourakis, K. Panourgia (Eds.), *Proceedings of the 11th International Conference on Intelligent Tutoring Systems* (pp. 511-516). Crete, Greece. doi: 10.1007/978-3-642-30950-2_66 [\[link\]](#)
- Poitras, E.**, Lajoie, S., & Hong, Y.-J. (2012). Learning through historical inquiry with the MetaHistoReasoning tool. In *Proceedings of the 40th Annual Meeting of the Canadian Society for the Study of Education*. Waterloo, Canada. [\[link\]](#)
- Poitras, E.**, Duffy, M., Azevedo, R., & Lajoie, S. (2012). Issues and challenges in the measurement of self-regulatory processes across disciplines in the context of advanced learning technologies. In *Proceedings of the 40th Annual Meeting of the Canadian Society for the Study of Education*. Waterloo, Canada. [\[link\]](#)
- Poitras, G., & **Poitras, E.** (2011). Implementation and evaluation of a cognitive apprenticeship approach to civil engineering. In *Proceedings of the 2nd Annual Canadian Engineering Education Association Conference*. St. John's, Canada. [\[link\]](#)
- Poitras, E.**, Lajoie, S., Nokes, J., & Hong, Y.-J. (2011). The MetaHistoReasoning Tool: Fostering domain-specific metacognitive processes while learning through historical inquiry. In G. Biswas, S. Bull, J. Kay, & A. Mitrovic (Eds.), *Proceedings of the 2011 Artificial Intelligence in Education Society Conference* (pp. 609-611). Auckland, New Zealand. doi: 10.1007/978-3-642-21869-9_117 [\[link\]](#)
- Poitras, E.**, Lajoie, S., & Hong, Y.-J. (2010). Using a bottom-up approach to design computers as metacognitive tools to enhance learning of history. In R. Pirrone, R. Azevedo, & G. Biswas (Eds.), *Proceedings of the AAAI Fall Symposium on Cognitive and Metacognitive Educational Systems* (pp. 81-86). Menlo Park, CA: Association for the Advancement of Artificial Intelligence (AAAI) Press. [\[link\]](#)
- Poitras, E.**, Hong, Y.-J., & Manson, B. (2010). Transformative learning in adult ESL education: An approach to enhance language skills and foster perspective transformation. In *Proceedings of the 38th Annual Meeting of the Canadian Society for the Study of Education*. Montreal, Canada. [\[link\]](#)

Manson, B., **Poitras, E.**, & Hong, Y.-J. (2010). Enhancing language skills and fostering perspective transformation in adult ESL education: A transformative learning approach. In *Proceedings of the 51st Annual Adult Education Research Conference (AERC)* (pp. 311-316). Sacramento, USA. [[link](#)]

PEER-REVIEWED PRESENTATIONS (WITHOUT PROCEEDINGS)

CONFERENCE PAPERS

Harley, J.M., Jarrell, A., Tressel, T., Lajoie, S.P., Pipe, L., & **Poitras, E. G.** (under review). *Evaluating usability dimensions of a mobile augmented reality app for history learning*. Paper submitted to the 17th Biennial conference of the European Association for Research on Learning and Instruction (EARLI).

Harley, J.M., Jarrell, A., Lajoie, S.P., Tressel, T., Pipe, L., Haldane, C., & **Poitras, E. G.** (under review). *Examining learners' physiological activation during an interaction with a mobile AR app for learning*. Paper submitted to the 17th Biennial conference of the European Association for Research on Learning and Instruction (EARLI).

Harley, J.M., Tressel, T., Jarrell, A., Lajoie, S.P., Pipe, L., & **Poitras, E. G.** (accepted). *Fostering historical reasoning and positive emotions with location-based augmented reality and tour-guide prompts*. Structured poster to be presented at the American Educational Research Association (AERA), San Antonio, TX

Poitras, E. G., Fazeli, N. (submitted). *Simulating preservice teachers' information-seeking behaviors while learning with an intelligent web browser*. Paper submitted at the 2017 Society for Information Technology and Teacher Educational annual conference. Austin, TX.

Doleck, T., **Poitras, E. G.**, & Lajoie, S. P. (submitted). *Towards detection of learner distractions in a medical learning environment: A subgroup discovery approach*. Paper to be presented at the 2017 American Educational Research Association Annual Meeting. San Antonio, TX.

Poitras, E. G., & Fazeli, N. (submitted). *Modeling information-seeking behaviors during learning from hypermedia with nBrowser*. Paper to be presented at the 2017 American Educational Research Association Annual Meeting. San Antonio, TX.

Poitras, E. G., Butcher, K., & Hudson, M. (submitted). *Mining sequential patterns in student collaborative dialogue while learning from Research Quest*. Paper to be presented at the 2017 American Educational Research Association Annual Meeting. San Antonio, TX.

Poitras, G. J., & **Poitras, E. G.** (2016). *Prerequisite evaluation of engineering skills*. Paper presented to the Canadian Engineering Education Association Conference 2016. Halifax, CA.

Poitras, E. G., Naismith, L., Doleck, T., & Lajoie, S. P. (2016). *Using educational data mining techniques to identify medical student misconceptions in a virtual patient environment*. Paper presented at the 2016 American Educational Research Association Annual Meeting. Washington, DC.

Poitras, E., Fazeli, N., Naismith, L., Lajoie, S. P. (2015). *Training medical students to solve complex diagnostic problems using web-based learning environments*. Paper presented at the Symposium on Emerging Technology Trends in Higher Education. Salt Lake City, UT.

Harley, J.M., **Poitras, E.**, Jarrell, A., Pipe, L., Gonzalez, E., Duffy, M., Lajoie, S. P., Li, K., Morton, M., Tissera, H., & Kee, K. (2015). *Augmented reality with mobile learning technologies: Comparing emotions and learning outcomes from outdoor and lab-based studies*. Paper presented at the Association for the Advancement of

- Computing in Education EdMedia World Conference on Educational Media and Technology (EdMedia). Montreal, Canada.
- Trevors, G., Chevrier, M., Muis, K. R., Pekrun, R., Sinatra, G., & **Poitras, E.** (2015). *Validating text mining software to study the effects on semantic similarity*. Paper – presented the 16th Biennial Conference of the European Association for Research in Learning and Instruction (EARLI). Limassol, Cyprus.
- Jarrell, A., Tenzin, D., Tressel, T., **Poitras, E.**, & Lajoie, S. (2015). *Towards adaptive help-seeking: Asking for help while problem solving in a computer based learning environment*. Paper presented at a round table to the Junior Researchers of EARLI at the 16th Biennial Conference of the European Association for Research in Learning and Instruction (EARLI). Limassol, Cyprus. [**Best Round Table Paper Award**]
- Poitras, E.**, Lajoie, S. P., Doleck, T., Jarrell, A. (2015). *Assessing Regulatory Patterns in Diagnostic Reasoning: A Precursor to Adaptive Scaffolding*. Paper presented at the Scaffolding Metacognition symposium at the American Educational Research Association, Chicago, Illinois, USA.
- Harley, J. M., **Poitras, E.**, Jarrell, A., Lajoie, S. P., Duffy, M., Cataldo, D., Kee, K. (2015). *Augmented Reality with Mobile Technologies: Can it Lead to Learning and Engagement with Historical Settings?* Poster presented at the American Educational Research Association, Chicago, Illinois, USA.
- Lee, L., Lajoie, S. P., **Poitras, E.**, Bassiri, M., Cruz-Panesso, I., Kazemitabar, M. A., Hmelo-Silver, C. E., Wiseman, J. (2015). *Metacognition and Co-Regulation in an On-Line Synchronous Problem-Based Learning Setting: Regulating One's Own and Others' Learning?* Paper presented at the American Educational Research Association, Chicago, Illinois, USA.
- Lajoie, S., **Poitras, E.** (2014). *Assessment and Instruction of Self- and Co-Regulation of Medical Diagnostic Processes in Technology-Rich Learning Environments*. Paper presented at the Metacognition and Self-Regulated Learning: Preparing Individuals through Learning How to Learn symposium at the International Conference of the Learning Sciences in Boulder, Colorado, USA.
- Kee, K., Compeau, T., **Poitras, E.** (2014). *History all Around us : Towards Best Practices for Augmented Reality for Public History and Cultural Empowerment*. Paper presented at the Digital Humanities Conference, Lausanne, Switzerland.
- Kee, K., **Poitras, E.**, Compeau, T. (2014). *The History All Around Us : Virtual Reconstructions of Cultural Heritage using Augmented Reality*. Paper presented at the Computer Applications and Quantitative Methods in Archaeology, Paris, France.
- Ranellucci, J., Bouchet, F., **Poitras, E.**, Lajoie, S., & Azevedo, R. (2014). *An Analysis of Emotions in Educationally Relevant Tweets*. Paper presented at the Annual Meeting of the American Educational Research Association Conference, Philadelphia, PA, USA.
- Poitras, E.**, Naismith, L., & Lajoie, S. P. (2014). *Automated Assessment of Writing Proficiency: Can Text Mining of Argumentative Texts Lead to More Nuanced Assessments?* Paper presented at the Innovative Practices for Assessment in Computer-Based Learning Environments Symposium at the Annual Meeting of the American Educational Research Association Conference, Philadelphia, PA, USA.
- Poitras, E.**, & Lajoie, S. (2014). *Using Computer-Based Learning Environments to Study the Role of Self-Regulation while Performing Inquiries into the Causes of Historical Events*. Paper presented at the Annual Meeting of the American Educational Research Association Conference, Philadelphia, PA, USA.
- Lajoie, S., & **Poitras, E.** (2014). *Using Technology-Rich Learning Environments as a Platform for Assessment and Instruction in the Medical Tutoring Domain*. Paper

- presented at the Invited Symposium on Technology and the 21st Century Learner at the Annual Meeting of the American Educational Research Association Conference, Philadelphia, PA, USA.
- Cormier, J.-M., & **Poitras, E.** (2014). *La collaboration interdisciplinaire en éducation muséale. Enjeux et promesses des technologies de l'information et des communications*. Paper presented at the Congrès National de l'Association des Musées Canadiens 2014. Toronto, CA.
- Poitras, E.**, Lajoie, S., Naismith, L., Summerside, C., Kazemitabar, M., Tressel, T., Lee, L. Bassiri, M., Farmanara, N., Alvo, S., Escalona, S., Wu, C.-H., Virone, A., & Wiseman, J. (2013). *Modelling Self-Regulatory Activities in Diagnostic Reasoning with BioWorld*. Paper presented to the Learning Environments Across Disciplines (LEADS) Research Partnership McGill Graduate Student Panel at the 12th Annual Education Graduate Student Society Conference (EGSS 2013), Meeting in the Middle:(de)Constructing Knowledge. Montreal, Canada.
- Lajoie, S., Cruz-Panesso, I., Summerside, C., **Poitras, E.**, Hmelo-Silver, C., Wiseman, J. Lu, J., Chan, L.K., Kazemitabar, M. (2013). *Technology Rich Learning Environments to Support Emotional Regulation: A case study of the Relationship between Physician Regulation and Patient Coping*. Paper presented at the Annual Meeting of the American Educational Research Association Conference, San Fransisco, USA.
- Lajoie, S., Cruz-Panesso, I., **Poitras, E.**, Ranellucci, J., Kazemitabar, M., Hong, Y.-J., Wiseman, J., Chan, L. K., Hmelo-Silver, C., & Lu, J. (2012). *Technology Triggers for Caring: Examining Affect while Learning to Communicate Bad News to Patients*. Paper presented at the Annual Meeting of the American Educational Research Conference, Vancouver, Canada.
- Ranellucci, J., **Poitras, E.**, Bouchet, F., Lajoie, S., & Azevedo, R. (2012). *Using social networking to guide research on emotions in education*. Roundtable paper presented at the 40th Annual Meeting of the Canadian Society for the Study of Education, Waterloo, Canada.
- Poitras, E.**, Lajoie, S., & Hong, Y.-J. (2012). *Learning through historical inquiry with the MetaHistoReasoning tool*. Paper presented at the 40th Annual Meeting of the Canadian Society for the Study of Education, Waterloo, Canada.
- Poitras, E.**, Lajoie, S., & Hong, Y.-J. (2012). *Designing an artificial pedagogical agent that provides instructional feedback in the context of learning with the MetaHistoReasoning tool*. Paper presented at the 12th Annual Education Graduate Student Society Conference: (e)Merging Knowledges: Classroom, Community, and Culture, Montreal, Canada.
- Poitras, E.**, Trevors, G., & Hong, Y.-J. (2011). *A computational implementation of the Landscape Model of Reading: Modelling causal coherence breaks in historical narrative texts*. Paper presented at the 38th Annual Meeting of the Canadian Society for the Study of Education, Fredericton, Canada.
- Poitras, E.**, & Trevors, G. (2011). *Investigating expert reader verbal protocol for designing advanced learning technology*. Paper presented to the National Interdisciplinary Graduate Symposium 2011, Montreal, Canada.
- Lajoie, S., Naismith, L., **Poitras, E.**, Panesso-Cruz, I., Hong, Y.-J., Ranelluci, J., & Wiseman, J. (2011). *Using Bioworld to enhance learning while performing an authentic inquiry-based task in medicine*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, USA.
- Trevors, G., **Poitras, E.**, & Hong, Y.-J. (2011). *The design of advanced learning technologies based on a process-oriented modelling approach to disciplinary comprehension*. Paper presented at the 10th Annual Education Graduate Student

- Society Conference: Education Matters: Theory, Practice, & Beyond, Montreal, Canada.
- Manson, B., Hong, Y.-J., & **Poitras, E.** (2010). *Transformative learning as a means of enhancing language skills and fostering perspective transformation in adult ESL education*. Paper presented at the AFDECE 9th International Colloquium (Association française d'éducation compare et des échanges), Montreal, Canada.
- Poitras, E.**, Hong, Y.-J., & Lajoie, S. (2010). *Agent technologies as a means to foster metacomprehension in learning history*. Paper presented at the 9th Annual Education Graduate Student Society Conference, Interdisciplinarity: Reality, Imagination & Diversity, Montreal, Canada.
- Lajoie, S., Wiseman, J., **Poitras, E.**, & Cruz-Panesso, I. (2009). *On-line based learning environment for fostering physicians' clinical skills necessary for early recognition of a deteriorating patient*. Paper presented at the 2nd Annual Conference on What really Works in Technology-Enhanced Health Education: Effective Use of Simulations and e-Education Strategies to Improve Teaching and Learning, Oshawa, Canada.

TALKS AND POSTERS

- Poitras, E. G.** (2017). Data-Driven Design of Adaptive Computer-Based Learning Environments. Poster Presented at the 2017 Data Science Day @ University of Utah. Salt Lake City, UT.
- Poitras, E. G.**, & Fazeli, N. (2016). *Educational web mining to support teachers' self-regulated learning in planning technological integration in the classroom*. Poster presented at the 2016 American Educational Research Association Annual Meeting. Washington, DC.
- Jarrell, A., Doleck, T., **Poitras, E.**, Lajoie, S., & Naismith, L. (2014). *Why Learners Ask for Help: The Role of Motivation in Help-Seeking Examined in a Technology Rich Learning Environment*. Poster presented at the 13th Annual Education Graduate Student Society Conference. Montreal, Canada.
- Jarrell, A., Doleck, T., **Poitras, E.**, Lajoie, S., & Naismith, L. (2014). *The How, When, and What of Help-Seeking: Exploring Help-Seeking Behaviors in BioWorld*. Poster presented at the 3rd Annual Meeting of the Learning Environments Across Disciplines Research Partnership. Montreal, Canada.
- Escalona, S., Lajoie, S., **Poitras, E.** (2013). *Text mining techniques to assess proficiency differences in diagnostic reasoning in medicine*. Poster presented at the 2013 Graduate Symposium in the Department of Education (GSDE 2013), Concordia University. Montreal, Canada.
- Cataldo, D., **Poitras, E.**, & Lajoie, S. (2013). *Advancing Domain-Specific Models of Self-Regulated Learning through Text Mining Technologies: The Use of Substantive Concepts with the MetaHistoReasoning tool*. Poster presented to the 12th Annual Education Graduate Student Society Conference (EGSS 2013), Meeting in the Middle:(de)Constructing Knowledge. Montreal, Canada.
- Lajoie, S.P., Naismith, L., & **Poitras, E.** (2012). *Supporting metacognitive processes in medical reasoning using technology*. Poster presented at the First Montreal International Conference on Clinical Reasoning, Montreal, Canada.
- Lajoie, S., Jingyan, L., Hmelo-Silver, C., Wiseman, J., Chan, L., Cruz-Panesso, I., **Poitras, E.**, Ranellucci, J., & Kazemi, M. (2011). *A case-study exploring the role of affect and culture in communicating bad news: Technology triggers for problem based learning and practice*. Poster presented to the Royal College of Physicians and Surgeons of Canada's Simulation Summit, Montreal, Canada.

- Trevors, G., & **Poitras, E.** (2011). *Reading professional-level social sciences text with the Highly-Skilled Reading Tutor*. Poster presented at the 8th Interdisciplinary Graduate Student Research Symposium 2011, Montreal, Canada.
- Poitras, E.**, Lajoie, S., & Hong, Y.-J. (2011). *Theory-driven design of metacognitive tools: A top-down and bottom-up approach*. Poster presented at the Annual Meeting of the American Educational Research Association (AERA 2011), New Orleans, USA.
- Hong, Y.-J., Manson, B., & **Poitras, E.** (2010). *Using transformative learning to enhance language skills and foster perspective transformation in adult ESL education*. Poster presented at the Annual Meeting of the American Educational Research Association (AERA 2010), Denver, USA.
- Poitras, E.**, Hong, Y.-J., & Manson, B. (2010). *Transformative learning in adult ESL education: An approach to enhance language skills and foster perspective transformation*. Poster presented at the annual meeting of the Canadian Society for the Study of Education, Montreal, Canada.
- Poitras, E.**, Hong, Y.-J., & Lajoie, S. (2010). *A bottom-up approach to design technology-rich learning environments that foster metacomprehension to enhance learning*. Poster presented at the 7th Interdisciplinary Graduate Student Research Symposium, Montreal, Canada.

NON-REFEREED INVITED TALKS

- Harley, J. M., **Poitras, E.**, & Lajoie, S. P. (2016). Project 17 : Fostering Historical Reasoning and Emotional Engagement with Location-Based Augmented Reality and Tour-Guide Prompts : Identifying Design Recommendations for Emerging Educational Technology. Paper presented at the 5th Annual Meeting of the Learning Environments Across Disciplines Research Partnership. Washington, D.C., USA.
- Poitras, E. G.**, Harley, J., Lajoie, S. (2016). *Project 7 : Using Augmented Reality Applications to Foster Learning and Engagement of History*. Paper presented at the 5th Annual Meeting of the Learning Environments Across Disciplines Research Partnership. Washington, D.C., USA.
- Poitras, E. G.**, Azevedo, R. (2016). *LEADS 2016 Learning Analytics Workshop*. Paper presented at the 5th Annual Meeting of the Learning Environments Across Disciplines Research Partnership. Washington, D.C., USA.
- Poitras, E. G.**, Fazeli, N., Lajoie, S. (2016). *A Network-Based Approach to Learner Modeling in Open-Ended Learning Environments*. Paper presented at the 5th Annual Meeting of the Learning Environments Across Disciplines Research Partnership. Washington, D.C., USA.
- Poitras, E.** (2016). *Modeling Learning and Performance with Adaptive Technology-Rich Learning Environments*. Invited lecture presented at the IPT Seminar at Brigham Young University, Provo, UT.
- Poitras, E.** (2015). *Building Network-Based Learner Models for Adaptive Instructional Technologies*. Invited Lecture presented at the Foundations of Learning Sciences Course at McGill University, Montreal, Canada.
- Poitras, E.** & Harley, J. (2015). *Using Augmented Reality Applications to Foster Learning and Engagement of History*. Paper presented at the 4th Annual Meeting of the Learning Environments Across Disciplines Research Partnership. Chicago, USA.
- Poitras, E.** (2014). *Implications of Educational Data Mining in an Effort to Map the Edublogosphere*. Invited Lecture presented at the Digital Media Course at McGill University, Montreal, Canada.

- Kee, K., & **Poitras, E.** (2014). *Using Augmented Reality Applications to Foster Learning and Engagement of History*. Paper presented at the 3rd Annual Meeting of the Learning Environments Across Disciplines Research Partnership. Montreal, Canada.
- Advanced Technologies for Learning in Authentic Settings Research Group.** (2013). *Learning Environments Across Disciplines: Some Examples*. Comment les sciences humaines propulsent l'ère numérique? Exposition interactive organisée par le Conseil de recherches en sciences humaines (CRSH) et l'Université du Québec à Montréal (UQAM), Montreal, Canada.
- Poitras, E.** (2013). *Support for the Final Stretch – A round-table Social Sciences and Humanities Research Council of Canada Event*. Invited workshop presented at the ABC's of the PhD in the Department of Educational and Counselling Psychology, Montreal, Canada.
- Poitras, E.** (2013). *Harnessing Technology in Student Assessment*. Public lecture at the LEADS Fall 2013 Reading Group, Montreal, Canada.
- Poitras, E., & Jarrell, A.** (2013). *Measurement of Learning and Reasoning Processes in Technology-Rich Learning Environments*. Invited lecture presented at the Foundations of Learning Sciences Course at McGill University, Montreal, Canada.
- Kee, K., & **Poitras, E.** (2013). *Using Augmented Reality Applications to Foster Learning and Engagement*. Paper presented at the 2nd Annual Meeting of the Learning Environments Across Disciplines Research Partnership. San Francisco, USA.
- Kee, K. & **Poitras, E.** (2013). *Using Augmented Reality Applications to Foster Learning and Engagement*. Poster presented at the 2nd Annual Meeting of the Learning Environments Across Disciplines Research Partnership. San Francisco, USA.
- Poitras, E.** (2013). *Model-Based Design of Technology-Rich Learning Environments*. Invited lecture presented at the Learning Environments and Processes Course at McGill University, Montreal, Canada.
- Poitras, E.,** Harley, J., Boucher, F., Tressel, T., Derian-Toth, M. (2013). *Learning Environments Across Disciplines (LEADS) Research Partnership McGill Graduate Student Panel*. Panel submitted to the 12th Annual Education Graduate Student Society Conference, Meeting in the Middle:(de)Constructing Knowledge. Montreal, Canada.
- Poitras, E.** (2012). *Advances in Methodological and Analytical Techniques, Session 4*. Public lecture at the LEADS Fall 2012 Reading Group, Montreal, Canada.
- Poitras, E.,** Kazemitabar, M. (2012). *Concurrent Think-Aloud Protocols: Transcribing, Segmenting, Coding, and Interrater Reliability*. Invited lecture presented at the Foundations of the Learning Sciences Course at McGill University, Montreal, Canada.
- Poitras, E.** (2012). *Demonstration of the MetaHistoReasoning tool and SMARTeacher softwares*. Invited lecture presented at the Foundations of the Learning Sciences Course at McGill University, Montreal, Canada.
- Poitras, E.,** Naismith, L., Summerside, C., Kazemi, M., Tressel, T. (2012). *Trends in Theories and Instruction, Session 1*. Public lecture at the LEADS Fall 2012 Reading Group, Montreal, Canada.
- Poitras, G., Cormier, G., & **Poitras, E.** (2012). *Technologies avancées d'apprentissage pour la formation professionnelle*. Invited presentation at the Colloque à l'appui de la réussite de l'Université de Moncton, Moncton, Canada.
- Poitras, E.** (2011). *Technology-rich learning environments*. Invited lecture presented at the Exceptional Students Course at McGill University, Montreal, Canada.
- Poitras, E.,** Lajoie, S., & Hong, Y.-J. (2010). *The MetaHistoReasoning Tool: A computer-based learning environment designed as a metacognitive tool to facilitate*

inquiry-based learning in history education. Public lecture presented at the Research Exchange Forum at McGill University, Montreal, Canada.

Poitras, E., Hong, Y.-J., & Lajoie, S. (2009). *A metacognitive agent that supports learners to monitor and control their comprehension while reading an historical narrative text*. Public lecture presented at the Research Exchange Forum at McGill University, Montreal, Canada.

Poitras, E. (2009). *Technology in support of self-regulated learning*. Public lecture presented at Learning Sciences Research Seminar at McGill University, Montreal, Canada.

INSTRUCTIONAL TECHNOLOGY DESIGN & DEVELOPMENT

Teacher Professional Development portal (under development) – A Learning Management System designed for educators to acquire skills through software simulations built as SCORM compliant eLearning modules. The platform logs user interactions, which are mined by researchers to discover knowledge in relation to learning processes and outcomes. The eLearning modules can also target a broad variety of skills that are useful to teachers, including classroom management practices.

mObserver (under development) – An intelligent quantitative field observation system for logging behavioral observations made by researchers. The system relies on input from keyboard strokes or a Peregrine data glove in order to analyze observations in real-time and deliver prompts to the experimenter via text-to-speech synthesis. The system has applications for guided walking tours augmented through mobile and wearable devices as well as behavioral assessment interventions in K-12 classrooms.

Novessa suite of software apps (under development) – The Novessa suite of apps for teacher professional development includes an intelligent web browser that supports pre- and in-service teachers in building lesson plans (i.e., nBrowser), a simulator that computes different learner trajectories to examine the performance of learner modeling algorithms (i.e., nSimulator), a log-file parser to extract features that characterize learner behaviors (i.e., nParser), a web-based library for visualizing networks of online resources built using RapidMiner web and text mining operators and exported via Gephi (i.e., nViewer), a web crawler to author network-based domain models (i.e., nCrawler), and a voice-activated virtual assistant to assist teachers in designing lesson plans (i.e., nAdviser).

Discover the U (completed) – A location-based augmented reality application that allows students to reconstruct the influence of historical figures and periods on changes in architecture and building of the University of Utah campus. The tour application is developed using content management systems (i.e., izi.Travel, GuidiGO, ARIES) as well as the jQuery Mobile UI framework in order to examine choices of design guidelines towards user learning and engagement. The app is compliant with iOS, Android, Windows, and Google Glass devices.

The MetaHistoReasoning Tool (MHRt) (completed) – The MHRt is a computer-based learning environment designed as a metacognitive tool to assist students in acquiring, applying, and transferring domain-specific metacognitive strategies that are critical in learning through historical inquiry. We used both example-based skill acquisition and inquiry-based learning to design two modules – the training and inquiry modules. Students investigate the causes of the Acadian Deportation by performing an authentic

task with the benefit of an artificial pedagogical agent, annotation tool, explanation palette, a digital library, and the source viewer. This project is funded by the Social Sciences and Humanities Research Council, the Wolfe Fellowship in Technology and Literacy, and the The History Education Network.

Civil Engineering Tutor (completed) – This computer-based learning environment aims to assist senior undergraduate students in civil engineering to learn how to calculate loads applied on different types of building structures. With the help of subject-matter experts, the software is designed based on cognitive apprenticeship to provide modelling, coaching, and scaffolding in relation to the skills that mediate proficiency in solving real-life problems. This project is funded by the Université de Moncton Fonds d'Initiatives Pédagogiques.

The Highly-Skilled Reading Tutor (completed) – This computer-based learning environment is designed based on example-based skill acquisition as an instructional model. We capture the reading comprehension strategies used by experts in the social sciences and humanities to create visual examples of the representative skills that mediate proficiency within this domain. A pedagogical agent embedded within the software assists students in studying the examples and acquiring these skills.

SOFTWARE & PROGRAMMING EXPERIENCE

Data Analysis: SPSS, SAS, R, RapidMiner, Noldus Observer XT11, FaceReader 5, iPi Soft Markerless Motion Capture, Eye Tribe Eye Tracker, NEULOG Sensors and Software

Web Design & Development: Camtasia, Flash/Animate, Photoshop, Illustrator, InDesign, Captivate, Premiere Pro, Edge Animate, Brackets, PhoneGap, Muse

Programming Languages: C++, C#, lua, HTML, CSS, JavaScript, jQuery, Vis.js

ADVISORY BOARD / CONSULTANT

Advisory Board Member. Edited Book: Zheng, R., & Gardner, M. (Eds.). Handbook of Research on Serious Games for Educational Applications. Hershey, PA: IGI Global Publisher.	2015
Consultant. Chief of Naval Operations Strategic Studies Group.	2015
Steering Committee Member. Learning Environments Across Disciplines Research Partnership of the Social Sciences and Humanities Research Council of Canada.	2010-2014

TEACHING EXPERIENCE

EDPS 7950 – Independent Study and Special Projects (Graduate, 3 credit), University of Utah	2016-2017
EDPS 6447 – Intro to Web-Based Tools and Apps (Graduate, 3 credit), University of Utah	2016-present
EDPS 7440 – Learning Sciences Seminar (Graduate, 1 credit, University of Utah)	2015-present
EDPS 3140 – Technology in Classrooms (Undergraduate level, 2 credits), University of Utah	2014-present

EDPS 6560 – Multimedia Learning (Graduate level, 3 credits), University of Utah	2015-present
EDPE 668 – Advanced Research Seminar (Graduate level, 3 credits), McGill University	2013
EDPE 676 – Intermediate Statistics Laboratory (Graduate level, 0 credits), McGill University	2009-2011

STUDENT MENTORING (University of Utah)

Ph.D. STUDENTS

Dissertation Committee Member, Krishna Gaurav, Computer Science	2016-
Dissertation Committee Member, Bradley Bloomfield, School Psychology	2016-
Dissertation Committee Member, Michael Tanana, Counseling Psychology	2016-
Dissertation Committee Member, Sarah Davies, Learning Sciences	2015-
Dissertation Committee Member, Lisa Ferrara, Learning Sciences	2015-

M.S. & M.ED. STUDENTS

IDET CAPSTONE COMMITTEE CHAIR

Marah Metallo, Brady Thompson, Ashley Bell, Bryce Bird, Michael Luthy, Lindsay Snow, Terrell Wyche	2016-2017
Denise Russell, Rachael Sweeten, Susan Cohen, Erin Luc	2015-2016
Dallin Cowles, James Morris, Sara Schneider, Damon Kenrick, Todd Lagerberg	2014-2015

IDET CAPSTONE COMMITTEE MEMBER

Brandon Baird, Pamela Carpenter, Sasha Land, Athena Nadeau, Corban Remund, Tristan Olson, Patrick Smith, Marla Beal, Aubrey Hart	2016-2017
Cherie Lindhardt, Hailey Ritchins, Chanté Wilson, Rory Christensen, Jeff Honsvick, Erica Ball, Oumar Traore, Heather Horseley, Jonathan Lofgren, Teju Shearer-Davis, Andy Tullis	2015-2016
Chad Crawford, Jeffrey Hodson, Amanda Higgs, McKenna Lane, Kareena Steed, Robine-Elise Call, Neil Carpenter, Justin Hill, Devaki Murch, Kimberley Sorenson	2014-2015

OTHER STUDENT ADVISING

Graduate Research Assistant Supervisor, Negar Fazeli, Learning Sciences	2014-
Graduate Research Assistant Supervisor, Susan Cohen, IDET	2014-2015

SERVICE

UNIVERSITY, COLLEGE, & PROGRAM

STANDING COMMITTEES

Volunteer Subject Matter Expert at the Commercialization Engine at Technology & Venture Commercialization, University of Utah	2015
Department of Educational Psychology, Learning Sciences Program Committee	2014-
Department of Educational Psychology, IDET Program Committee	2014-

PROFESSIONAL SERVICE

JOURNAL SERVICE

Ad Hoc Reviewer, Computers in Human Behavior	2017
Ad Hoc Reviewer, Contemporary Educational Psychology	2014
Ad Hoc Reviewer, Journal of Learning and Instruction	2013
Ad Hoc Reviewer, Engineering Education	2013

ACADEMIC CONFERENCES

Ad Hoc Reviewer, American Educational Research Association	2016
Program Committee Member, Supporting Dynamic Cognitive, Affective, and Metacognitive (SD-CAM) Processes in ITS Research, Workshop at the Intelligent Tutoring Systems 2016 Conference	2015
Organizer, Educational Data Mining and Learning Analytics Workshop at the Learning Environments Across Disciplines Annual Meeting (LEADS2016)	2015
Volunteer, Artificial Intelligence in Education Conference	2013
Organizer & Co-Chair, Learning Environments Across Disciplines Reading Group – Hosted by the Institute for Public Life and Ideas, McGill University	2012
Proposal Reviewer, Canadian Association of Educational Psychology	2011-2012
Chair and Discussant, Research Exchange Forum	2011
Chair and Discussant, Education Graduate Student Society Conference	2011
Chair and Discussant, National Interdisciplinary Graduate Symposium	2011
Proposal Reviewer, American Education Research Association	2011

ACADEMIC ASSOCIATIONS

THEN HiER Graduate Student Committee	2013
Planning Committee Member, McGill Education Graduate Student Society Conference	2012
French Translator, The Canadian Association of Educational Psychology Newsletter	2012

EDITED BOOKS

Ad Hoc Reviewer, Social Media Data Extraction and Content Analysis	2015
Ad Hoc Reviewer, Handbook of Research on Serious Games for Educational Applications	2015

PUBLIC SERVICE/COMMUNITY ENGAGEMENT

Consultant for Zizzle eLearning, Tech Start-Up at the Impact Hub	2016
Most Likely to Succeed film screening of the Utah College of Education discussion panel member	2015
Student Life Ambassador, McGill University	2010-2013
McGill University Representative, Canadian Committee of Graduate Students in Education	2011

PROFESSIONAL AFFILIATIONS

Adobe Education Trainer Program (AET)
Adobe Campus Leader Program (ACL)
European Association for Research on Learning and Instruction (EARLI)
American Educational Research Association (AERA)
International Artificial Intelligence in Education Society (AIED)
Canadian Association for Educational Psychology (CAEP)

Canadian Association for the Study of Education (CSSE)
THEN/HIER History Education Network (THEN/HIER)
Canadian Engineering Education Association (CEEA)
Canadian Committee of Graduate Students in Education (CCGSE)
Education Graduate Student Society (EGSS)
Immersive Education Initiative (iED)