

Curriculum Vitae

GENERAL INFORMATION

Name

Dr. Robin Kay
11 Simcoe St. North
PO Box 385
Oshawa, L1H 7K4
Email: robin.kay@uoit.ca
Webpage: faculty.uoit.ca/kay/home

Goals

- ▶ To develop a strong research program focussing the meaningful use of technology in face-to-face, blended and online learning environments
- ▶ To make significant contributions to the academic community (both domestic and international) through committees, conferences, publishing, and reviewing papers
- ▶ To continue developing my skills and techniques in delivering highly effective and useful undergraduate and graduate course
- ▶ To effectively mentor graduate students in research and teaching
- ▶ To develop and promote a top quality, innovative Masters of Education program

Highlights

- ▶ Director of Graduate Studies - UOIT – Faculty of Education since 2013
- ▶ Associate Professor - UOIT – Faculty of Education since 2008
- ▶ Over \$240,000 in grants including SSHRC and the Canadian Council on Learning
- ▶ Over 20 years' experience teaching computer applications, mathematics education, research methods, and educational psychology
- ▶ Written over 70 refereed articles and chapters in the areas classroom response systems, computer ability and attitudes, e-learning, emotions and computer behaviour, gender difference in computer behaviour, laptop use in higher education, learning with computers, pre-service teacher use of technology, video podcasts, and web-based learning tools
- ▶ Presented over 60 papers at over 20 international conferences
- ▶ Nominated for UOIT Teaching Award in 2006-2007

Education

Ph.D.	Educational Psychology (University of Toronto)	1996
M.A.	Computer Applications in Education (University of Toronto)	1988
B.Sc.	Psychology and Computer Science (University of Toronto)	1984

Ph.D. Thesis

Title: The Acquisition of Computer Knowledge: A Formative Analysis

Supervisors: Dr. Dan Keating and Dr. Keith Oatley

EMPLOYMENT

Director of Graduate Studies – Faculty of Education

2013-pres

University of Ontario Institute of Technology – Oshawa, Ontario

- responsible for the organization and delivery of a leading edge, high technology, synchronous Masters of Education program with over 160 students
- key duties include hiring faculty, scheduling, orientation for new students and faculty, curriculum development, admissions, website development, policy development and changes, promotion of the program and new cohorts, scholarship awards, course evaluations, and liaison with students

Associate Professor – Faculty of Education

2008-pres

University of Ontario Institute of Technology – Oshawa, Ontario

- designed and taught undergraduate courses in Math Methods and Computer Science
- designed and taught graduate courses in Web-Based Learning Tools, Advanced Research Methods, and Technology & Curriculum
- developed extensive web based materials for course delivery
- obtained over \$100, 000 in grants from SSHRC and the Canadian Council of Learning
- published 33 peer-reviewed articles and four chapters
- mentored junior faculty with respect to writing research papers and teaching
- actively participated in developing and launching the M.Ed. program at UOIT
- assisted with OCT evaluation committee for the B.Ed. Primary-Junior program
- currently supervising 4 M.Ed. students

Assistant Professor – Faculty of Education**2003-2008***University of Ontario Institute of Technology – Oshawa, Ontario*

- designed and taught courses in Math Methods, Computer Science, Research & Education, and Human Learning and Development
- created and delivered 4 day math camps for pre-service teachers
- developed extensive web based learning materials for course delivery
- nominated for UOIT teaching award 2006-2007
- obtained over \$150, 000 in grants from SSHRC and the Canadian Council of Learning
- published 21 peer-reviewed articles and two chapters
- actively participated in developing the inaugural B.Ed. program including field study evaluations, ordering of materials, and creating policies related to laptop use
- took lead role in OCT evaluation committee for the B.Ed. Intermediate-Senior program
- delivered workshops on laptop use, classroom response systems, and learning objects
- supervised over 75 teacher candidates in their practicum experiences
- supervised six research assistants

Instructor of Computer Science and Faculty Trainer**1996-2003***Upper Canada College – Toronto, Ontario**Phillips Exeter Academy - Exeter, New Hampshire*

- taught a two year., International Baccalaureate Computer Science program
- taught a variety of computer application courses to students (grades 9-12) and staff (word processing, spreadsheets, database, programming, email, web page design)
- developed effective on-line curriculum for grade 9-12 for computer science department
- designed manuals, course materials, and web pages for students and faculty
- consulted staff of 150 on the educational use of computers in their classes
- trained faculty to use Blackboard (on-line curriculum software) in their classrooms

Instructor of Computer Studies**1989-96***Ryerson University - Toronto, Canada**George Brown College • Humber College • York Region Board of Education*

- designed and developed a brand new curriculum for an intensive computer applications course involving a wide range of software packages
- created teaching manuals for Operating Systems, Word Processing, Spreadsheets, Database, and Graphics software
- counselled students on job searches, CVs, and effective interview techniques

Instructor of Math and Science **1991-95**

Seneca College • Sylvan Learning Institute •

- designed, organized, and taught courses in mathematics and science for new Canadians (Grades 3-13)
- developed extensive course materials including training manuals, readings, and practice exercises

Research Coordinator and Trainer **1989-93**

Ontario Institute for Studies in Education - Toronto, Canada

- worked with a research team on long term qualitative and quantitative assessment of social learning
- helped prepare reports, conferences presentations, and research papers
- organized and analyzed large data sets using SPSSX and SAS
- provided in-house training for students on a variety of software packages for IBM and MAC computers as well as evaluating and recommending software and hardware

Computer Systems Coordinator and Trainer **1988-90**

Ministry of Community and Social Services - Toronto, Canada

- co-ordinated all aspects of computer use including training, evaluation, coaching, purchasing,
- responsible for installation, maintenance, and programming for six departments with over 125 computers
- designed in-house training materials for specialized applications within the department

Sr. Research Associate **1987-88**

Addiction Research Foundation - Toronto, Canada

- assisted in preparation of grants, proposals and research papers
- analyzed and interpreted large data sets using SPSSX
- helped design evaluation studies and co-ordinate research teams in 2 year lifestyle project
- responsible for the development, organization and design of instruction manuals for in-house computer application software

Research Assistant and Trainer **1985-87**

Dellcrest Children's Centre - Toronto, Canada

- assisted in preparation of grants, analyzed and interpreted data, helped to design evaluation studies and write reports
- responsible for training staff on word processing, data base, and statistics software

Professional Affiliations and Activities

Reviewer for the following journals/programs

Action in Teacher Education	2004-pres
American Educational Research Association	2003-2005
British Journal of Educational Technology	2005-pres
Computers & Education	2008-pres
Computers in Human Behavior	1994-pres
Current Issues in Education	2005-pres
Educational Technology Research & Development	2005-pres
Higher Education	2012-pres
Journal of Computer Assisted Learning	2010-pres
Journal of Educational Computing Research	2008-pres
Journal of Research on Technology in Education	2004-2008
Technology, Pedagogy and Education	2004-pres

RESEARCH

Awards

Project	Awarding Agency	Role	Amount	Timeframe
Professional Development And Evaluation Of Professional Development Learning Environments	Canadian Council on Learning - Research Project in Structure Formal Learning (CCL)	Co-Applicant	\$70,000	2008-2009
Exploring the Use of Learning Objects in Math & Science Classroom	SSHRC Strategic Research Grant	Principal Applicant	\$75,000	2007-2010
Exploration And Evaluation Of Professional Development Learning Environments	SSHRC Strategic Research Grant	Co-Applicant	\$48,456	2007-2008
Evaluating the Impact of Learning Objects on Gr. 9 and 10 Remediation and Course Recovery Learning	Waterloo Region District School Board	Principal Applicant with Dr. Liesel Knaack & Dr. Bill Muirhead	\$22,750	2006-2007
Evaluating the Impact of Learning Objects on Classroom Learning	Canadian Council on Learning - Research Project in Structure Formal Learning (CCL)	Principal Applicant with Dr. Liesel Knaack & Dr. Bill Muirhead	\$70,000	2006-2007

Evaluating the Impact of Learning Objects on Classroom Learning	SSHRC	Principal Applicant with Dr. Liesel Knaack & Dr. Bill Muirhead	4A Status	2006
Developing Effective learning Objects to Improve Calculus Readiness Among First Year Students	UOIT Teaching Innovation Fund	Principal Applicant with Ilona Kletskin	\$4500	2006-2007
Developing a Lesson Planning Learning Objects for Pre-Service Teachers	UOIT Teaching Innovation Fund	Principal Applicant with Dr. Liesel Knaack	\$2900	2006-2007
Mentoring Effective Field Placement Supervisors/Advisors	UOIT Teaching Innovation Fund	Co-Applicant with Dr. Liesel Knaack	\$2700	2006-2007
TIPS Math Camp Study	Durham District School Board	Principal Applicant	\$15,000	2005-2006

Publications

Books/Chapters (n=6)

- Kay, R. H. (in press). Creating effective virtual classes using research and guided feedback. In F. J. Desjardins & S. M. Bullock (Eds.), *Graduate teaching in an online world*. Oshawa, Ontario: UOIT Press.
- Kay, R. H. (2009). A formative analysis of interactive classroom communication systems used in secondary school classrooms. In L. T. W. Hin & R. Subramaniam (Eds.) *Handbook of Research on New Media Literacy at the K-12 Level: Issues and Challenges* (pp.720-742). Hershey, PA: Information Science Reference.
- Kay, R. H. (2009). Understanding factors that influence of the effectiveness of learning objects in secondary school classrooms. . In L. T. W. Hin & R. Subramaniam (Eds.) *Handbook of Research on New Media Literacy at the K-12 Level: Issues and Challenges* (pp.419-435). Hershey, PA: Information Science Reference.
- Kay, R. H. (2009). Educational mini-clips in distance learning. In Rogers et al. (Eds.) *Encyclopedia of Distance Learning, 2nd Edition* (Volume 2) (pp. 754-758). Hershey, PA: Information Science Reference.
- Kay, R. H. (2008a). Exploring gender differences in computer-related behaviour: Past, present, and future. In T .T. Kidd & I. Chen, *Social Information Technology: Connecting Society and Cultural Issues* (pp. 12-30). Hershey, PA: Information Science Reference.
- Kay, R. H. (2009). The role of learning objects in distance learning: opportunities and challenges. In Rogers et al. (Eds.) *Encyclopedia of Distance Learning, 2nd Edition* (Volume 2) (pp. 1808-1813). Hershey, PA: Information Science Reference.
- Kay, R. H. (2007). Gender differences in computer attitudes, ability, and use in the elementary classroom. *Research into Practice, Ontario Ministry of Education*. Monograph #8, 1-4. Available at http://oere.oise.utoronto.ca/wp-content/uploads/2012/08/+WW_GenderDifferenceComputerAbilities.pdf
- Kay, R. H. (1992) Understanding gender biases in computer-related behaviour: Are we using the wrong metaphor?. In (Ed.), *In Search of Gender-Free Paradigms for Computer Science Education*, [NECC Monograph], 9-15.

Refereed Articles (n=67)

Kay, R. H. (in press). Exploring applications for using video podcasts in online learning. *International Journal of Online Pedagogy and Course Design*, 4(2)

Kay, R. H. & Lauricella, S. (in press). Investigating the benefits and challenges of using laptop computers in higher education. *CJLT*.

Kay, R. H. (2014). Developing a framework to create effective problem-based video podcasts. *International Journal of Emerging Technologies*, 9(1), 22-30.

Kay, R. H. (2012). Analyzing the use of video podcasts in middle school mathematics classrooms. *Canadian Journal of Learning and Technology*, 38(2), 1-20. Available at <http://www.cjlt.ca/index.php/cjlt/article/view/684>

Kay, R. H. (2012). Exploring individual differences in the impact of web-based learning tools (WBLTS) on student attitudes and learning performance. *Research and Practice in Technology Enhanced Learning*, 7(2), 89-104. Available at http://www.apsce.net/rptel/rptel2012julissue-article2_pp89-104.pdf

Kay, R. H. (2012). Examining factors that influence the effectiveness of learning objects in mathematics classrooms. *Canadian Journal of Science, Mathematics, and Technology Education*, 12(4), 35-366. doi: 10.1080/14926156.2012.732189

Kay, R. H. (2012). Exploring individual differences in the impact of web-based learning tools (WBLTS) on student attitudes and learning performance. *Research and Practice in Technology Enhanced Learning*, 7(2), 89-104. Available at http://apsce.net/RPTEL/RPTEL2012JulIssue-Article2_pp89-104.pdf

Kay, R. H. (2012). Exploring the use of video podcasts in education: A comprehensive review of the literature. *Computers in Human Behavior*, 28(3), 820-831. doi: 10.1016/j.chb.2012.01.011

Kay, R. H. (2012) Exploring the use of web-based learning tools in secondary school classrooms. *Interactive Learning Environments*, 20(1), 1-17. doi:10.1080/10494820.2011.64167

Kay, R. H. (2012). Evaluating the instructional architecture of web-based learning tools (WBLTs): Direct instruction vs. constructivism revisited. *Journal of Interactive Learning Research*, 24(1), 445-463.

Kay, R. H. (2012). Using video podcasts to enhance technology-based learning in preservice teacher education: A formative analysis. *Journal of Information Technology and Application in Education*, 1(3), 97-104. Available at <http://www.jitae.org/Download.aspx?ID=2617>

- Kay, R. H. (2011). Evaluating learning, design, and engagement in web-based learning tools (WBLTs): The WBLT Evaluation Scale. *Computers in Human Behaviour*, 27(5), 1849-1856. doi:10.1016/j.chb.2011.04.007
- Kay, R. H. (2011). Examining the effectiveness of web-based learning tools in middle and secondary school science classrooms. *Interdisciplinary Journal of E-Learning and Learning Objects*, 7, 359-374. Available at <http://www.ijello.org/Volume7/IJELLOv7p359-374Kay781.pdf>
- Kay, R. H. (2011) Exploring the influence of context on attitudes toward web-based learning tools (WBLTs) and learning performance. *Interdisciplinary Journal of E-Learning and Learning Objects*, 7. Available at <http://www.ijello.org/Volume7/IJELLOv7p125-142Kay748.pdf>
- Kay, R. H. (2011) Exploring the impact of web-based learning tools in middle school mathematics and science classrooms. *Journal of Computers in Mathematics and Science Teaching*, 30 (2), 141-162.
- Kay, R. H. (2009). Examining gender differences in attitudes toward interactive classroom communications systems (ICCS). *Computers and Education*, 52(4) 730-740. doi: 10.1016/j.compedu.2008.11.015
- Kay, R. H. (2008). Exploring the relationship between emotions and the acquisition of computer knowledge. *Computers & Education*, 50(4), 1269-1283. doi: <http://dx.doi.org/10.1016/j.compedu.2006.12.002>
- Kay, R. H. (2007). A formative analysis of how preservice teachers learn to use technology. *Journal of Computer Assisted Learning*, 23(5), 366-383. doi: 10.1111/j.1365-2729.2007.00222.x
- Kay, R. H. (2007). A formative analysis of resources used to learn software. *Canadian Journal of Learning and Technology*, 33(1), 9-40. Available at <http://cjlt.csj.ualberta.ca/index.php/cjlt/article/view/20/18>
- Kay, R. H. (2007). Learning performance and computer software: An exploration of knowledge transfer. *Computers in Human Behavior*, 23(1), 333-352. doi: <http://dx.doi.org/10.1016/j.chb.2004.10.029>
- Kay, R. H. (2007). The impact of preservice teachers' emotions on computer use: a formative analysis. *Journal of Educational Computing Research*, 36(4), 481-505. doi: 10.2190/J111-Q132-N166-K249
- Kay, R. H. (2007). The role of errors in learning computer software. *Computers & Education*, 49 (2), 441-459. doi: <http://dx.doi.org/10.1016/j.compedu.2005.09.006>

- Kay, R. H. (2006). Addressing gender differences in computer ability, attitudes, and use: The laptop effect. *Journal of Educational Computing Research*, 34(2), 187-211. doi: 10.2190/9BLQ-883Y-XQMA-FCAH
- Kay, R. H. (2006). Developing a comprehensive metric for assessing discussion board effectiveness. *British Journal of Educational Technology*, 37 (5), 761-783. doi: 10.1111/j.1467-8535.2006.00560.x
- Kay, R. H. (2006). Evaluating strategies used to incorporate technology into preservice education: A review of the literature. *Journal of Research on Technology in Education*, 38 (4), 383 – 408.
- Kay, R. H. (2006). Using online discussion boards to teach computer science: An exploratory analysis. *Canadian Journal of Learning and Technology*. 32(1), 77-104. Available at <http://cjlt.csj.ualberta.ca/index.php/cjlt/article/view/64/61>
- Kay, R. H. (1996). Identifying effective knowledge building activities for learning computer software. *Journal of Computer Science Education*, 11 (1), p. 21-24.
- Kay, R. H. (1994). Charting pathways of conceptual change in the use of computer software: A formative analysis. *Journal of Research on Computing in Education*, 26 (3), p. 403-417.
- Kay, R. H. (1994). Understanding and evaluating measures of computer ability: Making a case for an alternative metric. *Journal of Research on Computing in Education*, 26(2), 270-284.
- Kay, R. H. (1993). A critical evaluation of gender differences in computer-related behaviour. *Computer in the Schools*, 9(4), 81-93. doi: 10.1300/J025v09n04_08
- Kay, R. H. (1993). An exploration of theoretical and practical foundations for assessing attitudes toward computers: The computer attitude measure (CAM). *Computers in Human Behavior*, 9(4), 371-386. doi: [http://dx.doi.org/10.1016/0747-5632\(93\)90029-R](http://dx.doi.org/10.1016/0747-5632(93)90029-R)
- Kay, R. H. (1993). A practical research tool for assessing ability to use computers: The computer ability survey (CAS). *Journal of Research on Computing in Education*, 26(1), 16-27.
- Kay, R. H. (1992). An analysis of methods used to examine gender differences in computer-related behaviour. *Journal of Educational Computing Research*, 8(3), 323-336. doi: 10.2190/HPX9-9G0M-7UKJ-GBDX
- Kay, R. H. (1992) The computer literacy potpourri: A review of the literature or McLuhan revisited. *Journal of Research on Computing in Education*, 24(4), 446-456.

- Kay, R. H. (1992). Understanding gender differences in computer attitudes, aptitude and use: A invitation to build theory. *Journal of Research on Computing in Education*, 25(2), 159-171.
- Kay, R. H. (1990). Predicting student teacher commitment to the use of computers. *Journal of Educational Computing Research*, 6(3), 299-309. doi: 10.2190/CBG3-X2UE-DQGY-YWH9
- Kay, R. H. (1990). The relation between computer literacy and locus of control. *Journal of Research on Computing in Education*, 22(4), 464-474.
- Kay, R. H. (1989). A practical and theoretical approach to assessing computer attitudes: The computer attitude measure (CAM). *Journal of Research on Computing in Education*, 21(4), 456-463.
- Kay, R. H. (1989). Bringing computer literacy into perspective. *Journal of Research on Computing in Education*, 22(1), 35-47.
- Kay, R. H. (1989). Gender differences in computer attitudes, literacy, locus of control and commitment. *Journal of Research on Computing in Education*, 21 (3), 307-316.
- Kay, R. H. & Kletschin, I. (2012). Evaluating the use of problem-based video podcasts to teach mathematics in higher education. *Computers & Education*, 59(2), 619-627. doi: 10.1016/j.compedu.2012.03.007
- Kay, R. H., & Kletschin, I. (2010). Evaluating the use of learning objects for improving calculus readiness. *Journal of Computers in Mathematics and Science Teaching*, 29(1), 87-104.
- Kay, R. H. & Knaack, L. (2009). Analyzing the effectiveness of learning objects for secondary school science classrooms. *Journal of Educational Multimedia and Hypermedia*, 18(1), 113-135.
- Kay, R. H., & Knaack, L. (2009). Assessing learning, quality and engagement in learning objects: the learning object evaluation scale for students (LOES-S). *Education Technology Research and Development*, 57(2), 147-168. doi: 10.1007/s11423-008-9094-5
- Kay, R. H., & Knaack, L. (2009). Exploring individual differences in attitudes toward interactive classroom communications systems (ICCS). *Canadian Journal of Learning and Technology*. 35(1). Available at <http://www.cjlt.ca/index.php/cjlt/article/view/509/239>
- Kay, R. H. & Knaack, L. (2009). Exploring the use of audience response systems in secondary school science classrooms. *Journal of Science Education and Technology*, 18(5), 382-392. doi: 10.1007/s10956-009-9153-7

- Kay, R. H. & Knaack, L. (2008). Exploring the use and effect of learning objects in middle school classrooms. *Canadian Journal of Learning and Technology*, 34(1), 51-73, Available at <http://cjlt.csj.ualberta.ca/index.php/cjlt/article/view/174/170>
- Kay, R. H. & Knaack, L. (2008). A multi-component model for assessing learning objects: The learning object evaluation metric (LOEM). *Australasian Journal of Educational Technology*, 24(5), 574-591. Available at <http://www.ascilite.org.au/ajet/ajet24/kay.pdf>
- Kay, R. H., & Knaack, L. (2008). An examination of the impact of learning objects in secondary school. *Journal of Computer Assisted Learning*, 24(6) 447-461. Available at 10.1111/j.1365-2729.2008.00278.x
- Kay, R. H., & Knaack, L. (2008). A formative analysis of individual differences in the effectiveness of learning objects in secondary school. *Computers & Education*, 51(3), 1304-1320. doi: <http://dx.doi.org/10.1016/j.compedu.2008.01.001>
- Kay, R. H. & Knaack, L. (2008). Investigating the use of learning objects for secondary school mathematics. *Interdisciplinary Journal of E-Learning and Learning Objects*. 4, 269-289. Available at: <http://ijello.org/Volume4/IJELLOv4p269-289Kay.pdf>
- Kay, R. H., & Knaack, L. (2007). A systematic evaluation of learning objects for secondary school students. *Journal of Educational Technology Systems*, 35 (4), 411-448. doi: [10.2190/M770-J104-V701-8N45](http://dx.doi.org/10.2190/M770-J104-V701-8N45)
- Kay, R. H. & Knaack, L. (2007). Evaluating the learning in learning objects. *Open Learning*, 22(1), 5-28. doi: [10.1080/02680510601100135](http://dx.doi.org/10.1080/02680510601100135)
- Kay, R. H., & Knaack, L. (2007). Evaluating the use of learning objects for secondary school science. *Journal of Computers in Mathematics and Science Teaching*, 26(4), 261-289.
- Kay, R. H., & Knaack, L. (2005) A case for ubiquitous, integrated computing in teacher education. *Technology, Pedagogy, & Education*, 14(3), 391-412. doi: [10.1080/14759390500200213](http://dx.doi.org/10.1080/14759390500200213)
- Kay, R. H., & Knaack, L. (2005). Developing learning objects for secondary school students: A multi-component model. *Interdisciplinary Journal of Knowledge and Learning Objects*, 1, 229-254. Available at http://www.ijello.org/Volume1/v1p229-254Kay_Knaack.pdf
- Kay, R. H., Knaack, L., & Muirhead, B. (2009). A formative analysis of instructional strategies for using learning objects. *Journal of Interactive Learning Research*, 20(3), 295-315.
- Kay, R. H., Knaack, L., & Petrarca, D. (2009). Exploring teacher perceptions of web-based learning tools. *Interdisciplinary Journal of E-Learning and Learning Objects*, 5, 27-50. Available at <http://ijklo.org/Volume5/IJELLOv5p027-050Kay649.pdf>

- Kay, R.H., & Lauricella, S. (2011). Gender differences in the use of laptops in higher education: A formative analysis. *Journal of Educational Computing Research*, 44(3), 357-376. doi:10.2190/EC.44.3.f
- Kay, R.H., & Lauricella, S. (2011). Exploring the benefits and challenges of using laptop computers in higher education classrooms: A formative analysis. *Canadian Journal of Learning and Technology*, 37(1). Available at <http://www.cjlt.ca/index.php/cjlt/article/view/565/299>
- Kay, R.H., & Lauricella, S. (2011). Unstructured vs. structured use of laptops in higher education. *Journal of Information Technology Education*, 10, 33-42. Available at <http://www.jite.org/documents/Vol10/JITEv10IIPp033-042Kay840.pdf>
- Kay, R. H., & LeSage, A. (2009). Examining the benefits and challenges of using audience response systems: A review of the literature. *Computer & Education*, 53(3), 819-827. doi: 10.1016/j.compedu.2009.05.001
- Kay, R. H., & LeSage, A. (2009). A strategic assessment of audience response systems used in higher education. *Australian Journal of Educational Technology*, 25(2), 235-249. Available at: <http://www.ascilite.org.au/ajet/ajet25/kay.pdf>
- Kay, R. H., LeSage, A., & Knaack, L. (2010). Examining the use of audience response systems in secondary school classrooms: A formative analysis. *Journal of Interactive Learning Research*, 21(3), 342-365.
- Kay, R. H. & Loverock, S. (2008). Assessing emotions related to learning new software: The computer emotions scale. *Computers in Human Behavior*, 24(4), 1605-1623. doi: <http://dx.doi.org/10.1016/j.chb.2007.06.002>
- Lauricella, S. & Kay, R. H. (2013). Exploring the use of text and instant messaging in higher education classrooms. *Research in Learning Technology*, 21, doi: 10.3402/rlt.v21i0.19061
- Lauricella, S. & Kay, R. H. (2010). Assessing laptop use in higher education classrooms: The laptop effectiveness scale (LES). *Australian Journal of Educational Technology*, 26(2), 151-163. doi: <http://www.ascilite.org.au/ajet/ajet26/lauricella.pdf>

Peer Reviewed Conference Papers – Ascending Order (n=62)

- Kay, R. H. (2013). Best practices for developing effective online course in mathematics *OAME Annual Conference - Think Big*, Toronto, Canada.
- Kay, R. H. (2013). Best practices for using classroom response systems in the mathematics classroom, *OAME Annual Conference - Think Big*, Toronto, Canada.
- Kay, R. H. (2013). Choosing and using web-based learning tools for the mathematics classroom, *OAME Annual Conference - Think Big*, Toronto, Canada.

- Kay, R. H. (2013). Transforming your mathematics classroom with video podcasts (Jing), *OAME Annual Conference - Think Big*, Toronto, Canada.
- Kay, R. H. (2012). Exploring the Use of Laptops in Higher Education: An Analysis of Benefits and Distractions, *E-Learn*, Montreal, Canada.
- Kay, R. H. (2012). A model for creating effective instructional video podcasts. *Global Learn: Global Conference on learning and Technology*.
- Kay, R. H. (2011). Best practices for developing effective online course in mathematics *OAME Annual Conference - Put Math on the Map*, Windsor, Canada.
- Kay, R. H. (2011). Best practices for using classroom response systems in the mathematics classroom, *OAME Annual Conference - Put Math on the Map*, Windsor, Canada.
- Kay, R. H. (2011). Choosing and using web-based learning tools for the mathematics classroom, *OAME Annual Conference - Put Math on the Map*, Windsor, Canada.
- Kay, R. H. (2011). Transforming your mathematics classroom with video podcasts (Jing), *OAME Annual Conference - Put Math on the Map*, Windsor, Canada.
- Kay, R. H. (2010). A model for evaluating online learning in secondary school environments, *The Sixteenth Sloan-C International Conference on Online Learning, Orlando, Florida*. Selected Best in Track.
- Kay, R. H. (2010). Best practices for delivering effective instruction in virtual classrooms, *Ed-Media, Toronto*, Canada.
- Kay, R. H. (2010). Best practices for using classroom response systems, *Toys & Tools in Education Conference*, Toronto, Canada.
- Kay, R. H. (2010). Choosing and using web-based learning tools, *Toys & Tools in Education Conference*, Toronto, Canada.
- Kay, R. H. (2010). Examining the use of educational video clips on distance education, *Global Learn Asia Pacific 2010*, Penang, Malaysia.
- Kay, R. H. (2010). Evaluating the use of web-based learning tools in middle classrooms, *Ed-Media, Toronto*, Canada.
- Kay, R. H. (2010). Exploring a model for using video podcasts effectively in online learning, *The Sixteenth Sloan-C International Conference on Online Learning, Orlando, Florida*.
- Kay, R. H. (2010). Evaluating and using web-based learning tools for K-12 online learning, *The Sixteenth Sloan-C International Conference on Online Learning, Orlando, Florida*.
- Kay, R. H. (2010). Transforming your classroom with video podcasts, *Toys & Tools in Education Conference*, Toronto, Canada.
- Kay, R. H., & Edwards, J. (2010). Evaluating the use of instructional video podcasts for middle school mathematics students, *Ed-Media, Toronto*, Canada.

- Kay, R. H., & Lauricella, S. (2010). Exploring the benefits and challenges of using laptops in higher education classrooms, *Global Learn Asia Pacific 2010*, Penang, Malaysia.
- Kay, R. H. (2009) Evaluating the effectiveness of web-based learning tools for online learning, *The Fifteenth Sloan-C International Conference on Online Learning*, Orlando, Florida.
- Kay, R. H. (2009) Examining the use of educational mini-clips in online learning, *The Fifteenth Sloan-C International Conference on Online Learning*, Orlando, Florida.
- Kay, R. H. & Petrarca, D. (2009) Exploring the impact of video feedback in online courses, *The Fifteenth Sloan-C International Conference on Online Learning*, Orlando, Florida.
- Kay, R. H., & Kletschin, I. (2009) Developing effective learning objects to improve calculus readiness among first year university students, *The Ninth International Conference on Technology in Mathematics Teaching (ICMT9)*, University of Metz, France.
- van Oostveen, R., Hunter, W., Kay, R. & Muirhead, W. (2007). Developing argumentation skills in high school students: a video-based case study in science education. In C. Montgomerie & J. Seale (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2007* (pp. 391-397). Chesapeake, VACE.
- Kay, R. H. (2006). Educational mini clips: A powerful tool for higher education students. *Merlot Conference, Ottawa*.
- Kay, R. H. & Knaack, L. (2006). Developing a pedagogical model for evaluating learning objects, *Merlot Conference, Ottawa*.
- Kay, R. H. & Knaack, L. (2006). Developing and evaluating learning objects for secondary school education, *NECC, San Diego, CA*.
- Kay, R. H. (2006). Evaluating the use of learning objects in secondary school mathematics, *AERA, San Francisco*.
- Kay, R. H. (2006). Using Educational mini clips in mathematics and science. *Leading Learning Conference, York University*.
- Knaack, L., Kay, R. H., & Carson, B. & (2006). Designing learning objects: school – University partnerships in development, *Merlot Conference, Ottawa*.
- Kay, R. H. (2005). A case for computer integration in teacher education: An evaluation of a laptop program, *CSSE, London, Ontario*.
- Kay, R. H. (2005). Addressing Individual differences in computer experience: The laptop effect. *NECC, Philadelphia, PA*.
- Kay, R. H. (2005). Evaluating models used to integrate technology in preservice education. *NECC, Philadelphia, PA*.
- Kay, R. H., & Knaack, L. (2005). A case for computer integration in teacher education: An evaluation of a laptop program. *AERA, Montreal, Quebec*
- Kay, R. H. (2005). Examining the use of online discussion boards in secondary education. *AERA, Montreal, Canada*

- Kay, R. H. (2004). A formative analysis of the use of online discussion boards. *NECC Conference, New Orleans.*
- Kay, R. H. (2004). Learning with computer software: An exploration of knowledge transfer, SITE, p. 85, Atlanta, Georgia
- Kay, R. H. (2004). Developing a metric for evaluating discussion boards. *E-Learn Conference, Washington, DC.*
- Kay, R. H. (2004). Using laptops effectively in higher education. *E-Learn Conference, Washington, DC.*
- Kay, R. H., & Knaack, L. (2004). Strategies for effective laptop use in education. *EDUCAUSE, Denver, CO*
- Kay, R. H. (1995). An exploration of knowledge transfer and computer software. *AERA Conference, San Francisco, April.*
- Kay, R. H. (1995). Identifying effective knowledge building activities for learning computer software. *NECC Conference, Baltimore, June.*
- Kay, R. H. (1995). Understanding how people learn with computers: A formative model. *AERA Conference, San Francisco, April.*
- Kay, R. H. (1993). A formative model for exploring individual differences in learning with computers. *Ninth International Conference on Technology and Education (ICTE), Boston, MA, March.*
- Kay, R. H. (1993). An exploration of theoretical and practical foundations for assessing attitudes toward computers: The computer attitude measure (CAM). *Tenth International Conference on Technology and Education (ICTE), Boston, MA, March.*
- Kay, R. H. (1993). Assessing individuality in learning with computers: Difficult questions and practical answers. *Tenth International Conference on Technology and Education (ICTE), Boston, MA, March.*
- Kay, R. H. (1993). Developing a framework for understanding and predicting student teacher use of computers. *AERA Conference, Atlanta, GA, April.*
- Kay, R. H. (1993). Developing a model for understanding gender differences in behaviour toward computers. *Tenth International Conference on Technology and Education (ICTE), Boston, MA, March.*
- Kay, R. H. (1993). Learning with computer software: What knowledge actually transfers? *National Education Computing Conference (NECC), Orlando, Florida, June.*
- Kay, R. H. (1993). The acquisition of computer knowledge: A formative analysis. *AERA Conference, Atlanta, GA, April.*
- Kay, R. H. & Mackler, S. (1993). Bridging theory and practice in the teaching of computer skills: Results from two case studies. *Tenth International Conference on Technology and Education (ICTE), Boston, MA, March.*
- Kay, R. H. (1992). An examination of gender differences in computer attitudes, aptitude, and use. *AERA Conference, San Francisco, CA, April.*

- Kay, R. H. (1992). Charting pathways to computer expertise. *Ninth International Conference on Technology and Education (ICTE)*, Paris, France, March.
- Kay, R. H. (1992). Charting pathways of conceptual change in the use of computer software. *AERA Conference*, San Francisco, CA, April.
- Kay, R. H. (1992). Understanding the origins of gender differences in computer attitudes and ability. *Ninth International Conference on Technology and Education (ICTE)*, Paris, France, March.
- Kay, R. H. (1990). A case for a domain-specific approach to assessing locus of control: Locus of control and computers. *CPA Conference*, Ottawa.
- Kay, R. H. (1990). PART I- Understanding gender differences in computer attitudes, aptitude and use: An analysis of method. *National Education Computing Conference*, Nashville, Tennessee.
- Kay, R. H. (1990). PART II- Understanding gender differences in computer attitudes, aptitude and use: A analysis of method. *National Education Computing Conference*, Nashville, Tennessee.
- Kay, R. H. (1990). Understanding human-computer interaction using contextual modules: An exploratory analysis. *World Conference on Computing in Education*, Sydney, Australia.

TEACHING ACTIVITIES

Courses Developed & Taught

CURS4140	Math Methods Course for Teachers - Part 1	2003/04
CURS4141	Math Methods Course for Teachers - Part 2	2003/04
CURS4240	Educational Research, Theory, and Practice	2003/04
EDUC3750	Human Learning and Development	2003/04
CURS4140	Math Methods Course for Teachers - Part 1	2004/05
CURS4141	Math Methods Course for Teachers - Part 2	2004/05
CURS4140	Math Methods Course for Teachers - Part 1	2005/06
CURS4141	Math Methods Course for Teachers - Part 2	2005/06
CURS4140	Math Methods Course for Teachers - Part 1	2006/07
CURS4141	Math Methods Course for Teachers - Part 2	2006/07
CURS4140	Math Methods Course for Teachers - Part 1	2007/08
CURS4141	Math Methods Course for Teachers - Part 2	2007/08
CURS4161	Computer Studies - Part 2	2007/08
CURS4140	Math Methods Course for Teachers - Part 1	2008/09
CURS4141	Math Methods Course for Teachers - Part 2	2008/09
CURS4160	Computer Studies - Part 1	2008/09
CURS4161	Computer Studies - Part 2	2008/09
CURS4140	Math Methods Course for Teachers - Part 1	2009/10
EDUC5104	Learning Tools (Graduate Course)	2009/10
CURS4140	Math Methods Course for Teachers - Part 1	2010/2011
EDUC5104	Learning Tools (Graduate Course)	2010/2011
EDUC5104	Learning Tools (Graduate Course)	2012/2013
CURS4140	Math Methods Course for Teachers - Part 1	2012/2013
CURS4141	Math Methods Course for Teachers - Part 2	2012/2013
EDUC5003	Advanced Research Methods (Graduate Course)	2012/2013
EDUC5303	Technology and the Curriculum (Graduate Course)	2012/2013
CURS4140	Math Methods Course for Teachers - Part 1	2013/2014
CURS4141	Math Methods Course for Teachers - Part 2	2013/2014
EDUC5003	Advanced Research Methods (Graduate Course)	2013/2014

Current Course Web Sites

CURS4140 - Math Methods Course for Teachers - Part 1

http://faculty.uoit.ca/kay/courses/curs4140/home_frame.html

CURS4141 - Math Methods Course for Teachers - Part 2

http://faculty.uoit.ca/kay/courses/curs4141/home_frame.html

EDUC5140G -Web-Based Learning Tools

http://faculty.uoit.ca/kay/courses/educ5104g/home_frame.html

EDUC5003G – Advanced Research Methods

<http://advresuoit.weebly.com/>

EDUC5303G – Technology and the Curriculum

http://faculty.uoit.ca/kay/courses/curs4141/home_frame.html

SERVICE

University Service

<i>Volunteer</i>	B.Ed. Organization & Development	2003-2004
<i>Volunteer</i>	Practicum Review Committee	2003-2004
<i>Volunteer</i>	Orientation Committee	2003-2004
<i>Organizer</i>	TI-Workshop Program – Pre-Service Teachers	2003-2004
<i>Organizer</i>	Technology Workshops – Pre-Service Teacher	2003-2004
<i>Volunteer</i>	Faculty of Education – B.Ed. Committee	2003-2004
<i>Voting Member</i>	Admissions and Scholarship Committee	2004-2005
<i>Voting Member</i>	Ministry Liaison Committee	2004-2005
<i>Voting Member</i>	Faculty of Education – B.Ed. Committee	2004-2005
<i>Voting Member</i>	Faculty of Education Awards Committee	2004-2005
<i>Voting Member</i>	Faculty of Education Hiring Committee	2004-2005
<i>Voting Member</i>	Teaching Candidate Recruitment Committee	2004-2005
<i>Voting Member</i>	Graduate Program Committee	2004-2005
<i>Chair</i>	OCT Accreditation Committee	2004-2005
<i>Organizer</i>	TIPs Training program and UOIT Math Camp	2004-2005
<i>Voting Member</i>	Practicum Review Committee	2004-2005
<i>Voting Member</i>	Faculty of Education – B.Ed. Committee	2005-2006
<i>Voting Member</i>	Admissions and Scholarship Committee	2005-2006
<i>Voting Member</i>	Faculty of Education Awards Committee	2005-2006
<i>Voting Member</i>	Faculty of Education - Grad Program Committee	2005-2006
<i>Volunteer</i>	Faculty of Education Orientation Committee	2005-2006
<i>Volunteer</i>	Faculty of Education Recruitment Team	2005-2006
<i>Organizer</i>	TIPs Training program and UOIT Math Camp	2005-2006
<i>Volunteer</i>	PJ Program Development Committee	2005-2006
<i>Voting Member</i>	Dean Search Committee	2006-2007
<i>Voting Member</i>	Faculty of Education – B.Ed. Committee	2006-2007
<i>Organizer</i>	CRS Training for Pre-Service Students	2006-2007
<i>Volunteer</i>	Faculty of Education Orientation Committee	2006-2007
<i>Volunteer</i>	Faculty of Education Recruitment Team	2006-2007
<i>Organizer</i>	TIPs Training program and UOIT Math Camp	2006-2007
<i>Organizer</i>	Smart Board Training - Preservice Candidates	2006-2007
<i>Volunteer</i>	Orientation Day Training Committee	2006-2007

<i>Voting Member</i>	Graduate Program Committee	2007-2008
<i>Voting Member</i>	Hiring Committee – Faculty of Business	2007-2008
<i>Voting Member</i>	Admissions & Interview Committee	2007-2008
<i>Chair</i>	Graduate Oral Exam – Faculty of Eng M.A. Thesis	2007-2008
<i>Voting Member</i>	Ethical Review Committee – Plagiarism Review	2007-2008
<i>Voting Member</i>	PJ Math Program Review	2008-2009
<i>Voting Member</i>	PJ/IS Program Review Committee	2008-2009
<i>Voting Member</i>	Third Year Review Committee	2008-2009
<i>Volunteer</i>	Mentoring Program for Junior Faculty	2008-2009
<i>Voting Member</i>	M.Ed. Program – Start-Up Committee	2008-2009
<i>Voting Member</i>	Hiring Committee – Math & Computer Science	2009-2010
<i>Supervisor</i>	Supervised 3 M.Ed. Projects	2009-2010
<i>Voting Member</i>	Graduate Admission Committee	2009-2010
<i>Volunteer</i>	Mentoring Program for Junior Faculty	2009-2010
<i>Voting member</i>	B.Ed. Program Committee	2009-2010
<i>Reviewer</i>	External review of M.Ed. Learning Portfolio	2010-2011
<i>Voting Member</i>	Education & Technology Committee	2010-2011
<i>Voting Member</i>	Graduate Admission Committee	2010-2011
<i>Voting Member</i>	Hiring Committee – Adult Education	2010-2011
<i>Volunteer</i>	Mentoring Program for Junior Faculty	2009-2011
<i>Chair</i>	Graduate Admissions Committee	2012-2013
<i>Chair</i>	B.Ed. Technology Committee	2012-2013
<i>Supervisor</i>	Supervising 4 M.Ed. projects	2012-2013
<i>Reviewer</i>	External review of M.Ed. Learning Portfolios	2012-2013
<i>Mentor</i>	Official Faculty Mentor for New Professor	2012-2013
<i>Volunteer</i>	Ph.D. Proposal Committee	2012-2014
<i>Voting Member</i>	Appointment Committee – Math/Science	2012-2013
<i>Voting Member</i>	Appointment Committee – AEDT Sessional	2012-2013
<i>Voting Member</i>	Tenure & Promotion Committee	2012-2014
<i>Voting Member</i>	Third Year Review Committee	2012-2013
<i>Voting Member</i>	Faculty Council	2012-2014
<i>Voting Member</i>	Graduate Program Committee	2012-2013
<i>Voting member</i>	B.Ed. Program Committee	2012-2013

<i>Voting Member</i>	Canada Research Chair - Interviews	2013-2014
<i>Voting Member</i>	AEDT Appointment Committee	2013
<i>Voting Member</i>	Curriculum Committee	2013-2014
<i>Chair</i>	Graduate Program Committee	2012-2014
<i>Voting Member</i>	Executive Council	2013-2014
<i>Voting Member</i>	Graduate Program Directors Committee	2013-2014
<i>Voting Member</i>	Graduate Studies Committee	2013-2014
<i>Director</i>	Graduate Program Director	2013-2014

Professional Service

<i>Voting Member</i>	Evolving Technologies Committee - EDUCAUSE	2004-2005
<i>Volunteer</i>	Fields Institute Meetings	2004-2005
<i>Advisor</i>	JUMP Math Project	2004-2005
<i>Reviewer</i>	External reviewer for 3 journals	2004-2005
<i>Reviewer</i>	SSHRC Evaluator	2004-2005
<i>Reviewer</i>	Assess CATE proposals	2004-2005
<i>Reviewer</i>	Evaluate AERA proposals	2004-2005
<i>Reviewer</i>	External reviewer for 5 journals	2004-2005
<i>Co-Editor</i>	UWO Math Symposium	2004-2005
<i>Reviewer</i>	External reviewer for 5 journals	2005-2006
<i>Volunteer</i>	Ministry of Education – Updating Math Program	2005-2006
<i>Reviewer</i>	External reviewer for 7 journals	2006-2007
<i>Reviewer</i>	SSHRC Proposal	2006-2007
<i>Reviewer</i>	External reviewer for 8 journals	2007-2008
<i>Reviewer</i>	External reviewer for 7 journals	2008-2009
<i>Reviewer</i>	External reviewer for Ph.D. Thesis	2008-2009
<i>Reviewer</i>	External Reviewer – Senior Lecture Promotion	2008-2009
<i>Reviewer</i>	External reviewer for 5 journals	2009-2010
<i>Reviewer</i>	External reviewer for 7 journals	2010-2011
<i>Reviewer</i>	External reviewer for 6 journals	2012-2013

Community Service

<i>Volunteer</i>	PRISM Math project Steering Committee	2004-2005
<i>Supervisor</i>	Supervising Summer Undergraduate Students	2004-2005
<i>Presenter</i>	York – Leading & Learning in Tech Conference	2005-2006
<i>Trainer</i>	Trinity College – Multimedia Workshop	2005-2006
<i>Supervisor</i>	Supervising Summer Undergraduate Students	2005-2006
<i>Organizer</i>	ITEC Conference at UOIT (250 participants)	2006-2007
<i>Presenter</i>	RTT Presentation for the Learning Federation	2006-2007
<i>Organizer</i>	Training Proposal for OFT	2006-2007
<i>Organizer</i>	SMART Board Training for UOIT Alumni	2006-2007
<i>Org & Present</i>	CRS training for grade in-service 7-12 teachers	2006-2007
<i>Org & Present</i>	Learning Object Training for grade 7-12 teachers	2006-2007
<i>Organizer</i>	Develop online education video clips for grade 9-12 at-risk students (Centre for Success Program)	2006-2007
<i>Org & Present</i>	CRS training for grade in-service 7-12 teachers	2007-2008
<i>Org & Present</i>	Learning Object Training for grade 7-12 teachers	2007-2008
<i>Org & Present</i>	Develop online education video clips for grade 9-12 at-risk students (Centre for Success Program)	2007-2008
<i>Org & Present</i>	Teacher Trainer for Centre for Success Program	2008-2009
<i>Org & Present</i>	Peer Instruction and CRS Project – Waterloo	2008-2009
<i>Org & Present</i>	E-Learning Initiative – Waterloo	2008-2009
<i>Org & Present</i>	Scientists in the School Program	2009-2010
<i>Org & Present</i>	Trinity College – CRS Workshop	2009-2010
<i>Org & Present</i>	Web-Based Learning Tools Workshop	2009-2010
<i>Org & Present</i>	B.Ed. Research Conference	2010-2011
<i>Presenter</i>	Toys & Technology Conference Workshops	2010-2011
<i>Presenter</i>	OAME Conference Workshops	2010-2011
<i>Org & Present</i>	M.J. Hobbs Technology Workshop	2010-2011
<i>Voting Member</i>	OERB Pilot Study Program	2012-2013
<i>Consultant</i>	ODSB – Technology and Curriculum Committee	2012-2014