

Abbreviated Curriculum Vitae
Keith A. Willoughby, Ph.D.
Associate Professor, Department of Finance and Management Science
Hanlon Scholar in International Business
Edwards School of Business
University of Saskatchewan

Contact Information:

Work: (306) 966-2128

Cell: (306) 370-8851

Fax: (306) 966-2515

E-mail: willoughby@edwards.usask.ca

URL: [www.edwards.usask.ca/faculty/Keith Willoughby](http://www.edwards.usask.ca/faculty/Keith%20Willoughby)

Mailing Address:

Department of Finance and Management Science

Edwards School of Business

25 Campus Drive

University of Saskatchewan

Saskatoon, SK Canada

S7N 5A7

1. Education

1993-1999 Ph.D., University of Calgary
 Major: Operations Management
 Minor: Transportation Engineering

1990-1993 Master of Science, University of British Columbia
 Major: Management Science

1984-1985,
1987-1990 Bachelor of Commerce, University of Saskatchewan
 Major: Quantitative Analysis
 Minor: Finance

2. Teaching Experience

Associate Professor, University of Saskatchewan (Saskatoon, SK), 2008-present

- Appointment within the Edwards School of Business
- Appointed with tenure
- Named as a Hanlon Scholar in International Business, 2009-present

Adjunct Professor, University of Saskatchewan (Saskatoon, SK), 2005-2008

- Appointment within the Department of Community Health and Epidemiology, Edwards School of Business

Associate Professor, Department of Management, Bucknell University (Lewisburg, PA), 2005

- Promoted to rank of Associate Professor (with tenure)

Assistant Professor, Department of Management, Bucknell University (Lewisburg, PA), 1999-2005

Assistant Professor, College of Commerce, University of Saskatchewan (Saskatoon, SK), 1997-1999

3. Teaching Awards

2009-2010 University of Saskatchewan Students' Union Teaching Excellence Award

2001 "Outstanding Professor" award, Department of Management, Bucknell University

1999 "Most Approachable Professor" award, College of Commerce, University of Saskatchewan

4. Scholarship

A. Refereed Publications

KJ Kostuk, KA Willoughby. "A Decision Support System for Scheduling the Canadian Football League", Interfaces (forthcoming).

KA Willoughby, BTB Chan, M Strenger (2010). "Achieving Wait Time Reduction in the

Emergency Department”, Leadership in Health Services, vol. 23, no. 4, pp. 304-319.

KA Willoughby (2010). “Spinning the Big Wheel on ‘The Price is Right’: A Spreadsheet Simulation Exercise”, Spreadsheets in Education, vol. 4, no. 1, 12 pp.

KA Willoughby, CJ Zappe (2006). “A Methodology to Optimize Foundation Seminar Assignments”, Journal of the Operational Research Society, vol. 57, no. 8, pp. 950-956.

KJ Kostuk, KA Willoughby (2006). “Curling’s Paradox”, Computers and Operations Research, vol. 33, pp. 2023-2031.

KA Willoughby (2005). “Process Improvement in Project Expediting: There Must Be a Better Way”, International Journal of Project Management, vol. 23, pp. 231-236.

KA Willoughby, KJ Kostuk (2005). “An Analysis of a Strategic Decision in the Sport of Curling”, Decision Analysis, vol. 2, no. 1, pp. 58-63.

KA Willoughby (2004). “The Science of Sports: Combining Quantitative Analysis and Sports Applications in an Undergraduate Course”, INFORMS Transactions on Education, vol. 5, no. 1, 2004, <http://ite.pubs.informs.org/Vol5No1/Willoughby/>.

KA Willoughby, KJ Kostuk (2004). “Preferred Scenarios in the Sport of Curling”, Interfaces, vol. 34, no. 2, pp. 117-122.

KJ Klassen, KA Willoughby (2003). “In-Class Simulation Games: Assessing Student Learning”, Journal of Information Technology Education, vol. 2, pp. 1-13.

KA Willoughby, C Mancini (2003). “The Inaugural (and only) Season of the Xtreme Football League: A Case Study in Sports Entertainment”, International Journal of Sports Marketing and Sponsorship, vol. 5, no. 3, pp. 225-233.

KA Willoughby (2002). “A Mathematical Programming Analysis of Public Transit Systems”, Omega, vol. 30, no. 3, pp. 137-142.

KA Willoughby (2002). “Winning Games in Canadian Football: A Logistic Regression Analysis”, College Mathematics Journal, vol. 33, no. 3, pp. 215-220.

KA Willoughby (2001). “Project Procurement and Disposal Decisions: An Inventory Management Model”, The International Journal of Production Economics, vol. 71, no. 1-3, pp. 467-472.

KA Willoughby (2001). “The Return of a Missed Field Goal in Canadian Football”, Chance,

vol. 14, no. 3, pp. 29-33.

KA Willoughby, DH Uyeno (2001). “Resolving Splits in Location/Allocation Modelling: A Heuristic Procedure for Transit Centre Decisions”, Transportation Research E: The Logistics and Transportation Review, vol. 37, pp. 71-83.

KJ Kostuk, KA Willoughby, APH Saedt (2001). “Modelling Curling as a Markov Process”, The European Journal of Operational Research, vol. 133, no. 3, pp. 557-565.

EA Silver, KA Willoughby (1999). “Disposal of Excess Stock at the End of a Project When Facing On-Going Operational Usage”, The International Journal of Production Economics, vol. 59, no. 1-3, pp. 189-194.

DH Uyeno, KA Willoughby (1995). “Transit Centre Location-Allocation Decisions”, Transportation Research - A, vol. 29A, no. 4, pp. 263-272.

B. Published Proceedings¹

KA Willoughby. “Assigning Pastors to Parishes: An Optimization Model”, Proceedings of the 2010 Annual Meeting of the Northeast Decision Sciences Institute, Arlington, VA, 6 pp.

KA Willoughby, D Schattenkirk. “Make No Mistake: Reducing Errors in Hospital Pathology Samples and Information Flow”, Proceedings of the 2009 Annual Meeting of the Midwest Decision Sciences Institute, Oxford, OH, 6 pp.

KA Willoughby. “Fare Game: Exploring the Impact of Discount Airlines in Philadelphia”, Proceedings of the 2005 Annual Meeting of the Northeast Decision Sciences Institute, Philadelphia, PA, 6 pp.

KA Willoughby. “Spinning the Big Wheel on ‘The Price is Right’: A Spreadsheet Simulation Exercise”, in J.E. Kendall (ed.). Proceedings of the 35th Annual Meeting of the Decision Sciences Institute, Boston: Decision Sciences Institute, 2004, pp. 4751-4756.

KA Willoughby. “Fly, Fly Away: The Pricing of Airline Fares in Central Pennsylvania”, Proceedings of the 2004 Annual Meeting of the Northeast Decision Sciences Institute, Atlantic City, NJ, pp. 329-331.

KJ Klassen, KA Willoughby. “MusikFest: An In-Class Project Management Game”, Proceedings of the 2003 Annual Meeting of the Decision Sciences Institute, Washington, DC, submission #127: pp.1-6.

¹ To eliminate redundancy, published conference proceedings that eventually appeared as published papers in refereed journals are excluded.

KA Willoughby, JJ Chrisman. “Replenishments in Price Fluctuating Situations: Comparing the Performance of Optimal and Heuristic Approaches”, Proceedings of the 2003 Annual Meeting of the Decision Sciences Institute, Washington, DC, submission #18: pp.1-6.

KA Willoughby. “Optimization Modelling at the Happy Valley Transit Company”, Proceedings of the 2000 Annual Meeting of the Decision Sciences Institute, Orlando, FL, vol. 1, pp. 108-110.

KA Willoughby. “*Il Lance, Il Compte*: An Inventory Simulation Game for an Operations Management Course”, Proceedings of the 1999 Annual Meeting of the Decision Sciences Institute, New Orleans, LA, vol. 1, pp. 257-259.

KA Willoughby, RM Russell. “The Disposal of Excess Stock: A Classification of Literature and Some Directions for Further Research”, Proceedings of the 1997 Annual Meeting of the Decision Sciences Institute, San Diego, CA., vol. 3, pp. 1358-1360.

C. Non-Refereed Publications

KA Willoughby, BTB Chan, M Rathgeber, P Cascagnette (2007). *The Time It Takes: Breast Cancer Care in Saskatchewan: Operations Research Technical Report*. Saskatoon: Health Quality Council.

KA Willoughby, BTB Chan, M Strenger (2006). *Emergency Department Process Optimization Project*. Saskatoon: Health Quality Council.

S Hickey, BTB Chan, KA Willoughby (2006). *Speech Language Pathology and Early Childhood Psychology: Efficiency Optimization Project*. Saskatoon: Health Quality Council.

M Rathgeber, BTB Chan, WE MacDermott, KA Willoughby, P Cascagnette (2006). *The Time It Takes: Breast Cancer Care in Saskatchewan*. Saskatoon: Health Quality Council.

KA Willoughby, KJ Klassen (2006). “He Shoots, He Scores” (inventory simulation game), included on the Instructor’s CD in Operations Management (authors: Jay Heizer and Barry Render), Pearson Prentice Hall, 8th edition.

KJ Klassen, KA Willoughby (2006). “Rock ‘n Bands” (project management game), included on the Instructor’s CD in Operations Management (authors: Jay Heizer and Barry Render), Pearson Prentice Hall, 8th edition.

KA Willoughby (2004). “Drafts, Dynasties and Dance Cards”, *OR/MS Today*, vol. 31, no.1, pp. 12-13.

KJ Kostuk, KA Willoughby (1999). “OR/MS ‘Rocks’ the ‘House’”, *OR/MS Today*, vol. 26, no. 6, pp. 36-39.

KA Willoughby (1994). “Bus Garage Location for the Vancouver Regional Transit System: A Mixed Integer Programming Analysis”, extended abstract published in the "Have You Located Anything?" portion of the *Locator Newsletter*, vol. 4, no. 3, (invited contribution).

5. Research Awards

2010 Second Place, *Canadian Operational Research Society (CORS)* Practice Prize competition. “A Decision Support System for Scheduling a Professional Sports League”. (co-authored with KJ Kostuk).

2010 Best Presentation Award (Faculty). “The Fanbelt and the Engine: Improving Hospital Patient Flow”, *Alberta Research Conference on Operations*, Calgary, AB. (co-authored with L Clarke).

1994 Best Graduate Student Paper. “Bus Garage Location for the Vancouver Regional Transit System: A Mixed Integer Programming Analysis”. *Canadian Operational Research Society (CORS) National Conference*, Montreal, QC.

6. Industry Experience

2005-2008 Senior Operations Research Specialist
Health Quality Council (Saskatoon, Saskatchewan, Canada)

1992-1993 Transportation Analyst
B.C. Transit (Vancouver, British Columbia, Canada)

7. Professional Designations

American Society for Quality (ASQ) Certified Six Sigma Black Belt (October, 2008), Certificate # 8059