

Publications | Sara Kraemer

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Journal Articles

Zelenski, A. B., Saldivar, N., Park, L. S., Schoenleber, V., Osman, F., & **Kraemer, S**. (2020). Interprofessional improv: Using theater techniques to teach health professions students empathy in teams. Academic Medicine, 95(8), 1210-1214. https://doi.org/10.1097/ACM.00000000000003420

- Schmid, M. E., Gillian-Daniel, D. L., **Kraemer, S.**, & Kueppers, M. (2016). Promoting student academic achievement through faculty development about inclusive teaching. Change: The Magazine of Higher Learning, 48(5), 16-25. https://doi.org/10.1080/00091383.2016.1227672
- Gillian-Daniel, D. L., & **Kraemer**, **S.** (2015). Faculty development to address the achievement gap. Change: The Magazine of Higher Learning, 47(6), 32-41. https://doi.org/10.1080/00091383.2015.1089757
- **Kraemer, S.**, Carayon, P., & Sanquist, T. F. (2009). Human and organizational factors in security screening and inspection systems: Conceptual framework and key research needs Cognition, Technology, and Work, 11(1), 29-41. https://doi.org/10.1007/s10111-008-0121-4
- **Kraemer, S.**, Carayon, P., & Clem, J. (2009). Human and organizational factors in computer and information security: Pathways to vulnerabilities. Computers & Security, 28(7), 509-520. https://doi.org/10.1016/j.cose.2009.04.006
- **Kraemer, S.,** & Carayon, P. (2007). Human errors and violations in computer and information security: The viewpoint of network administrators and security specialists. Applied Ergonomics, 38(2), 143-154. https://doi.org/10.1016/j.apergo.2006.03.010

Select Evaluation Reports

Kraemer, S. (2015). Evaluation of Delta's Academic Excellence Fall 2014 Retreat, University of Wisconsin-Madison.





- **Kraemer, S**. (2014). Systems Approach to Closing the Achievement Gap Delta's Academic Excellence Initiative Fall 2014 Retreat, University of Wisconsin-Madison.
- **Kraemer, S**. (2014). Evaluation Study of Math 112 in the Wisconsin Collaboratory for Enhanced Learning (WisCEL), University of Wisconsin-Madison.
- **Kraemer, S.** (2013). Northeast Teacher Union Reform Network Evaluation Study: Summary of Findings, University of Wisconsin-Madison.
- **Kraemer, S.**, Delehant, A., Spry, A., & Watson, J. (2013). Great Lakes Turn Impact on Union Engagement: Early Findings, The Annual Teacher Union Reform Network (TURN) Symposium, University of Wisconsin-Madison.
- **Kraemer, S**. (2012). Great Lakes Teacher Union Reform Network Evaluation Study: Summary of Findings, University of Wisconsin-Madison.
- Price, D. V., Roberts, B., **Kraemer, S.**, & Chaplot, P. (2018). Community college approaches to address basic needs and improve financial sustainability for low-income students: Lessons from the Working Students Success Network implementation evaluation.

Conference Proceedings

- **Kraemer, S.** (2023). A human factors and systems engineering evaluation framework for engineering programs in higher education. Proceedings of the American Society for Engineering Education (ASEE) Annual Conference & Exposition, Baltimore, Maryland. https://peer.asee.org/42406
- **Kraemer, S.**, & McDonald, C. (2020). The Classroom Academy: Reimagining P-20 partnerships. The Hawaii International Conference on Education, Honolulu, Hawaii.
- **Kraemer, S.**, Scott, J., & Fairbairn, S. (2016). The role of the teacher support colleague in educator evaluation systems: A work design approach. American Education Research Association Annual Meeting, Washington, D.C.
- **Kraemer, S.**, Scott, J., & Fairbairn, S. J. (2015). Human capital management systems in rural education. Rural Sociological Society 78th Annual Meeting, Madison, Wisconsin.





- **Kraemer, S.** (2013). Strengthening the educator workforce through human capital management systems (HCMS). Learning Forward Winter Conference, Dallas, Texas.
- **Kraemer, S.,** & McDonald, M. (2013). Impact of labor-management collaborations on teaching and learning: Findings from the Great Lakes Teacher Union Reform Network Study. Illinois Education Research Symposium, Champaign, Illinois.
- **Kraemer, S.**, Rhodes, S., Steele, C., & Meyer, R. H. (2012). A team-based model of classroom assignment American Education Finance and Policy 37th Annual Conference, Boston, Massachusetts.
- Steele, C., **Kraemer, S.**, & Meyer, R. H. (2012). Measuring the unknown: Creating a survey about student-teacher assignment. American Education Finance and Policy 37th Annual Conference, Boston, MA.
- **Kraemer, S.**, Spry, A., & Scott, J. (2012). Data quality innovation through knowledge management in the Teacher Incentive Fund Program National Center for Education Statistics Winter Forum and 25th Annual Management Information Systems Conference, San Diego, California.
- **Kraemer, S**. (2011). A human factors framework for effective data use in education reform and accountability. American Educational Research Association Annual Meeting, New Orleans, Louisiana.
- **Kraemer, S.**, & Meyer, R. H. (2011). Student-teacher assignment in K-8 schools: Implications for classroom value-added productivity measures. American Education Research Association Annual Meeting, New Orleans, Louisiana.
- **Kraemer, S.**, Worth, R., & Meyer, R. H. (2011). Classroom assignment practices in urban school districts using teacher level value-added systems. American Education Finance and Policy Annual Conference, Seattle, Washington.
- Thorn, C., **Kraemer, S.**, & Watson, J. (2011). Data quality challenges when implementing classroom value-added models. National Center for Education Statistics 24th Annual Management Information Systems Conference, Austin, Texas.
- **Kraemer, S.**, Geraghty, E., Lindsey, D., & Raven, C. (2010). School leadership view of human and organizational factors in performance management: A comparative analysis of high- and low-performing schools. Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 54(17), 1287-1291. https://doi.org/10.1177/154193121005401705





- **Kraemer, S.,** & Witham, P. (2010). Integrated Resource Information System (IRIS) and performance management in district reform: Resource allocation and organizational alignment. Fifth Annual Institute for Education Sciences (IES) Research Conference, National Harbor, Maryland.
- Thorn, C., **Kraemer, S.**, & Watson, J. (2010). When worlds collide data quality and program evaluation PK-20. National Center for Education Statistics 23rd Annual Management Information Systems Conference, Phoenix, Arizona.
- Lindsey, D., Watson, J., & **Kraemer, S.** (2009). From data to information: Perspectives on policy and practice. National Center for Education Statistics Winter Forum and 22nd Annual Management Information Systems Conference, Seattle, Washington.
- Watson, J., Smith, T. J., **Kraemer, S.**, Halverson, R., & Woodcock, A. (2009). Macroergonomics in Education: On Your Mark, Set, GO! Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 53(16), 1042-1046. https://doi.org/10.1177/154193120905301610
- **Kraemer, S.**, & Thorn, C. (2008). High throughput computing as an enabler for interdisciplinary collaboration. ACM Conference on Computer Supported Cooperative Work: Workshop on Human Factors in CSCW, San Diego, California.
- **Kraemer, S.,** & Thorn, C. (2008). Virtually organized interdisciplinary teams using distributed cyberinfrastructure: A performance model. ACM Computer Supported Cooperative Work Conference: Workshop on Human Factors in CSCW, San Diego, California.
- **Kraemer, S.**, Thorn, C., & Watson, J. (2008). Macroergonomics of education reform: A framework for transforming merit-based educator compensation systems. Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 52(17), 1135-1139. https://doi.org/10.1177/154193120805201702
- **Kraemer, S.**, Carayon, P., & Clem, J. (2008). The management of computer and information security systems: The role of network administrators. Proceedings of the Human Factors in Organizational Design and Management Meeting VIII, São Paulo, Brazil.
- Thorn, C., **Kraemer, S.**, & Henderson, A. (2008). Lessons learned from Teacher Incentive Fund Proposals: The social and technical demands of pay for performance systems. National Center for Education Statistics Winter Forum and 21st Annual Management Information Systems Conference, San Francisco, California.





- **Kraemer, S.,** Carayon, C., & Clem, J. F. (2006). Characterizing violations in computer and information security systems. Proceedings of the 16th Triennial Congress of the International Ergonomics Association, Maastricht, the Netherlands.
- **Kraemer, S.**, & Carayon, P. (2005). Computer and information security culture: Findings from two studies. Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 49(16), 1483-1488. https://doi.org/10.1177/154193120504901605
- **Kraemer, S.**, & Carayon, P. (2005). Information support systems and computer and information security. Intelligent Decision Support Systems: Retrospect and Prospects, Siena, Italy.
- Carayon, P., & **Kraemer, S.** (2005). Teleworking The human and organizational issues of computer and information security. 11th Annual Conference on Human-Computer Interaction, Las Vegas, Nevada.
- **Kraemer, S.**, Carayon, P., & Duggan, R. (2004). Red team performance for improved computer security. Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 48(14), 1605-1609. https://doi.org/10.1177/154193120404801410
- Carayon, P., & Kraemer, S. (2003). Using accident analysis methods in computer security: The development of the Human Factors Vulnerability Analysis (HFVA). In Proceedings of the XVth Triennial Congress of the International Ergonomics Association and the 7th Joint Conference of Ergonomics Society of Korea/Japan Ergonomics Society.
- **Kraemer, S.**, & Carayon, P. (2003). A human factors vulnerability evaluation method for computer and information security. Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 47(12), 1389-1393. https://doi.org/10.1177/154193120304701202
- Carayon, P., & **Kraemer, S.** (2002). Macroergonomics in WWDU: What about computer and information system security? In H. Luczak, A. E. Cakir, & G. Cakir (Eds.), Proceedings of the 6th International Scientific Conference on Work With Display Units WWDU 2002 World Wide Work (pp. 87-89). ERGONOMIC Institut fur Arbeits- und Sozialforschung Forschungsgesellschaft mbH.

Technical Reports





- **Kraemer, S.** (2019). Job design: An integrated approach to creating effective teacher and principal leadership roles (ERIC Number: ED618906). https://files.eric.ed.gov/fulltext/ED618906.pdf
- **Kraemer, S.** (2016). Designing effective teacher leadership positions in human capital management systems. U.S. Department of Education, Teacher Incentive Fund Program.
- **Kraemer, S.**, Milanowski, A., Scott, J., Adrien, R., Fairbairn, S., Bourn, R., & Hill, M. (2015). Designing and implementing human capital management systems in educator evaluation (ERIC Number: ED566526). https://files.eric.ed.gov/fulltext/ED566526.pdf
- **Kraemer, S.,** Thorn, C., & Witham, P. (2011). Grantee risk analysis and technical assistance response plan for Teacher Incentive Fund 3 Program. U.S. Department of Education, Center for Educator Compensation Reform.
- Kraemer, S., & Thorn, C. (2010). Cyberinfrastructure and scientific collaboration: Application of a virtual team performance framework with potential relevance to education (Wisconsin Center for Education Research Working Paper No. 2010-12). https://files.eric.ed.gov/fulltext/ED512701.pdf
- **Kraemer, S.**, & Sanquist, T. F. (2008). Human and organizational factors in radiation portal monitoring: Final report. Pacific Northwest National Laboratory, Seattle, WA.
- **Kraemer, S.**, Carayon, P., & Clem, J. (2006). An adversarial viewpoint of human and organizational factors in computer and information security: Final report. Center for Quality and Productivity Improvement, Department of Industrial and Systems Engineering, University of Wisconsin-Madison. http://digital.library.wisc.edu/1793/69303
- Carayon, P., & **Kraemer**, **S**. (2004). Red team performance: Summary of findings. Center for Quality and Productivity Improvement, Department of Industrial and Systems Engineering, University of Wisconsin-Madison. http://digital.library.wisc.edu/1793/69295
- Carayon, P., & **Kraemer**, **S**. (2003). Human factors in e-security: The business viewpoint (Technical Report 184). Center for Quality and Productivity Improvement, Department of Industrial and Systems Engineering, University of Wisconsin-Madison.

 http://digital.library.wisc.edu/1793/69311

Book Chapters





- **Kraemer, S.,** & Carayon, P. (2006). Human and organizational factors in the computer and information security of interoperable systems. In P. C. Cacciabue, E. Hollnagel, D. D. Woods, J. Wilson, A. Rizzo, & P. Sanderson (Eds.), Intelligent Decisions? Intelligent Support?
- **Kraemer, S.**, & Carayon, P. (2005). A macroergonomic framework for computer and information security. In P. Carayon, M. Robertson, B. Kleiner, & P. Hoonakker (Eds.), Human Factors in Organizational Design and Management VII (pp. 243-254). IEA Press.
- Carayon, P., **Kraemer, S.**, & Bier, V. (2005). Human factors issues in computer and e-business security. In A. Labbi (Ed.), Handbook of Integrated Risk Management for E-Business: Measuring, Modeling, and Managing Risk (pp. 63-85). J. Ross Publishing, Inc.
- Carayon, P., Duggan, R., & **Kraemer, S.** (2003). A model of red team performance. In H. Luczak & K. J. Zink (Eds.), Seventh International Symposium on Human Factors in Organizational Design and Management (pp. 443-447). IEA Press.
- Carayon, P., Haims, M. C., & **Kraemer, S.** (2001). Turnover and retention of the Information Technology workforce: The diversity issue. In M. J. Smith & G. Salvendy (Eds.), Systems, Social and Internationalization Design Aspects of Human-Computer Interaction (pp. 67-70). Lawrence Erlbaum Associates.

Theses

- **Kraemer, S.** (2006). An Adversarial Viewpoint of Human and Organizational Factors in Computer and Information Security [Ph.D. Dissertation]. Department of Industrial and Systems Engineering, University of Wisconsin-Madison, Madison, Wisconsin.
- **Kraemer, S.** (2002). A Human Factors Evaluation Method for Computer and Information Security Technical Vulnerabilities and Security Breaches [Master of Science Thesis]. Department of Industrial and Systems Engineering, University of Wisconsin-Madison, Madison, Wisconsin.

Presentations

Kraemer, S. (2023). People strategies for leading smart manufacturing. Presentation at the University of Wisconsin E-Business Consortium (UWEBC) Business Best Practices and Emerging Technologies Conference (October 2, 2023), Madison, WI.





- **Kraemer, S.** (2023). Humans first, technology second: A holistic approach to digital transformation. Presentation at The Forward Festival (August 23, 2023), Madison, Wisconsin.
- **Kraemer, S.** (2013). Strengthening the educator workforce through human capital systems. Presentation at the Michigan Negotiator's Association Meeting (March 15, 2013), Lansing, MI.
- **Kraemer, S.**, & Thorn, C. (2010). Cyberinfrastructure and scientific collaboration: Application of a virtual team performance framework to GLOW II Teams. Presentation at Condor Week (April 14, 2010), University of Wisconsin-Madison, Madison, Wisconsin.

