

Curriculum Vitae – Bodong Chen

IDENTIFYING INFORMATION

Academic Rank

Associate Professor & Bonnie Westby Huebner Endowed Chair in Education and Technology
Department of Curriculum and Instruction
Graduate Faculty Appointment: Program of Learning Technologies
University of Minnesota–Twin Cities

Office: 1954 Buford Avenue, 210 LES Building, St. Paul, MN 55108
Phone: +1 612-626-2050
Email: chenbd@umn.edu
Website: <https://bodong.me/>

Education History

B.S. (Honors), Beijing Normal University, 2006

- ▶ Major: Educational Technology. Minor: Business Administration
- ▶ Thesis: *Design and Implementation of the Sequencing and Navigation Mechanism in an Embedded SCORM 2004 Engine*
- ▶ Advisor: Ronghuai Huang

M.Ed., Peking University, 2009

- ▶ Major: Educational Technology
- ▶ Thesis: *Pursuing Effective Facilitating Strategies: The Effect of Facilitator's Leadership Behaviors on Online Learning*
- ▶ Advisor: Qiong Wang

Ph.D., University of Toronto, 2014

- ▶ Program Area: Curriculum Studies & Teacher Development
- ▶ Collaborative program: Knowledge Media Design
- ▶ Dissertation: *Promisingness Judgments as Facilitators of Knowledge Building in Elementary Science*
- ▶ Committee: Marlene Scardamalia (advisor), Carl Bereiter, James D. Slotta, Earl Woodruff (internal-external examiner), Carolyn Rosé (external examiner)

Employment History

- ▶ 2019/09 – , *Co-Director* of the Learning Informatics Lab, University of Minnesota–Twin Cities
- ▶ 2019/08 – , *Associate Professor*, University of Minnesota–Twin Cities
- ▶ 2019/07 – , *Bonnie Westby Huebner Chair in Education and Technology*, University of Minnesota

- ▶ 2015/01 – 2019/08, *Assistant Professor*, University of Minnesota–Twin Cities
- ▶ 2018/03, *Visiting Professor*, Research Centre for Distance Education, Faculty of Education, Beijing Normal University
- ▶ 2013 – 2014, *Researcher* (part-time), University of Toronto
- ▶ 2013 – 2014, *Data Analyst* (part-time), People for Education, Toronto
- ▶ 2012 – 2013, *Research Analyst* (part-time), Toronto District School Board (TDSB), Toronto
- ▶ 2009 – 2014, *Graduate Assistant/Researcher*, Institute for Knowledge Innovation and Technology, Ontario Institute for Studies in Education, University of Toronto
- ▶ 2006 – 2009, *Research Assistant*, E-learning Future Lab, Peking University, Beijing
- ▶ 2007 – 2009, *Research Assistant*, Center for Educational Technology, Peking University, Beijing
- ▶ 2004 – 2006, *Research Assistant*, R&D Center for Knowledge Engineering, Beijing Normal University, Beijing

Membership in Professional Organizations

- ▶ 2011–ongoing, International Society of the Learning Sciences (ISLS)
- ▶ 2013–ongoing, Society for Learning Analytics Research (SoLAR)
- ▶ 2011–ongoing, American Educational Research Association (AERA)
 - ▶ Division C – Learning & Instruction
 - ▶ SIG 26 – Cooperative Learning: Theory, Research and Practice
 - ▶ SIG 35 – Online Teaching and Learning
- ▶ 2013–ongoing, Knowledge Building International (KBI)
- ▶ 2018–ongoing, EDUCAUSE
- ▶ 2011–2015, Chinese American Educational Research and Development Association
- ▶ 2011–2013, Canadian Society of Studies in Education (CSSE)
- ▶ 2010, Association for Advanced Computing in Education (AACE)

HONORS AND AWARDS

External Sources

Fellowships (since 2009)

- ▶ 2017, *NSF CRII Award*, National Science Foundation, Directorate for Computer & Information Science & Engineering
- ▶ 2013, *Mitacs-Accelerate Fellowship*, Mitacs, \$15,000
- ▶ 2013–2014, *Ontario Graduate Scholarship*, Province of Ontario, \$15,000
- ▶ 2010, *Chinese Government Award for Outstanding Self-financed Students Abroad*, Chinese Scholarship Council, \$5,000

Awards from Professional Associations or Journals

- ▶ 2021, *Best Student Paper Award* (as PhD advisor) and *Best Overall Paper Award Nominee*, The 29th International Conference on Computers in Education (ICCE 2021).
- ▶ 2021, *Outstanding Article Award*, Journal of Open Learning. (Article title: *Unpacking Learning Analytics: An attempt to tilt the iceberg.*)

- ▶ 2016, *Excellence Award–Innovation*, Minnesota eLearning Summit. (Project title: “Using Differentiated Feedback to Promote Student Learning in an Introductory Statistics Course,” with Dr. Vicky Cai from the Minnesota State University, Mankato.)
- ▶ 2015, *Dissertation Award*, Chinese American Educational Research and Development Association
- ▶ 2015, *Best Paper Award Nominee*, 11th International Conference on Computer Supported Collaborative Learning (CSCL)
- ▶ 2013, *Best Student Paper Award Nominee*, 10th International Conference on Computer Supported Collaborative Learning (CSCL)
- ▶ 2008, *Best Conference Paper Award*, Educational Technology International Forum

Consortia (competition-based)

- ▶ 2015, *Selected Attendee*, Early Career Workshop, 11th International Conference on Computer Supported Collaborative Learning (CSCL)
- ▶ 2015, *Selected Attendee*, New Faculty Mentoring Program, AERA – Division C
- ▶ 2014, *Selected Attendee*, Doctoral Consortium, 4th International Conference on Learning Analytics and Knowledge (LAK)
- ▶ 2013, *Selected Attendee*, The Inaugural Learning Analytics Summer Institute (LASI), Stanford University

Other

- ▶ 2015, *Distinguished Alumnus*, Graduate School of Education, Peking University

RESEARCH, SCHOLARSHIP, AND CREATIVE WORK

Grants and Contracts

External Sources

Investigator status: Co-PI

(PI: Moussa Ayyash)

National Science Foundation, INCLUDES

NSF INCLUDES: Alliance: Building a Diverse Data Science Workforce for STEM (DataSTEM)

07/01/2022-06/30/2027

Funded Amount: \$10,000,000

Subaward Amount: \$576,477

Status: Pending

Investigator status: PI

(PI: B. Chen; Co-PIs: C. Scharber and D. DeLiema)

National Science Foundation, Discovery Research PreK-12

DataX: Exploring Justice-Oriented Data Science with Secondary School Students

07/01/2021 - 06/30/2023

Funded Amount: \$449,199

Direct Amount: \$310,712

Indirect Amount: \$138,487

Investigator status: PI

External Agency: The Eric and Wendy Schmidt Fund for Strategic Innovation

Project title and Dates: *Learning engineering: Instrumenting a large-scale Student Information System for research*

Dates: 03/2020-03/2022

Total costs: \$799,995

Investigator status: Co-PI

(PI: D. DeLiema; UMN Co-PIs: B. Chen and K. Varma; External Co-PIs: S. Salehi, M. Bernacki, and C. Anderson)

Carina Initiatives

Playful Problem Solving

9/1/2020 – 08/30/2023

Funded Amount: \$990,700

Direct Amount: \$927,994

Indirect Amount: \$62,730

Investigator status: PI (sole)

External Agency: National Science Foundation

Program: CISE Research Initiation Initiative (CRII)

Project title and Dates: *CRII: Cyberlearning: Connecting Web Annotations and Progressive Online Discourse in Science Classrooms*, 07/01/17–03/31/2020

Award Number: 1657009

Total costs: \$169,041

Investigator status: Co-PI

Name of PI: Stephanie Teasley, University of Michigan

External Agency: National Science Foundation

Program: Cyberlearn & Future Learn Tech

Project title and Dates: *Doctoral Consortium for the 2016 Learning Analytics and Knowledge Conference*, 6/1/2016–5/31/2017

Award Number: 1622831

Total costs: \$24,930

Investigator status: Co-investigator

Name of PI: Qiong Wang, Peking University, China

External Agency: Digital Learning for Development (DL4D)

Project title and Dates: *MOOCs for teacher professional development in underserved regions: Examining persistent teacher-learners in a Chinese MOOC*, 2016

Total costs: C\$64,375.67

University Sources

- ▶ 2019, *International Travel Grant Award*, \$1,500, Global Programs and Strategy Alliance, University of Minnesota
- ▶ 2019–2020, *DataExpedition: Supporting Youth Computational Thinking with Open Geoscience Data*, \$23,943, Grant-in-Aid Program, the Office of the Vice President for Research, University of Minnesota

- ▶ 2018, *Enriching an Online Course with Interactive Web Content and Learning Analytics*, \$1,000, Center for Educational Innovation, University of Minnesota
- ▶ 2018, *Discover open geoscience data to support Data Expedition in high school science*, University Libraries Research Sprints, University of Minnesota
- ▶ 2016, *International Travel Grant Award*, \$2,000, Global Programs and Strategy Alliance, University of Minnesota
- ▶ 2016, *"Stats Carpentry"*, PI, \$1,500, Partnership for Affordable Content Program, University of Minnesota Libraries
- ▶ 2015, *Supporting Metadiscourse in Ideational Writing*, PI (Co-PI: Cassie Scharber), \$3,123.71, Center for Writing, University of Minnesota
- ▶ 2013, *OISE Graduate Students Conference Travel Grant*, \$330, University of Toronto
- ▶ 2012, *School of Graduate Studies Research Travel Grant*, \$3,000, University of Toronto
- ▶ 2012, *OISE Graduate Students Conference Travel Grant*, \$725, University of Toronto
- ▶ 2011, *School of Graduate Studies Conference Travel Grant*, \$666, University of Toronto
- ▶ 2011, *OISE Graduate Students Conference Travel Grant*, \$705, University of Toronto

Publications

[^] Invited

^G Graduate student author

^U Undergraduate student author

^T Classroom teacher

Manuscripts/Work under Review

1. **Chen, B.**, Shui, H., & Haklev, S. (in revision). Orchestrating the flow and advancement of artifacts in a knowledge community.
2. **Chen, B.** & Poquet, S. (in revision). Socio-temporal dynamics in online discussions: An event-based approach.

Journal Articles

1. **Chen, B.**, & Poquet, O. (2022). Networks in Learning Analytics: Where Theory, Methodology, and Practice Intersect. *Journal of Learning Analytics*, 9(1), 1–12. <https://doi.org/10.18608/jla.2022.7697>
2. Gan, Y., Hong, H.-Y., **Chen, B.**, & Scardamalia, M. (2021). Knowledge building: Idea-centered drawing and writing to advance community knowledge. *Educational Technology Research & Development*. <https://doi.org/10.1007/s11423-021-10022-7>
3. **Chen, B.**, Fan, Y., Zhang, G., Liu, M., & Wang, Q. (2020). Teachers' networked professional learning with MOOCs. *PLOS ONE*, 15(7), e0235170. <https://doi.org/10.1371/journal.pone.0235170> (Impact Factor 2020: 2.870. Indexing: SCI.)
4. Zhu, X., **Chen, B.**, Avadhanam, R. M., Shui, H., & Zhang, R. Z. (2020). Reading and connecting: Using social annotation in online classes. *Information and Learning Sciences*, 121(5/6), 261–271. <https://doi.org/10.1108/ILS-04-2020-0117>
5. Rosenberg, J.M., Edwards, A., & **Chen, B.** (2020). Tools and strategies for engaging students in analyzing and interpreting complex data sources. *The Science Teacher*, 87(5), 30-34. https://doi.org/10.2505/4/tst20_087_05_30

6. **Chen, B.**, & Huang, T. (2019). It is about timing: Network prestige in asynchronous online discussions. *Journal of Computer Assisted Learning*, 34, 503–515. <https://doi.org/10.1111/jcal.12355>
7. **Chen, B.** (2019). Designing for Networked Collaborative Discourse: An UnLMS Approach. *TechTrends*, 63(2), 194–201. <https://doi.org/10.1007/s11528-018-0284-7>
8. Hong, H.-Y., Lin, P.-Y., **Chen, B.**, & Chen, N. (2019). Integrated STEM learning in an idea-centered knowledge-building environment. *The Asia-Pacific Education Researcher*, 28(1), 63–76. <https://doi.org/10.1007/s40299-018-0409-y>
9. **Chen, B.**, Chang, Y.-H.^G, Ouyang, F.^G, & Zhou, W.^U (2018). Fostering student engagement in online discussion through social learning analytics. *The Internet and Higher Education*, 37, 21–30. <https://doi.org/10.1016/j.iheduc.2017.12.002>
(Impact Factor 2017: 5.847)
10. Cai, Q., **Chen, B.**, Wu, H., & Trussell, G. (2018). Using differentiated feedback to improve performance in introductory statistics. *Innovations in Education and Teaching International*. <https://doi.org/10.1080/14703297.2018.1508362>
(Author order reflects writing contributions. Impact Factor 2017: 1.106)
11. **Chen, B.**, Knight, S., & Wise, A. F. (2018). Critical issues in designing and implementing temporal analytics. *Journal of Learning Analytics*, 5(1), 1–9. <http://dx.doi.org/10.18608/jla.2018.53.1>
12. Fan, Y.,^G Zhang, G.,^G **Chen, B.**, & Wang, Q. (2018). Why did they come back?: Analyzing motivations for repeated enrollment in MOOCs [in Chinese]. *Journal Open Education Research*, 24(2), 89–96.
(JOER is ranked the 6th among 37 educational science journals in the Chinese Social Sciences Citation Index (CSSCI). Author order reflects writing contributions. Role: project Co-PI, research design, and draft revisions.)
13. Li, C., **Chen, B.**, & Gobert, J. (2018). Innovations in scaling and enhancing learning: Review on the Fifth Annual ACM Conference on Learning at Scale [in Chinese]. *Journal of Open Learning*, 23(5), 1–7. doi:10.19605/j.cnki.kfxyj.2018.05.001
14. **Chen, B.** (2017). Fostering scientific understanding and epistemic beliefs through judgments of promisingness. *Educational Technology Research and Development*, 65(2), 255–277. doi:10.1007/s11423-016-9467-0
(Impact Factor 2017: 1.728)
15. **Chen, B.**, Resendes, M., Chai, C.S., & Hong, H.-Y. (2017). Two tales of time: Uncovering the significance of sequential patterns among contribution types in knowledge-building discourse. *Interactive Learning Environments*, 25(2), 162–175. doi:10.1080/10494820.2016.1276081
(Impact Factor 2016: 1.674)
16. Knight, S., Wise, A. F., & **Chen, B.** (2017). Time for change: Why learning analytics needs temporal analysis. *Journal of Learning Analytics*, 4(3), 7–17. <https://doi.org/10.18608/jla.2017.43.2>
17. **Chen, B.** & Huang, T.^G (2017). Unpacking Learning Analytics: An attempt to tilt the iceberg [in Chinese]. *Journal of Open Learning*, 22(4), 1–9. doi:10.19605/j.cnki.kfxyj.2017.04.001
18. **Chen, B.**, & Zhang, J. (2016). Analytics for knowledge creation: Towards epistemic agency and design-mode thinking. *Journal of Learning Analytics*, 3(2), 139–163. doi:10.18608/jla.2016.32.7
19. **Chen, B.**, & Hong, H.-Y. (2016). Schools as knowledge-building organizations: Thirty years of design research. *Educational Psychologist*, 51(2), 266–288. doi:10.1080/00461520.2016.1175306
(Impact Factor 2015: 5.688)
20. Hong, H.-Y., **Chen, B.**, & Chai, C. S. (2016). Exploring the development of college students' epistemic views during their knowledge building activities. *Computers & Education*, 98, 1–13. doi:10.1016/j.compedu.2016.03.005

- (Author order reflects writing contributions. Role: Drafting and revising the manuscript. Impact Factor 2015: 2.881)
21. **Chen, B.**, Scardamalia, M., & Bereiter, C. (2015). Advancing knowledge building discourse through judgments of promising ideas. *International Journal of Computer-Supported Collaborative Learning*, 10(4), 345-366. <http://dx.doi.org/10.1007/s11412-015-9225-z>
(Impact Factor 2016: 3.469. **Recognized in June 2017 by Springer as one of the Highly Cited Articles in Education & Language.**)
 22. **Chen, B.** (2015). Exploring the digital divide: The use of digital technologies in Ontario public schools. *Canadian Journal of Learning and Technology / La revue canadienne de l'apprentissage et de la technologie*, 41(3), 1-23.
 23. Resendes, M., Scardamalia, M., Bereiter, C., **Chen, B.**, & Halewood, C.^T (2015). Group-level formative feedback and metadiscourse. *International Journal of Computer-Supported Collaborative Learning*, 10(3), 309–336. <http://dx.doi.org/10.1007/s11412-015-9219-x>
(Author order reflects writing contributions. Role: Designing and developing the feedback tool; analyzing data; and drafting the manuscript. Impact Factor 2016: 3.469)
 24. Goggins, S., Xing, W., Chen, X., **Chen, B.**, & Wadholm, B. (2015). Learning analytics at “small” scale: Exploring a complexity-grounded model for assessment automation. *Journal of Universal Computer Science*, 21(1), 66–92.
(Author order reflects research contributions. Role: Conceptual discussion and manuscript revision. Impact Factor 2017: 1.066)
 25. **Chen, B.** (2015). From theory use to theory building in learning analytics: A commentary on “Learning analytics to support teachers during synchronous CSCL”. *Journal of Learning Analytics*, 2(2), 163–168. doi:10.18608/jla.2015.22.12
 26. Zhang, Y., **Chen, B.**, Scardamalia, M., & Bereier, C. (2012). From shallow to deep constructivism: Development of Knowledge Building theory and its application in China [in Chinese]. *E-education Research*, 9, 5-12.
(Contribution: 40%; the 1st and 2nd author contributed equally to writing. Role: Conceptual design; drafting the manuscript; and addressing review comments.)
 27. **Chen, B.**, Resendes, M., Chuy, M., Tarchi, C. & Bereiter, C. (2011). Identifying promising ideas in a knowledge-building discourse [in Italian: Identificare, selezionare e sviluppare le idee promettenti nel Knowledge Building]. *QWERTY - Interdisciplinary Journal of Technology, Culture and Education*, 6(2), 224-241.
 28. Chuy, M., Resendes, M., Tarchi, C., **Chen, B.**, & Scardamalia, M. (2011). Ways of contributing to an explanation-seeking dialogue in science and history [in Italian: Modi di contribuire ad un dialogo per la ricerca di spiegazioni]. *QWERTY - Interdisciplinary Journal of Technology, Culture and Education*, 6(2), 242-260.
(Author order reflects writing contributions. Role: Analyzing data; and drafting the manuscript.)
 29. **Chen, B.**, Jia, J., & Wang, A. (2007). An application framework of educational resources repository based on ontology and semantic web technologies [in Chinese]. *China Educational Technology*(251), 105-109.
 30. Li, Q., Tang, H., **Chen, B.**, Yang, S., & Huang, R. (2006). Development and application of an LMS SCORM 2004 engine [in Chinese]. *Journal of Open Education Research*, 12(6), 85-87.
(Author order reflects research and writing contributions. Role: Technology design & development; and drafting the manuscript.)

Book Chapters

1. Poquet, O. & **Chen, B.** (under review). Integrating Theories of Learning and Social Networks in Learning Analytics. In *Theory Informing and Arising from Learning Analytics*. Springer: New York.
2. **Chen, B.** & Teasley, S. (2021, forthcoming). Collaboration Analytics. In *Handbook of Learning Analytics (2nd Edition)*. Society for Learning Analytics Research (SoLAR).
3. **Chen, B.**, Håklev, S. & Rosé, C.P. (2021). Massive-scale collaborative learning. In U. Cress, C. Rosé, A. F. Wise, & J. Oshima (Eds.), *International Handbook of Computer-Supported Collaborative Learning* (pp. 163–181). Springer International Publishing. https://doi.org/10.1007/978-3-030-65291-3_9
4. Romero-Hall, E., Correia, A.P., Branch, R.M., Cevik, Y.D., Dickson-Deane, C., **Chen, B.**, Liu, J.C., Tang, H., Vasconcelos, L., Pallitt, N., & Thankachan, B. (2020). Futurama: Learning, Design and Technology Research Methods. In *Research Methods in Learning Design and Technology*. Routledge.
5. **Chen, B.**, & Lin, F. (2020). Representational affordances for collaborative learning in technology-enhanced environments. In P. Kendeou, P.V. Meter, A List, & D. Lombardi (Eds.), *Handbook of Learning from Multiple Representations and Perspectives*. Routledge.
6. Gutiérrez Braojos, C., Montejo-Gámez, J., Ma, L., & **Chen, B.** (2019). Exploring collective responsibility within a knowledge building community: Analysis of online peer feedback. In L. Daniela (Ed.), *Didactics of Smart Pedagogy: Smart Pedagogy for Technology Enhanced Learning*. Springer.
7. **Chen, B.**, Chen, C.-M., Hong, H.-Y., & Chai, C. S. (2018). Learning analytics: Approaches and cases from Asia. In K. J. Kennedy & J. C.-K. Lee (Eds.), *Routledge International Handbook of Schools and Schooling in Asia* (pp. 419–432). New York, NY: Routledge.
8. **Chen, B.**, & Fan, Y. (2018). Learning analytics: Perspectives from Mainland China. In C. P. Lim & V. L. Tinio (Eds.), *Learning analytics for the Global South* (pp. 36–43). Quezon City, Philippines: Foundation for Information Technology Education and Development.

Full Papers in Refereed Conference Proceedings

1. Zhang, J., Xiang, M., Guo, G., Huang, J., & **Chen, B.** (2021). Network analysis of themes and concepts in learning analytics. In *Proceedings of the 20th International Forum on Educational Technology (IFET2021)*. : Jinhua, Zhejiang, China.
2. Zhu, X., Shui, H., & **Chen, B.** (2021). Designing Support for Productive Social Interaction and Knowledge Co-construction in Collaborative Annotation. In Rodrigo, M. M. T. et al. (Eds.). *Proceedings of the 29th International Conference on Computers in Education*. Asia-Pacific Society for Computers in Education.
3. **Chen, B.**, & Zhu, H. (2019). Towards Value-Sensitive Learning Analytics Design. In *Proceedings of the 9th International Conference on Learning Analytics & Knowledge* (pp. 343–352). ACM. <https://doi.org/10.1145/3303772.3303798>
4. Lund, K., **Chen, B.**, Gaudwin, S. (2018). The potential of interdisciplinarity in MOOC research: How do researchers in education and computer science compare?. In *Proceedings of the 2018 Learning @ Scale Conference*. London, UK: ACM Press. <https://doi.org/10.1145/3231644.3231661> (Overall Acceptance Rate: 22%)
5. Ma, L.^G, Matsuzawa, Y., **Chen, B.**, & Scardamalia, M. (2016). Community knowledge, collective Responsibility: The emergence of rotating leadership in three knowledge building

- communities. In C. K. Looi, J. L. Polman, U. Cress, & P. Reimann. (Eds.), *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016, Volume 1* (pp. 615-622). Singapore: The International Society of the Learning Sciences.
6. **Chen, B.**, Ma, L.^G, Matsuzawa, Y., & Scardamalia, M. (2015). The development of productive vocabulary in knowledge building: A longitudinal study. In O. Lindwall, P. Hakkinen, T. Koschman, P. Tchounikine, & S. Ludvigsen. (Eds.), *Exploring the Material Conditions of Learning: The Computer Supported Collaborative Learning (CSCL) Conference 2015, Volume 1* (pp. 443-450). Gothenburg, Sweden: The International Society of the Learning Sciences. (Note: Best Paper Award Nominee. Paper Acceptance Rate: 36%)
 7. **Chen, B.**, Chen, X., & Xing, W. (2015). "Twitter archeology" of Learning Analytics and Knowledge conferences. In *Proceedings of the Fifth International Conference on Learning Analytics and Knowledge - LAK '15* (pp. 340-349). New York, NY, USA: ACM. doi:10.1145/2723576.2723584 (Full Paper Acceptance Rate: 27%)
 8. Resendes, M., **Chen, B.**, Acosta, A., & Scardamalia, M. (2013). The effect of formative feedback on vocabulary use and distribution of vocabulary knowledge in a grade two Knowledge Building class. In N. Rummel, M. Kapur, M. Nathan, & S. Puntambekar (Eds.), *To See the World and a Grain of Sand: Learning across Levels of Space, Time, and Scale: CSCL 2013 Conference Proceedings Volume 1 – Full Papers & Symposia* (pp. 391-398). International Society of the Learning Sciences. (Note: Best Student Paper Award Nominee)
 9. **Chen, B.**, Scardamalia, M, Resendes, M., Chuy, M., & Bereiter, C. (2012). Students' intuitive understanding of promisingness and promisingness judgments to facilitate knowledge advancement. In J. van Aalst, K. Thompson, M. J. Jacobson & P. Reimann (Eds.), *The future of learning: Proceedings of the 10th international conference of the learning sciences (ICLS 2012) – Volume 1, Full Papers* (pp. 111-118). Sydney, Australia: ISLS.
 10. **Chen, B.** & Wang, Q. (2010). Pursuing effective facilitating strategies: The effect of facilitator's leadership behaviors on online learning. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010* (pp. 2192-2199). Chesapeake, VA: AACE.

Evaluation, Project, and Technical Reports

1. Wang, Q., **Chen, B.**, Fan, Y., & Zhang, G. (2018). *MOOCs as an alternative for teacher professional development: Examining learner persistence in one Chinese MOOC*. Final project report. Manila, The Philippines: Digital Learning for Development (DL4D).
2. **Chen, B.**, Gallagher-Mackay, K., Kidder, A., & Proulx, K. (2014). *Public education: Our best investment (Annual report on Ontario's publicly funded schools 2014)*. Technical report, People for Education, Toronto, ON, Canada.
3. **Chen, B.**, Gallagher-Mackay, K., & Kidder, A. (2014). *Digital learning in Ontario schools: The 'new normal'*. Technical report, People for Education, Toronto, ON, Canada.
4. Rolheiser, C., **Chen, B.**, Håklev, S., Harrison, L., Najafi, H., & Teplovs, C. (2014). *Hatch, match, and dispatch: Examining the relationship between student intent, expectations, behaviours and outcomes in six Coursera MOOCs at the University of Toronto*. MOOC Research Initiative. Retrieved from <http://www.moocresearch.com/reports>

Software Development

1. Batu, W., Chen, W., & **Chen, B.** (2019). DataX [computer software]. Minneapolis, MN.

2. Chen, W., Batu, W., & **Chen, B.** (2019). IdeaMagnets for Knowledge Forum 6 [computer software]. Minneapolis, MN.
3. Chen, W., & **Chen, B.** (2019). Personal Learning Compass [computer software]. Minneapolis, MN.
4. Liu, X., & **Chen, B.** (2015). WordWhispers for Knowledge Forum 6 [computer software]. Minneapolis, MN.
5. **Chen, B.** (2015). CanvasNet [Social learning analytics for Canvas]. Minneapolis, MN.
6. **Chen, B.** (2015). LexFreq [R-based computer software for computing Lexical Frequency Profiles]. Minneapolis, MN.
7. **Chen, B.** (2015). LagSeq [R-based computer software for Lag-sequential Analysis]. Minneapolis, MN.
8. **Chen, B.** (2011). Promising Ideas Tool of Knowledge Forum [computer software]. Toronto, ON: Institute for Knowledge Innovation and Technology.
9. **Chen, B.** (2011). Metadiscourse Tool of Knowledge Forum [computer software]. Toronto, ON: Institute for Knowledge Innovation and Technology.

Other Papers in Refereed Conference Proceedings

1. **Chen, B.** Zhu, X., & Shui, H. (2022). Socio-Semantic Network Motifs Framework for Discourse Analysis. In *Proceedings of the 12th International Conference on Learning Analytics & Knowledge*. ACM. <https://doi.org/10.1145/3506860.3506893>
2. **Chen, B.**, Hussein, B., & Poquet, O. (2021). Modelling network dynamics in social annotation. In O. Poquet, B. Chen, M. Saqr, & T. Hecking (Eds.), *Proceedings of the NetSciLA2021 workshop "Using Network Science in Learning Analytics: Building Bridges towards a Common Agenda" (NetSciLA2021)* (No. 2868; pp. 9–15). http://ceur-ws.org/Vol-2868/#article_3
3. Poquet, O., **Chen, B.**, Saqr, M., & Hecking, T. (2021). Using network science in learning analytics: Building bridges towards a common agenda. In O. Poquet, B. Chen, M. Saqr, & T. Hecking (Eds.), *Proceedings of the NetSciLA2021 workshop "Using Network Science in Learning Analytics: Building Bridges towards a Common Agenda" (NetSciLA2021)* (No. 2868; pp. 1–2). http://ceur-ws.org/Vol-2868/#article_1
4. Poquet, O., Saqr, M., & **Chen, B.** (2021). Recommendations for network research in learning analytics: To open a conversation. In O. Poquet, B. Chen, M. Saqr, & T. Hecking (Eds.), *Proceedings of the NetSciLA2021 workshop "Using Network Science in Learning Analytics: Building Bridges towards a Common Agenda" (NetSciLA2021)* (No. 2868; pp. 34–41). http://ceur-ws.org/Vol-2868/#article_7
5. **Chen, B.** & Poquet, O. (2020). Socio-Temporal Dynamics in Peer Interaction Events. In *Proceedings of the 10th International Conference on Learning Analytics & Knowledge*. ACM. <https://doi.org/10.1145/3375462.3375535>
6. Peri, S.S.S., **Chen, B.**, Dougall, A.L., & Siemens, G. (2020). Towards Understanding the Lifespan and Spread of Ideas: Epidemiological Modeling of Participation on Twitter. In *Proceedings of the 10th International Conference on Learning Analytics & Knowledge*. ACM. <https://doi.org/10.1145/3375462.3375515>
7. Poquet, O., Hecking, T., & **Chen, B.** (2020). The Modeling of Digital Learning Networks. In *Companion Proceedings 10th International Conference on Learning Analytics & Knowledge (LAK20)*.
8. Huang, T.^G, & **Chen, B.** (2018). Uncovering the rich club phenomenon in an online class. In *Proceedings of the 2018 ICLS Conference*. London, UK: ISLS.
9. de Jong, F., van den Ende, J., van Heijst, H., Matsuzawa, Y., Kirschner, P., Zhang, J., Chen,

- M., Chen, F., Rosé, C., Godinez, E. V., Ratté, S., **Chen, B.**, ... Wise, A. (2017). Making a Difference: Analytics for Quality Knowledge-Building Conversations. In B. K. Smith, M. Borge, E. Mercier, & K. Y. Lim (Eds.), *Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017* (Vol. 2, pp. 711–718). Philadelphia, PA: International Society of the Learning Sciences. <https://doi.org/10.22318/cscl2017.114>
10. Scardamalia, M., Bereiter, C., Laferrière, T., Bielaczyc, K., Chai, S., Chan, C. K. K., **Chen, B.**, ... Zhang, J. (2017). Toward a multi-level knowledge building innovation network. In B. K. Smith, M. Borge, E. Mercier, & K. Y. Lim (Eds.), *Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017* (Vol. 2, pp. 703–710). Philadelphia, PA: International Society of the Learning Sciences. <https://doi.org/10.22318/cscl2017.113>
 11. **Chen, B.**, Fan, Y.^G, Zhang, G.^G, & Wang, Q. (2017). Examining motivations and self-regulated learning strategies of returning MOOCs learners. In *Proceedings of the Seventh International Learning Analytics & Knowledge Conference* (pp. 542–543). New York, NY: ACM. <https://doi.org/10.1145/3027385.3029448>
 12. Hong, H., **Chen, B.**, Tsai, C.-C., Lin, C.P., & Wu, Y.-T. (2016). Fostering more informed epistemic views among students through knowledge building. In C. K. Looi, J. L. Polman, U. Cress, & P. Reimann. (Eds.), *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016, Volume 2* (pp. 787-790). Singapore: The International Society of the Learning Sciences.
 13. Cai, Q., Wu, H., & **Chen, B.** (2016). Using differentiated feedback messages to promote student learning in an introductory statistics course. In C. K. Looi, J. L. Polman, U. Cress, & P. Reimann. (Eds.), *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016, Volume 2* (pp. 795-798). Singapore: The International Society of the Learning Sciences.
 14. **Chen, B.**, Wise, A. F., Knight, S., & Cheng, B. H. (2016). Putting temporal analytics into practice. In *Proceedings of the Sixth International Conference on Learning Analytics & Knowledge - LAK '16* (pp. 488–489). New York, New York, USA: ACM Press. doi:10.1145/2883851.2883865
 15. **Chen, B.** (2015). Devising technological and pedagogical supports for metadiscourse in knowledge building. In O. Lindwall, P. Hakkinen, T. Koschman, P. Tchounikine, & S. Ludvigsen. (Eds.), *Exploring the Material Conditions of Learning: The Computer Supported Collaborative Learning (CSCL) Conference 2015, Volume 2* (pp. 908-909). Gothenburg, Sweden: The International Society of the Learning Sciences.
(Note: Research summary for Early Career Workshop)
 16. Knight, S., Wise, A. F., **Chen, B.**, & Cheng, B. H. (2015). It's about time: 4th international workshop on temporal analyses of learning data. In *Proceedings of the Fifth International Conference on Learning Analytics and Knowledge - LAK '15* (pp. 388–389). New York, NY, USA: ACM Press. doi:10.1145/2723576.2723638 (Note: Workshop paper)
 17. **Chen, B.** (2014). Visualizing semantic space of online discourse: The Knowledge Forum case. In *Proceedings of the Fourth International Conference on Learning Analytics and Knowledge - LAK '14* (pp. 271–272). New York, New York, USA: ACM Press. doi:10.1145/2567574.2567595 (Paper Acceptance Rate: 30%)
 18. **Chen, B.**, & Resendes, M. (2014). Uncovering what matters: Analyzing transitional relations among contribution types in knowledge-building discourse. In *Proceedings of the Fourth International Conference on Learning Analytics And Knowledge - LAK '14* (pp. 226–230). New York, New York, USA: ACM Press. doi:10.1145/2567574.2567606 (Paper Acceptance Rate: 30%)

19. Xu, Z., Woodruff, E., & **Chen, B.** (2013). Efficacy of reward allotment on children's motivation and learning. In *Proceedings of the European Conference on Games Based Learning* (pp. 748–755). Porto, Portugal: Academic Publishing.
20. **Chen, B.**, Scardamalia, M., Acosta, A., Resendes, M., & Kici, D. (2013). Promisingness judgments as facilitators of knowledge building. In N. Rummel, M. Kapur, M. Nathan, & S. Puntambekar (Eds.), *To See the World and a Grain of Sand: Learning across Levels of Space, Time, and Scale: CSCL 2013 Conference Proceedings Volume 2 – Short papers, Panels, Posters, Demos & Community Events* (pp. 231-232). International Society of the Learning Sciences.
21. **Chen, B.**, Chuy, M., Resendes, M., Scardamalia, M., & Bereiter, C. (2011). Evaluation by grade 5 and 6 students of the promisingness of ideas in knowledge-building discourse. In H. Spada, G. Stahl, N. Miyake & N. Law (Eds.), *Connecting Computer-Supported Collaborative Learning to Policy and Practice: CSCL2011 Conference Proceedings. Volume II - Short Papers & Posters* (pp. 571-575). Hong Kong: International Society of the Learning Sciences.
22. Resendes, M., Chuy, M., **Chen, B.**, & Scardamalia, M. (2011). Ways of contributing to a knowledge building dialogue in history. In H. Spada, G. Stahl, N. Miyake & N. Law (Eds.), *Connecting Computer-Supported Collaborative Learning to Policy and Practice: CSCL2011 Conference Proceedings. Volume II - Short Papers & Posters* (pp. 998-999). Hong Kong: International Society of the Learning Sciences.

Media Appearances and Interviews

1. Chen, B., & Tan, S. (2020, September). A Principle-based Approach to Teaching and Learning. *SingTeach*. Retrieved from <https://singteach.nie.edu.sg/issue74-a-principle-based-approach-to-teaching-and-learning/>
2. Burger, Kevyn. (Reporter), & Chen, B. (Interviewee). (2020, May). Twin Cities homeowners turn to YouTube videos to learn repair skills. *CEHD Connect*. Retrieved from <https://www.startribune.com/using-youtube-videos-to-repair-maintain-and-upgrade-your-home/569352942/>
3. Frisch, Suzy. (Reporter), & Chen, B. (Interviewee). (2020, April). Understanding learning through data: A fresh way of developing new educational tools. *CEHD Connect*. Retrieved from <https://connect.cehd.umn.edu/understanding-learning-through-data/>
4. Frisch, Suzy. (Reporter), & Chen, B. (Interviewee). (2019, December). Acting on data: Professor Bodong Chen aims to help educators use analytics to improve teaching and learning. *CEHD Connect*. Retrieved from <https://connect.cehd.umn.edu/acting-on-data/>
5. Chao, Max. (Reporter), & Chen, B. (Interviewee). (2018, April 19). University of Minnesota professors use their free time to write free textbooks. *Minnesota Daily*. Retrieved from <https://z.umn.edu/opentext>
6. Harfield, T. (Interviewer), & Chen, B. (Interviewee). (2016, July 28). Social Network Analysis & Personal Responsibility. *2016 Minnesota eLearning Summit*. Retrieved from <https://www.youtube.com/watch?v=3Y12cS2ehg0&feature=youtu.be>
7. Sinha, S. (Interviewer), & Chen, B. (Interviewee). (2016, June 5). The Inception of Revolutionary Learning: Blending Machine Learning & Learning Analytics from the University of Minnesota. *Yellowdig Biweekly, First Edition*. Yellowdig. Retrieved from https://cdn2.hubspot.net/hubfs/2058153/FirstFinal_DailyDig.pdf
8. Helgeson, M. (Interviewer), & Chen, B. (Interviewee). (2016, January 12). How Technology and Learning Analytics Are Transforming Education, *CEHD Vision 2020 Blog*. Retrieved from <http://cehdvision2020.umn.edu/cehd-blog/technology-and-learning-analytics/>

Presentations, Posters, and Exhibits

Keynotes and Invited Speeches

1. Chen, B. (2019, December). *Creating conditions for knowledge building for the public good*. Theme-based Invited Speech at the 27th International Conference on Computers in Education (ICCE 2019), Kenting, Taiwan.
2. Chen, B. (2016, November). *Promoting epistemic cognition in knowledge building: Discourse, tools, and analytics*. Invited Speech at the 3rd International Conference for Personal Epistemology and Learning in Digital Age, Taipei, Taiwan.
3. Chen, B. (2016, October). *Mapping the Terrain of MOOC Research*. Keynote speech at the MOOC Doctoral Forum, Beijing, China.

Invited Talks

1. **Chen, B.** (Guest Moderator), Garcia, C. (Panelist), Lindquist, M. (Panelist), & Zhu, X. (Panelist) (2020, December). *Liquid Margins 15: Social Reading: Theory & Practice*. Liquid Margins webinar series organized by Hypothes.is, Online.
2. Milligan, S., Winne, P., Gašević, D., Jovanović, J., Lund, K., & **Chen, B.** (2020, November). *What Do We Mean by Rigour in Learning Analytics?*. Panel presentation organized by the Society for Learning Analytics Research (SoLAR), Online.
3. Chen, B. (2020, October). *Learning, Design, and Analytics in the Knowledge Society: A Research Agenda*. An invited talk at the Graduate School of Education, Peking University, Online.
4. Chen, B. (2020, July). *Learning analytics: Frontiers, trends, and challenges*. Invited talk at the Symposium of Artificial Intelligence for Educational Innovation, East China Normal University, Online.
5. Chen, B. (2020, July). *Sharpened tools for sharp minds: Knowledge management in academic research*. Invited talk at the Fridays Zoom Seminar, Beijing Normal University, Online.
6. Poquet, O., & Chen, B. (2020, April). *Analyzing Learning and Teaching through the Lens of Networks*. Invited webinar organized by the Society for Learning Analytics Research (SoLAR).
7. Chen, B. (2019, November). *Designing technology and analytics for knowledge building classrooms*. Invited talk at the Center for Cognitive Sciences Symposium on Learning at the University of Minnesota, Minneapolis, MN.
8. Chen, B. (2018, November). *Truly Social or Just Timely: Modeling Peer Interactions in a Social Media Environment*. Invited Brownbag Lecture at the UC Irvine School of Education, Irvine, CA.
9. Chen, B. (2018, March). *The Development of Productive Vocabulary and Rotating Leadership in Knowledge Building*. Invited Presentation at the Graduate School of Education, Peking University, Beijing, China.
10. Chen, B. (2018, March). *Teachers' Perpetual Learning in and with MOOCs*. Invited Presentation at the Research Centre of Distance Education, Beijing Normal University, Beijing, China.
11. Chen, B. (2018, March). *Fostering Online Discussion Through Social Learning Analytics*. Invited Presentation at the School of Educational Technology, Beijing Normal University, Beijing, China.
12. Chen, B. (2017, October). *MOOCs for Teacher Professional Development in China*. Invited Presentation at "Leveraging Digital Learnings for 2020", 2017 mEducation Alliance Symposium, Washington D.C.

13. Chen, B. (2017, October). *Learning Analytics for the Global South: A Chinese Perspective*. Invited Presentation at "Include Us All! Directions for Adoption of Learning Analytics in the Global South", 2017 mEducation Alliance Symposium, Washington D.C.
14. Chen, B. (2017, April). *Dynamic Network Analysis of Knowledge-Building Discourse*. Invited Presentation of the AIM Analytics Lecture Series, University of Michigan, Ann Arbor.
15. Chen, B. (2016, October). *Learning analytics in higher education: Promising practices and lessons learned*. Invited presentation at the 30th Annual Conference of the Asian Association of Open University, Manila, Philippines.
16. Chen, B., & Wang, Q. (2016, October). *Learning analytics: An introduction*. Invited pre-conference seminar at the 30th Annual Conference of the Asian Association of Open University, Manila, Philippines.
17. Chen, B. (2013, May). *Knowledge Building: Theory, pedagogy, technology, and its recent development*. Invited Presentation, E-learning Forum Online Seminar (<http://www.elearningforum.net/>).
18. Chen, B. (2013, February). *Promisingness judgments in knowledge building classrooms*. Invited Presentation, Gimnasio La Montaña, Bogotá, Colombia.
19. Chen, B. (2012, August). *Introduction to knowledge building principles*. Invited Presentation, Baiyunyuan Elementary School, Nanjing, China.

Contributed Papers Presented at Professional Meetings, Conferences, etc.

International and National (refereed)

1. Stewart, K., Aimone, E., Zhu, X.^G, Shui, H.^G, & **Chen, B.** (2021, May). *Impact of a Social Annotation Platform on Knowledge Construction and Higher-Order Thinking Skills in an Online Global Health Ethics Graduate Course at Duke in Spring 2021*. Pandemic Pedagogy Research Symposium, Online.
2. **Chen, B.**, Chang, Y.-H.,^G & Groos, D.^T (2020, November) *Crisscrossing Information Spaces with the IdeaMagnets Tool*. Paper presented at the 2020 Knowledge Building Summer Institute, Online.
3. **Chen, B.** (2020, Apr 17 - 21). *Truly Social or Simply Coincident: Mining Peer Interaction in Asynchronous Online Discussions* [Paper Session]. AERA Annual Meeting, San Francisco, CA <http://tinyurl.com/snwqf5d> (Conference Canceled)
4. **Chen, B.**, Barbaro, V., Ma, L. & Peebles, B. (2020, Apr 17 - 21). *Data Expedition in a Knowledge-Building Community* [Structured Poster Session]. AERA Annual Meeting, San Francisco, CA <http://tinyurl.com/yxobqlmd> (Conference Canceled)
5. Teo, C. L., **Chen, B.**, Ma, L., Wong, L. H., & Koh, E. (2019, December). *Questions, Design, Indicators for CSCL*. Panel presentation at the 27th International Conference on Computers in Education (ICCE 2019), Kenting, Taiwan.
6. Miao, J., Wang, Q., & **Chen, B.** (2019, April). *Facilitating Collaborative Learning in a Teacher Professional Development MOOC*. Paper presented in the "Innovating MOOC Pedagogies" Structured Poster Session at the AERA Annual Meeting, Toronto, Canada.
7. Chang, Y.-H.,^G **Chen, B.**, Ouyang, F.,^G Groos, D.,^T & Alton, J.^T (2019, April). *Teachers as Co-designers of a Knowledge Building Environment*. Paper presented at the 2019 Knowledge Building Summer Institute, Toronto, Canada.
8. **Chen, B.**, Chang, Y.-H.,^G Chen, W.,^G Batu, W.,^G Ouyang, F.,^G & Groos, D.^T (2019, April). *IdeaMagnets: Towards Knowledge Building on the Open Web*. Paper presented at the 2019 Knowledge Building Summer Institute, Toronto, Canada.

9. **Chen, B.**, & Zhu, H. (2019, March). *Towards Value-Sensitive Learning Analytics Design*. Paper presented at the 9th International Conference on Learning Analytics & Knowledge, Tempe, AZ.
10. Dean, J., Kalir, R., **Chen, B.**, Ma, J., & Wagstaff, S. (2018, October). *Annotation as infrastructure for next generation digital learning environments*. Presented at the 2018 EDUCAUSE Annual Conference, Denver, Colorado.
11. Groos, D.,^T & **Chen, B.** (2018, August). *Designing and reflecting with analytics: A work in progress*. Presented at the 2018 Knowledge Building Summer Institute: Knowledge Building: A Place for Everyone in a Knowledge Society, Toronto, Ontario, Canada.
12. **Chen, B.**, Ouyang, F.,^G Shoberg, J.,^U & Reen, D.^G (2018, June). *Web annotation in classrooms as boundary play*. Presented at the I Annotate 2018: At the Tipping Point: Annotation on the Web, San Francisco.
13. **Chen, B.**, & Matsuzawa, Y. (2017, June). *Deriving knowledge-building analytics through activity theory and dynamic network analysis*. In CSCL 2017 Symposium: Making a Difference: Analytics for Quality Knowledge-Building Conversations, Philadelphia, PA.
14. **Chen, B.**, Chang, Y.-H.,^G Ouyang, F.^G, & Zhou, W.^U (2017, April). *Fostering Online Discussions Through Social Learning Analytics*. Paper presented at the 2017 AERA Annual Meeting, Saint Antonio, TX.
15. Fan, Y.,^G **Chen, B.**, Wang, Q., & Zhang, G.^G (2016, October). *MOOC as an alternative for teacher professional development: Examining persistent teacher-learners in one Chinese MOOC*. Paper presented at Learning with MOOCs III: Being and learning in a digital age, University of Pennsylvania, Philadelphia, PA.
16. Ma, L.,^G Matsuzawa, Y., **Chen, B.**, & Scardamalia, M. (2016, June). *Community knowledge, collective Responsibility: The emergence of rotating leadership in three knowledge building communities*. Paper presented at the 12th International Conference of the Learning Sciences, Singapore.
17. Hong, H., **Chen, B.**, Tsai, C.-C., Lin, C.P., & Wu, Y.-T. (2016, June). *Fostering more informed epistemic views among students through knowledge building*. Paper presented at the 12th International Conference of the Learning Sciences, Singapore.
18. Cai, Q., Wu, H., & **Chen, B.** (2016, June). *Using differentiated feedback messages to promote student learning in an introductory statistics course*. Paper presented at the 12th International Conference of the Learning Sciences, Singapore.
19. **Chen, B.**, & Liu, X.^G (2016, June). *WordWhispers: A tool for bootstrapping vocabulary development in knowledge-building communities*. Paper presented at the 2016 Knowledge Building Summer Institute, Singapore.
20. **Chen, B.** (2015, September). *Towards multimodal indicators of idea improvement in knowledge building*. Paper presented at the 2015 Knowledge Building Summer Institute, Trieste, Italy.
21. **Chen, B.**, Ma, L., Matsuzawa, Y., & Scardamalia, M. (2015, June). *The development of productive vocabulary in knowledge building: A longitudinal study*. Paper presented at the 11th International Conference on Computer-Supported Collaborative Learning (CSCL2015), Gothenburg, Sweden.
22. **Chen, B.**, Chen, X., & Xing, W. (2015, March). *"Twitter archeology" of learning analytics and knowledge conferences*. Paper presented at the Fifth International Conference on Learning Analytics And Knowledge, Poughkeepsie, NY.
23. Xu, Z., Woodruff, E., & **Chen, B.** (2014, June). *Children's motivation in digital game-play: The effects of task-reward structure and the role of self-efficacy*. Paper presented at the International Conference on Motivation 2014 (jointly organized by EARLI SIG 8 and the University of Helsinki), Helsinki, Finland.
24. **Chen, B.**, Gallagher-Mackay, K., Kidder, A., & Proulx, K. (2014, May). *Exploring the digital*

- divide: The use of digital tools in Ontario public schools*. Paper presented at the Canadian Society for the Study of Education Conference (CSSE2014), St. Catharines, ON, Canada.
25. Gallagher-Mackay, K., Chen, B., Kidder, A., & Proulx, K. (2014, May). *Issues of equity in special education identification and services in Ontario schools*. Paper presented at the Canadian Society for the Study of Education Conference (CSSE2014), St. Catharines, ON, Canada.
 26. Proulx, K., Chen, B., Gallagher-Mackay, K., & Kidder, A. (2014, May). *Social stratification and the role of subject choices in Ontario secondary schools*. Paper presented at the Canadian Society for the Study of Education Conference (CSSE2014), St. Catharines, ON, Canada.
 27. Chen, B. (2014, March). *Learning analytics for group knowledge building*. Paper presented at the Doctoral Consortium of the 4th International Conference on Learning Analytics and Knowledge (LAK14). Indianapolis, Indiana, USA.
 28. Chen, B., & Resendes, M. (2014, March). *Analyzing sequential relations among contribution types in knowledge-building discourse*. Paper presented at the 4th International Conference on Learning Analytics and Knowledge (LAK14). Indianapolis, Indiana, USA.
 29. Chen, B., Håklev, S., Heikoop, W., Harrison, L., Najafi, H., Rolheiser, C., & Teplov, C. (2013, December). *Hatch, Match and Dispatch: Examining the relationship between student intent, expectations, behaviours and outcomes in six Coursera MOOCs at the University of Toronto*. Paper presented at MOOC Research Initiative Conference, Arlington, TX, USA. (Note: Authors are in alphabetical order.)
 30. Xu, Z., Woodruff, E., & Chen, B. (2013, October). *Efficacy of Reward Allotment on Children's Motivation and Learning*. Paper presented at the 7th European Conference on Games Based Learning (ECGBL 2013). Porto, Portugal.
 31. Chen, B., González, J.^T, Díaz del Castillo, F.^T, & Slotta, J. (2013, August). *Promisingness judgments as facilitators of epistemic growth and conceptual change*. Paper presented at the Knowledge Building Summer Institute 2013 (KBSI2013). Puebla, Mexico.
 32. Hutton, K.S., Chen, B., & Moss, J. (2013, August). *A knowledge building discourse analysis of proportional reasoning in Grade 1*. Paper presented at the Knowledge Building Summer Institute 2013 (KBSI2013). Puebla, Mexico.
 33. Resendes, M., Chen, B., Acosta, A., & Scardamalia, M. (2013, June). *The effect of formative feedback on vocabulary use and distribution of vocabulary knowledge in a grade two knowledge building class*. Paper presented at the 10th International Conference on Computer Supported Collaborative Learning (CSCL2013). Madison, WI.
 34. Chen, B., Scardamalia, M., & Resendes, M. (2012, August). *Promisingness judgments by Grade 3 and 4*. Paper presented at the 16th Knowledge Building Summer Institute (KBSI2012), Toronto, Canada.
 35. Resendes, M., Chen, B., Chuy, M., & Scardamalia, M. (2012, August). *The effect of meta-discourse on ways of contributing to an explanation-seeking dialogue in Grade 2*. Paper presented at the 16th Knowledge Building Summer Institute (KBSI2012), Toronto, Canada.
 36. Chen, B., Scardamalia, M., Resendes, M., Chuy, M., & Bereiter, C. (2012, July). *Students' intuitive understanding of promisingness and promisingness judgments to facilitate knowledge advancement*. Paper presented at the International Conference of the Learning Sciences (ICLS2012), Sydney, Australia.
 37. Chen, B., & Resendes, M. (2012, May). *Inviting students to reflect: Meta-discourse tool in Knowledge Forum*. Paper presented at The Canadian Society for the Study of Education Annual Conference (CSSE2012), Waterloo, Canada.
 38. Zhang, J., Zhao, N., Chen, B., & Childs, R. (2012, May). *The relationship of home computer use with students' cognitive skills and literacy*. Paper presented at The Canadian Society for the Study of Education Annual Conference (CSSE2012), Waterloo, Canada.

39. Chen, B., Chuy, M., Resendes, M., Scardamalia, M., & Bereiter, C. (2011, July). *Evaluation by Grade 5 and 6 students of the promisingness of ideas in knowledge-building discourse*. Paper presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL2011), Hong Kong, China.
40. Resendes, R., Chuy, M., Chen, B., Bereiter, C., & Scardamalia, M. (2011, July). *Causal explanation: A way to achieve greater cognitive benefits from knowledge media*. Enhancing the Social and Cognitive Benefits of Digital Tools and Media - Symposium conducted at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL2011), Hong Kong, China.
41. Chuy, M., Chen, B., Resendes, R., van Aalst, J., Chan, C. K. K., Scardamalia, M., & Bereiter, C. (2011, July). *Generic improvements in communication technology to enhance socio-cognitive gains*. Enhancing the Social and Cognitive Benefits of Digital Tools and Media - Symposium conducted at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL2011), Hong Kong, China.
42. Chen, B., Resendes, R., Chuy, M., Bielaczyc, K., Hong, H.-Y., Scardamalia, M., & Bereiter, C. (2011, July). *Advancing the design of knowledge-building software*. Paper presented at the Enhancing the Social and Cognitive Benefits of Digital Tools and Media Symposium at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL2011), Hong Kong, China.
43. Chuy, M., Tarchi, C., Resendes, R., & Chen, B. (2011, July). *Knowledge Building in Senior Kindergarten and Grade 1*. Getting started and sustaining Knowledge Building. Paper presented at the Getting started and sustaining Knowledge Building Symposium at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL2011), Hong Kong, China.
44. Chen, B. (2011, April). *Is the backchannel enabled? Using twitter in academic conferences*. Paper presented at the 2011 Annual Meeting of the American Educational Research Association (AERA), New Orleans, Louisiana.
45. Chen, B. (2011, April). *International cooperative projects for ICT application in basic education in China: A multiple-case evaluation study*. Paper presented at the 19th Annual International Conference of Chinese American Educational Research and Development Association (CAERDA), New Orleans, Louisiana.
46. Chen, B., & Wang, Q. (2010, June). *Pursuing effective facilitating strategies: The effect of facilitator's leadership behaviors on online learning*. Paper presented at ED-MEDIA 2010 – World Conference on Educational Multimedia, Hypermedia & Telecommunications, Toronto, Canada.
47. Chen, B., & Wang, Q. (2008, October). *Building online communities of practice for teachers' informal learning*, Paper presented at the 2008 Educational Technology International Forum, Jinan, China.

Regional (refereed)

1. Chen, B., Chang, Y.-H., Ouyang, F., & Zhou, W. (2016, July). *Fostering engagement and reflection through social learning analytics: A design-based research study*. Paper presented at 2016 Minnesota eLearning Summit, Minneapolis, MN.

Non-refereed presentations

1. Chen, B. (2021, October). *Modeling Network Dynamics in Social Web Annotation*. Sub-forum

- on Complex Network Analysis and Modeling in Education Research at the 7th Forum on Empirical Education Research, Online.
2. Zhu, X.,^G Shui, H.,^G & Chen, B. (2021, June). *Designing Support for Productive Social Interaction and Knowledge Co-construction in Collaborative Annotation*. Panel presentation at the I Annotate 2021 Conference, Online.
 3. Hmelo-Silver, C., Borge, M., **Chen, B.**, Mercier, E., & Wise, A.F. (2017, April). *Computer Supported Collaborative Learning: Theories, Methods, and Important Considerations*. Cyberlearning 2017 Expertise Exchange Session, Arlington, VA.
 4. Chen, B. (2016, November). *Promises and potholes: Using Canvas in an undergraduate writing-intensive course*. Talk presented at the Canvas Pilot Presentation Series, University of Minnesota, Minneapolis, MN.
 5. Chen, B., Song, H., & Khanlari, A. (2014, December). *What makes knowledge building analytics unique? A reflection on the Summer Institute symposium*. Talk presented at the Advanced Learning Analytics Colloquium/Hackathon/Design Jam, Wageningen, The Netherlands.
 6. Chen, B. (2014, December). *Visualize and re-visualize knowledge-building discourse with its semantic makeups*. Talk presented at the Advanced Learning Analytics Colloquium/Hackathon/Design Jam, Wageningen, The Netherlands.
 7. Resendes, M., Chen, B., Acosta, A., McAuley, A., & Zhang, Y. (2013, August). *Plenary: Next-generation Knowledge Forum and Building Cultural Capacity for Innovation*. Panel presentation at Knowledge Building Summer Institute 2013, Puebla, Mexico.
 8. Acosta, A., Chen, B., Resendes, M., Gachuhi, R. & Perreault, C. (2012, August). *Workshop/Interactive Session: Knowledge Forum rebuild*. Workshop presented at the 16th Knowledge Building Summer Institute (KBSI2012), Toronto, Canada.
 9. Scardamalia, M., & Bereiter, C., & Chen, B. (2011, July). *Next-generation knowledge building environments*. Workshop at Knowledge Building Summer Institute 2011, Guangzhou, China.

Posters or Exhibitions

1. Hussein, B.^G & **Chen, B.** (2020, November). *Intelligent Support for Knowledge Building Across Web Spaces*. Poster presented at the 2020 Knowledge Building Summer Institute, Online.
2. **Chen, B.**, Chang, Y.-H.,^G Groos, D.,^T Chen, W.,^G Batu, W.,^G Costa, S.,^G Peebles, B.,^T Ma, L.^G (2019, March) *IdeaMagnets: Bridging Knowledge Building in Schools with Public Discourse*. Poster presented at the CEHD Research Day, Minneapolis, MN.
3. Groos, D.,^T & Chen, B. (2018, August). *Knowledge Improvement Cycle and Map: Scaffolding the Grasp of the KB Principle, Improvable Ideas, Through Visualizations*. Poster presented at the 2018 Knowledge Building Summer Institute, Toronto, Ontario, Canada.
4. Lin, P.Y., Chang, Y.-H.,^G & Chen, B. (2018, August). *Exploring Novice Teachers' Reflections and Design Practices on Knowledge-Building in Junior High School Classrooms*. Poster presented at the 2018 Knowledge Building Summer Institute, Toronto, Ontario, Canada.
5. Gutiérrez-Braojos, C., Ma, L., Montejo-Gámez, J. & Chen, B. (2018, August). *Knowledge Building: Indices of Impacting Builders to Assess the Collective Cognitive Responsibility*. Poster presented at the 2018 Knowledge Building Summer Institute, Toronto, Ontario, Canada.
6. Chen, B., Fan, Y.^G, Zhang, G.^G, Wang, Q. (2017, March). *Examining motivations and self-regulated learning strategies of returning MOOCs learners*. Poster presented the 2017 Learning Analytics and Knowledge Conference, Vancouver, Canada.
7. Chen, B., Håklev, S., Harrison, L., Najafi, H., & Rolheiser, C. N. (2015, April). *How Do MOOC learners' intentions relate to their behaviors and overall outcomes?*. Poster presented at the 2015 Annual Meeting of the American Educational Research Association (AERA), Chicago, IL.

8. Chen, B., & Resendes, M. (2014, April). *Uncovering hidden patterns: Temporal analysis of productive and improvable knowledge-building discourse*. Poster presented at the 2014 Annual Meeting of the American Educational Research Association (AERA), Philadelphia, PA.
9. Chen, B. (2014, March). *Visualizing semantic space of online discourse: The Knowledge Forum case*. Poster presented at the 4th International Conference on Learning Analytics and Knowledge (LAK14). Indianapolis, Indiana, USA.
10. Chen, B., Scardamalia, M., Acosta, A., Resendes, M., & Kici, D. (2013, June). *Promisingness judgments as facilitators of knowledge building*. Poster presented at the 10th International Conference on Computer Supported Collaborative Learning (CSCL2013). Madison, WI.
11. Chen, B., Scardamalia, M., & Resendes, M. (2013, April). *Dynamics of promisingness judgments in knowledge-building work of 8-to-10-years-olds*. Poster presented at the 2013 Annual Meeting of the American Educational Research Association (AERA), San Francisco, CA.
12. Chen, B., Scardamalia, M., & Bereiter, C. (2013, April). *Towards a developmental understanding of promisingness judgments*. Poster presented at the 2013 Annual Meeting of the American Educational Research Association (AERA), San Francisco, CA.
13. Chen, B., Scardamalia, M., & Bereiter, C. (2012, August). *A developmental study of promisingness judgments*. Poster presented at the 16th Knowledge Building Summer Institute (KBSI2012), Toronto, Canada.
14. Chen, B., Fu, J., & Scardamalia, M. (2012, August). *Automated assessments for knowledge creation: A review of possibilities*. Poster presented at the 16th Knowledge Building Summer Institute (KBSI2012), Toronto, Canada.
15. Resendes, M., Chen, B., Chuy, M., & Scardamalia, M. (2012, August). *The effect of contributor roles in knowledge building discourse: Can expanding individual contribution repertoires lead to group knowledge advancement?*. Poster presented at the 16th Knowledge Building Summer Institute (KBSI2012), Toronto, Canada.
16. Kariuki, N., Resendes, M., & Chen, B. (2012, August). *Young students' abilities to improve ideas*. Poster presented at the 16th Knowledge Building Summer Institute (KBSI2012), Toronto, Canada.
17. Chuy, M., Resendes, M., Chen, B., Tarchi, C. & Scardamalia, M. (2011, August). *Ways of contributing to a knowledge-building dialogue in elementary classrooms*. Poster presented at the 14th Biennial EARLI Conference for Research on Learning and Instruction, Exeter, United Kingdom.
18. Resendes, M., Chuy, M., Chen, B., & Scardamalia, M. (2011, July). *Ways of contributing to a knowledge building dialogue in history*. Poster presented at the 9th International Conference on Computer-Supported Collaborative Learning (CSCL2011), Hong Kong, China.
19. Chen, B., Lee, K., Chuy, M., Resendes, M., & Scardamalia, M. (2011, May). *Integrating knowledge-building discourse into Open Learning Initiative*. Poster presented at the Canadian Society for the Study of Education Conference (CSSE2011), Fredericton, New Brunswick, Canada.
20. Resendes, M., Chuy, M., Chen, B., & Scardamalia, M. (2010, November). *Integrating individual learning and group knowledge building in OER*. Poster presented at the Mozilla Drumbeat Festival, Barcelona, Spain.
21. Chen, B., Chuy, M., Resendes, M. & Scardamalia, M. (2010, August). *"Big Ideas Tool" as a new feature of Knowledge Forum*. Poster presented at the 2010 Knowledge Building Summer Institute, Toronto, Canada.

TEACHING AND CURRICULUM DEVELOPMENT

University of Minnesota

Courses, Seminars, and Instructional Units Taught

- ▶ CI 8134 - Foundations of Research in Curriculum and Instruction I
- ▶ CI 8135 - Foundations of Research in Curriculum and Instruction II
- ▶ CI 8371 - Applied Social Network Analysis in Education
- ▶ CI 5371 - Learning Analytics: Theory and Practice
- ▶ CI 5330 - Special Topics: Learning Analytics in the Knowledge Age
- ▶ CI 5330 - Special Topics: Social Network Analysis in Education
- ▶ CI 5301 - Foundations of Computer Applications for Business and Education
- ▶ CI 4311W - Technology & Ethics in Society
- ▶ CI 2311W - Introduction to Technology & Ethics in Society

Curriculum Development

- ▶ 2018, New course development, *CI 8371: Applied Social Network Analysis in Education*, 3-credit
- ▶ 2018, New course development, *CI 5371: Learning Analytics: Theory and Practice*, 3-credit
- ▶ 2016, New course development, *Special Topics: Social Network Analysis in Education*, 3-credit
- ▶ 2015, New course development, *Special Topics: Learning Analytics in the Knowledge Age*, 3-credit

Curriculum Materials

- ▶ Chen, B. (2018). *Learning Analytics: Theory and Practice*. A Course Website. Retrieved from <https://colig.github.io/laumn/>.
- ▶ Chen, B. (2016). *Social Network Analysis in Education*. A Course Website. Retrieved from <https://bookdown.org/chen/snaEd/>.
(Note: It has attracted 15K page views 2K visitors by May 2018. It has been adopted in an edX MOOC as an additional resource.)

Unassigned Teaching

- ▶ Chen, B. (2021, November). *Knowledge Building*. Guest lecture in Foundations of the Learning Sciences, Department of Educational Psychology, University of Minnesota, Minneapolis, MN.
- ▶ Chen, B. (2021, November). *Responsible artificial intelligence*. Guest lecture in WRIT 8520 – Humane Futures: Augmentation Technologies & Technical Communication, Department of Writing Studies, University of Minnesota, Minneapolis, MN.
- ▶ Chen, B. (2021, September). *Correlational research*. Guest lecture in CI 8134 – Foundations of Research in Curriculum and Instruction I, Department of Curriculum and Instruction, University of Minnesota, Minneapolis, MN.
- ▶ Chen, B. (2021, September). *Information ethics in learning analytics*. Guest lecture in Digital Ethics, Department of Philosophy, Macalester College, Saint Paul, MN.
- ▶ Chen, B. (2020, November). *Regression and content analysis*. Guest lecture in CI 8134 – Foundations of Research in Curriculum and Instruction I, Department of Curriculum and Instruction, University of Minnesota, Minneapolis, MN.
- ▶ Chen, B. (2018, October). *Correlational research*. Guest lecture in CI 8134 – Foundations of Research in Curriculum and Instruction I, Department of Curriculum and Instruction, University of Minnesota, Minneapolis, MN.

- ▶ Chen, B. (2019, November). *Data Literacy*. Guest lecture in the STEM Education in the 21st Century, an Online Professional Development Course offered by the New York Academy of Sciences. New York, NY.
- ▶ Chen, B. (2018, November). *Technology Integration in K-12 Schools in North America*. Guest lecture at the Mingda Institute for Leadership Training, University of Minnesota, Minneapolis, MN.
- ▶ Chen, B. (2018, June). *Tutorial on Social Media Mining in Learning Contexts*. 2018 Learning Analytics Summer Institute (LASI), New York, NY.
- ▶ Chen, B. (2018, March). *Knowledge Building and 21st century competencies*. Guest lecture in “Instructional Design for 21st Century Competencies in the ICT Context” – a teacher professional development MOOC led by Drs. C.S. Chai and Z.M. Yan, Chinese University MOOC.
- ▶ Chen, B. (2017, February). *Knowledge Building*. Guest lecture in Applied Learning Sciences, Department of Teaching and Learning, University of Miami.
- ▶ Chen, B. (2015, February). *Learning Analytics in the Knowledge Age*. Guest lecture in CI 8350–Learning Technologies Collaborative, Curriculum and Instruction, University of Minnesota.
- ▶ Chen, B. (2012, September). *Promisingness judgments in knowledge building*. Guest lecture in CTL1799H – Special Topics: 21 Century Competencies, Multiliteracies, and Assessment, Department of Curriculum, Teaching and Learning, OISE/University of Toronto.
- ▶ Chen, B. (2012, March). *Knowledge Building*. Guest lecture in Introduction to Knowledge Building, Department of Educational Technology, Nanjing Normal University.

Professional Development in Teaching

- ▶ *Participant*, Early-Career Teaching Program, Center for Educational Innovation, University of Minnesota, 2016–2017
- ▶ *Participant*, Intercultural Pedagogy – Workshop for Supporting International Students, University of Minnesota, 2016
- ▶ *Participant*, Treks Program, College of Education and Human Development, University of Minnesota, June 2016

ADVISING AND MENTORING

Undergraduate Student Activities

Undergraduate Research Projects

University of Minnesota

- ▶ 2020–, Hayden Johnson, Cognitive Science & Computer Science
- ▶ 2016, Wanying Zhou,¹ Psychology

University of Toronto

- ▶ 2014, Younsu Woo, Statistics
- ▶ 2014, Leighton Du, Statistics
- ▶ 2013, Anton Bondar, Computer Science
- ▶ 2013, Abdullah Tabassum, Computer Science
- ▶ 2012, Franz Carlo Achacoso, Computer Science
- ▶ 2010, Saman Alvi, Computer Science

¹With support from the Undergraduate Research Opportunities Program (UROP) at the University of Minnesota.

Graduate Student Activities

Doctoral Students (Ph.D.) Advised (Current)

- ▶ 2018–, Hong Shui, Department of Curriculum & Instruction, *Learning Technologies* program
- ▶ 2018–, Robert Kreml, Department of Curriculum & Instruction, *Learning Technologies* program
- ▶ 2019–, Patrick O’Leary, Department of Curriculum & Instruction, *Learning Technologies* program
- ▶ 2019–, Basel Hussein, Department of Curriculum & Instruction, *Learning Technologies* program
- ▶ 2019–, Chen Chen, Department of Curriculum & Instruction, *Learning Technologies* program
- ▶ 2019–, Xinran Zhu, Department of Curriculum & Instruction, *Learning Technologies* program
- ▶ 2019–2021, Valerie Barbaro, Department of Curriculum & Instruction, *Learning Technologies* program

Doctoral Students (Ph.D.) Co-Advised (Completed)

- ▶ Fan Ouyang², Department of Curriculum & Instruction, *Learning Technologies* program, Spring 2018
- ▶ Alfonso Jose Sintjago³, Department of Organizational Leadership, Policy, and Development, *Comparative and International Development Education* program, Spring 2018

Doctoral Committees Served On (Current and Completed) ⁴

- ▶ Lixin Zhang, *OLPD*, University of Minnesota, 2021–
- ▶ Shiri Kashi, *Educational Technologies Graduate Program*, University of Haifa, 2021–
- ▶ Patrick O’Leary, *Learning Technologies*
- ▶ Yu-Hui Chang, *Learning Technologies*
- ▶ Christiane Reily, *Learning Technologies*
- ▶ Jennifer Englund, *Learning Technologies*
- ▶ David Groos, *STEM Education*
- ▶ FangFang Zhao, *STEM Education*
- ▶ Foster Graif, *STEM Education*
- ▶ Kourtney Kromminga, *School Psychology*, Department of Educational Psychology
- ▶ Kris Isaacson, *Learning Technologies*
- ▶ Lana Peterson, *Learning Technologies*
- ▶ Jing-Huey Lin, *Learning Technologies*
- ▶ Ye Xiong^E, *Informatics*, New Jersey Institute of Technology
- ▶ Derek Schwartz, *Learning Technologies*, 11/26/18
- ▶ Fan Ouyang, *Learning Technologies*, 5/15/18
- ▶ Alfonso Jose Sintjago, *Comparative and International Development Education*, 5/17/18
- ▶ Shiyang Jiang^E, *Applied Learning Sciences*, University of Miami, 06/15/18
- ▶ Wendy Knapp, *Learning Technologies*, 10/24/17
- ▶ Jeni Henrickson, *Learning Technologies*, 05/17/16

²Co-advised with Dr. Cassie Scharber.

³Co-advised with Dr. Gerald Fry.

⁴In this list, ^E indicates external students; a specific date means the date a dissertation was defended.

Master of Arts (MA) Students Co-Advised (Completed)

- ▶ Fei Fang⁵, Learning Technologies, Department of Curriculum & Instruction

Master of Education (MEd) Students Advised (Completed)

- ▶ Fall '15–Spring '16: Jennifer Herron, Jerry Broeckert, Melissa Benson, Mary Whelan, Learning Technologies, Department of Curriculum & Instruction, University of Minnesota

Visiting Scholars Hosted

- ▶ Huanqing Wu, Associate Professor at QuFu Normal University (China), 03/2019–09/2019
- ▶ Yizhou Fan, Ph.D. candidate from Peking University, 09/2017–12/2017
- ▶ Tianhui Huang, Ph.D. student from Fudan University, 11/2016–12/2017

Other Mentoring Activities

- ▶ *Mentor*, OISE Mentorship Program, February 28, 2017
- ▶ *Faculty Mentor*, Doctoral Consortium, The 7th Learning Analytics and Knowledge Conference, Vancouver, Canada, March 2017
- ▶ *Mentor*, “Adopt a New Member” Program, International Society of the Learning Sciences, 2016
- ▶ *Faculty Mentor*, Doctoral Consortium, The 6th Learning Analytics and Knowledge Conference, Edinburgh, Scotland, April 2016

SERVICE AND PUBLIC OUTREACH**Service to The Discipline/Profession/Interdisciplinary Area(s)***Editorships/Journal Reviewer Experience*

Editorships / Editorial Board

- ▶ *Associate Editor*, *Asia Pacific Journal of Education*, 2020–
- ▶ *Member*, International Advisory Board, *Learning: Research and Practice*, 2020–
- ▶ *Member*, Scientific Committee, *Qwerty–Open and Interdisciplinary Journal of Technology, Culture and Education*, 2019–
- ▶ *Member*, Editorial Board, *Journal of Learning Analytics*, 2018–
- ▶ *Member*, Editorial Board, *The Internet and Higher Education*, 2018–
- ▶ *Member*, Editorial Advisory Board, *Information and Learning Science*, 2018–
- ▶ *Co-editor*, Special Section on Temporal Analyses of Learning Data, *Journal of Learning Analytics*, 2016–2017

Journal ad-hoc reviewer

- ▶ *Journal of the Learning Sciences*, 2014–
- ▶ *Journal of Learning Analytics*, 2015–
- ▶ *Computer & Education*, 2015–

⁵Co-advised with Dr. Cassie Scharber. Transferred to the M.Ed. program in June 2017.

- ▶ *Educational Technology Research & Development*, 2017–
- ▶ *The Internet and Higher Education*, 2017–
- ▶ *Instructional Science*, 2017–
- ▶ *Information and Learning Science*, 2018–
- ▶ *IEEE's Transactions on Learning Technologies*, 2016–
- ▶ *Learning and Instruction*, 2017–
- ▶ *Computers in Human Behavior*, 2017–
- ▶ *International Journal of Computer-Supported Collaborative Learning*, 2012
- ▶ *Big Data & Society*, 2015
- ▶ *Scientometrics*, 2017
- ▶ *Research and Practice in Technology Enhanced Learning*, 2015–
- ▶ *Learning: Research and Practice*, 2016
- ▶ *Journal of Computer Assisted Learning*, 2018–
- ▶ *Journal of Open Learning (Chinese)*, 2018–
- ▶ *Open Education Research (Chinese)*, 2018–

Grant reviewer experiences

- ▶ *Reviewer*, Israel Science Foundation, 2021/06
- ▶ *Reviewer*, Call for Contributions to “CSCL in a Time of Crisis”, International Society of the Learning Sciences, 2020/11
- ▶ *Panelist*, National Science Foundation, 2020/04
- ▶ *Panelist*, National Science Foundation, 2020/03
- ▶ *Grant Reviewer*, Interdisciplinary Studies of Writing, Center for Writing, University of Minnesota, 2016/04

Conference reviewer experience

- ▶ *Reviewer*, The ISLS Annual Meeting, 2021
- ▶ *Reviewer*, Learning Analytics and Knowledge Conference, 2021
- ▶ *Meta Reviewer*, International Conference on the Learning Sciences (ICLS), 2020
- ▶ *Knowledge Building Summer Institute*, Official annual conference of the Knowledge Building International, 2020/09
- ▶ *Reviewer*, 2019 AERA Annual Meeting, 2018/08
- ▶ *Senior Reviewer*, Learning Analytics and Knowledge Conference, 2018
- ▶ *GCCCE 2017 - Sub-conference C7: Learning Analysis, Assessment, and Artificial Intelligence in Education*, 2017/01
- ▶ *Learning @ Scale 2017*, 2016/12
- ▶ *The 12th International Conference on Computer Supported Collaborative Learning (CSCL 2017)*, 2016/12
- ▶ *Learning with MOOCs III*, 2016/06
- ▶ *The CAERDA Annual International Conference*, 2016/01
- ▶ *American Educational Research Association (AERA) Annual Meeting, Division C*, 2015/08, 2013/08
- ▶ *American Educational Research Association (AERA) Annual Meeting, SIG-Learning Sciences*, 2015/08
- ▶ *Knowledge Building Summer Institute*, Official annual conference of the Knowledge Building International, 2015/08, 2013/08, 2012/07, 2010/08
- ▶ *IEEE International Conference on Advanced Learning Technologies (ICALT)*, 2021, 2014, 2013

- ▶ *Association for Computing Machinery's (ACM) CHI Conference*, the world's premiere conference on Human Factors in Computing Systems, 2015/11, 2014/11
- ▶ *Learning Analytics and Knowledge Conference*, 2014/03
- ▶ *International Conference on Learning Sciences*, Official biannual conference of the International Society of the Learning Sciences (ISLS), 2013/11
- ▶ *Annual International Conference of Chinese American Educational Research and Development Association*, 2011/04

Book or book chapter reviewer experience

- ▶ Member of the Editorial Advisory Board, *Cases on Teaching with Online Discussions* edited by Drs. Clare Brett and Lesley Wilton, IGI Global, 2019–2020
- ▶ Member of the Editorial Advisory Board, *China Learning Project Report* edited by Drs. J. Shang, R. Miao, A. Wang, R. Hu, Learning Sciences Lab, Peking University, 2019
- ▶ *Include them all!: Directions for Adoption of Learning Analytics in the Global South*, White Paper commissioned by the DL4D Network, January 2016
- ▶ *International Handbook on Learning Analytics and Educational Data Mining*, Edited by George Siemens and Charles Long, March 2016
- ▶ *Educational Innovations for Sustained Knowledge Building: Pedagogical and Technological Innovations*, edited volume proposed by Jianwei Zhang & Shengquan Yu, Springer, October 2015
- ▶ *Educational Stages and Interactive Learning: From Kindergarten to Workplace Training*, edited volume by Dr. Jiyou Jia, April 2011

Committee or board memberships

- ▶ *Member-at-large (elected)*, Executive Committee of the Society for Learning Analytics Research (SoLAR), 2020-2022
- ▶ *Member (elected)*, CSCL Committee of the International Society of the Learning Sciences (ISLS), 2018-2022
- ▶ *Co-Chair*, Membership Committee of the International Society of the Learning Sciences (ISLS), 2017–2020
- ▶ *Member*, ICCE Best Student Paper Award Selection Committee, 2019
- ▶ *Co-Chair*, Social Media Communications Committee, CSCL 2019, 2018–2019
- ▶ *Member*, Program Committee, ICCE 2018 sub-conference on Computer-supported Collaborative Learning and Learning Sciences, 2017–2018
- ▶ *Co-Chair*, GCCCE 2018 Doctoral Student Forum (DSF), 2018
- ▶ *Member*, Outreach Advisory Board, *Journal of the Learning Sciences*, 2017–ongoing
- ▶ *Member*, Program Committee, *Learning with MOOCs 2017*, July 2017
- ▶ *Member*, Program Committee, *Doctoral Student Forum on MOOC Research at Peking University*, July 2017
- ▶ *Member*, Program Committee, *LAK '17 Workshop - Integrated Learning Analytics of MOOC Post-Course Development*, January 2017
- ▶ *Member*, DL4D Expert Group on Learning Analytics, Digital Learning for Development, The Philippines, 2016–ongoing
- ▶ *Co-Chair*, Doctoral Consortium, 7th Learning Analytics and Knowledge Conference, Vancouver, Canada, 2017
- ▶ *Member*, Program Committee, GCCCE 2017 - Sub-conference C7: Learning Analysis, Assessment, and Artificial Intelligence in Education, 2017

- ▶ *Member*, Program Committee, 2017 Learning @ Scale, 2017
- ▶ *Member*, Program Committee, Learning with MOOCs III, University of Pennsylvania, 2016
- ▶ *Member*, Program Committee, the Fourth Annual ACM Conference on Learning at Scale (L@S), MIT, Boston, MA, 2017
- ▶ *Co-Chair*, Publicity and Social Media Committee, 6th Learning Analytics and Knowledge Conference, Edinburgh, Scotland, 2016
- ▶ *Co-Chair*, Doctoral Consortium, 6th Learning Analytics and Knowledge Conference, Edinburgh, Scotland, 2016
- ▶ *Member*, International Society of the Learning Sciences (ISLS) Membership Committee, 2015–2020
- ▶ *Member*, Program Committee, 15th IEEE International Conference on Advanced Learning Technologies (ICALT), 2015

Organization of conferences, workshops, panels, symposia

- ▶ *Chair*, Sub-forum on Complex Network Analysis and Modeling in Education Research at the 7th Forum on Empirical Education Research, 2021/10
- ▶ *Program Chair*, CSCL Conference of the 2022 ISLS Annual Meeting, 2021-2022
- ▶ *Moderator*, CSCL in Times of Crisis Webinars: Learning in and with Community, International Society of the Learning Sciences, 01/17/21
- ▶ *Session Chair*, 2020 Knowledge Building Summer Institute, Online, 2020/11
- ▶ *Session Chair*, Session on *Predictive and Privacy*, the 2019 Learning Analytics and Knowledge Conference, Tempe, AZ, 03/07/2019
- ▶ *Moderator*, Panel on *Learning Sciences: Design and analysis strategies that promote inclusion and increase access*, the 2019 Learning Analytics and Knowledge Conference, Tempe, AZ, 03/06/2019
- ▶ *Co-chair*, Interactive Symposium on “Knowledge Building Analytics: From Analysis to Actionable Insights” at the 2018 Knowledge Building Summer Institute, Toronto, Ontario, Canada.
- ▶ *Co-chair*, CSCL 2017 Pre-Conference Workshop Establishing a Foundation for Collaborative Process Evaluation and Adaptive Support in CSCL, CSCL 2017, Philadelphia, PA, USA, June 19, 2017
- ▶ *Co-organizer*, CSCL 2017 New Members Session, CSCL 2017, Philadelphia, PA, USA, June 19, 2017
- ▶ *Discussant*, 12th International Conference on Computer Supported Collaborative Learning (CSCL 2017), Philadelphia, PA, USA, June 21, 2017
- ▶ *Session Chair*, 2017 Knowledge Building Summer Institute, Philadelphia, PA, June 2017
- ▶ *Session Chair*, 12th International Conference of the Learning Sciences, Singapore, June 2016
- ▶ *Session Chair*, 2016 Knowledge Building Summer Institute, June 2016
- ▶ *Workshop Chair* (with Wise, A. F., Knight, S., & Cheng, B. H.), *Putting Temporal Analytics into Practice: The 5th International Workshop on Temporality in Learning Data*, The Sixth International Conference on Learning Analytics And Knowledge (LAK '16), Edinburgh, Scotland, April 2016
- ▶ *Workshop Co-Chair* (with Knight, S., Wise, A. F., & Cheng, B. H.), *It's About Time: 4th International Workshop on Temporal Analyses of Learning Data*, The Fifth International Conference on Learning Analytics And Knowledge (LAK '15), Poughkeepsie, NY, March 2015
- ▶ *Workshop Co-Chair* (with Resendes, M., Kici, D., Ma, L., & Scardamalia, M.), *“Light up the Curriculum”: Designs for Concurrent, Transformative and Embedded Assessments for Knowledge*

Creation, Knowledge Building Summer Institute 2014, Quebec City, Quebec, Canada, August 2014

- ▶ Workshop Chair (with Teplovs, C., Zhang, J., Matsuzawa, Y., Hong, H-Y., Perreault, C., Philip, D., Scardamalia, M., & Bereiter, C.), *Knowledge building analytics: Where we were, where we are, and where we are headed*, Knowledge Building Summer Institute 2014, Quebec City, Quebec, Canada, August 2014
- ▶ Workshop Chair (with Conley, C.), *Data Visualization with R*, Knowledge mobilization workshop as part of the Knowledge Network for Applied Education Research (KNAER) Data Visualization Project, Toronto, Canada, April 2013
- ▶ Workshop Co-Chair (with Acosta, A., Resendes, M., Gachuhi, R., & Perreault, C.), *Knowledge Forum Rebuild*, Knowledge Building Summer Institute 2012, Toronto, Canada, August 2012
- ▶ Session Chair, People for Education Conference, Toronto, November 2013
- ▶ Session Chair, 16th Knowledge Building Summer Institute, August 2012

Advisory boards of federal grants

- ▶ *Advisory Board Member*, “Superhero School: Harnessing the Power of Science, Literacy, and Media”, Twin Cities Public Television, \$36,765,832, funded by the Ready to Learn program of the U.S. Department of Education, May 2015–ongoing

Service To The University/College/Department

Collegiate Service and Intercollegiate Service

- ▶ *Member*, Data Science Task Force, University of Minnesota, 2021–ongoing
 - ▶ *Chair*, Curriculum sub-group
- ▶ *Faculty co-chair*, Faculty Development for Online Teaching (FDOT), University of Minnesota, 2020–ongoing
- ▶ *Member*, EdPsy Psyc Foundations Tenure-Track Position Search Committee, 2018–2019
- ▶ *Ad-hoc Participant*, Cognitive Sciences Review Committee, Office of the Executive Vice President and Provost, University of Minnesota, May 2018–ongoing
- ▶ *Co-Lead*, UMN Learning Analytics Faculty Group, January 2018–ongoing
- ▶ *Co-Facilitator*, UMN Learning Analytics CoP, March 2017–August 2018
- ▶ *Presenter*, WordWhispers in An Online Collaborative Discourse Environment, Center for Writing, University of Minnesota, November 11, 2016
- ▶ *Presenter*, Canvas: Bells & Whistles + Improvables, Canvas Experiences Presentation Series, University of Minnesota Academic Technology Support Services, November 8, 2016
- ▶ *Faculty Adviser*, Teacher Education Research Collaborative, College of Education & Human Development, University of Minnesota, Fall 2015–ongoing
- ▶ *Participant*, “Speed Dating” with the Dean’s Advisory Board, College of Education & Human Development, University of Minnesota, October 8, 2015
- ▶ *Co-convener*, Learning Sciences Reading Group, College of Education and Human Development, University of Minnesota, September 2015–December 2017
- ▶ *Consultant*, “Investigating Student Learning in an Integrated Curriculum” project, University of Minnesota–Rochester, 2015–2017

Department/Unit Service

- ▶ *Moderator*, C&I Pro-Seminar on “Presenting at Online Conferences”, 2020/12/04

- ▶ *Member*, C&I Chair's Advisory Council, Curriculum & Instruction, 2018–2019
- ▶ *Member*, C&I Graduate Studies Committee, Curriculum & Instruction, April 2016–ongoing
- ▶ *Chair*, C&I Technology Committee, Curriculum & Instruction, August 2016–May 2017
- ▶ *Discussant*, C&I Graduate Student Research Day, Curriculum & Instruction, April 1, 2016
- ▶ *Member*, C&I Technology Committee, Curriculum & Instruction, 2015–2017
- ▶ *Panelist*, “New Directions in STEM & LT Faculty Research: A Panel Presentation”, Curriculum & Instruction, November 11, 2015
- ▶ *Discussant*, C&I Graduate Student Research Day, Curriculum & Instruction, March 27, 2015

Program Area Service

- ▶ *Coordinator*, Learning Technologies Program Area, Curriculum & Instruction, University of Minnesota, 2021-2022
- ▶ *Coordinator*, Learning Technologies Program Area, Curriculum & Instruction, University of Minnesota, 2019-2020
- ▶ *Coordinator*, CI 5301 Course, Learning Technologies Program, Curriculum & Instruction, University of Minnesota, February 2016-2019
- ▶ *Member*, P&A Search Committee, Learning Technologies Program, Curriculum & Instruction, University of Minnesota, November 2015
- ▶ *Member*, Learning Technologies Program Area Committee, Curriculum & Instruction, University of Minnesota, 2015–present
- ▶ *Member*, P&A Search Committee, Learning Technologies Program, Curriculum & Instruction, University of Minnesota, August 2015
- ▶ *Organizer*, Learning Analytics Speaker Event (Guest speakers: Drs. George Karypis and Jeff D. Grann), Learning Technologies Program, Curriculum & Instruction, University of Minnesota, March 2015

Community Service Activities

- ▶ *Member*, Minnesota Learning Commons (MnLC) Innovations Special Interest Group, 2017–ongoing
- ▶ *Advisor*, Mendeley Advisor Program, 2016–2017
- ▶ *Panelist*, “Entrepreneurship, Ed Tech, Health & Wellness, Counseling Psychology”, Education Connection 2013, OISE/University of Toronto, November 2013

Other Service Activities

- ▶ *Invited Attendee*, AERA-NSF Data Sharing and Research Transparency Workshop, Washington D.C., July 2017
- ▶ *Invited Attendee*, Workshop on Building Interdisciplinary Capacity for Understanding and Supporting Computer Supported Collaborative Learning, funded by the NSF EAGER grant
 - ▶ Indiana University in Bloomington, IN, February 2016
 - ▶ Carnegie Mellon University in Pittsburgh, PA, October 2016
- ▶ *Invited Attendee*, Workshop on Educational Discourse Research, funded by the NSF Cyberlearning program (Award #: 1439520)
 - ▶ University of Michigan, Ann Arbor, MI, May 2015
 - ▶ University of Texas at Arlington, Arlington, TX, October 2015