Karen Brennan

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Appointments

Timothy E. Wirth Professor of Practice in Learning Technologies (endowed chair), Harvard University, Graduate School of Education (January 2023–present)

Affiliate in Computer Science, Harvard University, School of Engineering and Applied Sciences (2018–present)

Professor of Practice, Harvard University, Graduate School of Education (July 2022–December 2022)

Associate Professor of Education, Harvard University, Graduate School of Education (2016–2022)

Faculty Associate, Berkman Klein Center for Internet & Society at Harvard University (2019–2020)

Visiting Scholar, Massachusetts Institute of Technology, Media Arts and Sciences (2013–2020)

Assistant Professor of Education, Harvard University, Graduate School of Education (2012–2016)

Education

- Ph.D. Massachusetts Institute of Technology, Media Arts and Sciences (2013). Dissertation: *Best of both worlds: Issues of structure and agency in computational creation, in and out of schools.*Committee members: Mitch Resnick, Barry Fishman, Ethan Zuckerman
- M.A. The University of British Columbia, Curriculum Studies (2007). Thesis: *Building a community of (new media) practice: Sharing learning stories from a videoblogging collective*.

 Committee members: Stephen Petrina, Mary K. Bryson
- B.Ed. The University of British Columbia, Computer Science and Mathematics (2005). BC College of Teachers, Certified Teacher (L174307).
- B.Sc. The University of British Columbia, Combined Honors Computer Science and Mathematics (2003).

Publications

JOURNAL ARTICLES AND BOOK CHAPTERS

- Brennan, K. (2022). A case for why: School, society, self. In S.-C. Kong & H. Abelson (Eds.), *Computational thinking education in K–12: Artificial intelligence literacy and physical computing* (pp. 15–28). MIT Press. https://doi.org/10.7551/mitpress/13375.003.0004
- Brennan, K., Blum-Smith, S., Peters, L., & Kang, J. M. (2022). Designing for student-directedness: How K–12 teachers utilize peers to support projects. *ACM Transactions on Computing Education*, 22(2), 1–18. https://dx.doi.org/10.1145/3476515 [HGSE post-doctoral scholar, Boston Public Schools teacher, HGSE doctoral student co-authors]

- Brennan, K., Blum-Smith, S., & Haduong, P. (2021). Four principles for assessing student-directed projects. *Phi Delta Kappan*, 103(4), 44–48. https://doi.org/10.1177/00317217211065826 [HGSE post-doctoral scholar, HGSE doctoral student co-authors]
- Brennan, K. (2021). How kids manage self-directed programming projects: Strategies and structures. *Journal of the Learning Sciences*, 30(4–5), 576–610. https://doi.org/10.1080/10508406.2021.1936531
- Blum-Smith, S., Yurkofsky, M., & Brennan, K. (2021). Stepping back and stepping in: Facilitating learner-centered experiences in MOOCs. *Computers & Education*, *160*, 104042. https://doi.org/10.1016/j.compedu.2020.104042 [HGSE doctoral student co-authors]
- Metcalf, S. J., Reilly, J. M., Jeon, S., Wang, A., Pyers, A., Brennan, K., & Dede, C. (2021). Assessing computational thinking through the lenses of functionality and computational fluency. *Computer Science Education*, 31(2), 199–223. https://doi.org/10.1080/08993408.2020.1866932
- McGill, M. M., DeLyser, L. A., Brennan, K., Franke, B., Kaylor, E., Mayhew, E., Mills, K., & Yadav, A. (2020). Evaluation and assessment for improving CS teacher effectiveness. *ACM Inroads, 11*(4), 36–41. https://doi.org/10.1145/3410478
- Brennan, K., & Jimenez, R. (2020). The Scratch Educator Meetup: Useful learning in a playful space. In N. Holbert, M. Berland, & Y. Kafai (Eds.), *Designing constructionist futures: The art, theory, and practice of learning designs* (pp. 85–95). MIT Press. [HGSE doctoral student co-author]
- Chen, C., Haduong, P., Brennan, K., Sonnert, G., & Sadler, P. (2019). The effects of first programming language on college students' computing attitude and achievement: A comparison of graphical and textual languages. *Computer Science Education*, 29(1), 23–48. doi:10.1080/08993408.2018.1547564 [First two authors were HGSE doctoral students]
- Dickes, A., Kamarainen, A., Metcalf, S., Gün-Yildiz, S., Brennan, K., Grotzer, T., & Dede, C. (2019). Scaffolding ecosystems science practice by blending immersive environments and computational modeling. *British Journal of Educational Technology*, 50(5), 2182–2202. doi:10.1111/bjet.12806
- Yurkofsky, M., Blum-Smith, S., & Brennan, K. (2019). Expanding outcomes: Exploring varied conceptions of teacher learning in an online professional development experience. *Teaching and Teacher Education*, 82(June 2019), 1–13. https://doi.org/10.1016/j.tate.2019.03.002 [HGSE doctoral student co-authors]
- Brennan, K., Blum-Smith, S., & Yurkofsky, M. (2018). From checklists to heuristics: Designing MOOCs to support teacher learning. *Teachers College Record*, 120(9), 1–48. [HGSE doctoral student coauthors]
- Brennan, K. (2017). Designing for learning by creating. *International Journal of Child-Computer Interaction*. https://doi.org/10.1016/j.ijcci.2017.06.003
- Brennan, K. (2016). Audience in the service of learning: How kids negotiate attention in an online community of interactive media designers. *Learning, Media, and Technology, 41*(2), 193–212. doi:10.1080/17439884.2014.939194
- Brennan, K. (2015). Beyond right or wrong: Challenges of including creative design activities in the classroom. *Journal of Technology and Teacher Education*, 23(3), 279–299.
- Brennan, K. (2015). Beyond technocentrism: Supporting constructionism in the classroom. *Constructivist Foundations*, 10(3), 289–296.
- Brennan, K. (2013). Learning computing through creating and connecting. *Computer*, 46(9), 52–59. doi:10.1109/MC.2013.229

- Brennan, K., & Resnick, M. (2013). Imagining, creating, playing, sharing, reflecting: How online community supports young people as designers of interactive media. In N. Lavigne & C. Mouza (Eds.), *Emerging technologies for the classroom: A learning sciences perspective* (pp. 253–268). Springer. doi:10.1007/978-1-4614-4696-5 17
- Brennan, K., & Clarke, A. (2011). Intergenerational learning in a teacher education context: The Jared phenomenon. *Asia-Pacific Journal of Teacher Education*, 39(2), 125–137. doi:10.1080/1359866x.2011.560652
- Brennan, K., Monroy-Hernández, A., & Resnick, M. (2010). Making projects, making friends: Online community as catalyst for interactive media creation. *New Directions for Youth Development*, 2010(128), 75–83. doi:10.1002/yd.377
- Resnick, M., Maloney, J., Monroy-Hernández, A., Rusk, N., Eastmond, E., Brennan, K., . . . Kafai, Y. (2009). Scratch: Programming for all. *Communications of the ACM*, *52*(11), 60–67. doi:10.1145/1592761.1592779
- Brennan, K. (2006). The managed teacher: Emotional labour, education, and technology. *Educational Insights*, 10(2), 55–65.

CONFERENCE PROCEEDINGS

- Haduong, P., & Brennan, K. (2022). Possibility, perspectives, personal investment, and process: How K–12 teachers support programming projects through assessment. In C. Chinn, E. Tan, C. Chan, & Y. Kali (Eds.), *Proceedings of the 16th International Conference of the Learning Sciences ISLS 2022*, (pp. 583–590). [HGSE doctoral student co-author; ICLS Best Student Paper Finalist]
- Haduong, P., & Brennan, K. (2022). Supporting computational fluency: Clowder, a new Scratch project analyzer. In A. Weinberger, W. Chen, D. Hernández-Leo, D., & B. Chen (Eds.), *Proceedings of the 15th International Conference on Computer-Supported Collaborative Learning CSCL 2022 (pp. 583–584)*. [HGSE doctoral student co-author]
- Haduong, P., Zenke, C., Eng, J., & Brennan, K. (2021). PK–12 computing teacher interactions in an online professional learning experience. In C. E. Hmelo-Silver, B. De Wever, & J. Oshima (Eds.), *Proceedings of the 14th International Conference on Computer-Supported Collaborative Learning CSCL 2021* (pp. 289–290). [HGSE doctoral student, HGSE Master's student, Harvard College undergraduate co-authors]
- Haduong, P., & Brennan, K. (2020). Talking in pairs: Learning from and with teachers through artifact-based dyadic interviews. In M. Gresalfi & I. S. Horn (Eds.), *Proceedings of The International Conference of the Learning Sciences (ICLS) 2020: Vol. 4* (pp. 2369–2370). [HGSE doctoral student co-author]
- Jimenez, R., & Brennan, K. (2020). Facilitating change: A study of supporting teacher learning. In M. Gresalfi & I.S. Horn (Eds.), *Proceedings of The International Conference of the Learning Sciences (ICLS) 2020: Vol. 4* (pp. 1926–1933). [HGSE doctoral student co-author]
- Kafai, Y. B., Biswas, G., Hutchins, N., Snyder, C., Brennan, K., Haduong, P., DesPortes, K., Fong, M., Flood, V. J., Walker-van Aalst, O., DeLiema, D., Fields, D. A., Gresalfi, M., Brady, C., Steinberg, S., Knowe, M., Franklin, D., Coenraad, M., Weintrop, D., Eatinger, D., Palmer, J., Wilkerson, M., Roberto, C., Bulalacao, N. M., & Danish, J. (2020). Turning bugs into learning opportunities: Understanding debugging approaches and pedagogies. In M. Gresalfi & I. S. Horn (Eds.), *Proceedings of The International Conference of the Learning Sciences (ICLS) 2020: Vol. 1* (pp. 374–381).
- Peters, L., Sadeh, S., & Brennan, K. (2020). Surfacing teachers' aspirations and decisions through digital design journals. In M. Gresalfi & I. S. Horn (Eds.), *Proceedings of The International Conference*

- of the Learning Sciences (ICLS) 2020: Vol. 4 (pp. 2363–2364). [HGSE research staff first author, HGSE Ed.M. student second author]
- Haduong, P., & Brennan, K. (2019). Helping K–12 teachers get unstuck with Scratch: The design of an online professional learning experience. In E. K. Hawthorne, M. A. Pérez-Quiñones, S. Heckman, & J. Zhang (Eds.), *Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE'19)* (pp. 1095–1101). [HGSE doctoral student co-author]
- Yurkofsky, M., Blum-Smith, S., & Brennan, K. (2016). Expanding outcomes: Exploring varied forms of teacher learning in an online professional development experience. In C. K. Looi, J. L. Polman, U. Cress, & P. Reimann (Eds.), *Proceedings of The International Conference of the Learning Sciences (ICLS) 2016: Vol. 1* (pp. 330–337). [HGSE doctoral student co-authors]
- Brennan, K. (2014). Constructionism in the classroom: Three experiments in disrupting technocentrism. In G. Futschek & C. Kynigos (Eds.), *Proceedings of the 3rd International Constructionism and Creativity Conference*.
- Martin, W., Brennan, K., Tally, W., & Cervantes, F. (2014). Identifying and assessing computational thinking practices. In J. L. Polman, E. A. Kyza, D. K. O'Neill, I. Tabak, W. R. Penuel, A. S. Jurow, K. O'Connor, T. Lee, & L. D'Amico (Eds.), *Proceedings of The International Conference of the Learning Sciences (ICLS) 2014* (pp. 1559–1560).
- Brennan, K. (2011). Mind the gap: Differences between the aspirational and the actual in an online community of learners. In H. Spada, G. Stahl, N. Miyake, & N. Law (Eds.), *Proceedings of Computer Supported Collaborative Learning (CSCL) 2011: Vol. 1* (pp. 342–349).
- Brennan, K., Valverde, A., Prempeh, J., Roque, R., & Chung, M. (2011). More than code: The significance of social interactions in young people's development as interactive media creators. In T. Bastiaens & M. Ebner (Eds.), *Proceedings of EdMedia 2011: World Conference on Educational Media and Technology* (pp. 2147–2156). [Received outstanding paper award]
- Brennan, K. (2009). Scratch-Ed: An online community for Scratch educators. In A. Dimitracopoulou, C. O'Malley, D. Suthers, & P. Reimann (Eds.), *Proceedings of Computer Supported Collaborative Learning (CSCL) 2009: Vol. 2* (pp. 76–78).
- Brennan, K., Monroy-Hernández, A., & Resnick, M. (2009). Scratch: Creating and sharing interactive media. In A. Dimitracopoulou, C. O'Malley, D. Suthers, & P. Reimann (Eds.), *Proceedings of Computer Supported Collaborative Learning (CSCL) 2009: Vol. 2* (p. 217).
- Daily, S.B., & Brennan, K. (2008). Utilizing technology to support the cultivation of empathy. In J. Cassell (Ed.), *Proceedings of the 7th International Conference on Interaction Design and Children (IDC'08)* (pp. 5–8). doi:10.1145/1463689.1463704
- Brennan, K., Hara, H., Trey, L., & Hall, L. (2007). A community of (new media) practice: Examining learning stories from a videoblogging collective. In C. Montgomerie & J. Seale (Eds.), *Proceedings of EdMedia: World Conference on Educational Media and Technology 2007* (pp. 1734–1739).
- Brennan, K. (2007). New media and pre-service professional development: Using blogs for student teacher e-portfolio creation and open source programming curriculum. In R. Carlsen, K. McFerrin, J. Price, R. Weber & D. Willis (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2007* (pp. 2513–2518).
- Brennan, K., Feng, F., Hall, L. & Petrina, S. (2007). On the complexity of technology and the technology of complexity. In B. Davis (Ed.), *Proceedings of the Fourth Complexity Science and Educational Research conference* (pp. 47–73).

OTHER PUBLICATIONS

- Brennan, K., Haduong, P., Williamson, M. A., Peters, L., Smolevitz, S., & Yu, B. (2021). *Getting unstuck: An intermediate Scratch curriculum to support design studio culture in the classroom.* Creative Computing Lab. Retrieved from https://gettingunstuck.gse.harvard.edu
- National Academies of Sciences, Engineering, and Medicine. (2021). *Cultivating interest and competencies in computing: Authentic experiences and design factors*. The National Academies Press. [Committee member and contributing author]
- Brennan, K., Haduong, P., & Veno, E. (2020). *Assessing creativity in computing classrooms*. Creative Computing Lab. Retrieved from https://creativecomputing.gse.harvard.edu/assessment/
- Brennan, K. (2017). Computer programming. In K. Peppler (Ed.), *The SAGE Encyclopedia of Out-of-School Learning* (Vol. 2, pp. 123–126). Thousand Oaks, CA: SAGE. doi:10.4135/9781483385198.n55
- Brennan, K. (2017). Scratch. In K. Peppler (Ed.), *The SAGE Encyclopedia of Out-of-School Learning* (Vol. 2, pp. 684–685). Thousand Oaks, CA: SAGE. doi:10.4135/9781483385198.n263
- Brennan, K., Peragine, W., & Kutler, A. (2017). *Scratch educator meetup organizer guide*. Creative Computing Lab. Retrieved from https://meetups.gse.harvard.edu
- Brennan, K. (2015). Author's response: The critical context of teacher attitudes and beliefs. *Constructivist Foundations*, 10(3), 301–302.
- Brennan, K. (2015). Open peer commentary: Objects to think with. *Constructivist Foundations*, 10(3), 313–314.
- Brennan, K. (2015). Reimagining learning environments. In American Institutes for Research (Ed.), Developing a bold vision for teaching and learning to prepare students for success in 2025 (pp. 34–39). American Institutes for Research: Washington, DC.
- Brennan, K., Balch, C., & Chung, M. (2014). *Creative computing: A design-based introduction to computational thinking*. Creative Computing Lab. Retrieved from https://creativecomputing.gse.harvard.edu/guide/
- Brennan, K. (2014). Creative Computing Online Workshop. *Computer Science Teachers Association Voice*, 10(1), 2–3.
- Brennan, K. (2014). *Social dimensions of computing education*. Paper prepared for the NSF Future Directions in Computing Education Summit, Orlando, FL.
- Brennan, K. (2012). ScratchEd: Developing support for educators as designers. In E. Reilly & I. Literat (Eds.), *Designing with teachers: Participatory professional development in education*. Retrieved from https://dmlhub.net/publications/designing-with-teachers-participatory-approaches-to-professional-development-in-education/

Designs

- Getting Unstuck Curriculum (2021; 62.7K page views)

 Developed an intermediate Scratch curriculum (https://gettingunstuck.gse.harvard.edu) for upper elementary students, based on the Getting Unstuck summer learning experience for teachers.
- Getting Unstuck Summer Course (2018, 2020; 3K subscribers, 719 participants)

 Developed Getting Unstuck, a multi-day, email-based learning experience about creative approaches to computer science for K–12 teachers.

- Scratch Educator Meetups Network (2016–present; 50 groups, 18 countries, 4.6K members)

 Developed the Scratch Educator Meetups Network (https://meetups.gse.harvard.edu/), an international network of participatory professional learning experiences for K–12 teachers.
- Creative Computing Curriculum (v1. 2014, v2. 2019; 947K page views, translated into 12 languages)

 Developed the Creative Computing Curriculum, an introduction to computer science with the Scratch programming language (https://creativecomputing.gse.harvard.edu/guide).
- Computational Thinking with Scratch (2014; 251K page views, 2.4K citations)

 Developed a computational thinking framework (https://creativecomputing.gse.harvard.edu/ct/), with accompanying assessment strategies and demonstration videos.
- Creative Computing Online Workshop (2013; 2.1K enrolled)

 Developed and facilitated the Creative Computing Online Workshop (https://creative-computing.appspot.com), a six-week MOOC for K-12 educators.
- ScratchEd Online Community (2009–2019; 27K registered members, 3.58M visitors, 12.5M page views) Developed and managed ScratchEd (https://scratched.gse.harvard.edu), an online community for K–12 teachers who teach with Scratch, featuring stories, resources, discussions, and events.
- Scratch Day (2009–2012; 552 events, 44 countries)

 Developed and led the Scratch Day project (https://day.scratch.mit.edu/), involving hundreds of events and thousands of children, parents, and teachers worldwide.
- Scratch (2007–2012; 1.26M members, 2.85M uploaded projects)

 Contributed to the design and development of the Scratch authoring environment and online community (https://scratch.mit.edu).

Presentations

REFEREED PRESENTATIONS

- Brennan, K. & Haduong, P. (2023, April). Classroom as design studio: Supporting learner-directed programming projects through access to others. Poster presented at the annual meeting of the American Educational Research Association. [HGSE doctoral student co-author]
- Brennan, K., Haduong, P., Smolevitz, S., & Williamson, M. A. (2021, July). *Get unstuck with a new intermediate Scratch curriculum*. Presentation conducted at the Computer Science Teachers Association annual meeting.
- Brennan, K., Peters, L., & Williamson, M. A. (2021, July). *Creative computing in remote learning environments*. Presentation conducted at the Computer Science Teachers Association annual meeting.
- Brennan, K., & Williamson, M. A. (2021, July). *Join the Scratch Educator Meetups Network!*Presentation conducted at the Computer Science Teachers Association annual meeting.
- Brennan, K., Haduong, P., & Williamson, M. A. (2021, June). *Getting unstuck: Designing and evaluating teacher resources to support conceptual and creative fluency with programming.* Presentation conducted in structured poster session on CS and Computational Thinking at the National Science Foundation DR K–12 PI meeting.
- Haduong, P., & Brennan, K. (2021, April). *Designing for and with teachers: Supporting teacher learning through collaborative curriculum development.* Paper presented at the annual meeting of the American Educational Research Association. [HGSE doctoral student co-author]

- Lyon, M. A., Snaider, C., Ready, D., Sands, P., Yadav, A., Moudgalya, S. K., Zamansky, M., Ridgway, R., Linacre, I., Ready, D., Patel, A., Thompson, A., Sykora, C., Vitale, A., Evans, J. A., & Brennan, K. (2021, April). *Dynamics of computational thinking: Theoretical and practical debates in teacher training.* Discussant for session conducted at the annual meeting of the American Educational Research Association.
- Brennan, K., & Peters, L. (2020, July). *ScratchEd Meetups: Participatory professional learning for teachers*. Presentation conducted at the Computer Science Teachers Association annual meeting.
- Metcalf, S. J., Dickes, A. C., Reilly, J. M., Kamarainen, A. M., Jeon, S., Brennan, K. A., Grotzer, T. A. & Dede, C. J. (2020, April) *Impact of a blended immersive and computational modeling tool on elementary ecosystems science learning.* Paper presented at the annual meeting of the American Educational Research Association.
- Metcalf, S., Dickes, A., Brennan, K., & Dede, C. (2019, July). *Design of an agent-based visual programming tool for elementary ecosystem science learning*. Poster presented at the 2019 ACM Conference on International Computing Education Research, Toronto ON, Canada.
- Brennan, K., & Peters, L. (2019, July). *Get to know the Creative Computing Curriculum*. Presentation conducted at the Computer Science Teachers Association annual meeting, Phoenix, AZ.
- Brennan, K., Kutler, A., & Peters, L. (2019, July). *Scratch Educator Meetups: Participatory professional learning for teachers*. Presentation conducted at the Computer Science Teachers Association annual meeting, Phoenix, AZ.
- Brennan, K., Peters, L., & Kutler, A. (2019, June). *Designing for imagination: Creative computing in the K–12 classroom*. Presentation conducted at the International Society for Technology in Education (ISTE) conference, Philadelphia, PA.
- Brennan, K., Kutler, A., Gustafson, I., & Beasley, J. (2019, June). *ScratchEd Meetups: Participatory professional learning for teachers*. Presentation conducted at the International Society for Technology in Education (ISTE) conference, Philadelphia, PA.
- Brennan, K., Kutler, A., & Peters, L. (2019, June). Supporting creative computing in your classroom. Poster presented at the International Society for Technology in Education (ISTE) conference, Philadelphia, PA.
- Kamarainen, A., Metcalf, S., Dickes, A., Gün Yildiz, S., Brennan, K., Grotzer, T., & Dede, C. (2019, April). *Impact of blended immersive virtual world and programming curriculum on student perspectives about scientific modeling*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- Dickes, A., Kamarainen, A., Metcalf, S., Brennan, K., Grotzer, T., & Dede, C. (2019, April). *Integrating immersive virtual worlds with computational modeling to support scientific practice in elementary learners*. Poster presented at the annual meeting of the American Educational Research Association, Toronto, Canada.
- Haduong, P., & Brennan, K. (2018, November). *Beyond 'I'm done': Encouraging deeper exploration of challenging computational concepts.* Presentation conducted at BLOCKS+ 2018, Boston, MA. [HGSE doctoral student co-presenter]
- Brennan, K., Fields, D., Haduong, P., Jayathirtha, G., Kafai, Y., Litts, B., Mortensen, C., & Tissenbaum, M. (2018, August). *Learning from failure: Debugging in coding, gaming, and making activities*. Presentation conducted at the 2018 Connected Learning Summit, Cambridge, MA.
- Dickes, A., Metcalf, S., Kamarainen, A., Reilly, J., Brennan, K., Grotzer, T., & Dede, C. (2018, August). EcoMOD: Integrating computational thinking into ecosystems science education via modeling in

- *immersive virtual worlds*. Presentation conducted at the 2018 Connected Learning Summit, Cambridge, MA.
- Haduong, P., & Brennan, K. (2018, February). *Getting unstuck: New resources for teaching debugging strategies in Scratch.* Poster presented at the 49th ACM Technical Symposium on Computer Science Education (SIGCSE'18), Kansas City, MO. [HGSE doctoral student co-author]
- Dickes, A., Metcalf, S., Kamarainen, A., Reilly, J., Brennan, K., Grotzer, T., & Dede, C. (2018, February). *EcoMOD: Integrating computational thinking into ecosystems science education via modeling in immersive virtual worlds.* Poster presented at the 49th ACM Technical Symposium on Computer Science Education (SIGCSE'18), Kansas City, MO.
- Brennan, K., & Peragine, W. (2017, June). *Scratch educator idea share*. Presentation conducted at the International Society for Technology in Education (ISTE) conference, San Antonio, TX.
- Brennan, K., & Peragine, W. (2017, June). Supporting creative computing in your classroom with Scratch. Poster presented at the International Society for Technology in Education (ISTE) conference, San Antonio, TX.
- Chen, C., Haduong, P., Brennan, K., Sonnert, G., & Sadler, P. (2017, April). *Effects of first programming languages on college students' achievement in CS1: Graphical and textual languages.* Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX. [HGSE doctoral student co-presenters: Chen Chen, Paulina Haduong]
- Blum-Smith, S., Yurkofsky, M., & Brennan, K. (2016, October). *Negotiating the medium: Designing for learner-centered experiences in the massive, open, online space.* Paper presented at Learning with MOOCs III, Philadelphia, PA. [HGSE doctoral student co-authors]
- Brennan, K., & Jimenez, R. (2016, June). *Communicating culture: Building a network of participatory teacher meetups to support K–12 computing education*. Poster presented at the 12th International Conference of the Learning Sciences, Singapore. [HGSE doctoral student co-author]
- Blum-Smith, S., Yurkofsky, M., & Brennan, K. (2015, April). Supporting constructionism in the classroom: MOOC as platform for teacher learning. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL. [HGSE doctoral student co-presenters]
- Brennan, K., Hutton, P., MacDonald, R., & Wilcox-González, Y. (2015, March). *The coded curriculum: A year in review.* Panel presentation conducted at the SXSWedu conference, Austin, TX.
- Apone, K., Bers, M., Brennan, K., Franklin, D., Israel, M., & Yongpradit, P. (2015, March). *Bringing grades K–5 to the mainstream of computer science education*. Panel presentation conducted at the 46th ACM Technical Symposium on Computer Science Education (SIGCSE'15), Kansas City, MO.
- Brennan, K. (2014, August). *Constructionism in the classroom: Three experiments in disrupting technocentrism*. Plenary presentation conducted at the Constructionism and Creativity conference, Vienna, Austria.
- Brennan, K. (2014, April). Why we create: Conversations with kids and teachers about making games (and other interactive media). Panel presentation conducted at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Mindell, E., Brennan, K., Britton, G., Kay, J. S., & Rosato, J. (2014, March). *CS professional development MOOCs*. Panel presentation conducted at the 45th ACM Technical Symposium on Computer Science Education (SIGCSE'14), Atlanta, GA.
- Brennan, K., Harms, K. J., Kraemer, E. T., Medlock-Walton, P., & Wendel, D. (2014, March). *Blocks-based programming languages: Simplifying programming for different audiences with different*

- *goals*. Panel presentation conducted at the 45th ACM Technical Symposium on Computer Science Education (SIGCSE'14), Atlanta, GA.
- Brennan, K. (2013, July). *Get to know Scratch 2.0*. Workshop conducted at the Computer Science Teachers Association annual meeting, Quincy, MA.
- Brennan, K., & Resnick, M. (2013, June). *Learn to code, code to learn*. Workshop conducted at EdMedia: World Conference on Educational Media and Technology, Victoria, Canada.
- Brennan, K. (2013, March). *Designing with teachers: Participatory approaches to professional development in education*. Panel presentation conducted at the Digital Media and Learning conference, Chicago, IL.
- Brennan, K., & Resnick, M. (2013, March). Stories from the Scratch community: Connecting with ideas, interests, and people. Presentation conducted at the 44th ACM Technical Symposium on Computer Science Education (SIGCSE'13), Denver, CO.
- Brennan, K., & Resnick, M. (2012, June). *ScratchEd: Working with teachers to develop design-based learning approaches to the cultivation of computational thinking*. Poster presented at the National Science Foundation DR K–12 PI meeting, Washington, DC.
- Brennan, K. (2012, April). *Using artifact-based interviews to study the development of computational thinking in interactive media design*. Presentation conducted at the annual meeting of the American Educational Research Association, Vancouver, Canada.
- Brennan, K., & Resnick, M. (2012, April). *New frameworks for studying and assessing the development of computational thinking*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, Canada.
- Brennan, K., & Roque, R. (2012, March). A culture of sharing: Exploring ways to support connections among designers of digital media. Workshop conducted at the Digital Media and Learning conference, San Francisco, CA.
- Brennan, K. (2011, July). *Mind the gap: Differences between the aspirational and the actual in an online community of learners*. Presentation conducted at the Computer Supported Collaborative Learning conference, Hong Kong, China.
- Brennan, K. (2011, June). More than code: The significance of social interactions in young people's development as interactive media creators. Presentation conducted at EdMedia: World Conference on Educational Media and Technology, Lisbon, Portugal.
- Brennan, K. (2011, June). *Getting started with Scratch*. Discussion session conducted at EdMedia: World Conference on Educational Media and Technology, Lisbon, Portugal.
- Daily, S., Brennan, K., & Picard, R. (2011, April). *Empathy development environments: A framework for supporting the cultivation of empathic capacities*. Presentation conducted at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Brennan, K., Maloney, J., & Roque, R. (2011, March). *Teaching and learning with Scratch*. Discussion session conducted at the 42nd ACM Technical Symposium on Computer Science Education (SIGCSE'11), Dallas, TX.
- Wolz, U., Brennan, K., Maloney, J., & Roque, R. (2011, March). *What makes a good Scratch program? Examining structure and style in Scratch programs*. Discussion session conducted at the 42nd ACM Technical Symposium on Computer Science Education (SIGCSE'11), Dallas, TX.
- Brennan, K., & Monroy-Hernández, A. (2011, March). *Designing for designers: Exploring ways in which online community settings support young people's participation as digital media creators*. Workshop conducted at the Digital Media and Learning conference, Long Beach, CA.

- Brennan, K. (2011, March). *Getting to know Scratch*. Workshop conducted at the Cyberlearning Tools for STEM Education (CyTSE) conference, Berkeley, CA.
- Brennan, K. (2011, March). *Scratch and ScratchEd*. Demonstration conducted at the Cyberlearning Tools for STEM Education (CyTSE) conference, Berkeley, CA.
- Brennan, K., & Resnick, M. (2010, December). *ScratchEd: Working with teachers to develop design-based learning approaches to the cultivation of computational thinking*. Poster presented at the National Science Foundation DR K–12 PI meeting, Washington, DC.
- Kafai, Y., Peppler, K., Resnick, M., & Brennan, K. (2010, August). *Scratch: Programming for everyone*. Presentation conducted at the Constructionism conference, Paris, France.
- Brennan, K., & Resnick, M. (2010, August). *Getting to know Scratch*. Workshop conducted at the Constructionism conference, Paris, France.
- Brennan, K., & Resnick, M. (2010, June). *We do WeDo and Scratch*. Workshop conducted at the International Society for Technology in Education (ISTE) conference, Denver, CO.
- Brennan, K. (2010, June). *ScratchEd: Supporting teachers working with Scratch*. Poster presented at the International Society for Technology in Education (ISTE) conference, Denver, CO.
- Daily, S., & Brennan, K. (2010, April). *Trajectories of identity: Designing a collaborative learning environment that supports the development of empathy*. Poster presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Brennan, K., Daily, S., & Resnick, M. (2010, February). *Programming and pluralism: Diversifying participation in computational creation*. Presentation conducted at the Digital Media and Learning conference, La Jolla, CA.
- Kafai, Y., Peppler, K., Resnick, M., Fields, D. A., Diazgranados, A., Brennan, K., . . . Parks, N. (2010, February). *Cultivating creativity and criticality in schools and after-school programs with Scratch*. Presentation conducted at the Digital Media and Learning conference, La Jolla, CA.
- Brennan, K. (2009, June). *Scratch-Ed: An online community for Scratch educators*. Poster presented at the National Educational Computing Conference, Washington, DC.
- Brennan, K., & Resnick, M. (2009, June). *Using Scratch in your classroom*. Workshop conducted at the National Educational Computing Conference, Washington, DC.
- Brennan, K. (2009, June). *Scratch-Ed: An online community for Scratch educators*. Poster presented at the Computer Supported Collaborative Learning conference, Rhodes, Greece.
- Brennan, K., & Resnick, M. (2009, June). *Scratch: Creating and sharing interactive media*. Workshop conducted at the Computer Supported Collaborative Learning conference, Rhodes, Greece.
- Brennan, K. (2009, May). Scratch-Ed: Designing an online community for Scratch educators.

 Presentation conducted at the Canadian Society for the Study of Education conference, Ottawa, Canada.
- Brennan, K. (2008, October). *Illusions of ambiguity: Signaling presence and representation of gender identities on a programmable media website for young people*. Paper presented at the Association of Internet Researchers conference, Copenhagen, Denmark.
- Daily, S.B., & Brennan, K. (2008, May). *Utilizing technology to support the development of empathy*. Poster presented at the Interaction Design & Children conference, Chicago, IL.
- Brennan, K. (2008, March). *The Jared phenomenon: Intergenerational learning in a teacher education context.* Presentation conducted at the annual meeting of the American Educational Research Association, New York City, NY.

- Brennan, K., Hall, L., Kojima, D., & Petrina, S. (2007, June). *Methodologies for researching cognition and technology: Dynamically responsive learning environments*. Presentation conducted at EdMedia: World Conference on Educational Media and Technology, Vancouver, Canada.
- Brennan, K., Hara, H., Trey, L., & Hall, L. (2007, June). *A community of (new media) practice: Examining learning stories from a videoblogging collective.* Presentation conducted at EdMedia: World Conference on Educational Media and Technology, Vancouver, Canada.
- Kim, S., Brennan, K., & Petrina, S. (2007, June). *The sources of production: Open source, philosophy, policy, and practice*. Poster presented at EdMedia: World Conference on Educational Media and Technology, Vancouver, Canada.
- Brennan, K., & Clarke, T. (2007, May). Recent B.Ed. graduates returning to campus to facilitate instruction for current B.Ed. students: A case of intergenerational learning? Presentation conducted at the Canadian Society for the Study of Education conference, Saskatoon, Canada.
- Brennan, K. (2007, March). New media and pre-service professional development: Using blogs for student teacher e-portfolio creation and open source programming. Presentation conducted at the Society for Information Technology & Teacher Education conference, San Antonio, TX.
- Brennan, K., Feng, F., Hall, L., & Petrina, S. (2007, February). *Complexity of technology*. Presentation conducted at the Complexity Science and Educational Research conference, Vancouver, Canada.
- Morton, C., & Brennan, K. (2006, May). Bulletin board technology in the classroom: A demonstration of and discussion about online musical communities. Presentation conducted at Investigating Our Practices conference, Vancouver, Canada.
- Nicol, C., Baird, J., Barney, D., Brennan, K., Burgess, D., Hamilton, D., . . . Ramos, D. (2006, May). *Action research: Investigating practice, practicing change*. Poster presented at Investigating Our Practices conference, Vancouver, Canada.
- Dean, V., & Brennan, K. (2006, February). *Planning your professional teaching portfolio*. Presentation conducted at WestCAST conference, Vancouver, Canada.
- Dean, V., & Brennan, K. (2005, May). *Technology support for pre-service teachers*. Presentation conducted at Investigating Our Practices conference, Vancouver, Canada.

INVITED PRESENTATIONS

- Long, B. T., Brennan, K., Cheatham, J., Jack, A., Umaña-Taylor, A., & West, M. (2020, December). *The future of education*. Invited panelist at HGSE Centennial closing event.
- Brennan, K. (2020, May). *Three questions about CT in PK-5*. Invited presentation at National Academies Enhancing Science and Engineering in Prekindergarten through Fifth Grades event.
- Higgins, M., Honan, J., & Brennan, K. (2020, January). *Entrepreneurship and innovation in education*. Invited workshop at HGSE Centennial opening event.
- Brennan, K. (2019, October). *Supporting student-directed learning*. Invited presentation at The Derek Bok Center for Teaching and Learning Faculty Lunch series, Cambridge, MA.
- Brennan, K. (2019, September). *Designing for learning by questioning*. Invited presentation at Harvard Higher Education Leaders Forum, Cambridge, MA.
- Brennan, K., Dovi, R., & Yongpradit, P. (2019, September). *Integrating computer science in K–8*. Invited panelist at CSEdCon 2019, Las Vegas, NV.
- Brennan, K., & Peters, L. (2019, September). *The Creative Computing Curriculum*. Invited presentation at CSEdCon 2019, Las Vegas, NV.

- Adrion, R., Brennan, K., Frye, D., Leftwich, A., Stephenson, C., & Warner, J. (2019, September). *A dialogue between researchers and policymakers*. Invited panelist at CSEdCon 2019, Las Vegas, NV.
- Brennan, K. (2019, July). *Designing for curiosity*. Invited keynote at Building Learning Communities annual conference, Boston, MA.
- Brennan, K. (2019, March). *Getting creative with code*. Invited lecture at Massachusetts DESE Kairos event, Amherst, MA.
- Brennan, K., Light, J., Resnick, M., & Sun, J. (2018, June). *Sherry in the classroom*. Invited plenary panelist at Sherry Turkle's Festschrift, American Academy of Arts and Science, Somerville, MA.
- Brennan, K. (2018, April). Hard fun. Invited lecture at KIPP and LEGO Education event, Boston, MA.
- Brennan, K. (2017, November). *Creative computing*. Invited lecture at Northwestern University, School of Education and Social Policy, Evanston, IL.
- Brennan, K. (2017, October). Computational creativity. Invited webinar at The University of Michigan.
- Brennan, K. (2017, August). *Creative computing for all.* Invited lecture at NYC Department of Education, New York, NY.
- Resnick, M., Brennan, K., Cobo, C., & Schmidt, P. (2017, April). *Creative learning @ scale*. Invited plenary panelist at the Fourth ACM Conference on Learning @ Scale, Cambridge, MA.
- Brennan, K. (2017, March). *Creative computing for all*. Invited presentation at Scratch Foundation annual benefit, New York, NY.
- Brennan, K. (2017, March). *Playing with perspective*. Invited presenter at the Harvard Graduate School of Education (HGSE) Programs in Professional Education (PPE) Scaling for Impact, Cambridge, MA.
- Brennan, K., Alper, M., Giacobbe, N., & Gutierrez, R. (2016, August). ... For all. Invited plenary discussant for Scratch Conference panel, Cambridge, MA.
- Brennan, K., Beary, V., Marcus, A., & Honan, J. P. (2016, April). *Disruptive innovation and gender equality*. Invited panelist at Harvard Advanced Leadership Initiative (ALI) Education and Gender Equality event, Cambridge, MA.
- Brennan, K. (2015, November). *Creative computing in the classroom*. Invited keynote at the International Symposium on Computers in Education (SIIE'15), Setúbal, Portugal.
- Brennan, K. (2015, December). Computational creativity. Invited webinar at The University of Michigan.
- Brennan, K. (2015, September). *Designing for learning by creating*. Invited presentation at Hewlett Foundation board meeting, hosted by the American Association for the Advancement of Science, Cambridge, MA.
- Brennan, K. (2015, May). *Coding is for everybody*. Invited speaker at the Harvard Women in Technology Group meeting, Cambridge, MA.
- Sims, Z., Brennan, K., & Resnick, M. (2015, March). *Programming across contexts*. Invited panelist at Scratch Foundation event, New York, NY.
- Brennan, K., Bryant, K., Klawe, M., Margolis, J., & Wilson, S. (2015, February). *A space of their own? Girls, women, & STEM.* Invited moderator at the Harvard Graduate School of Education Askwith Forum, Cambridge, MA.
- Brennan, K. (2014, December). Computational creativity. Invited webinar at The University of Michigan.

- Brennan, K. (2014, October). *Computational creativity*. Invited speaker at the Harvard Ed Portal Faculty Series, Allston, MA.
- Brennan, K., Chung, M., Balch, C., & Gustafson, I. (2014, October). *Creative computing: Getting started with computational literacy in the classroom*. Invited webinar for the National Writing Project.
- Brennan, K. (2014, October). *Design principles for learning*. Invited presenter at the Harvard Graduate School of Education (HGSE) Programs in Professional Education (PPE) Independent Schools Institute, Cambridge, MA.
- Brennan, K. (2014, September). *Getting started with* Scratch. Invited workshop at the Harvard Ed Portal, Allston, MA.
- Brennan, K. (2014, September). *Getting unstuck*. Invited presenter at the Harvard Graduate School of Education 8x8 event, Cambridge, MA. Available at https://www.youtube.com/watch?v=c_AdWB1GkRw
- Brennan, K. (2014, September). *Designing for learning by creating*. Invited presenter at Harvard Initiative for Learning and Teaching (HILT) conference, Cambridge, MA.
- Noss, R., Brennan, K., Harvey, B., Hoyles, C., & Resnick, M. (2014, August). Whatever happened to the powerful ideas? Invited panelist at Constructionism and Creativity conference, Vienna, Austria.
- Brennan, K., Balch, C., & Chung, M. (2014, August). *Getting to know the Scratch curriculum guide*. Invited presenter at the Scratch@MIT conference, Cambridge, MA.
- Brennan, K., Blum-Smith, S., & Yurkofsky, M. (2014, August). *Reflections on the creative computing online workshop*. Invited presenter at the Scratch@MIT conference, Cambridge, MA.
- Brennan, K., Blum-Smith, S., & Yurkofsky, M. (2014, July). *Creative computing online workshop:*Designing a large online constructionist learning experience for educators. Invited presenter at HarvardX research seminar, Cambridge, MA.
- Kumpulainen, K., Sefton-Green, J., Brennan, K., Mikkola, A., Peppler, K., & Soep, E. (2014, June). Learning and becoming through making and participatory media. Invited panelist at the International Conference of the Learning Sciences, Boulder, CO.
- Brennan, K. (2014, May). *Design principles for learning*. Invited presenter at the Harvard Graduate School of Education (HGSE) Programs in Professional Education (PPE) Education Grantmakers Institute, Cambridge, MA.
- Brennan, K. (2014, April). *Connectedness and technology*. Invited presenter at the Harvard Graduate School of Education (HGSE) Programs in Professional Education (PPE) Learning Environments for Tomorrow Institute, Cambridge, MA.
- Brennan, K. (2014, March). *Designing T550: (Talking about) Designing for Learning by Creating.* Invited presenter at Harvard Talking About Teaching faculty series, Cambridge, MA.
- Brennan, K. (2014, March). *Getting unstuck*. Invited panelist at Brookline High School 21st Century Fund event, Brookline, MA.
- Brennan, K. (2014, March). *Computational creativity for everyone*. Invited speaker at Two Sigma event, New York, NY.
- Brennan, K. (2014, February). *Three experiments in hybridity*. Invited speaker at Radcliffe Institute Workshop on The Opportunities and Challenges of Open Online Education, Cambridge, MA.
- Brennan, K. (2014, February). Computational creativity. Invited webinar at The University of Michigan.

- Brennan, K. (2014, February). *Getting unstuck*. Invited speaker at the HGSE Thinks Big event, Cambridge, MA.
- Brennan, K. (2014, January). *Getting unstuck*. Invited speaker at the National Science Foundation Continuing Education for the 21st Century (CE21) annual meeting, Orlando, FL.
- Brennan, K. (2013, December). Computational creativity: How new tools and new communities support young people as designers of interactive media. Invited speaker at Governor's STEM Advisory Council meeting, Cambridge, MA.
- Brennan, K. (2013, November). *Building community and sustaining engagement*. Invited speaker at the MIT Center for Mobile Learning, Cambridge, MA.
- Brennan, K. (2013, November). Computational creativity: How new tools and new communities support young people as designers of interactive media. Invited webinar at The University of Michigan.
- Brennan, K. (2013, November). *Scratch.* Invited demonstration for NY Tech Demo at New York University, New York, NY.
- Brennan, K. (2013, October). *A lie my father told me*. Invited keynote at the Harvard Graduate School of Education (HGSE) Arts in Education (AIE) Continuing the Conversation event, Cambridge, MA.
- Brennan, K. (2013, October). *International day of the girl*. Invited panelist at the Massachusetts Institute of Technology D-Lab, Cambridge, MA.
- Brennan, K., Ho, A., & Klopfer, E. (2013, September). *Ed Tech Insights from Learning Research*. Invited panelist at LearnLaunch event, Boston, MA.
- Brennan, K. (2013, September). *No substitute? Designing a massive online constructionist learning experience for educators.* Invited speaker at the Harvard Graduate School of Education (HGSE) Education Policy, Leadership, and Instructional Practice (EPLIP) series, Cambridge, MA.
- Brennan, K. (2013, August). *Change-MAKER stories*. Invited speaker at Girls MAKE the City event, organized by the office of Mayor Thomas Menino, Boston, MA.
- Brennan, K. (2013, August). *Computational creativity: What kids learn as designers of interactive media.* Invited keynote at PyCon Canada conference, Toronto, Canada.
- Brennan, K. (2013, August). *Programming as an expressive and creative medium*. Invited workshop at the Harvard Graduate School of Education (HGSE) Programs in Professional Education (PPE) Arts and Passion-Driven Learning Institute, Cambridge, MA.
- Brennan, K. (2013, August). Computational creativity: How new tools and communities support young people as designers of interactive media. Invited keynote at the Massachusetts New Literacies Institute, Cambridge, MA.
- Brennan, K., McInerney, C., & Marques, T. (2013, July). *Connecting communities: Strategies for (and challenges of) supporting teachers working with Scratch*. Invited panelist at the European Scratch conference, Barcelona, Spain.
- Resnick, M., & Brennan, K. (2013, July). *Boston, Barcelona, and Beyond*. Invited keynote at the European Scratch conference, Barcelona, Spain.
- Brennan, K., & Resnick, M. (2013, June). *Coding is for everybody: Learning through creating, personalizing, sharing, and reflecting.* Invited month-long webinar series for the MacArthur Foundation Connected Learning initiative.
- Brennan, K. (2013, June). Programming and coding. Invited panelist for Maker Bridge webinar series.

- Brennan, K. (2013, May). *Education's digital future: Disruption and promise for America's schools.* Invited panelist at Harvard Club event, New York, NY.
- Brennan, K., & Millner, A. (2013, May). *ScratchEd*. Invited panelist at the MIT Media Lab Learning Creative Learning event, Cambridge, MA.
- Brennan, K. (2013, April). *Scratch & ScratchEd*. Invited demonstration at Players & Professors: Exploring the Future of Digital Media & Learning event hosted by the Exploratorium, San Francisco, CA.
- Brennan, K. (2013, April). Computational creativity: How new tools and new communities support young people as designers of interactive media. Invited keynote at the Computer Science Education Research Conference (CSERC'13), Arnhem/Nijmegen, Netherlands.
- Brennan, K. & Resnick, M. (2013, March). *Scratch community meeting*. Invited presentation at the 44th ACM Technical Symposium on Computer Science Education (SIGCSE'13), Denver, CO.
- Brennan, K. (2013, March). *Creativity is for everybody*. Invited web keynote at Elk Island Public Schools Scratch Day event.
- Brennan, K. (2013, January). *Computational creativity*. Invited workshop at Harvard University January Academy on Technology-Enabled Teaching and Learning, Cambridge, MA.
- Brennan, K. (2012, December). *Computer programming for kids 8 and up*. Invited guest for NPR Here & Now. Available at http://hereandnow.wbur.org/2012/12/26/computer-programming-kids
- Brennan, K. (2012, November). *Mobile learning: Let the games begin!* Invited panelist for Thought Leaders Symposium on Mobile Education, Cambridge, MA.
- Brennan, K. (2012, August). From unaware to everywhere: Young people as designers of interactive media. Invited keynote at Destination Innovation conference, Banff, Canada.
- Brennan, K. (2012, April). *Creativity is for everybody*. Invited lecture at National School Boards Association meeting, Cambridge, MA.
- Brennan, K. (2012, April). *Young people as designers of interactive media*. Invited webinar at The University of Michigan.
- Brennan, K. (2012, February). *Young people as designers of interactive media*. Invited lecture at What Matters & What Counts in Education discussion series, Denver, CO.
- Brennan, K. (2012, February). *Best of both worlds: Issues of structure and agency in computational creation, in and out of school.* Invited lecture at the University of Washington Information School, Seattle, WA.
- Brennan, K. (2012, February). *Best of both worlds: Issues of structure and agency in computational creation, in and out of school.* Invited lecture at the Harvard Graduate School of Education, Cambridge, MA.
- Brennan, K. (2011, November). From unaware to everywhere: Young people as designers of interactive media. Invited webinar at The University of Michigan.
- Brennan, K. (2011, October). *Designing for designers: Exploring how online community supports young people's participation as creators of interactive digital media.* Invited lecture for T526 (Power of Networked Learning) at the Harvard Graduate School of Education, Cambridge, MA.
- Brennan, K. (2011, September). *Creative expression with Scratch*. Invited workshop at the Massachusetts College of Art and Design, Boston, MA.

- Resnick, M., & Brennan, K. (2011, July). *Happily ever after: Digital storytelling with Scratch*. Invited workshop at the Building Learning Communities Conference, Boston, MA.
- Resnick, M., & Brennan, K. (2011, July). *Let's play! Game design and Scratch*. Invited workshop at the Building Learning Communities Conference, Boston, MA.
- Brennan, K. (2011, July). *Making projects, making friends: Online community as catalyst for interactive media creation*. Invited webinar for PEAR Youth as Contributors: The Role of New Media & Technology series.
- Brennan, K. (2011, July). Remixing learning. Invited workshop at Benesse Corporation, Tokyo, Japan.
- Brennan, K. (2011, July). *Getting started with Scratch*. Invited workshop at The Hong Kong Federation of Youth Groups, LEAD Centre, Hong Kong, China.
- Brennan, K. (2011, July). *Getting started with Scratch*. Invited workshop at Hong Kong Polytechnic University, Hong Kong, China.
- Brennan, K. (2011, June). From unaware to everywhere: Young people as designers of interactive media. Invited keynote at UK Teachers' Conference, University of Birmingham, Birmingham, UK.
- Brennan, K. (2011, June). *Let's play! Game design and Scratch*. Invited workshop at the Games+Learning+Society conference, Madison, WI.
- Brennan, K. (2011, May). *Creativity is for everybody*. Invited keynote at Digital Film Festival, University of Alabama at Birmingham, Birmingham, AL.
- Brennan, K. (2011, May). Young people as designers of interactive media. Invited lecture at the University of Alabama at Birmingham Department of Computer and Information Sciences, Birmingham, AL.
- Brennan, K. (2011, April). *Designing, personalizing, collaborating, reflecting: Supporting young people as designers of interactive media.* Invited lecture in HUDK 4035 (Technology and Human Development), Columbia University, New York, NY.
- Brennan, K. (2011, April). Best of both worlds: Issues of structure and agency in computational creation, in and out of school. Invited lecture at Cyberscholars Working Group, Harvard University, Cambridge, MA.
- Brennan, K. (2011, April). *Young people as designers of interactive media*. Invited webinar at The University of Michigan.
- Brennan, K. (2011, March). *Young people as designers of interactive media*. Invited keynote at The Institute of Contemporary Art (ICA) Regional Youth Media Arts Educator Consortium (RYMAEC) Web 2.0pen Mic event, Boston, MA.
- Brennan, K. (2011, March). *Creative expression with Scratch*. Invited workshop at The Institute of Contemporary Art, Boston, MA.
- Klopfer, E., Brennan, K., Bull, G., Eisenberg, M., Norris, C., Powell, A., & Soloway, E. (2011, February). *Trends and tools for teaching digital age learners*. Invited panelist at the annual meeting of the American Association of Colleges for Teacher Education (AACTE), San Diego, CA.
- Brennan, K., & Roque, R. (2010, December). *Scratch dance party!* Invited workshop at the MIT Women in Science and Engineering Mentorship Program, Cambridge, MA.
- Moss, F., Minsky, M., Egozy, E., Hawley, M., Viegas, F., & Brennan, K. (2010, October). *Media Lab Five x Five*. Invited panelist at the Media Lab 25th Anniversary event, Cambridge, MA.

- Resnick, M., & Brennan, K. (2010, October). *Scratch*. Invited workshop at the Massachusetts Computer Using Educators conference, Foxborough, MA.
- Blikstein, P., Berland, M., Brennan, K., Buechley, L., Millner, A., Sipitakiat, A., . . . Wilkerson, M. (2010, August). *Young constructionists under construction*. Invited panelist at the Constructionism conference, Paris, France.
- Brennan, K. (2010, June). *Working with Scratch: An international perspective*. Invited keynote at the Look to the Future conference, Heriot-Watt University, Edinburgh, Scotland.
- Brennan, K. (2010, June). *Scratch*. Invited panelist at the MIT Alumni Association Tech Reunions K–12 Education Panel, Cambridge, MA.
- Brennan, K. (2010, March). *Media Lab dedication*. Invited speaker at the MIT Media Lab building dedication, Cambridge, MA.
- Brennan, K., & Chang, A. (2010, February). *Scratch rocks!* Invited workshop at the MIT Women in Science and Engineering Mentorship Program, Cambridge, MA.
- Brennan, K. (2009, September). *Programming and beyond: Enabling creative learning through Scratch*. Invited lecture in CD173 (Curriculum for Young Children: Math, Science and Technology) at Tufts University, Medford, MA.
- Brennan, K. (2009, September). *Scratch as a pathway to math and programming*. Invited webinar for the Math 2.0 Interest Group.
- Brennan, K. (2009, June). *Broadening participation in the creative society*. Invited lecture at the Interdisciplinary Center (IDC), Herzliya, Israel.
- Brennan, K., & Monroy-Hernández, A. (2009, April). *Scratch!* Invited workshop for KEYs Middle School Mentorship Program, Cambridge, MA.
- Brennan, K., & Monroy-Hernández, A. (2009, March). *Getting started with Scratch*. Invited workshop at Microsoft DigiGirlz event, Cambridge, MA.
- Brennan, K. (2008, December). *Scratch*. Invited workshop at Massachusetts Computer Using Educators conference, Sturbridge, MA.
- Brennan, K. (2008, September). *Programming and beyond: Enabling creative learning through Scratch.*Invited workshop at Winchester School District Professional Development Day, Winchester, MA.
- Brennan, K. (2008, September). *Programming and beyond: Enabling creative learning through Scratch*. Invited lecture in CD173 (Curriculum for Young Children: Math, Science and Technology), Tufts University, Medford, MA.
- Brennan, K. (2008, September). *Scratch*. Invited keynote at Women in Games conference, Coventry, England.
- Brennan, K., & Monroy-Hernández, A. (2008, August). *Culture jamming: Deconstructing and reconstructing media messages*. Invited workshop at Computer Clubhouse annual conference, Boston, MA.
- Brennan, K., & Monroy-Hernández, A. (2008, June). *Scratch*. Invited panelist at Digital Natives forum on creativity and media literacy, hosted by the Berkman Center for Internet & Society, Harvard University, Cambridge, MA.
- Brennan, K. (2008, June). *Programming and beyond: Enabling creative learning through Scratch*. Invited lecture at MIT Network of Educators in Science & Technology meeting, Cambridge, MA.

- Brennan, K. (2008, April). *Sowing the seeds for a more creative society*. Invited lecture at Open World Learning event, Denver, CO.
- Brennan, K., & Stern, T. (2007, December). *Getting started with Scratch*. Invited lecture at Kean University, Union, NJ.
- Dean, V., & Brennan, K. (2005, February). *Professional teaching portfolios*. Invited lecture at North Vancouver School District event, North Vancouver, Canada.
- Jean, L., Dean, V., Cardwell, S., & Brennan, K. (2004, December). *Going beyond school boundaries: Building sustainable learning communities*. Invited panelist at National Staff Development Council event, Vancouver, Canada.

Grants and Gifts

FUNDED

NSF DRK-12 Award DRL-1908110 (PI, \$440,786, 2019-2022)

Funding to support the Getting Unstuck project, which involves designing and evaluating teacher resources to support conceptual and creative fluency with programming.

- Google CS-ER Grant No. 93661905 (PI, \$112,000, 2018–2019)
 Funding to support an investigation of assessment strategies in K–12 computer science classrooms.
- HGSE Faculty Experimentation Fund (PI, \$16,200, 2018–2019)

 Funding to support a study to investigate the implementation of personalized learning in T550:

 Designing for Learning by Creating.
- NSF STEM+C Award DRL-1639545 (Co-PI, \$2,442,889, 2016–2021)
 Funding to support the integration of computational thinking in ecosystem science education via modeling in immersive virtual worlds.
- Siegel Family Endowment Gift (PI, \$857,000, 2016–2023)

 Funding to support educational research and outreach with K–12 educators in the field of computing education.
- Scratch Foundation Gift (PI, \$1,405,000, 2013–2022)
 Funding to support educational research and outreach with K–12 educators working with the Scratch programming language.
- Google CS4HS Gift (PI, \$50,000, 2013–2014)
 Funding to develop and study a constructionist MOOC for computer science educators.
- NSF Sub-Award to DRL-1019396 (PI, \$555,261, 2013–2014)
 Funding to support the ScratchEd project, which explores constructionist approaches to developing computational thinking in K–12 classrooms.
- NSF DRK–12 Award DRL-1019396 (Project Director and Co-PI, \$2,198,587, 2010–2014) Funding to support the ScratchEd project, which explores constructionist approaches to developing computational thinking in K–12 classrooms.
- Google CS4HS Grant (Project Director and Co-PI, \$47,500, 2010–2012) Funding to support a series of annual in-person computer science workshops for K–12 educators.

Awards and Fellowships

Morningstar Family Teaching Award, 2017, Harvard Graduate School of Education Faculty Convocation Speaker, 2015, Harvard Graduate School of Education International Society for Design and Development in Education Fellow, 2015—present DML Research Summer Institute Fellow, 2011 University Graduate Fellowship, 2007, The University of British Columbia Dean of Education Fellowship, 2005–2006, The University of British Columbia NSERC Research Fellowship, 2003, The University of British Columbia

Teaching

Harvard Graduate School of Education (2013-present)

T550: Designing for Learning by Creating (Instructor; 2013–present, annually; 1,226 students)
T553: Learning, Teaching, and Technology (Instructor; 2013–2018, annually; 236 students)
T217: Designing K–12 CS Learning Experiences (Instructor; 2020, 2022–present, annually; 51 students)
CS196: Designing K–12 CS Learning Experiences (*co-listed with T217*) (Instructor, 2023; 16 students)
Creative Computing, Programs in Professional Education (PPE) (Chair; August 2016; 30 participants)

MIT Media Lab (2008-2011)

MAS.714: Technologies for Creative Learning (Co-Facilitator) MAS.790: Qualitative Approaches to Research (Instructor)

The University of British Columbia, Department of Curriculum Studies (2005-2007)

Technology Studies Education: Curriculum and Instruction (Co-Facilitator) Technology Studies Education: Introduction to Open Source (Instructor)

Massachusetts Institute of Technology, CSAIL (2004)

Women's Technology Program: Computer Science (Instructor)

The University of British Columbia, Department of Computer Science (2001–2003)

CS219: Software Development Laboratory (Lab Instructor)

Service

Harvard Graduate School of Education

Faculty Co-Chair, Learning Design, Innovation, and Technology (LDIT) (July 2023–present) Committee on Rights and Responsibilities Member (July 2022–present)

Master's Redesign Learning Design Workgroup Member (September 2019–May 2021)

Vitale Learning Sciences Faculty Search Committee Member (September 2019–March 2020)

Teacher Preparation Search Committee Member (September 2017–February 2018)

Student Mental Health Committee Member (October 2016–May 2018)

Community Values Committee Member (September 2016–May 2018)

Teaching and Learning Lab Advisory Committee, Committee Member (September 2015–May 2018)

Learning, Technology, and Design Search Committee Member (September 2015–March 2016)

Radcliffe Public/Private Partnerships Exploratory Seminar, Co-Chair (April 2015–October 2015)

HGSE HUBweek Event, Project Lead (March 2015–October 2015)

Curriculum Planning Committee, Committee Member (September 2014–May 2018)

Online Learning Models Technology Working Group, Co-Chair (November 2013–May 2014) Learning Spaces Technology Working Group, Committee Member (May 2013–May 2014) Technology Advisory Group, Committee Member (March 2013–May 2014) Committee on Curriculum and Instruction, Committee Member (August 2012–May 2014)

Harvard University

Harvard PK-12 Task Force, Committee Member (September 2019–February 2020)
Harvard VPAL Research Committee, Committee Member (September 2015–May 2018)
Harvard TLT Executive Committee, Committee Member (March 2015–June 2016)
HILT Cultivation Grant Faculty Selection Committee, Committee Member (Dec 2013–May 2014)

MIT Media Lab

Annual Media Lab Preview Event, Chair (Mar 2010–Apr 2011)
Media Lab Faculty Search Committee, Committee Member (Nov 2009–Apr 2010)
Research@ML Conference, Planning Committee Member (Dec 2008–Apr 2011)
Media Lab Diversity Committee, Committee Member (Nov 2008–Jan 2012)
C@ML (Community at Media Lab), Committee Member (Sep 2008–Feb 2010)
Media Lab Student Committee, Co-Chair (Jan 2008–Jan 2012)
Scratch@MIT Biennial Conference, Co-Chair (Dec 2007–Jul 2012)

Reviewing

Editorial boards: Computers & Education, Associate Editor (April 2019–present); ACM Transactions on Computing Education, Associate Editor (August 2022–present)

Journals: ACM Transactions on Computing Education; Communications of the ACM; Computer Science Education; Digital Experiences in Mathematics Education; Journal of the Learning Sciences; Teachers College Record

Conferences: ACM SIGCHI; ACM SIGCSE; AERA Division C; Constructionism; International Society of the Learning Sciences; Learning@Scale

Other: National Science Foundation Ad Hoc and Panel; AERA Handbook of Research on Teaching (Chapter Reviewer); MIT Press (Book Reviewer)

Other

International Conference of the Learning Sciences, Program Co-Chair (September 2022–June 2023)
Harvard Education Press, Editorial Advisory Board (September 2021–present)
National Academies Authentic STEM Committee, Member (May 2019–December 2020)
City of Cambridge STEAM Council, Advisor (December 2017–December 2019)
New York City's CS4All Advisory Council, Advisor (October 2017–August 2018)
K–12 Computer Science Education Framework, Advisor (March 2016–September 2016)
CSNYC Education Advisory Committee, Founding Member (October 2015–October 2017)
NuVu Studio, Advisory Board Member (May 2015–present)
U.S. Department of Education Future of STEM Education, Workshop Participant (March 2015)