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Selected Publications

Walker, J.T., Barany, A., Barrera, A., Slater, S., Badreddin, O., Reza, S., Johnson, M. (in preparation). How Twitter Users Leverage Platform Specific Features to Advance Information about COVID19.

Walker, J.T. (revise and resubmit). A Case Study of Middle Schoolers' Use of Context to Explain and Justify their Attitudes about Synthetic Biology.

Rahimi, S., **Walker, J.T.**, Shin, J., Lin, L. (in press). Toward Defining and Assessing Creativity in Sandbox Games. Creativity Research Journal.

Walker, J.T., Stamato, L., Asgarali-Hoffman, N., Hamidi, F., Scheifele, L. (in press). Community Labs: BioMakerspaces for Life Science Learning and Doing. Public Understanding of Science.

Walker, J. T. (2021). Middle School Student Knowledge and Attitudes Toward Biotechnology. Journal of Science Education and Technology. https://doi.org/10.1007/s10956-021-09919-y.

Walker, J. T. & Kafai, Y. B. (2021). The Biodesign Studio: Constructions and Reflections of High School Students on Making with Living Media. British Journal of Educational Technology. https://doi.org/10.1111/bjet.13081.

Fields, D.A., Kafai, Y.B., Morales-Navarro, L., **Walker, J. T.** (2021). Debugging by Design: A Constructionist Approach to High School Students' Crafting and Coding of Electronic Textiles as Failure Artifacts. British Journal of Educational Technology. https://doi.org/10.1111/bjet.13079.

Fields, D., Lui, D., Kafai, Y., Jayathirtha, G., **Walker, J.T.**, & Shaw, M. (2021). Communicating about computational thinking: understanding affordances of portfolios for assessing high school students' computational thinking and participation practices. Computer Science Education, 1-35. https://doi.org/10.1080/08993408.2020.1866933.

Kafai, Y. B., & Walker, J. T. (2020). Bringing 21st-century science into schools. *Phi Delta Kappan*, 102(1), 38-41. https://doi.org/10.1177/0031721720956848.

Lui, D., Kafai, Y.B., Litts, B., **Walker, J.T.**, Widman, S. (2019). Pair Physical Computing: High School Students' Practices and Perceptions of Collaborative Coding and Crafting with Electronic Textiles. *Computer Science Education*. https://doi.org/10.1080/08993408.2019.1682378.

Lui, D., **Walker, J.T.**, Hanna, S., Kafai, Y.B., Fields, D., & Jayathirtha, G. (2019). Communicating computational concepts and practices within high school students' portfolios of making electronic textiles. *Interactive Learning Environments*, 1-18. https://doi.org/10.1080/10494820.2019.1612446.

Litts, B.K., Widman, S.A., Lui, D. A., **Walker, J.T.**, & Kafai, Y.B. (2019). A Maker Studio Model for High School Classrooms: The Nature and Role of Critique in an Electronic Textiles Design Project. *Teachers College Record*, *121*(9).

Litts, B.K., Kafai, Y.B., Lui, D., **Walker, J.T.**, & Widman, S.A. (2017). Stitching Codeable Circuits: High School Students' Learning about Circuitry and Coding with Electronic Textiles. *Journal of Science Education and Technology*, 26(5), 494-507. https://doi.org/10.1007/s10956-017-9694-0.

Conference Proceedings: Peer Reviewed

Walker, J.T., Barrera, A., Reza, S., Barany, A., Badreddin, O. & Johnson, M. (under review). Coding Like a Data Miner: Stakeholder Reflections about Approaches to High School Data Science Computing Curriculum CoDesign.

Barany, A., Reza, S., Johnson, M., Barrera, A., Badreddin, O., Fuentes, C., **Walker, J.T.** (under review). Towards the Design of a Culturally Relevant Curriculum for Equitable, Data Mining-based CS Education

Walker, J.T., Barerra, A., Sepulveda, R. & Perez-Piza, M. (2022, June). Critical Biomaking: Socioscientific Issues as Contexts for Life Science Maker Education. 2022 International Conference of the Learning Sciences Annual Meeting. Hiroshima, Japan.

Rahimi, S. Walker, J.T. & Lin L. (2022, June). In Pursuit of Creativity in Minecraft: A Mixed-Method Approach. 2022 International Conference of the Learning Sciences Annual Meeting. Hiroshima, Japan.

Kafai, Y.B. and **Walker, J.T.** (2020, October). Tools for Biomakers: Reviewing Affordances and Constraints for K-12 Hands-On Making with Biology. FabLearn 2020. https://doi.org/10.1145/3386201.3386204.

Kafai, Y.B. and **Walker, J.T.** (2020, May). Twenty Things to Make with Biology. In *Tangney, B., Byrne, J., & Girvan, C. (Eds.). Proceedings of the 2020 Constructionism Conference*, 551-559. Dublin, Ireland. http://www.constructionismconf.org/.

Walker, J.T., Slater, S., & Kafai, Y. (2019, June). A Scaled Analysis of How Minecraft Gamers Leverage YouTube Comment Boxes to Participate and Collaborate. In Lund, K., Niccolai, G. P., Lavoué, E., Gweon, C. H., & Baker, M. (Eds.), A Wide Lens: Combining Embodied, Enactive, Extended, and Embedded Learning in Collaborative Settings, 13th International Conference on Computer Supported Collaborative Learning (CSCL), 1, 440-447. Lyon, France: International Society of the Learning Sciences. https://repository.isls.org//handle/1/1601.

Kafai, Y.B., Fields, D.A., Lui, D.A., **Walker, J.T.**, Shaw, M. S., Jayathirtha, G., & Giang, M.T. (2019, February). Stitching the Loop with Electronic Textiles: Promoting Equity in High School Students' Competencies and Perceptions of Computer Science. In *Proceedings of the 50th ACM Technical Symposium on Computer Science Education*, 1176-1182. ACM. https://doi.org/10.1145/3287324.3287426.

Book Chapters

Fields, D. A., Kafai, Y. B., Aguilera, E., Slater, S. & **Walker, J.** (2021). Perspectives on Scales, Contexts and Directionality of Collaborations in and around Virtual Worlds and Video Games. In U. Cress, C. Rose, A. F. Wise, & J. Oshima (Eds.) *Handbook of Computer Supported Collaborative Learning*, 371-388. https://doi.org/10.1007/978-3-030-65291-3_20.

Kafai, Y. B. & Walker, J. (2021). Twenty Things to Make with Biology. In G.S. Stager (Ed.) *Twenty Things to Do with a Computer Forward 50: Future Visions of Education Inspired by Seymour Papert and Cynthia Solomon's Seminal Work*. ISBN-13: 978-1955604000.