

Laura K. Allen

Assistant Professor

Department of Educational Psychology, University of Minnesota
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EDUCATION

- 2017 **Doctor of Philosophy, Psychology (Cognitive Science)**
Arizona State University
- 2014 **Master of Arts, Psychology**
Arizona State University, *summa cum laude*
- 2010 **Bachelor of Arts, English**
Mississippi State University, *summa cum laude*
- 2010 **Bachelor of Arts, Foreign Languages (French)**
Mississippi State University, *summa cum laude*
- 2010 **TESOL Certificate**
Mississippi State University

PROFESSIONAL EXPERIENCE

- 2022-present **Assistant Professor**
University of Minnesota, Department of Educational Psychology
- 2019-2022 **Assistant Professor**
University of New Hampshire, Department of Psychology
- 2017-2019 **Assistant Professor**
Mississippi State University, Department of Psychology
- 2011-2017 **Graduate Research Assistant**
Arizona State University, Science of Learning and Educational Technology Lab

LEADERSHIP EXPERIENCE

- 2021-present **President-Elect**
Society for Computation in Psychology
- 2021-present **Governing Board**
Society for Text and Discourse
- 2020-present **Chair**, Diversity, Equity, and Inclusion Committee
Society for Computation in Psychology
- 2017-present **Steering Committee**
Society for Computation in Psychology

GRANTS AND FELLOWSHIPS

Current and Previous Support

- 2022-2024 **Automatic Labelling of Educational Materials Using Natural Language Processing (PI)**
Schmidt Futures, \$550,000

2019-2022	Using Computational Linguistics to Detect Comprehension Processes in Constructed Responses across Multiple Large Data Sets <i>Agency:</i> Institute of Education Sciences (IES) <i>Role:</i> Co-PI <i>Total Award:</i> \$599,973.00
2019-2024	Social Media Comprehension and Mass Communication: Curriculum Development to Combat Misinformation <i>Agency:</i> Office of Naval Research (ONR) <i>Role:</i> PI <i>Total Award:</i> \$627,650.00
2018-2022	Developing a Deeper Understanding of the Cognitive Processes that Drive Multiple Text Comprehension <i>Agency:</i> Institute of Education Sciences (IES) <i>Role:</i> Co-PI <i>Total Award:</i> \$1,399,469.00
2018-2022	The Development of the Writing Assessment Tool (WAT): An On-Line Platform for the Automated Assessment of Writing Educational Technology <i>Agency:</i> Institute of Education Sciences (IES) <i>Role:</i> Co-PI <i>Total Award:</i> \$1,399,984.00
2016-2017	Data Consortium Fellowship <i>Agency:</i> National Science Foundation <i>Total Award:</i> \$2,000
2016	Graduate Excellence Fellowship for First Generation College Students <i>Agency:</i> Arizona State University <i>Total Award:</i> \$5,000

AWARDS AND HONORS

2022	Tom Trabasso Young Investigator Award, Society for Text & Discourse
2019	Federation of Associations in Behavioral and Brain Sciences Early Career Impact Award
2017	ASU Doctoral Scholar Award
2017	Finalist for Best Paper Award at the 2017 LAK Conference
2015	Society for Text and Discourse Outstanding Student Paper Award
2015	Psychology Graduate Scholar Award
2014	John Castellan Award for Best Student Paper at the Society for Computers in Psychology (SCIP) Conference
2013	Honorable Mention – Finalist for Best Paper Award at the 26 th Annual FLAIRS Conference
2013	Honorable Mention – Finalist for Best Paper Award at the 26 th Annual FLAIRS Conference
2013	Latin American (LA) School for Education, Cognitive and Neural Sciences

PUBLICATIONS

Journal Articles

Kuvar, V., Blanchard, N., Colby, A., **Allen**, L. K., Mills, C. (in press) Automatically detecting task unrelated thoughts during conversations using keystroke analysis.
McNamara, D. S., Fang, Y., Butterfuss, R., Arner, T., Watanabe, M., McCarthy, K. S., **Allen**, L. K., &

- Roscoe, R. D. (under review). iSTART: Adaptive comprehension strategy training and stealth literacy assessment.
- Colby, A., **Allen**, L. K., Gliser, I., Kun, A. Mills, C. (revision requested). Be like me: Group identity and task-unrelated thought during conversations. *Cognitive Science*.
- Öncel, P., Creer, S. & **Allen**, L. K. (in press). Seeing through the character's eyes: Examining phenomenological experiences of perspective-taking during reading.
- Smith, S., Ward, R., **Allen**, L., Wormwood, J., Mills, C. (revision requested). Mind your words: Affective experience during reading mediates the effect of textual valence on reading comprehension.
- Sonia, A. N., Magliano, J. P., McCarthy, K. S., Creer, S. D., McNamara, D. S., **Allen**, L. K. (2022). Integration in multiple document comprehension: A natural language processing approach.
- Crossley, S. A., **Allen**, L. K., & McNamara, D. S. (revision resubmitted). Crowdsourced approaches to assessing writing quality: Reliability and validity. *Journal of Writing Assessment*.
- McCarthy, K., **Allen**, L. K., Sonia, A. N., McNamara, D. S., & Magliano, J. P. (in press). On the basis of source: Impacts of individual differences on source-based writing in a multiple-documents inquiry task.
- Butterfuss, R., Roscoe, R. D., **Allen**, L. K., McCarthy, K. S., & McNamara, D. S. (in press). Strategy uptake in W-Pal: Adaptive feedback and instruction. *Journal of Educational Computing Research*.
- Crossley, S. A., **Allen**, L. K., & McNamara, D. S. (in press). Source inclusion in synthesis writing: An NLP approach to understanding argumentation, sourcing, and essay quality. *Reading and Writing*.
- Flynn, L., McCarthy, K., McNamara, D. S., Magliano, J., & **Allen**, L. K. (in press). The appearance of coherence: Using cohesive properties of readers' constructed responses to predict individual differences. *Revista Signos*.
- McCarthy, K., Likens, A. L., **Allen**, L. K., & McNamara, D. S. (in press). Automated writing evaluation: Does spelling and grammar feedback support high-quality writing and revision? *Assessing Writing*.
- Allen**, L. K., Creer, S., & Poulos, M. (2021). Toward the use of computational linguistics as a model of discourse processing. *Language and Linguistics Compass*.
- Allen**, L. K., Likens, A. D., & McNamara, D. S. (2019). Writing flexibility in argumentative essays: A multidimensional analysis. *Reading and Writing*.
- McNamara, D. S., Roscoe, R. D., **Allen**, L. K., Balyan, R., & McCarthy, K. (2019). Literacy: From the perspective of text and discourse theory. *Journal of Language and Education*, 5, 56-69.
- Roscoe, R. D., **Allen**, L. K., & McNamara, D. S. (2019). Contrasting writing practice formats in a writing strategy tutoring system. *Journal of Educational Computing Research*. DOI: 10.1177/0735633118763429..
- Crossley, S., **Allen**, L. K., & McNamara, D. (2018). What's prompt got to do with it? The relationships between writing prompts, language production, and essay quality. *Assessing Writing*.
- McCarthy, K., Guerrero, T. A., Kent, K. M., **Allen**, L. K., McNamara, D. S., Chao, S., Steinberg, J., O'Reilly, T., & Sabatini, J. (2018). Comprehension in a scenario-based assessment: General and topic-specific background knowledge. *Discourse Processes*, 55, 510-524.
- Dascalu, M., McNamara, D. S., Trausan-Matu, S., & **Allen**, L. K. (2017). Cohesion network analysis of CSCL participation. *Behavioral Research Methods*, 1-16.
- Weston-Sementelli, J. L., **Allen**, L. K., & McNamara, D. S. (2016). Comprehension and writing strategy training improves performance on source-based writing in science. *International Journal of Artificial Intelligence in Education*, 18, 1-32.
- Crossley, S. A., **Allen**, L. K., Snow, E. L., & McNamara, D. S. (2016). Incorporating learning characteristics into automatic essay scoring models: What individual differences and linguistic features tell us about writing quality. *Journal of Educational Data Mining*, 8, 1-19.
- Allen**, L. K., Snow, E. L., & McNamara, D. S. (2016). The narrative waltz: The role of flexibility on writing performance. *Journal of Educational Psychology*, 108, 911-924.
- Snow, E. L., Likens, A. D., **Allen**, L. K., & McNamara, D. S. (2015). Taking control: Stealth assessment of deterministic behaviors within a game-based system. *International Journal of Artificial Intelligence in Education*, 26, 1011-1032.
- Snow, E., Jackson, G., **Allen**, L. K., & McNamara, D. S. (2015). Spendency: A students' propensity to interact with game-based features. *International Journal of Artificial Intelligence in*

Education, 25, 407-427.

- Snow, E. L., **Allen**, L. K., Jacovina, M. E., Crossley, S. D., Perret, C. A., & McNamara, D. S. (2015). Keys to detecting writing flexibility over time: Entropy and natural language processing. *International Journal of Learning Analytics*, 2, 40-54.
- Snow, E., **Allen**, L. K., Jacovina, M., & McNamara, D. (2015). Does agency matter?: Exploring the impact of controlled behaviors within a game-based environment. *Computers & Education*, 26, 378-392.
- Roscoe, R. D., Snow, E. L., **Allen**, L. K., & McNamara, D. S. (2015). Automated detection of essay revising patterns: Application for intelligent feedback in a writing tutor. *Technology, Instruction, Cognition, and Learning*, 10, 59-79.
- McNamara, D. S., Jacovina, M. E., Snow, E. L., & **Allen**, L. K., (2015). From generating in the lab to tutoring systems in the classroom. Invited Submission to Special Issue of *The American Journal of Psychology*, 128, 159-172.
- McNamara, D. S., Crossley, S. A., Roscoe, R. D., **Allen**, L. K., & Dai, J. (2015). A hierarchical classification approach to automated essay scoring. *Assessing Writing*, 23, 35-59.
- Roscoe, R., **Allen**, L. K., Weston, J., Crossley, S. A., & McNamara, D. S. (2014). The Writing Pal intelligent tutoring system: Usability testing and development. *Computers and Composition*, 34, 39-59.
- Crossley, S. A., Kyle, K., **Allen**, L. K., Guo, L., & McNamara, D. S. (2014). Linguistic microfeatures to predict L2 writing proficiency: A case study in automated writing evaluation. *Journal of Writing Assessment*, 7. Retrieved from <http://www.journalofwritingassessment.org/article.php?article=74>.
- Crossley, S. A., **Allen**, L. K., Kyle, K., & McNamara, D. S. (2014). Analyzing discourse processing using a simple natural language processing tool (SiNLP). *Discourse Processes*, 51, 511-534.
- Allen**, L. K., Snow, E. L., & Crossley, S. A., Jackson, G. T., & McNamara, D. S. (2014). Reading comprehension components and their relation to the writing process. *L'année psychologique/Topics in Cognitive Psychology*, 114, 663-391.
- Allen**, L. K., Crossley, S. A., Snow, E. L., & McNamara, D. S. (2014). Game-based writing strategy tutoring for second language learners: Game enjoyment as a key to engagement. *Language Learning and Technology*, 18, 124-150.
- Roscoe, R. D., **Varner (Allen)**, L. K., Crossley, S. A., & McNamara, D. S. (2013). Developing pedagogically-guided threshold algorithms for intelligent automated essay feedback. *International Journal of Learning Technology*, 8, 362-381.
- Jackson, G. T., **Varner (Allen)**, L. K., Boonthum-Denecke, C., & McNamara, D. S. (2013). The impact of individual differences on learning with an educational game and a traditional ITS. *International Journal of Learning Technology*, 8, 315-336.
- Varner (Allen)**, L. K., Roscoe, R. D., & McNamara, D. S. (2013). Evaluative misalignment of 10th-grade student and teacher criteria for essay quality: An automated textual analysis. *Journal of Writing Research*, 5, 35-59.

Book Chapters

- Fang, Y., **Allen**, L. K., Roscoe, R. D., & McNamara, D. S. (under review). Stealth literacy assessment: Leveraging games and NLP in iSTART. National Council on Measurement in Education
- Allen**, L. K., Graesser, A. C., & McNamara, D. S. (in press). Automated analysis of essays and open-ended verbal responses. In *APA Handbook of Research Methods in Psychology, Vol 2*. Washington, DC: American Psychological Association.
- Sonia, A. N., Crossley, S. A., & **Allen**, L. K. (in press). Writing-reading connections in the digital world. *Writing and Reading Connections: Bridging Research and Practice*. Guilford Press.
- Allen**, L. K., Creer, S., & Öncel, P. (2022). The role of natural language processing in learning analytics. In G. Siemens & C. Lang (Eds.), *Handbook of learning analytics and educational data mining* (Vol II). Society for Learning Analytics Research.
- Allen**, L. K., & McNamara, D. S. (2020). Defining deep reading comprehension for diverse readers. In P. Afflerbach, E. Birr Moje, P. Enciso & N. K. Lesaux (Eds.), *Handbook of Reading Research, Volume V* (pp. 261-276). New York: Routledge.
- Allen**, L. K., Likens, A. D., & McNamara, D. S. (2019). Modeling the dissemination of misinformation

- through discourse dynamics. *Misinformation, 'quackery', and 'fake news' in education*.
- McNamara, D. S., **Allen**, L. K., McCarthy, K. S., & Balyan, R. (2019) NLP: Getting computers to understand discourse. *Deep learning: Multi-disciplinary approaches*.
- McNamara, D. S., & **Allen**, L. K. (2019). Defining deep reading comprehension for diverse readers. To appear in *Handbook of reading research (Vol. V)* (pp. 261-276). New York: Routledge.
- McNamara, D. S., & **Allen**, L. K. (2019). Writing. In L. Zhang, M. T. & McCrudden (Eds.). *Oxford Research Encyclopedia of Educational Psychology*. New York, NY: Oxford University Press.
- Stone, M., Kent, K., Roscoe, R., Corley, K., **Allen**, L. K., & McNamara, D. (2018). The Design Implementation Framework: Iterative design from the lab to the classroom. In R. Roscoe, S. Craig, & I. Douglas (Eds.), *End-user considerations in educational technology design* (pp.76-98). Hershey, PA: IGI Global.
- McCarthy, K., Kopp, K. J., **Allen**, L. K., & McNamara, D. S. (2018). Methods of studying text: Memory, comprehension, and learning. In H. Otani & B. L. Schwartz (Eds.), *Handbook of research methods in human memory*. New York, NY: Routledge.
- McNamara, D. S., **Allen**, L. K., Crossley, S. A., Dascalu, M., & Perret, C. (2017). Natural language processing and learning analytics. In G. Siemens & C. Lang (Eds.), *Handbook of learning analytics and educational data mining* (pp. 93-104). Society for Learning Analytics Research.
- McNamara, D. S., & **Allen**, L. K. (2017). Toward an integrated perspective of writing as a discourse process. *Handbook of discourse processes (2nd ed.)*. New York, NY: Routledge.
- Allen**, L. K., & McNamara, D. S. (2017). Five building blocks for comprehension strategy instruction. In José A. León & Inmaculada Escudero (Eds.), *Reading comprehension in educational settings* (pp. 125-144). John Benjamins Publishing Company.
- Jackson, G. T., **Allen**, L. K., & McNamara, D. S. (2016). Common Core TERA: Text Ease and Readability Assessor. In D. S. McNamara & S. A. Crossley (Eds.), *Handbook on educational technologies for literacy* (pp. 49-68). Taylor & Francis, Routledge: NY.
- Crossley, S. A., **Allen**, L. K., & McNamara, D. S. (2016). The Writing Pal: A writing strategy tutor. In D. S. McNamara & S. A. Crossley (Eds.), *Handbook on educational technologies for literacy* (pp. 204-224). Taylor & Francis, Routledge: NY.
- Allen**, L. K., & Perret, C. (2016). Commercialized writing systems. In D. S. McNamara & S. A. Crossley (Eds.), *Handbook on educational technologies for literacy* (pp. 145-162). Taylor & Francis, Routledge: NY.
- Allen**, L. K., & McNamara, D. S. (2016). The role of language development in the successful comprehension of texts. In C. Connor (Ed.), *The cognitive development of reading* (pp. 87-98). Taylor & Francis, Routledge: NY.
- Allen**, L. K., Jacovina, M. E., & McNamara, D. S. (2016). Computer-based writing instruction. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research (2nd ed.)* (pp. 316-329). New York, NY: The Guilford Press.
- Snow, E. L., **Allen**, L. K., & McNamara, D. S. (2015). The dynamical analysis of log-data within educational games. In Loh and Sheng (Eds.), *Serious games analytics: Methodologies for performance measurement, assessment, and improvement* (pp. 81-100). Springer International.
- McNamara, D. S., Jacovina, M. E., & **Allen**, L. K. (2015). Higher order thinking in comprehension. In P. Afflerbach (Ed.), *Handbook of individual differences in reading: Text and context* (pp. 164-176). Taylor & Francis, Routledge: NY.
- Crossley, S. A., **Allen**, L. K., & McNamara, D. S. (2014). A multi-dimensional analysis of essay writing: What linguistic features tell us about situational parameters and the effects of language functions on judgments of quality. In T. B. Sardinha and M. V. Pinto (Eds.), *Multi-dimensional analysis, 25 years on: A tribute to Douglas Biber* (pp. 197-237). Philadelphia, PA: John Benjamins.

Published Conference Proceedings (Strictly Peer Reviewed)

- Allen**, L. K., Magliano, J. P., McCarthy, K. S., Sonia, A. N., Creer, S. D., & McNamara, D. S. (2021). Coherence-building in multiple document comprehension. In T. Fitch, C. Lamm, H. Leder, & K. Tessmar (Eds.), *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. Vienna, Austria: Cognitive Science Society.
- Botarleanu, R.-M., Dascalu, M., **Allen**, L. K., Crossley, S. A. & McNamara, D. S. (2021). Automated Summary Scoring with ReaderBench. In the 17th International Conference on Intelligent Tutoring Systems (ITS 2021). Athens, Greece: Springer.

- Butterfuss, R., Arner, T., McNamara, D. S., & **Allen**, L. K. (2021). Social media spillover: Attitude-inconsistent Tweets reduce memory for subsequent information. In T. Fitch, C. Lamm, H. Leder, & K. Tessmar (Eds.), *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. Vienna, Austria: Cognitive Science Society.
- McCarthy, K. S., Magliano, J. P., Snyder, J. O., Kenney, E. A., Newton, N. N., Perret, C. A., Knezevic, M., **Allen**, L. K., & McNamara, D. S. (2021). Quantified qualitative analysis: Rubric development and inter-rater reliability as iterative design. In E. de Vries, J. Ahn, & Y. Hod (Eds.), *15th International Conference of the Learning Sciences - ICLS 2021*. Bochum, Germany (Online): International Society of the Learning Sciences.
- Wan, Q., Crossley, S.A., Banawan, M., Balyan, R., **Allen**, L., & McNamara, D. S. (2021). Automated Claim Identification Using NLP Features in Student Argumentative Essays. *Proceedings of the 14th International Conference on Educational Data Mining (EDM)*.
- Öncel, P., Flynn, L. E., Sonia, A. N., Barker, K., Lindsay G. C., McClure, C. M., McNamara, D. S., & **Allen**, L. K. (2021). Automatic student writing evaluation: Investigating the impact of individual differences on source-based writing. In M. Scheffel, N. Dowell, S. Joksimovic, & G. Siemens (Eds.), *Proceedings of the 11th International Learning Analytics & Knowledge Conference*, (pp. 620-625). NY, USA: Association for Computing Machinery.
<https://doi.org/10.1145/3448139.3448207>
- McCarthy, K. S., **Allen**, L. K., & Hinze, S. R. (2020). Predicting Reading Comprehension from Constructed Responses: Explanatory Retrievals as Stealth Assessment. In *Proceedings of the International Conference on Artificial Intelligence in Education (AIED)*. Ifrane, Morocco: Springer.
- Wan, Q., Crossley, S. A., **Allen**, L. K., & McNamara, D. S. (2020). Claim detection and relationship with writing quality. In V. Cavalli-Sforza, C. Romero, A. Rafferty, & J. R. Whitehill (Eds.), *Proceedings of the 13th International Conference on Educational Data Mining (EDM)*. Virtual Conference: International Educational Data Mining Society.
- Allen**, L. K., Mills, C., Perret, C., & McNamara, D. S. (2019). Are you talking to me? Multi-dimensional language analysis of explanations during reading. *Proceedings of the International Learning Analytics and Knowledge Conference*.
- Allen**, L. K., Zachary, L. C., & McNamara, D. S. (2019). Learning with text: Toward a multidimensional perspective on text-based communication. In S. Hsiao, J. Cunningham, K. McCarthy, G. Lynch, N. Hoover, C. Brooks, R. Ferguson, & U. Hoppe (Eds.), *Companion Proceedings of the 9th International Conference on Learning Analytics and Knowledge (LAK'18)* (pp. 252). Phoenix, AZ, USA: SOLAR.
- Crossley, S. A., Kim, M., **Allen**, L. K., & McNamara, D. S. (2019). Automated Summarization Evaluation (ASE) Using Natural Language Processing Tools. In S. Isotani, E. Millán, A. Ogan, P. Hastings, B. McLaren, & R. Luckin (Eds.), *Proceedings of the 20th International Conference of Artificial Intelligence in Education (AIED) in Chicago, IL* (pp. 84-95). Cham, Switzerland: Springer.
- McNamara, D. S., **Allen**, L. K., & Crossley, S. A. (2019). WAT: Writing Assessment Tool. In S. Hsiao, J. Cunningham, K. McCarthy, G. Lynch, N. Hoover, C. Brooks, R. Ferguson, & U. Hoppe (Eds.), *Companion Proceedings of the 9th International Conference on Learning Analytics and Knowledge (LAK'18)* (pp. 250). Phoenix, AZ, USA: SOLAR.
- Likens, A. D., McCarthy, K. M., **Allen**, L. K., & McNamara, D. S. (2018). Recurrence Quantification Analysis as a method for studying text comprehension dynamics. In *Proceedings of the International Learning Analytics and Knowledge Conference*. Sydney, Australia.
- Allen**, L. K., Likens, A. D., & McNamara, D. S. (2018). A multi-dimensional analysis of writing flexibility in an automated writing evaluation system. *Proceedings of the Eighth International Learning Analytics and Knowledge Conference*. Sydney, Australia.
- Likens, A. D., **Allen**, L. K., & McNamara, D. S. (2017). Keystroke dynamics predict essay quality. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar (Eds.), *Proceedings of the 39th Annual Meeting of the Cognitive Science Society* (pp. 2573 - 2578). London, UK: Cognitive Science.
- Dascalu, M., Jacovina, M. E., Soto, C., **Allen**, L. K., Guerrero, T. & McNamara, D. S. (2017). Teaching iSTART to understand Spanish. In R. Baker & E. Andre (Eds.), *Proceedings of the 18th International Conference on Artificial Intelligence in Education* (pp. 485-489). Wuhan, China: Springer.

- Dascalu, M., **Allen**, L. K., McNamara, D. S., Trausan-Matu, S., & Crossley, S. A. (2017). Modeling comprehension processes via automated analyses of dialogism. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar (Eds.), *Proceedings of the 39th Annual Meeting of the Cognitive Science Society (CogSci 2017)*. London, UK: Cognitive Science Society.
- Allen**, L. K., Perret, C., Likens, A., & McNamara, D. S. (2017). What'd you say again? Recurrence quantification analysis as a method for analyzing the dynamics of discourse in a reading strategy tutor. In *Proceedings of the Seventh International Learning Analytics and Knowledge Conference* (pp. 373-382). Vancouver, BC: ACM. [Best Paper Nominee]
- Allen**, L. K., Likens, A., & McNamara, D. S. (2017). Recurrence Quantification Analysis: A technique for the dynamical analysis of student writing. In Z. Markov & V. Rus (Eds.), *Proceedings of the 30th Annual Florida Artificial Intelligence Research Society International Conference (FLAIRS)*. Marco Island, FL: AAAI Press.
- Roscoe, R. D., Jacovina, M. E., **Allen**, L. K., Johnson, A. C., & McNamara, D. S. (2016). Toward revision-sensitive feedback in automated writing evaluation. *T. Barnes, M. Chi, & M. Feng (Eds.), Proceedings of the 9th International Conference on Educational Data Mining* (pp.628-629).
- Knight, S. **Allen**, L. K., Littleton, K., Rienties, B., & Tempelaar, D. (2016). Writing analytics for epistemic features of student writing. Looi, C. K., Polman, J. L., Cress, U., and Reimann, P. (Eds.). (2016). *Transforming Learning, Empowering Learners: The International Conference of the Learning Sciences (ICLS) 2016*, (pp. 194-200). Singapore: International Society of the Learning Sciences.
- Gifu, D., Dascalu, M., Trausan-Matu, S., & **Allen**, L. K. (2016). Time evolution of writing styles in Romanian language. In *Proceedings of the International Conference on Tools with Artificial Intelligence* (pp. 1048-1054)
- Crossley, S., Dascalu, M., Trausan-Matu, S., **Allen**, L. K., & McNamara, D. (2016). Document cohesion flow: Striving towards coherence. In J. Trueswell, A. Papafragou, D. Grodner, & D. Mirman (Eds.), *Proceedings of the Annual Meeting of the Cognitive Science Society* (pp. 764-769).
- Buckingham Shum, S., Knight, S., McNamara, D. S., **Allen**, L. K., Bektik, D., & Crossley, S. A. (2016). Critical perspectives on writing analytics. In D. Gašević, G. Lynch, S. Dawson, H. Drachsler, & C. P. Rosé (Eds.), *Proceedings of the 6th International Learning Analytics & Knowledge Conference*, Edinburgh, United Kingdom (LAK'16), (pp. 481-483). New York, NY: ACM
- Allen**, L. K., Perret, C., & McNamara, D. S. (2016). Linguistic signatures of cognitive processes during writing. In J. Trueswell, A. Papafragou, D. Grodner, & D. Mirman (Eds.), *Proceedings of the 38th Annual Meeting of the Cognitive Science Society* (pp. 2483-2488). Philadelphia, PA.
- Allen, L. K., Mills, C., Jacovina, M. E., Crossley, S. A., D'Mello, S. K., & McNamara, D. S. (2016). Investigating boredom and engagement during writing using multiple sources of information: The essay, the writer, and keystrokes. In D. Gašević, G. Lynch, S. Dawson, H. Drachsler, & C. P. Rosé (Eds.), *Proceedings of the 6th International Learning Analytics & Knowledge Conference*, Edinburgh, United Kingdom (LAK'16), (pp. 114-123). New York, NY: ACM.
- Allen**, L. K., Jacovina, M. E., & McNamara, D. S. (2016). Cohesive features of deep text comprehension processes. In J. Trueswell, A. Papafragou, D. Grodner, & D. Mirman (Eds.), *Proceedings of the 38th Annual Meeting of the Cognitive Science Society* (pp. 2681-2686). Philadelphia, PA.
- Allen**, L. K., Jacovina, M. E., Dascalu, M., Roscoe, R. D., Kent, K., Likens, A. D., & McNamara, D. S. (2016). {ENTER}ing the time series {SPACE}: Uncovering the writing process through keystroke analyses. In *T. Barnes, M. Chi, & M. Feng (Eds.), Proceedings of the 9th International Conference on Educational Data Mining, Raleigh, NC (EDM 2016)* (pp.22-29).
- Allen**, L. K., Dascalu, M., McNamara, D. S., Crossley, S. A., & Trausan-Matu, S. (2016). Modeling individual differences among writers using ReaderBench. *EduLearn*.
- Soto, C. M., McNamara, D. S., Jacovina, M. E., Snow, E. L., Dai, J., **Allen**, L. K., Perret, C. A., Johnson, A. M., & Russell, D. G. (2015). iSTART-E: Desarrollando un tutor inteligente para la comprensión lectora de estudiantes de habla hispana. In M. Garcia (Ed.), *Proceedings of the 15th annual colloquium on peninsular and Spanish American literature, linguistics and culture*. Orlando, FL.
- Snow, E. L., McNamara, D. S., Jacovina, M. E., **Allen**, L. K., Johnson, A. M., Perret, C. A., Dai, J., Jackson, G. T., Likens, A. D., Russell, D. G., & Weston, J. L. (2015). Promoting metacognitive awareness within a game-based intelligent tutoring system. In A. Mitrovic, F. Verdejo, C. Conati, & N. Heffernan (Eds.), *Proceedings of the 17th International Conference on Artificial*

Intelligence in Education (AIED 2015). Madrid, Spain.

- Snow, E. L., **Allen**, L. K., Jacovina, M. E., Perret, C. A., & McNamara, D.S. (2015). You've got style! Detecting writing flexibility across time. In P. Blikstein, A. Merceron, & G. Siemens (Eds.), *Proceedings of the 5th International Learning Analytics & Knowledge Conference* (pp. 194-202). Poughkeepsie, NY.
- Jacovina, M.E., Snow, E. L., **Allen**, L. K., Roscoe, R. D., Weston, J. L., Dai, J., & McNamara, D. S. (2015). How to visualize success: Presenting complex data in a writing strategy tutor. In O. C. Santos, J. G. Boticario, C. Romero, M. Pechenizkiy, A. Merceron, P. Mitros, J. M. Luna, C. Mihaescu, P. Moreno, A. HersHKovitz, S. Ventura, & M. Desmarais (Eds.), *Proceedings of the 8th International Conference on Educational Data Mining (EDM 2015)*. Madrid, Spain.
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- Roscoe, R. D., Crossley, S. A., Snow, E. L., **Varner (Allen)**, L. K., & McNamara, D. S. (2014). Writing quality, knowledge, and comprehension correlates of human and automated essay scoring. In W. Eberle & C. Boonthum-Denecke (Eds.), *Proceedings of the 27th International Florida Artificial Intelligence Research Society (FLAIRS) Conference* (pp. 393-398). Palo Alto, CA: AAAI Press.
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- Allen**, L. K., Snow, E. L., & McNamara, D. S. (2014). Now we're talking: Leveraging the power of natural language processing to inform ITS development. In J. Stamper, Z. Pardos, M. Mavrikis, & B. M. McLaren (Eds.), *Proceedings of Educational Data Mining* (pp. 401-402). London, UK.
- Allen**, L., Snow, E., & McNamara, D. (2014). The long and winding road: Investigating the differential writing patterns of high and low skilled writers. In J. Stamper, Z. Pardos, M. Mavrikis, & B. McLaren (Eds.), *Proceedings of Educational Data Mining* (pp. 304-307). London, UK
- Varner (Allen)**, L. Jackson, G., Snow, E., & McNamara, D. S. (2013) Linguistic content analysis as a tool for improving adaptive instruction. In K. Yacef et al. (Eds.), *Proceedings of the 16th International Conference on Artificial Intelligence in Education* (pp. 692-695). Heidelberg, Berlin: Springer
- Varner (Allen)**, L. K., Jackson, G. T., Snow, E. L., & McNamara, D. S. (2013). Does size matter? Investigating user input at a larger bandwidth. In C. Boonthum-Denecke & G. M. Youngblood (Eds.), *Proceedings of the 26th International Florida Artificial Intelligence Research Society (FLAIRS) Conference* (pp. 546-549). Menlo Park, CA: AAAI Press. [Runner-up for Best Poster]
- Varner (Allen)**, L. K., Jackson, G. T., Snow, E. L., & McNamara, D. S. (2013). Are you committed? Investigating interactions among reading commitment, natural language input, and students' learning outcomes. In S. D'Mello, R. Calvo, & A. Olney (Eds.), *Proceedings of the 6th International Conference on Educational Data Mining* (pp. 368-369). Heidelberg, Berlin.
- Snow, E. L., Jackson, G. T., **Varner (Allen)**, L. K., & McNamara, D. S. (2013). The impact of system interactions on motivation and performance. In *Proceedings of the 15th International Conference on Human-Computer Interaction (HCII)* (pp. 103-107). Heidelberg, Berlin, Germany: Springer.
- Snow, E. L., Jackson, G. T., **Varner (Allen)**, L. K., & McNamara, D. S. (2013). The impact of performance orientation on students' interactions and achievements in an ITS. In C. Boonthum-Denecke & G. M. Youngblood (Eds.), *Proceedings of the 26th International Florida Artificial Intelligence Research Society (FLAIRS) Conference* (pp. 521-526). Menlo Park, CA: AAAI Press.
- Snow, E. L., Jackson, G. T., **Varner (Allen)**, L. K., & McNamara, D. S. (2013). Investigating the effects of off-task personalization on system performance and attitudes within a game-based environment. In S. K. D'Mello, R. A., Calvo, & A. Olney (Eds.), *Proceedings of the 6th International Conference on Educational Data Mining* (pp. 272-275). Heidelberg, Berlin, Germany: Springer.
- Snow, E. L., Jackson, G. T., **Varner (Allen)**, L. K., & McNamara, D. S. (2013). Expectations of technology: A factor to consider in game-based learning environments. In K. Yacef et al. (Eds.), *Proceedings of the 16th International Conference on Artificial Intelligence in Education (AIED)* (pp. 359-368). Heidelberg, Berlin: Springer.
- Jackson, G. T., Snow, E. L., **Varner (Allen)**, L. K., & McNamara, D. S. (2013). Game performance as a measure of comprehension and skill transfer. In C. Boonthum-Denecke & G. M. Youngblood (Eds.), *Proceedings of the 26th International Florida Artificial Intelligence Research Society (FLAIRS) Conference* (pp. 497-502). Menlo Park, CA: The AAAI Press.
- Crossley, S. A., **Varner (Allen)**, L. K., Roscoe, R. D., & McNamara, D. S. (2013). Using automated cohesion indices as a measure of writing growth in intelligent tutoring systems and automated essay writing systems. In K. Yacef et al. (Eds.), *Proceedings of the 16th International*

Conference on Artificial Intelligence in Education (AIED) (pp. 269-278). Heidelberg, Berlin: Springer.

- Crossley, S. A., **Varner (Allen)**, L. K., & McNamara, D. S. (2013). Cohesion-based prompt effects in argumentative writing. In C. Boonthum-Denecke & G. M. Youngblood (Eds.), *Proceedings of the 26th International Florida Artificial Intelligence Research Society (FLAIRS) Conference* (pp. 202-207). Menlo Park, CA: The AAAI Press. [Runner-up for Best Paper Award]
- Roscoe, R. D., **Varner (Allen)**, L. K., Cai, Z., Weston, J. L., Crossley, S. A., & McNamara, D. S. (2011). Internal usability testing of automated essay feedback in an intelligent writing tutor. In R. C. Murray & P. M. McCarthy (Eds.), *Proceedings of the 24th International Florida Artificial Intelligence Research Society (FLAIRS) Conference* (pp. 543-548). Menlo Park, CA: AAAI Press.

WORKSHOPS

- Knight, S., **Allen**, L. K., Gibson, A., McNamara, D. S., & Buckingham Shum, S., (2017, April). *Writing analytics literacy: Bridging from research to practice*. Workshop conducted at the 6th International Learning Analytics and Knowledge (LAK) Conference.
- Buckingham Shum, S., Knight, S., McNamara, D. S., **Allen**, L. K., Bektik, D., & Crossley, S. A. (2016, April). *Critical perspectives on writing analytics*. Workshop to conducted at the 6th International Learning Analytics and Knowledge (LAK) Conference.
- Crossley, S. A., **Allen**, L. K., & McNamara, D. S. (2015, June). *Using natural language processing tools in educational data mining*. Workshop conducted at the 8th International Conference on Educational Data Mining, Madrid, Spain.
- McNamara, D. S., Crossley, S. A., & **Varner (Allen)**, L. K. (2013, July). *Designing, building, and using automated writing evaluation systems: A tutorial*. Workshop conducted at the 23rd Annual Meeting of the Society for Text and Discourse, Valencia, Spain.

PRESENTATIONS

Invited Talks

- Allen**, L. K. (2021, October). What'd you say? How the properties of language are critical for the development of dynamic, adaptive systems [Invited presentation]. Colorado State University, Department of Computer Science.
- Allen**, L. K. (2020, June). The role of genre in the comprehension and production of complex discourse [Invited talk and tutorial presentation]. Yonsei University.
- Allen**, L. K. (2020, June). Automated analysis of cohesion in student writing [Invited presentation]. NIAS-Lorentz International Workshop on The Paradox of Genre, Virtual Conference, Leiden, Netherlands.
- Magnifico, A. M., Silva, B. A., **Allen**, L. K., & Barry, A. E. (2021, March). Interdisciplinary Research in the Age of Zoom. Invited talk presented for the UNH Collaborative Research Excellence Initiative.
- Allen**, L. K. (2019, November). Discourse as a multi-dimensional dynamic process. [Invited presentation]. Annual Meeting of the Society for Computers in Psychology (SCiP), Montreal, QC.
- Allen**, L. K. (2017, March). Learning with text: Toward a multi-dimensional perspective on text-based communication. [Invited presentation]. The Department of Psychology, University of Notre Dame.
- Allen**, L. K. (2016, September). Linguistic signatures of fine-grained learning processes [Invited presentation]. Department of Computer Science and Learning Science and Technologies Program, Worcester Polytechnic Institute.
- Allen**, L. K. (2015, March). Modeling cognition: Using natural language processing techniques to better understand the cognitive processes involved in learning [Invited presentation]. BCC Educational Discourse Workshop, University of Michigan.
- Allen**, L. K. (2014, January). Taking a closer look: Assessing fine-grained student processes through dynamic and natural language methodologies. Brownbag Series, Human and Environmental Systems Department, Arizona State University, January 22, 2014 [joint presentation with Erica Snow]
- Allen**, L. K. (2013, November). Taking a closer look: Assessing fine-grained student processes through

dynamic and natural language methodologies. Learning Analytics Seminar Series, Teachers College, Columbia University. [joint presentation with Erica Snow]

Symposia

Allen, L. K., Snow, E. L., & McNamara, D. S. (2014, August). *Cracking the creative code: Investigating the link between creativity and literacy skills*. Symposium conducted at the annual meeting of the Society for Text and Discourse. Chicago, Illinois.

Conference Presentations (only those not listed as Proceedings listed)

- Creer, S. D., Jarosz, A. F., & **Allen, L. K.** (2021, August). The interaction between working memory and prior knowledge in text comprehension. [Conference presentation]. Society of Text & Discourse's Annual Meeting, Cyberspace.
- Creer, S. D., Kelley, D. C., Cohn, E., S., & **Allen, L. K.** (2021, August). Inadmissible evidence: Integrating irrelevant information in a multiple source scenario. [Conference presentation]. Society of Text & Discourse's Annual Meeting, Cyberspace.
- Flynn, L. E., Magliano, J. P., McCarthy, K. S., McNamara, D. S., & **Allen, L. K.** (2021, August). Predicting cohesive comprehension based on individual differences and genre effects [Conference presentation]. Society of Text & Discourse's Annual Meeting, Cyberspace.
- Öncel, P., Creer, S. D., Mills, C. S., & **Allen, L. K.** (2021, August). Examining the effects of visual and verbal thoughts on reading outcomes [Poster session]. Society of Text & Discourse's Annual Meeting, Cyberspace.
- Smith, S., Öncel, P., Mills, C. S., & **Allen, L. K.** (2021, August 2). Predicting readers' online thought characteristics using natural language processing analyses on text. [Poster session]. Society of Text & Discourse's Annual Meeting, Cyberspace.
- Sonia, A. N., Magliano, J. P., McCarthy, K. S., Creer, S. D., McNamara, D. S., **Allen, L. K.** (2021, August). Cohesion and coherence-building in multiple document comprehension [Conference presentation]. Society of Text & Discourse's Annual Meeting, Cyberspace.
- Öncel, P., Creer, S. D., Barker, K. E., Mills, C. S., & **Allen, L. K.** (2020, November). Not all minds think alike: Individual differences in thought patterns during reading [Poster session]. 61st Annual Meeting of The Psychonomic Society, Virtual.
- Öncel, P., Creer, S. D., Mills, C. S., & **Allen, L. K.** (2020, November). Visualizing the narrative: Linguistic and learner level correlates of phenomenological experiences during reading [Conference presentation]. 50th Annual Conference of The Society for Computation in Psychology, Virtual.
- Banawan, M., Perret, C., Öncel, P., Creer, S., McNamara, D., **Allen, L. K.** (2020, November). Cohesion and action: NLP reveals principal components of COVID- 19 Tweets [Conference presentation]. 50th Annual Conference of The Society for Computation in Psychology, Virtual.
- Sonia, A. N., Creer, S. D., McCarthy, K. S., **Allen, L. K.** (2020, November). The role of reader knowledge on comprehension. Paper presented at the 61st Annual Meeting of The Psychonomic Society, Virtual.
- Allen, L. K., Watanabe, M., & McNamara, D. S.** (2020, July). *Exploring individual differences in adult discourse comprehension and production*. Paper presented at the Society of Text & Discourse's Annual Meeting, Cyberspace.
- Colby, A., Gliser, I., **Allen, L. K., & Mills, C.** (2020, July). Pay attention to me: Group identity and mind-wandering in text communication. Poster presented at the Society of Text & Discourse's Annual Meeting, Cyberspace.
- Crittenden, E. B., Meyer, G. J., O'Gorman, E. T., Eblin, J. J., **Allen, L. K., Dar, I., Keene, A., Assaly, O. R., & Mihura, J. L.** (2021). Does adding automated speech analysis to dimensionalized R-PAS cognitive codes improve our ability to assess disordered thinking? Society for Personality Assessment.
- Dygert, S. K. C., Creer, S. D., Jarosz, A. F., & **Allen, L. K.** (2020, July). The competing roles of knowledge and working memory in reading comprehension. Paper presented at the Society of Text & Discourse's Annual Meeting, Cyberspace.
- Öncel, P., Creer, S. D., LePoer, C. J., Santos, C. A., Mills, C., & **Allen, L. K.** (2020, July 21-23). Catcher in the mind: An examination of visual and verbal patterns during reading [Poster session]. Society of Text & Discourse's Annual Meeting, Atlanta, GA.

- Wan, Q., Crossley, S. A., **Allen**, L. K., & McNamara, D. S. (2020, July 21-23). Automated claim detection in argumentative essays and their relationship with writing quality. [Poster session]. Society of Text & Discourse's Annual Meeting, Atlanta, GA.
- Balyan, R., McCarthy, K. S., **Allen**, L. K., & McNamara, D. S., (2019, November). *Toward automated assessment of source-based essays*. Paper to be presented at the Annual Meeting of the Society for Computers in Psychology (SCiP), Montreal, QC.
- Creer, S. C., & **Allen**, L. K. (2019, November). *Let's Explain: The differential effects of self-explanation and think-aloud instructions on multiple document comprehension*. Poster to be presented at the the Society for Computers in Psychology's Annual Meeting. Montréal, Québec, Canada.
- Creer, S. C. & **Allen**, L. K. (2019, November). Using natural language processing tools to examine the features of student's responses to text. Abstract submitted to the Society for Computers in Psychology's Annual Meeting. Montréal, Québec, Canada.
- McCarthy, K. S., **Allen**, L. K., McNamara, D. S., & Magliano, J. P. (2019, November). *Effects of relevancy and importance judgments on a multiple-document writing task*. Poster to be presented at the Annual Meeting of the Psychonomic Society, Montreal, QC.
- Allen**, L. K., McCarthy, K., Perret, C., Magliano, J., & McNamara, D. S. (2019, July). *Argue me sophisticated; Describe me coherently: A computational linguistic analysis of prompt differences in source-based writing*. Paper presented at the Annual Meeting of the Society for Text and Discourse. New York City, NY.
- Higgs, K. P., Feller, D., Kopatich, R. D., & **Allen**, L. K. (2019, July). Using machine learning to analyze English learners' think-aloud protocols. Poster presented at the Annual Meeting of the Society for Text and Discourse. New York City, NY.
- Zachary, L., Poulos, M. C., **Allen**, L. K. (2019, July). *Linguistic signatures of cognitive processes during source-based writing*. Paper presented at the Annual Meeting of the Society for Text and Discourse. New York City, NY.
- Allen**, L. K. & McNamara, D. S. (2018, November). *A multi-dimensional analysis of students' writing flexibility*. Poster presented at the Annual Meeting of the Psychonomic Society. New Orleans, LA.
- Likens, A. D., McCarthy, K. M., **Allen**, L. K., & McNamara, D. S. (2017, November). *Let's walk about that: Random walk analyses contextualize performance in an intelligent tutoring system*. Paper presented at the Annual Meeting of the Society for Computers in Psychology. Vancouver, BC.
- Allen**, L. K., Likens, A. D., Perret, C. A., & McNamara, D. S. (2017, November). *Recurrent properties of text comprehension processes*. Poster presented at the Annual Meeting of the Psychonomic Society. Vancouver, BC.
- Allen**, L. K., Likens, A. D., & McNamara, D. S. (2017, November). *An examination of students' adaptive writing behaviors*. Paper presented at the Annual Meeting of the Society for Computers in Psychology. Vancouver, BC.
- Ocuppaugh, J., Almeda, M. A., Slater, S., Baker, R., & **Allen**, L. K. (2017, July). *Lexical sophistication, learning, and engagement in math problems*. Paper presented at the Annual Meeting of the Society for Text and Discourse. Philadelphia, PA.
- McCarthy, K. S., Guerrero, T. A., Kent, K. M., **Allen**, L. K., McNamara, D. S., Chao, S., Steinberg, J., O'Reilly, T., & Sabatini, J. (2017, July). *Learning from texts in a scenario-based assessment: General and topic-specific background knowledge*. Paper presented at the Annual Meeting of the Society for Text and Discourse. Philadelphia, PA.
- Allen**, L. K., Perret, C., Likens, A. D., & McNamara, D. S. (2017, July). *Recurrence Quantification Analysis as a method for analyzing comprehension dynamics*. Paper presented at the Annual Meeting of the Society for Text and Discourse. Philadelphia, PA.
- Allen**, L. K., Perret, C., Guerrero, T., & McNamara, D. S. (2017, July). *You talkin' to me? The role of audience in the generation of explanations*. Poster presented at the Annual Meeting of the Society for Text and Discourse. Philadelphia, PA.
- Magliano, J. P., **Allen**, L. K., Feller, D., Millis, K. K., McNamara, D. S. (2016, November). *Rethinking RSAT: Exploring the relationships between reading strategies and cohesion in think-aloud protocols*. Paper presented at the 46th Annual Meeting of the Society for Computers in Psychology, Boston MA.
- Allen**, L. K., Jacovina, M. E., Dascalu, M., Roscoe, R. D., Kent, K., Likens, A. D., & McNamara, D. S. (2016, November). *Capturing the writing process: Keystroke logging in a writing tutor*. Paper

- presented at the Annual Meeting of the Society for Computers in Psychology, Boston, MA.
- Dascalu, M., **Allen**, L. K., & McNamara, D. S. (2016, July). *Modeling comprehension processes via automated analyses of dialogism*. Paper presented at the Annual Meeting of the Society for Text and Discourse. Kassel, Germany.
- Allen**, L. K., Perret, C., & McNamara, D. S. (2016, July). *Linguistic signatures of cognitive processes during writing*. Paper presented at the Annual Meeting of the Society for Text and Discourse. Kassel, Germany.
- Allen**, L. K., Jacovina, M. E., & McNamara, D. S. (2016, July). *The cohesive properties of text comprehension processes*. Poster presented at the Annual Meeting of the Society for Text and Discourse. Kassel, Germany.
- Allen**, L. K., Jacovina, M. E., Dascalu, M., Roscoe, R. D., Kent, K., Likens, A. D., & McNamara, D. S. (2016, July). *Capturing the writing process: Keystroke logging in a writing tutor*. Poster presented at the Annual Meeting of the Society for Text and Discourse. Kassel, Germany.
- Roscoe, R. D., **Allen**, L. K., & Patchan, M. (2016, April). *Evaluative misalignment of students' writing assessment criteria: Hypothesized consequences and causes*. Poster presented at the Annual Meeting of the American Education Research Association.
- Allen**, L. K., Roscoe, R., Crossley, S., Snow, E., Jacovina, M. E., & McNamara, D. S. (2016, April). *The role of computer-based writing instruction on the accuracy of students' performance monitoring*. Poster presented at the Annual Meeting of the American Education Research Association.
- Allen**, L. K., Jacovina, M. E., & McNamara, D. S. (2016, April). *Higher order thinking in comprehension*. Poster presented at the Annual Meeting of the American Education Research Association.
- Jacovina, M. E., **Allen**, L. K., Snow, E. L., & McNamara, D. S. (2015, July). *Capturing the writing process: Keystroke logging in a writing tutor*. Paper presented at the annual meeting of the Society for Text and Discourse. Minneapolis, Minnesota.
- Allen**, L. K., McNamara, D. S., & McCrudden, M. T. (2015, July). *Change your mind: Investigating the effects of self-explanation in the resolution of misconceptions*. Paper presented at the annual meeting of the Society for Text and Discourse. Minneapolis, MN.
- Allen**, L. K., Crossley, S., Snow, E., Jacovina, M., Perret, C., & McNamara, D. S. (2015, July). *Am I wrong or am I right? Gains in monitoring accuracy in an intelligent tutoring system for writing*. Poster presented at the annual meeting of the Society for Text and Discourse. Minneapolis, MN.
- Crossley, S. A., **Allen**, L. K., & McNamara, D. S. (2015, April). *A diachronic analysis of first grade reading texts: Shifts and patterns detected using automatic analyses*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- Snow, E. L., **Allen**, L. K., Jacovina, M. E., & McNamara, D. S. (2014, November). *Does control matter?: Agency within a game-based intelligent tutoring system*. Poster presented at the annual meeting of the Psychonomic Society, Long Beach, California.
- Snow, E. L., **Allen**, L. K., Jacovina, M. E., & McNamara, D. S. (2014, November). *Does agency matter?: Path analysis within a game-based system*. Paper presented at the 44th annual meeting of the Society for Computers in Psychology, Long Beach, California.
- Russell, D. G., Snow, E. L., **Allen**, L. K., & McNamara, D. S. (2014, November). *Monitoring behavior in a game-based tutoring system*. Paper presented at the 44th annual meeting of the Society for Computers in Psychology, Long Beach, California.
- Jacovina, M. E., Snow, E. L., **Allen**, L. K., Roscoe, R. D., & McNamara, D. S. (2014, November). *Educational lesson formats: The appeal of animated videos versus illustrated texts*. Poster presented at the annual meeting of the Psychonomic Society, Long Beach, California.
- Jacovina, M. E., Snow, E. L., **Allen**, L. K., Roscoe, R. D., & McNamara, D. S. (2014, November). *Classroom implementation of Writing Pal: Linking system interactions and individual differences*. Paper presented at the 44th annual meeting of the Society for Computers in Psychology, Long Beach, California.
- Allen**, L. K., Snow, E. L., & McNamara, D. S. (2014, November). *Let's take a walk: An investigation into the role of flexibility in the relation between cohesion and essay quality*. Poster presented at the annual meeting of the Psychonomic Society, Long Beach, California.
- Allen**, L. K., Roscoe, R. D., Snow, E. L., & McNamara, D. S. (2014, November). *Gains in metacognitive*

- awareness and writing proficiency in an intelligent tutoring system for writing*. Paper presented at the Annual meeting of the Society for Computers in Psychology, Long Beach, CA.
- Snow, E. L., McNamara, D. S., **Allen**, L. K., & Jacovina, M. E., (2014, September) *Towards formative feedback and stealth assessment in computer-based learning environments*. Paper presented at the annual Dresden Summer School for Cognitive Science.
- Snow, E. L., **Allen**, L. K., & McNamara, D. S. (2014, August). *The dynamic use of narrative in writing: Assessing writing flexibility using entropy*. Paper presented at the annual meeting of the Society for Text and Discourse. Chicago, Illinois.
- Snow, E. L., **Allen**, L. K., & McNamara, D. S. (2014, August). *Who's in control?: Self-regulated behaviors and self-explanation quality*. Paper presented at the annual meeting of the Society for Text and Discourse. Chicago, Illinois.
- Allen**, L. K., Snow, E. L., & McNamara, D. S. (2014, August). *Let's take a walk: An investigation into the role of flexibility in the relation between cohesion and essay quality*. Paper presented at the annual meeting of the Society for Text and Discourse. Chicago, Illinois.
- Allen**, L. K., Snow, E. L., & McNamara, D. S. (2014, August). *In other words: Investigating the role of lower and higher-level cognitive skills in the properties of written essays*. Paper presented at the annual meeting of the Society for Text and Discourse. Chicago, Illinois.
- McNamara, D. S., **Allen**, L. K., & Snow, E. L., (2014, August). *You've got style: Examining the links between writing flexibility and creativity*. Paper presented in the symposium, "Cracking the creative code: Investigating the link between creativity and literacy skills" at the annual meeting of the Society for Text and Discourse. Chicago, Illinois.
- Varner (Allen)**, L. K., Snow, E. L., Crossley, S., & McNamara, D. S. (2013, November). *Whad'ya say? Examining linguistic correlates of student's abilities*. Paper presented at the 43rd Annual Meeting of the Society for Computers in Psychology, Toronto, Canada.
- Varner (Allen)**, L. K., Crossley, S., Snow, E. L., & McNamara, D. S. (2013, November). *You are your words: Linguistic correlates of cognitive task performance*. Poster presented at the Annual Meeting of the Psychonomic Society, Toronto, Canada.
- Snow, E. L., **Varner (Allen)**, L. K., Jackson, G. T., & McNamara, D. S. (2013, November). *We're watching you: Using random walks and probability trajectories to profile system users*. Paper presented at the 43rd Annual Meeting of the Society for Computers in Psychology, Toronto.
- Snow, E. L., Jackson, G. T., **Varner (Allen)**, L. K., & McNamara, D. S. (2013, November). *Learning isn't random: Assessing how students' expectations moderate behaviors that affect learning*. Poster presented at the Annual Meeting of the Psychonomic Society, Toronto, Canada.
- Varner (Allen)**, L. K., Roscoe, R. D., & McNamara, D. S. (2013, July). *Evaluative misalignment of student and teacher criteria for essay quality: An automated textual analysis*. Paper presented at the 23rd Annual Meeting of the Society for Text and Discourse, Valencia, Spain.
- Varner (Allen)**, L. K., Roscoe, R. D., Crossley, S. A., & McNamara, D. S. (2013, July). *Developing pedagogically-guided threshold algorithms for intelligent automated essay feedback*. Poster presented at the 23rd Annual Meeting of the Society for Text and Discourse, Valencia, Spain.
- Varner (Allen)**, L. K., Jackson, G. T., & Snow, E. L., McNamara, D. S. (2013, July). *Reading components and their relation to the writing process*. Paper presented at the 23rd Annual Meeting of the Society for Text and Discourse, Valencia, Spain.
- Crossley, S. A., **Varner (Allen)**, L. K., & McNamara, D. S. (2013, July). *How important is the prompt? A study of prompt-based cohesion effects in essay writing*. Paper presented at the 23rd Annual Meeting of the Society for Text and Discourse, Valencia, Spain.
- Varner (Allen)**, L. K., Roscoe, R. D., & McNamara, D. S. (2011, November). *Linguistic alignment of student and teacher holistic ratings of essay quality*. Paper presented at the 41st Annual Meeting of the Society for Computers in Psychology, Seattle, WA.
- Roscoe, R. D., **Varner (Allen)**, L. K., Weston, J. L., & McNamara, D. S. (2011, November). *Mixed-method usability testing and development of the writing pal intelligent tutor*. Paper presented at the 41st Annual Meeting of the Society for Computers in Psychology, Seattle, WA.

TEACHING

Psychology of Language
University of New Hampshire

Fall 2019: 5.0/5.0
Spring 2020: n/a due to COVID-19

Fall 2020: 4.86/5.0
 Spring 2021: *qualitative only (available on request)*
 Fall 2021: *in progress*

Advanced Seminar in Cognition
 University of New Hampshire

Fall 2020: 5.0/5.0

Applied Cognitive Psychology
 Mississippi State University
Rating: 4.9/5.0

Spring 2019

Language and Thought
 Mississippi State University

Spring 2019: 4.9/5.0
 Spring 2018: 4.8/5.0

Graduate Psychological Research Methods
 Mississippi State University

Fall 2018: 4.7/5.0
 Fall 2017: 4.6/5.0

MENTORED GRADUATE STUDENTS AND POSTDOCS

2020-present **Allison Sonia**, PhD student in Psychology
 Primary Advisor
 2020-present **Lauren Flynn**, PhD student in Psychology
 Primary Advisor
 2019-present **Püren Öncel**, PhD student in Psychology
 Primary Advisor
 2019-present **Sarah Creer**, Postdoctoral Fellow
 Primary Mentor

PROFESSIONAL SERVICE

2021-present **Liaison**
 Societies Consortium on Sexual Harassment in the Sciences
 2020-present **Member**, Diversity, Equity, and Inclusion Committee
 Society for Learning Analytics Research
 2021 **Program Committee**
 The International Conference on Artificial Intelligence in Education
 2018 **Workshop and Tutorials Chair**
 The International Meeting of the Learning Analytics and Knowledge Conference
 2016-present **Program Committee**
 The International Meeting of the Learning Analytics and Knowledge Conference
 2016-present **Program Committee**
 International Meeting of the Society for Text and Discourse
 2016 **Award Selection Committee Member**
 AERA Division C, Early Career Award
 2015-2016 **Program Committee**
 Workshop on the Innovative Use of NLP for Building Educational Applications
 (BEA10), Denver, CO

EDITORIAL SERVICE

2021-present **Editorial Board**
 Discourse Processes
 2019-present **Editorial Board**
 Psychonomic Bulletin & Review
 2019-present **Editorial Board**
 Technology, Mind, & Behavior

UNIVERSITY SERVICE

2021-present	Chair of Psychology Department IRB Committee
2021-present	Chair of Advisory and Space Committee for UNH Psychology Department
2021-present	Diversity, Equity, and Inclusion Committee for UNH Psychology Department
2021-present	AAUP Union Representative for UNH Psychology Department
2019-2021	Social Media Chair for UNH Psychology Department

PROFESSIONAL SOCIETIES

American Educational Research Association, American Psychological Association, Cognitive Science Society, Psychonomic Society, Society for Learning Analytics Research, International Society of the Learning Sciences, Society for Computers in Psychology, International Artificial Intelligence in Education Society, International Educational Data Mining Society, Society for Text and Discourse

REVIEWING

Contemporary Educational Psychology, International Journal of Artificial Intelligence in Education, Journal of Writing Research, Reading in a Foreign Language, Handbook of Learning Analytics and Educational Data Mining, Big Data and Society, Workshop on the Innovative Use of NLP for Building Educational Applications, Cognitive Science Society Meeting (Cog Sci), Journal of Educational Psychology, Language Learning and Technology, International Journal of Computer Supported Collaborative Learning, Journal of Educational Data Mining, Transactions on Learning Technologies, Technology, Knowledge and Learning, Reading and Writing, Discourse Processes, International Conference of the Learning Sciences, Journal of International Migration and Integration, American Educational Research Association, Artificial Intelligence in Education Conference, Reading and Writing, Learning and Instruction, AERA Open, Journal of Experimental Psychology