Dr. Roy B. Clariana

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Education

1986-1990	Ed.D., Curriculum and Instruction with an emphasis in Instructional Design and Technology, Memphis State University, TN
1977-1979	M.S., Biology Education, University of Central Arkansas, Conway, AR
1973-1975	B.S., Biology, University of Central Arkansas, Conway, AR
1971-1973	A.A.S., Science, Phillips Community College, West Helena, AR

Professional Experiences

2010-*present*	*Professor, Learning Design and Technology*
2016-*2020*	*Department Head (Chair),* Department of Learning and Performance Systems, Pennsylvania State University
2015-*2016*	*Director of Graduate and Undergraduate Studies,* Department of Learning and Performance Systems, Pennsylvania State University
2007-2010	*Education Division Head,* Pennsylvania State University, School of Graduate Professional Studies
2004-2005	*Sabbatical, Fulbright award at the University of Oulu, Finland, Educational Technology Research Unit*
2003-2010	*Associate Professor, Instructional Systems*
1997-2003	*Assistant Professor, Instructional Systems*
1992-1997	*National C&I Specialist, Project Director*, and *Field Director* (UK 1995-1996), Jostens Learning Corporation, San Diego, CA
1991-1992	*Education Consultant*, WICAT Systems, Inc., Orem, UT (*Jostens acquired WICAT in 1992*)
1990-1991	*Training Analysis Manager* and *Manager of Quality Systems*, Rocky Flats Nuclear Weapons Facility, EG&G Inc., Golden, CO
1985-1990	*Teaching Assistant and Graduate Research Assistant*, Memphis State University
1985-1990	*Technology Coordinator* (K-8), St. Anne's Elementary School, Memphis, TN

1988	*Executive Program Assistant*, Katmandu, Nepal, U.S. Peace Corps
1984-1985	*Training Director*, U.S. Peace Corps, Lilongwe, Malawi
1982-1984	*Technical Coordinator, Assistant Training Director*, U.S. Peace Corps, Kenya
1979-1982	*Peace Corp Volunteer*, Biology teacher, Iten, Kenya [link]
1977-1979	*Lead Graduate Assistant*, Chemistry Department, Microbiology lab assistant, University of Central Arkansas, Conway, AR
1976-1977	*Math Teacher*, Marvell High School, Marvell, AR

Doctoral Adviser/Chair (chronological)

Chang, Hwei Kit (PhD, 2021) – *The effect of embedded interactive adjunct questions in instructional videos*

Wang, Yu (PhD, 2021) – *Comparative Investigation of full and focused network feedback on students' knowledge structure and learning*

Yan, Yu (PhD, 2019, co-chair) – *The effect of gamification on English language learners' participation in and satisfaction with a curriculum-based measurement system*

Garbrick, Amy Hughes (PhD, 2018) – *Factors influencing student engagement in an online asynchronous discussion forum measured by quantity, quality, survey, and social network analysis*

Kim, Kyung (PhD, 2018) – *Visualizing reading comprehension: Understanding the influence of text structures on readers' knowledge structures*

Salman, Fariha Hayat (PhD, 2018) – *Embodied engagement: Examining learner interactions within Ubilearn experiences for design-focused STEM education*

Dan Fanella (PhD, 2015) – *The effects of changing the number of terms used to create proximity files on the predictive ability of scoring essay-derived network graphs via the ala-reader approach.*

Rysavy, Monica (PhD, 2015) – *Achievement goal orientation and its implications for workplace goal setting programs, supervisory/subordinate relationships, and training.*

Wilson, Douglas Anthony (PhD, 2015, co-chair) – *A portrait of academically at-risk male undergraduate students at The Pennsylvania State University*

Lu Bai (*MS, 2014) – *Parallel-pattern versus linear-pattern discussion online collaborations.*

Patricia Nordstrom (DEd, 2013) – *An evaluation of reported changes in teachers' practices in the Classroom for the Future initiative based on levels of technology implemented.*

General Ntshalintshali (PhD, 2013) – *Instructional effects of refutation text on different types of knowledge.*

Dana Webber (PhD, 2013) – *Using technology to develop a collaborative-reflective teaching practice toward synthecultural competence: An ethnographic case study in world language teacher preparation.*

John C. Rubisch (PhD, 2004) – *Enhancing social perspective taking in delinquent adolescents through cognitive flexibility in a hypermedia program.*

Gustavo Prestera (PhD, 2003) – *Context effects of color on recall: border color as a lesson and posttest cue for factual and conceptual information presented in computer-based instruction.*

Extramural Funding (active)

Endowment title: "PSU Learning Agility Graduate Fellowship", PI: Roy Clariana, Sponsor: Life Sciences Trainers & Educators Network LTEN, Period of Performance: 7/01/2020-6/30/2023, Total Budget: $150,000, Candidate's Role: Principal Investigator, Donor/Entity ID: 2019099606

Extramural Funding (completed)

Project Title: "NCS-FO: Reading in the Brain: Toward Integrative Approaches in First and Second Language Comprehension", PI: Ping Li, Sponsor: National Science Foundation, Period of Performance: 8/1/2015-7/31/2020, Total Budget: $1,094,878, Candidate's Role: Co-Pi (years 1-4), Principal Investigator (year 5), Award #: BCS-1533625

Project Title: "Academic Research Services Order for Life Sciences Trainers & Educators Network (LTEN)", PI: Roy Clariana, Sponsor: Life Sciences Trainers & Educators Network, Period of Performance: 1/15/2018-12/31/2019, Total Budget: $71,077, Candidate's Role: Principal Investigator, Award #: 206005

Project Title: "NASA STEM Educator Professional Development (EPD) Collaborative", PI: Roy Clariana, Sponsor: Texas State University, Period of Performance: 9/1/2014-12/31/2018, Total Budget: $412,431, Candidate's Role: Principal Investigator (years 3-4), Award #: 15004-82232-4

Peer-Reviewed Journal Articles

Clariana, R. B., & Park, E. (2021). Item-level monitoring, response style stability, and the hard-easy effect. *Educational Technology Research and Development, 69*(2), 693-712. https://www.researchsquare.com/article/rs-256756/v1.pdf

Follmer, D. J., Li, P., & Clariana, R. B. (2021). Predicting expository text processing: causal content density as a critical expository text metric. *Reading Psychology*, Online First. https://www.tandfonline.com/doi/full/10.1080/02702711.2021.1912867

Follmer, D. J., & Clariana, R. B. (2020). Predictors of adults' metacognitive monitoring ability: The roles of task and item characteristics. *Journal of Experimental Education*, Online First. https://doi.org/10.1080/00220973.2020.1783193

Ntshalintshali, G. N., & Clariana, R. B. (2020). Paraphrasing refutation text improved higher knowledge forms and hindered lower knowledge forms: examples from repairing relational database design misconceptions. *Educational Technology Research and Development*, online first https://doi.org/10.1007/s11423-020-09758-5.

Hsu, C-T., Clariana, R. B., Schloss, B., & Li, P. (2019). Neurocognitive signatures of naturalistic reading of scientific texts: A fixation-related fMRI study. *Scientific Reports, 9*, 10678. https://www.nature.com/articles/s41598-019-47176-7Li, P., & Clariana, R. B. (2019). Reading comprehension in L1 and L2: An integrative approach. *Journal of Neurolinguistics, 50*, 94-105. http://blclab.org/wp-content/uploads/2018/04/Li_Clariana_2018.pdf

Kim, K., Clariana, R. B., & Kim, Y. (2019). Automatic representation of knowledge structure: Enhancing learning through knowledge structure reflection in an online course. *Educational Technology Research and Development, 67*, 105-122. http://link.springer.com/article/10.1007/s11423-018-9626-6

Kim, K., & Clariana, R. B. (2019). Applications of Pathfinder Network scaling for identifying the optimal use of a first language to support second language text comprehension. *Educational Technology Research and Development, 67*, 85-103. https://link.springer.com/article/10.1007/s11423-018-9607-9

Follmer, D. J., Fang, S-Y., Clariana, R. B., Meyer, B. J. F., & Li, P. (2018). What predicts adult readers' understanding of STEM texts? *Reading and Writing, 31*, 185-214. https://link.springer.com/article/10.1007%2Fs11145-017-9781-x

Kim, K., & Clariana, R. (2018). Text signals influence second language expository text comprehension: Knowledge structure analysis. *Educational Technology Research and Development, 65*, 909-930. Online First, http://link.springer.com/article/10.1007/s11423-016-9494-x

Zimmerman, W. A., Kang, H. B., Kim, K., Gao, M., Johnson, G., Clariana, R. B., & Zhang, F. (2018). Computer-automated approach for scoring short essays in an introductory statistics course. *Journal of Statistics Education, 25*, 40-47. https://www.tandfonline.com/doi/abs/10.1080/10691898.2018.1443047

Tang, H., & Clariana, R. (2017). Leveraging a sorting task as a measure of knowledge structure in bilingual settings. *Technology, Knowledge and Learning, 22*, 23-35. Online First. http://link.springer.com/article/10.1007/s10758-016-9290-z.

Kim, K., & Clariana, R.B. (2015). Knowledge structure measures of reader's situation models across languages: Translation engenders richer structure. *Technology, Knowledge and Learning, 20*, 249-268.

Fesel, S.S., Segers, E., Clariana, R.B., & Verhoeven, L. (2015). Quality of children's knowledge representations in digital text comprehension: Evidence from Pathfinder networks. *Computers in Human Behavior, 47*, 135-146.

Clariana, R.B., Rysavy, M. D., & Taricani, E. M. (2015). Text signals influence team artifacts. *Educational Technology Research and Development, 63*, 35-52.

Engerman, J. A., Rusek, M. C., & Clariana, R. (2014). Excel spreadsheets for algebra: improving mental modeling for problem solving. *Journal of Computers in Mathematics and Science Teaching, 33*(4), 409-427.

Clariana, R.B., Wolfe, M. B., & Kim, K. (2014). The influence of narrative and expository lesson text structures on knowledge structures: alternate measures of knowledge structure. *Educational Technology Research and Development, 62* (4), 601-616.

Engelmann, T., Kozlov, M.D., Kolodziej, R., & Clariana, R.B. (2014). Fostering group norm development and orientation while creating awareness contents for improving net-based collaborative problem solving. *Computers in Human Behavior, 37,* 298-306.

Clariana, R.B., Engelmann, T., & Yu, W. (2013). Using centrality of concept maps as a measure of problem space states in computer-supported collaborative problem solving. *Educational Technology Research and Development, 61* (3), 423-442.

Barb, A.S., Clariana, R.B., & Chi-Ren, S. (2013). Applications of PathFinder Network Scaling for improving the ranking of satellite images. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 6* (3), 1092-1099.

Merriman, K.A., Clariana, R.B., & Bernardi, R.J. (2012). Goal orientation and feedback congruence: effects on discretionary effort and achievement. *Journal of Applied Social Psychology, 42* (11), 2776-2796.

Laru, J., Järvelä, S., & Clariana, R. B. (2012). Supporting collaborative inquiry during a biology field trip with mobile peer-to-peer tools for learning: a case study with K-12 learners. *Interactive Learning Environments, 20* (2), 103-117.

DeFranco, J.F., Neill, C.J., & Clariana, R.B. (2011). A cognitive collaborative model to improve performance in engineering teams – A study of team outcomes and mental model sharing. *Systems Engineering, 14* (3), 267-278.

Clariana, R.B., & Taricani, E. M. (2010). The consequences of increasing the number of terms used to score open-ended concept maps. *International Journal of Instructional Media*, *37* (2), 163-173.

Koul, R., Clariana, R.B., Jitgarun,K., & Songsriwittaya, A. (2009). The influence of achievement goal orientation and gender on plagiarism. *Learning and Individual Differences*, *19* (4), 506-512.

Koul, R., Clariana, R.B., Kongsuwan, S., & Suji-Vorakul, C. (2009). Students' goal orientations and perceptions of professional competencies. *Journal of Vocational Education and Training, 61* (3), 307-318.

Clariana, R.B., Wallace, P.E., & Godshalk, V.M. (2009). Deriving and measuring group knowledge structure from essays: The effects of anaphoric reference. *Educational Technology Research and Development*, *57*, 725-737.

Clariana, R.B., & Prestera, G.E. (2009). The effects of lesson screen background color on declarative and structural knowledge. *Journal of Educational Computing Research, 40* (3), 281-293.

Clariana, R.B. (2009). Ubiquitous wireless laptops in upper elementary mathematics. *Journal of Computers in Mathematics and Science Teaching, 28* (1), 5-21.

Clariana, R.B., & Wallace, P. E. (2009). A comparison of pair-wise, list-wise, and clustering approaches for eliciting structural knowledge in information systems courses. *International Journal of Instructional Media*, *36* (3), 287-302.

Clariana, R.B., & Koul, R. (2008). The effects of learner prior knowledge when creating concept maps from a text passage. *International Journal of Instructional Media, 35* (2), 229-236.

Clariana, R.B., & Wallace, P. E. (2007). A computer-based approach for deriving and measuring individual and team knowledge structure from essay questions. *Journal of Educational Computing Research, 37* (3), 209-225.

Clariana, R.B., & Marker, A. (2007). Generating topic headings during reading of screen-based text facilitates learning of structural knowledge and impairs learning of lower-level knowledge. *Journal of Educational Computing Research, 37* (2), 173-191.

Clariana, R.B. & Koul, R. (2006). The effects of different forms of feedback on fuzzy and verbatim memory of science principles. *British Journal of Educational Psychology, 76* (2), 259-270.

Clariana, R.B., Koul, R., & Salehi, R. (2006). The criterion-related validity of a computer-based approach for scoring concept maps. *International Journal of Instructional Media*, *33* (3), 317-325.

Poindexter, M. T., & Clariana, R.B. (2006). The influence of relational and proposition-specific processing on structural knowledge and traditional learning outcomes. *International Journal of Instructional Media*, *33* (2), 177-184.

Taricani, E. M. & Clariana, R.B. (2006). A technique for automatically scoring open-ended concept maps. *Educational Technology Research and Development, 54*, 61-78.

Koul, R., Clariana, R.B., & Salehi, R. (2005). Comparing several human and computer-based methods for scoring concept maps and essays. *Journal of Educational Computing Research, 32* (3), 261-273.

Clariana, R.B. & Koul, R. (2005). Multiple-try feedback and higher-order learning outcomes. *International Journal of Instructional Media*, *32* (3), 239-245.

Prestera, G.E., Clariana, R.B., & Peck, A.C. (2005). Memory-context effects of color in computer-based instruction: Does color-coding make screen text more memorable? *Journal of Educational Multimedia and Hypermedia, 14* (4), 415-436.

Wallace, P. E., & Clariana, R.B. (2005). Perception versus reality—determining business students' computer literacy skills and need for instruction in information concepts and technology. *Journal of Information Technology Education, 4*, 141-152.

Wallace, P. E., & Clariana, R.B. (2005). Test mode familiarity and performance - gender and race comparisons of test scores among computer-literate students in advanced information systems courses. *Journal of Information Systems Education, 16* (2), 177-182.

Wallace, P. E., & Clariana, R.B. (2005). Gender differences in computer-administered versus paper-based tests. *International Journal of Instructional Media*, *32* (2), 175-183.

Clariana, R.B. (2004). An interaction of screen color and lesson task in CAL. *British Journal of Educational Technology*, *35* (1), 35-43.

Clariana, R.B. (2004). The instructional effects of matching or mismatching lesson and posttest screen color. *International Journal of Instructional Media*, *31* (4), 393-400.

Clariana, R.B. (2003). The effectiveness of constructed-response and multiple-choice study tasks in computer aided learning. *Journal of Educational Computing Research*, *28* (4), 397-408.

Clariana, R.B., & Wallace, P. E. (2002). Paper-based versus computer-based assessment: Key factors associated with the test mode effect. *British Journal of Educational Technology*, *33* (5), 595-604.

Clariana, R.B., & Lee, D. (2001). Recognition and recall study tasks with feedback. *Educational Technology Research and Development*, *49* (3), 23-35.

Wallace, P. E., & Clariana, R.B. (2000). Achievement predictors for a computer-applications module delivered online. *Journal of Information Systems Education*, *11*, (1/2), 13-18.

Clariana, R.B. (2000). Colloquia: Change in instruction-related web sites in an 18-month period. *British Journal of Educational Technology*, *31* (3), 251-253.

Clariana, R.B., Wagner, D., & Murphy, L. R. (2000). Applying a connectionist description of feedback timing. *Educational Technology Research and Development*, *48*, 5-11.

Marcinkiewicz, H. R., & Clariana, R, B. (1997). The performance effects of headings within multiple-choice tests. *British Journal of Educational Psychology*, *67*, 113-119.

Clariana, R.B. (1997). Pace in computer-assisted learning. *British Journal of Educational Technology*, *28* (2), 135-138.

Clariana, R.B. (1997). Considering learning style in computer-assisted learning. *British Journal of Educational Technology*, *28* (1), 66-68.

Clariana, R.B. (1996). Differential achievement gains for mathematics computation, concepts and application with an Integrated Learning System. *Journal of Computers in Mathematics and Science Teaching*, *15* (3), 21-26.

Clariana, R.B. (1994). The Effects of an Integrated Learning System on Third Graders' Mathematics and Reading Achievement. *Journal of Computer-Based Instruction*, *21* (1), 12-17.

Clariana, R.B. & Schultz, C. W. (1993). Gender by content achievement differences in computer-based instruction. *Journal of Computers in Mathematics and Science Teaching*, *12* (3/4), 277-288.

Clariana, R.B. (1993). The motivational effect of advisement on attendance and achievement in computer-based instruction. *Journal of Computer-Based Instruction*, *20* (2), 47-51.

Clariana, R.B. (1993). A review of multiple-try feedback in traditional and computer-based instruction. *Journal of Computer-Based Instruction*, *20* (3), 67-74.

Clariana, R.B. & Bond, C. L. (1993). Using readability formulas to establish the grade level difficulty of software. *Journal of Computing in Childhood Education*, *4* (3), 255-261.

Clariana, R.B. (1993). The effects of item organization and feedback density using computer-assisted multiple-choice questions as instruction. *Journal of Computer-Based Instruction*, *20* (1), 26-31.

Clariana, R.B. (1992). Prescriptions in reading computer-assisted instruction: Reading versus writing. *Journal of Computer-Based Instruction*, *19* (2), 58-63.

Clariana, R.B. (1992). The effects of public reports of progress on rate of lesson completion in computer-based instruction. *Journal of Computing in Childhood Education*, *3* (2), 127-136.

Clariana, R.B. (1991). A computer administered cloze placement test and a standardized reading test. *Journal of Computers in Mathematics and Science Teaching*, *10* (3), 107-112.

Clariana, R.B. (1991). pH and rate of enzymatic reactions. *American Biology Teacher*, *53* (6), 119-121.

Clariana, R.B., Ross, S. L., & Morrison, G. R. (1991). The effects of different feedback strategies using computer-assisted multiple-choice questions as instruction. *Educational Technology Research and Development*, *39* (2), 5-17.

Clariana, R.B. (1990). Gender and ability differences in galvanic skin response during pair and individual computer-assisted mathematics instruction. *Journal of Computing in Childhood Education*, *2* (1), 69-82.

Clariana, R.B. (1990). A comparison of answer until correct feedback and knowledge of correct response feedback under two conditions of contextualization. *Journal of Computer-Based Instruction*, *17* (4), 125-129.

Clariana, R.B. (1990). Rate of activity completion by achievement, gender, and report in computer-based instruction. *Journal of Computing in Childhood Education*, *1* (3), 81-90.

Clariana, R.B. (1989). Galvanic skin response biosensor. *Journal of Computers in Mathematics and Science Teaching*, *8* (3), 44-45.

Bond, C. L., & Clariana, R.B. (1989). Prescriptions in reading computer-assisted instruction: A study considering the effects of three instructional combinations with for reviewing either computer-adaptive or controlled placement on reading achievement. *Journal of Computing in Childhood Education*, *1* (1), 59-72.

Clariana, R.B. (1989). Computer simulations of science laboratory experiences. *Journal of Computers in Mathematics and Science Teaching*, *8* (2), 14-19.

Book Chapters

Gregg, A., Chang, G., Wang, Y., Ward, P., & Clariana, R. B. (2020). Using student facilitation and interactive tools within and beyond the LMS: Towards creating an authentic community of inquiry. In L. Wilton & C. Brett (eds.), *[Handbook of Research on Online Discussion-Based Teaching Methods](...)* (Chapter 8, pp. 160-182 *tent*.). Hershey, PA: IGI Global.

Clariana, R. B., & Hooper, S. (2012). Adaptive evaluation systems. In N. M. Seel (Ed.), *Encyclopedia of the Sciences of Learning* (pp.104-106). Secaucus, NJ: Springer.

Hooper, S., & Clariana, R. B., (2012). Cooperative learning groups and streaming. In N. M. Seel (Ed.), *Encyclopedia of the Sciences of Learning* (pp. 815-818). Secaucus, NJ: Springer.

Clariana, R.B. (2010). Deriving group knowledge structure from semantic maps and from essays. In D. Ifenthaler, P. Pirnay-Dummer, & N.M. Seel (Eds.), *Computer-Based Diagnostics and Systematic Analysis of Knowledge* (Chapter 7, pp. 117-130). New York, NY: Springer.

Clariana, R.B. (2010). Multi-decision approaches for eliciting knowledge structure. In D. Ifenthaler, P. Pirnay-Dummer, & N.M. Seel (Eds.), *Computer-Based Diagnostics and Systematic Analysis of Knowledge* (Chapter 4, pp. 41-59). New York, NY: Springer.

Clariana, R.B. & Strobel, J. (2007). Modeling technologies. In J. M. Spector, M. D. Merrill, J. J. G. van Merriënboer, & M. P. Driscoll (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 997-1046). Mahwah, NJ: Erlbaum.

Shoop, G.H., Nordstrom, P., & Clariana, R.B. (2007). Model-facilitated learning environments: The pedagogy of the design. In R. Zheng and S. P. Ferris (Eds.), *Understanding online instructional modeling: theories and practices* (pp. 11-34). Hershey, PA: IGI Global Press.

Laru, J., Jarvela, S., & Clariana, R.B. (2006). Augmenting students' collaborative inquiry learning on the nature trail with mobile tools. In Enkenberg, Kentz & Hatakka (Eds.), *Emerging practices in educational technology* (pp. 93-114). Joensuu, FI: University Press.

Peer Reviewed Conferences and Proceedings *(incomplete)*

Park, E., & Clariana, R. B. (2020). Self-regulated learning and adaptive learning analytics dashboards: A reflexive thematic analysis. Paper presentation at the Annual Meeting of American Educational Research Association (AERA), Toronto, Canada, April.(Conference cancelled).

Clariana, R. B., Follmer, D. J., & Li, P. (2019). Sentence versus paragraph processing: Linear and relational knowledge structure measures. Presented at the 7th International Workshop on Advanced Learning Sciences (IWALS 2019), June 17-19, 2019, University of Jyväskylä, Finland.

Ma, L., Liu, Y., Clariana, R. B., & Li, P. (2019). From eye-fixation sequence to knowledge representation: Utilization of network science. Presented at the 7th International Workshop on Advanced Learning Sciences (IWALS 2019), June 17-19, 2019, University of Jyväskylä, Finland.

Li, P., Hsu, C., Schloss, B., & Clariana, R. (2018). How students understand STEM concepts: A fMRI study of expository science text comprehension. Paper presented at the Symposium on Neuroimaging Studies of Text Comprehension, Annual Meeting of the Society for Text & Discourse, Brighton, U.K., July, 2018.

Li, P., Hsu, C., Schloss, B., & Clariana, R. (2018). Acquisition of STEM concepts through expository text comprehension: An fMRI study. Poster presented at the 24th Annual Meeting of the Organization for Human Brain Mapping, Singapore, June, 2018.

Ma, X., Clariana, R., & Li, P. (2018). Predicting mental knowledge representation from fixation sequence using graph analysis. Poster presented at the 6th International Workshop on Advanced Learning Sciences (IWALS 2018), Pittsburgh, June, 2018.

Hsu, C., Clariana, R., & Li, P. (2018). Knowledge structure and expository texts comprehension: A neurocognitive study. Poster presented at the 25th Annual Meeting of the Cognitive Neuroscience Society, Boston, March, 2018.

Li, P., Clariana, R., & Meyer, B.J.F. (2015). How do students understand science concepts? Brain signatures of reading comprehension. Poster presented at the BRAIN Initiative Investigators Conference, National Science Foundation, Bethesda, December, 2015.

Taricani, E., and Clariana, R.B. (2015). AECT 2015, "Observation and awareness of text cues and the impact on team knowledge mapping," Association for Educational Communication and Technology (AECT), Indianapolis, IN, Presentations. (November 4, 2015).

Garbrick, A., & Clariana, R.B. (2015). E-Learn 2015 -- World Conference on E-Learning, "How notifications influence participants in asynchronous discussion forums: A case study," AACE, Kona, Hawaii, Papers and Presentations. (October 15, 2015).

Garbrick, A., & Clariana, R.B. (2015). Global Learn 2015, "The influence of email notifications in asynchronous discussion on interaction patterns using social network analysis," AACE, Berlin, Germany, Papers and Presentations. (April 15, 2015).

Kim, K., & Clariana, R.B. (2014). AECT 2014, "Concept centrality: A useful and usable analysis method to reveal mental representation of bilingual readers," Association for Educational

Communication and Technology (AECT), Jacksonville, FL, Papers and Presentations. (November 15, 2014).

Kim, K., Clariana, R.B., & Mun, Y. (2014). 2014 IEEE International Conference on Advanced Learning Technologies (ICALT), "Using Pathfinder Network as a measure of lexical structure of bilingual learners," IEEE, Athens, Greece, Papers. (July 15, 2014).

Kozlov, M.D., Engelmann, T., Kolodziej, R., & Clariana, R.B. (2014). Improving online collaboration by fostering norm-oriented content based knowledge awareness. A Poster presented at the International Conference of the Learning Sciences (ICLS), Boulder, CO (July 2014).

Kim, K., Clariana, R.B., & Garbrick, A. (2013). CSCL 2013, "The effect of computer-supported independent and interdependent collaboration on information sharing," International Society of the Learning Sciences, Madison, WI, Posters. (June 30, 2013).

Klois, S., Segers, E., Clariana, R.B., & Verhoeven, L., (2013). SSSR 2013, 20th Annual Meeting of the Society for the Scientific Study of Reading, "Effects of links in children's digital text comprehension," Society for the Scientific Study of Reading (SSSR), The Chinese University of Hong Kong, Papers and Presentations. (July 11, 2013).

Asino, T., Clariana, R.B., Dong, Y., Groff, B., Ntshalintshali, G., Taricani, E., Techatassanasoontorn, C. & Yu, W. (2012). The effect of independent and interdependent group collaboration on knowledge extent, knowledge form, and knowledge convergence. Proceedings of Selected Research and Development Papers Presented at the National Convention of the Association for Educational Communications and Technology, 35, 20-29 (Louisville, KY, November 2012)

Draper, D., Clariana, R., & Land, S. M. (2011). An Automated Measure of Group Knowledge Structure Convergence. Presentation at the AECT Annual meeting, Association for Educational Communications & Technology, Jacksonville, FL.

Draper, D., Land, S. M., & Clariana, R., (2011). Knowledge building activities and knowledge convergence in workplace communities of practice. Presentation at the AECT Annual meeting, Association for Educational Communications & Technology, Jacksonville, FL.

Clariana, R. (2011). Symposium: Measures of Group Knowledge Structure Convergence in an Online Collaborative Learning Environment. Symposium presentation title: Knowledge Maps for Representation of Higher-Order Cognitions: Potentials and Limitations from an International Perspective. American Educational Research Association, New Orleans, LA.

Draper, D., Land, S. & Clariana, R B. (2010). The Instructional Effects of Knowledge-based CoP Learning Environments on Student Achievement and Knowledge Convergence. Paper presented at the annual meeting of the AECT Convention, Hyatt Regency Orange County, Anaheim, CA, Oct 26.

Clariana, R.B., Wallace, P.E., & Godshalk, V.M. (2008). Deriving and measuring group knowledge structure via computer-based analysis of essay questions: the effects of controlling anaphoric reference. In Kinshuk, D. G. Sampson, J. M. Spector, P. Isaías, & D. Ifenthaler (Eds.), Proceedings of the IADIS international conference on cognition and exploratory learning in the digital age (88-95). Freiburg, Germany: International Association for Development of the Information Society.

Clariana, R.B. (2006). A demo of free essay scoring software. A presentation at the 5th Annual Wyoming Math and Science Teachers Conference in Casper, WY, January 13-14, 2006. PowerPoint presentation at link to PPT file

Clariana, R.B. (2006). Free software that scores biology field reports and essays. T3 International Conference sponsored by Texas Instruments. Denver, CO, February 24-25.

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