

Curriculum Vitae

Amy L. Baylor, PhD
Washington DC 20003

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E-Mail Address: amy.baylor@gmail.com
Web Site: <http://amybaylor.com>
Phone: 703-585-7549

Summary statement

- Senior leader with 30+ years of experience in AI-driven learning technologies, strategic funding, and cross-disciplinary research. Expertise in managing multi-million-dollar research portfolios, spearheading federal funding programs, and driving innovation at the intersection of education, computing, and human-centered AI. Managed research assistance for faculty in experimental design and data analysis.

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Academic Background

1993 - 1997 Ph.D. Educational Psychology, University of South Carolina, Columbia SC.
Specialization in Cognitive Science and Technology

1986 - 1990 B.A. Philosophy, Stanford University, Stanford CA.
Specialization in Artificial Intelligence and Cognitive Science.

Professional Experience

2016 – present **Lead Program Director** – Division of Research on Learning (DRL), STEM Education (EDU) Directorate, National Science Foundation, Arlington, Virginia.

- Lead Program Director for the Research on Innovative Technologies for Enhanced Learning (RITEL), RETTL, and Cyberlearning and Future Learning Technologies Program and related Dear Colleague Letters. Manage 16-member cross-directorate program officer working group, leading the review process and procedures.
- Spearheaded NSF’s “AI-Augmented Learning” National Artificial Intelligence Research Institutes, leading to \$100M in funding for five Institutes from 2020-2024, shaping the future of intelligent learning technologies.
- Initiate new funding programs and strategic initiatives: e.g., Dear Colleague Letter to solicit RAPID proposals in line for urgent need for research on the use of generative AI in K12 learning settings; aligned the Cyberlearning program with NSF Big Idea “Future of Work at the Human-Technology Frontier” (FW-HTF). Serve as active member of NSF-wide FW-HTF working group; contribute to solicitations and socialize to communities inside and outside of NSF.
- Manage the review process (inviting expert reviewers, leading formal review panels, and making award recommendations) for 100+ proposals/year in multiple programs. Conduct outreach to Principal Investigator communities through conference presentations and webinars. Manage personal award portfolio of ~\$40M. Serve as liaison for joint activities with the Computer, Information Sciences and Engineering (CISE) directorate.

- Present and facilitate research discussions regarding funding and future directions in advanced learning technologies: e.g., keynote at US-China Smart Education Conference; provide input as stakeholder to Department of Defense Advanced Distributed Learning (ADL) initiative
- In 2020, nominated for and completed senior executive leadership training “Leadership for a Democratic Society” at the Federal Executive Institute (FEI), Charlottesville Virginia. Four-week residential program.

2019 (Apr -Aug) **Acting Deputy Division Director** – Division of Research on Learning (DRL), Education and Human Resources (EHR) Directorate, National Science Foundation, Arlington, Virginia.

- On 4-month detail in Senior Executive Service (SES), manage administrative operations and the scientific review process of one of the largest divisions at NSF (50+ staff, including 30 at Ph.D. level) and an annual budget of \$250M.

2011 – 2016 **Principal Consultant** – Amy Baylor Consulting, LLC. Reston, Virginia. Serve as strategic advisor to corporate and government clients in the following areas:

- innovative and emerging learning technologies
- design and evaluation of the overall learning experience
- strategic planning and evaluation
- quantitative and qualitative research

Selected client projects:

- led effort to develop a strategic evaluation plan and learning framework for the Chief Learning Officer (CLO) of the Department of Defense
- designed, implemented and researched the effectiveness of an innovative technology-based intervention for the Women, Infants, Children (WIC) supplemental food program
- advised the Saylor Foundation regarding instructional design for MOOCs, including a collaboration with Google

2003 -- 2010 **Associate Professor with tenure**– Instructional Systems, Educational Psychology, and Information Technology. Appointed in both the College of Education and the College of Information, Florida State University. Conduct research in technology-mediated learning, human-computer interaction, supervise/advise doctoral students and teaching assistants, teach graduate-level courses. Direct independent research and individual study.

Chair of Doctoral Dissertation Supervisory Committees

Also have served as a committee member for 20+ other doctoral students.

- Rinat Rosenberg-Kima (2011). (Tristan Johnson co-chair)
- MiYoung Lee (2007). (Tristan Johnson co-chair)
- Suzanne Ebbers (2007).
- Soyoung Kim (2006).
- Minjeong Kim (2005).
- Yanghee Kim (2004).
- Jeeheon Ryu (2004).
- Il-Hyun Jo (2001). (John Keller co-chair)

2002 -- 2010 **Founding Director**– Center for Research of Innovative Technologies for Learning (RITL), (formerly PALS - Pedagogical Agents Learning Systems) Research Laboratory. Learning Systems Institute, Florida State University, Tallahassee, FL. Manage interdisciplinary research projects involving faculty and students from a variety of programs (computer science, information technology, graphic arts, communication, psychology, and education).

Research strands included:

- Pedagogical Agent Learning Systems
- Diversity in Computing
- Emerging Learning Technologies
- Metacognitive Scaffolding
- Affective Computing

2006 -- 2009 **Program Director** – Human-Centered Computing (HCC) (on IPA assignment from Florida State University), Division of Information and Intelligent Systems (IIS), Computer Information Science & Engineering (CISE) Directorate, National Science Foundation, Arlington, Virginia.

Selected activities:

- Managed the review process (inviting expert reviewers, leading formal review panels, and making award recommendations) for 150+ proposals/year from HCC, Advanced Learning Technologies (ALT), CreativeIT, and Trustworthy Computing programs. Managed personal award portfolio of ~\$40M.
- Lead Program Director (2008-2009). Coordinated program activities for four program officers and three administrative staff in Human-Centered Computing. Revamped proposal processing procedures and managed program budget of \$20M.
- Initiated new funding programs and strategic initiatives, including bringing together 12 program officers to create the Social-Computational Systems (SoCS) program with the Social and Behavioral Sciences (SBE) Directorate. In addition, solicited proposals and funded transformative research proposals and workshops with single-signature authority for a total of \$2M.
- Program Director for Advanced Learning Technologies (ALT), working as part of a cross-directorate team from CISE and Education/Human Resources (EHR) to manage the review process, recommend and manage awards. Took lead to re-conceptualize the solicitation and solicit buy-in from other directorates (ENG, BIO, and GEO) to expand the program.
- Technical Coordinator (Program Director) for the Pittsburgh Science of Learning Center (PSLC), a \$20M NSF-funded research center. Managed the ongoing collaborative agreement between NSF and the PSLC.

1999 – 2003 **Assistant Professor** – Instructional Systems and Educational Psychology. Department of Educational Psychology and Learning Systems. Florida State University, Tallahassee, FL.

1997 - 1999 **Assistant Professor of Educational Technology** – Department of Educational Technology. San Diego State University, San Diego, CA

1994 - 1996 **Coordinator of Research Consulting Services** – Office of Research, University of South Carolina, Columbia, SC. Managed staff of four to provide research assistance (e.g., research design, instrument development, data analysis) for faculty.

1993 - 1994 **Research Assistant** – Center for Excellence in the Assessment of Student Learning, University of South Carolina, Columbia, SC.

1992 - 1993 **Instructional Designer** – Microsoft Corporation, Redmond, WA. Led the design and development of a case study for an executive course on client-server systems.

1990 - 1992 **Research Analyst** – Failure Analysis Associates, Menlo Park, CA. Provided data analysis and litigation support, including developing educational simulations to demonstrate scientific principles to juries.

Visiting Professorship(s)

Summer 2000 **Visiting Scholar.** Knowledge Based Systems (KBS) Institute, University of Hanover, Germany. Sponsored by Dr. Wolfgang Nejdl, Director of KBS.

February 2000 **Visiting Professor.** Cognitive Psychology. Univ. of Monterrey, Mexico. Responsible for teaching an intensive graduate course in Cognitive Psychology to University of Monterrey students.

Honors and Awards

- 2019 NSF Director’s award for Superior Accomplishment. For outstanding effort and superior accomplishment as a collaborative, cross-directorate team in launching one of NSF’s Big Ideas, the “Future of Work at the Human-Technology Frontier,” responding to research challenges at the intersection of work, technology and workers at a time of rapid social and technological change.
- 2015 Acknowledged for having one of the most highly-cited articles (“Simulating Instructional Roles through Pedagogical Agents”) in the history of the *International Journal of Artificial Intelligence in Education* and invited to submit a commentary on the article in the 25th anniversary special issue.
- Baylor, A. L. & Kim, Y. (2005). Simulating instructional roles through pedagogical agents. *International Journal of Artificial Intelligence in Education*, 15(1), 95-115.
 - Kim, Y. & Baylor, A.L. (2015). Research-based design of pedagogical agent roles: A review, progress, and recommendations. *International Journal of Artificial Intelligence in Education*, 26(1), 160-169.
- 2009 Invited plenary presentation to Royal Society of Great Britain in 2-day session entitled, “Computation of emotions in man and machines.” This session was the most oversold meeting in the 350+ year history of the Royal Society.
- Baylor, A. L. (2009). Promoting motivation with virtual agents and avatars: role of visual presence and appearance. *Philosophical Transactions of the Royal Society B*, 364, 3559-3565.
- 2006 Best Paper Award from American Educational Research Association SIG Advanced Technologies for Learning.
- Park, S. Keller, J. & Baylor, A. L. (2006, March). The Effects of Seductive Augmentation and Agent Role on Learning Interest, Achievement, and Attitude. Paper presented at AERA (American Educational Research Association), San Francisco, CA.
- 2005 Young Scholar Award (for my former doctoral student Yanghee Kim) from Association for Educational Communication & Technology (AECT).
For paper that I co-authored with her, published in *Educational Technology Research and Development*:
- Kim, Y., & Baylor, A. L. (2006). A social-cognitive framework for pedagogical agents as learning companions. *Educational Technology Research & Development*, 54(6), 569-590.
- 2005 Nominated by the National Academy of Sciences (NAS) to participate as one of 80 leading scientists from a variety of scientific fields in the 17th Frontiers of Science Symposium. Represented Computer Science / Social Computing. Irvine, CA.
- 2003 Finalist for University Graduate Teaching Award. Florida State University.
- 2002 Article of the year from the Association for Educational Communications and Technology.
- Baylor, A. L. (2002). Expanding pre-service teachers’ metacognitive awareness of instructional planning through pedagogical agents. *Educational Technology Research & Development*, 50(2), 5-22

- 2001 Best Research Study. Society for Information Technology and Teacher Education (SITE), Orlando, Florida.
- Baylor, A. L. & Ritchie, D.R. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? *Computers and Education*, 39(4), 395-414. [ISI-indexed, Acceptance rate 15%, Impact factor 2.190]
- 2001 Annual Achievement Award. Association of Educational Communication and Technology. Awarded for serving as Guest Editor of Tech Trends.
- 2000 FYAP Award. Florida State University. Summer stipend of \$10,000 for project “Developing MIMIC (Multiple Intelligent Mentors Instructing Collaboratively): An agent-based environment for learning instructional design.”
- 1998 Research and Creative Scholarly Activities Award. San Diego State University. One month fellowship award.
- 1997 Won national research award competition sponsored by the CCUMC (College Consortium of University Media Centers). “Disorientation on the Web—Adventure or Distraction?”
- 1986 National Merit Scholar.

Membership in Professional Organizations

Association for Computing Machinery (ACM)
 ACM SIG CHI (Computer-Human Interaction)
 International Society of the Learning Sciences (ISLS)
 American Educational Research Association (AERA)
 International Artificial Intelligence in Education Society

SCHOLARLY OR CREATIVE ACTIVITIES

Publications

Refereed Journal Articles Published

1. Rosenberg-Kima, R. B., Merrill, M. D., Baylor, A. L. & Johnson, T. E. (2022) Explicit instruction in the context of whole-tasks: the effectiveness of the task-centered instructional strategy in computer science education. *Educational Technology Research & Development*, Volume 70, 1627–1655. <https://doi.org/10.1007/s11423-022-10143-7>
2. Kitsantas, A, Baylor A. L. & Hiller, S. E. (2019) Intelligent Technologies to Optimize Performance: Augmenting Cognitive Capacity and Supporting Self-Regulation of Critical Thinking Skills in Decision-Making. *Cognitive Systems Research*, Volume 58, December 2019, 387-397. <https://doi.org/10.1016/j.cogsys.2019.09.003>
3. Kim, Y. & Baylor, A.L. (2015). Research-based design of pedagogical agent roles: A review, progress, and recommendations. *International Journal of Artificial Intelligence in Education*.
4. Baylor, A. L. (2011). The design of motivational agents and avatars. *Educational Technology Research & Development*, 59(2), 291-300. [ISI-indexed, Impact factor 1.42]
5. Rosenberg-Kima, R., Plant, E. A., Doerr, C. & Baylor A. L. (2010). The influence of computer-based model’s race and gender on female students’ attitudes and beliefs towards engineering. *Journal of Engineering Education*, 99, 35-44. [ISI-indexed, Impact factor 2.06]
6. Baylor, A. L. (2009). Promoting motivation with virtual agents and avatars: role of visual presence and appearance. *Philosophical Transactions of the Royal Society B*, 364, 3559-3565. [ISI-indexed, Impact factor 5.6]

7. Plant, E. A., Baylor A. L., Doerr, C., & Rosenberg-Kima, R. (2009). Changing Middle-School Students' Attitudes and Performance Regarding Engineering with Computer-based Social Models. *Computers and Education*, 53(2), 209-215. [ISI-indexed, Acceptance rate 15%, Impact factor 2.190]
8. Baylor, A. L. & Kim, S. (2009) Designing nonverbal communication for pedagogical agents: When less is more. *Computers and Human Behavior*, 25, 450-457. [ISI-indexed, Impact factor 1.767, Acceptance rate 32%]
9. Rosenberg-Kima, R., Baylor A. L., Plant, E. A., & Doerr, C. (2008). Interface Agents as Social Models for Female Students: The Effects of Agent Visual Presence and Appearance on Women's Attitudes and Beliefs. *Computers in Human Behavior*, 24(6), 2741-2756. [ISI-indexed, Impact factor 1.767, Acceptance rate 32%]
10. Kim, C. & Baylor, A.L. (2008). A Virtual Change Agent: Motivating Pre-service Teachers to Integrate Technology in Their Future Classrooms. *Educational Technology & Society*, 12(2), 309-321. [ISI-indexed, Impact factor .469, Acceptance rate 15%]
11. Lange, C. & Baylor, A. L. (2007). Teaching the Repeated Prisoner's Dilemma with a Computerized Tournament. *Journal of Economic Education*, 38(4), 407-418. [ISI-indexed, Impact factor .211, Acceptance rate 10%]
12. Kim, Y., Baylor, A. L. & Shen, E. (2007). Pedagogical agents as learning companions: The impact of agent affect and gender. *Journal of Computer Assisted Learning (JCAL)*, 23(3), 220-532. [ISI-indexed, Impact factor .532, Acceptance rate 25%]
13. Kim, Y., & Baylor, A. L. (2006). A social-cognitive framework for pedagogical agents as learning companions. *Educational Technology Research & Development*, 54(6), 569-590. [ISI-indexed, Impact factor .364, Acceptance rate 8%] Paper received ***Young Scholar Award*** for first author, awarded by Association of Educational Communications & Technology.
14. Kim, Y. & Baylor, A. L. (2006). Pedagogical agents as learning companions: The role of agent competency and type of interaction. *Educational Technology Research & Development*, 54(3), 223-243. [ISI-indexed, Impact factor .364, Acceptance rate 8%]
15. Lee, M. & Baylor, A. L. (2006). Designing Metacognitive Maps for Web-Based Learning. *Educational Technology & Society*, 9(1), 344-348. [ISI-indexed, Impact factor .469, Acceptance rate 15%]
16. Ryu, J. & Baylor, A. L. (2005). The Psychometric Structure of Pedagogical Agent Persona. *Technology, Instruction, Cognition & Learning (TICL)*, 2(4), 291-315. [Peer-refereed, Acceptance rate 20%]
17. Baylor, A. L. & Kim, Y. (2005). Simulating instructional roles through pedagogical agents. *International Journal of Artificial Intelligence in Education*, 15(1), 95-115. [Peer-refereed, Acceptance rate < 20%]
18. Baylor, A. L. & Kitsantas, A. (2005). Comparative Analysis and Validation of Instructivist and Constructivist Self-Reflective Tools (IPSRT and CPSRT) for Novice Instructional Planners. *Journal of Technology and Teacher Education*, 13(3), 431-455. [Peer-refereed, Acceptance rate 10-15%]
19. Lee, Y., Baylor, A. L. & Nelson, D. (2005). Supporting Problem Solving Performance through the Construction of Knowledge Maps. *Journal of Interactive Learning Research*, 16(2), 117-131. [Peer-refereed, Acceptance rate 10-15%]
20. Gao, H., Baylor, A. L., & Shen, E. (2005). Designer Support for Online Collaboration and Knowledge Construction. *Educational Technology & Society*, 8(1), 69-79. [ISI-indexed, Impact factor .469, Acceptance rate 15%]
21. Baylor, A. L., Kitsantas, A. & Hu, H. (2003). Two tools to facilitate pre-service teacher's self-regulation during instructional planning. *TechTrends*, 47(2), 45-49. [Peer-reviewed, Acceptance rate 25%]
22. Baylor, A. L. & McCormick, C. B. (2003). Thematic awareness and recall of information from text. *Reading and Writing*, 16, 247-258. [ISI-indexed, Acceptance rate 15%, Impact factor 3.85]

23. Baylor, A. L. & Ryu, J. (2003). The effects of image and animation in enhancing pedagogical agent persona. *Journal of Educational Computing Research*, 28(4), 373-395. [ISI-indexed (in 2003), Acceptance rate 11-20%]
24. Baylor, A. L. & Ritchie, D.R. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? *Computers and Education*, 39(4), 395-414. [ISI-indexed, Acceptance rate 15%, Impact factor 2.190]
25. Baylor, A. L. (2002). Expanding pre-service teachers' metacognitive awareness of instructional planning through pedagogical agents. *Educational Technology Research & Development*, 50(2), 5-22. [ISI-indexed, Acceptance rate 11-20%, Impact factor .364] ***Best Article of the Year*** awarded by Association of Educational Communications & Technology.
26. Baylor, A. L. (2002). Agent-based learning environments for investigating teaching and learning. *Journal of Educational Computing Research*, 26(3), 249-270. [ISI-indexed (in 2002), Acceptance rate 11-20%]
27. Baylor, A. L. (2001). Permutations of control: Cognitive considerations for agent-based learning environments. *Journal of Interactive Learning Research*, 12(4), 403-425. [Peer-reviewed, Acceptance rate 6-10%]
28. Baylor, A. L. (2001). Incidental learning and perceived disorientation in a web-based environment: Internal and external factors. *Journal of Educational Multimedia and Hypermedia*, 10(3), 227-251. [Peer-reviewed, Acceptance rate 10-19%]
29. Baylor, A. L. (2001). A U-Shaped model for the development of intuition by expertise. *New Ideas in Psychology*, 19(3), 237-244. [ISI-indexed, Impact factor .793, Acceptance rate 15%]
30. Kitsantas, A. & Baylor, A. L. (2001). The impact of the instructional planning self-reflective tool (IPSRT) on pre-service teachers' performance, disposition, and self-efficacy beliefs regarding systematic instructional planning. *Educational Technology Research & Development*, 49(4), 101-110. [ISI-indexed, Impact factor .364, Acceptance rate 8%]
31. Baylor, A. L. (2000). Beyond butlers: Intelligent agents as mentors. *Journal of Educational Computing Research*, 22(4), 373-382. [ISI-indexed (in 2000), Acceptance rate 11-20%]
32. Baylor, A. L. (2000). Cognitive strategies for technology and training. *TechTrends*, 44(5), 13-15. [Peer-reviewed, Acceptance rate 25%]
33. Baylor, A. L. (1997). A three-component conception of intuition: Immediacy, sensing relationships, and reason. *New Ideas in Psychology*, 15(2), 185-194. [ISI-indexed, Impact factor .793, Acceptance rate 15%]
34. Ritchie, D.R. & Baylor, A. L. (1997). Teaching technology: Finding a workable strategy, *TechTrends*, 42(4), 27-30. [Peer-reviewed, Acceptance rate 25%]

Refereed Proceedings Published

1. Baylor, A. L. (2018). Three Research Directions for Affective Learning Technologies. In Kay, J. and Luckin, R. (Eds.) *Rethinking Learning in the Digital Age: Making the Learning Sciences Count, 13th International Conferences of the Learning Sciences (ICLS) 2018, Volume 3*. London, UK: International Society of the Learning Sciences, pp. 1843-1846. [Peer-reviewed, Acceptance rate < 20%, International]
2. Baylor, A. L. (2009). More than just an inter "face"- the important influence of agent appearance on motivation. Proceedings of the 17th International Conference on Computers in Education. Hong Kong: Asia-Pacific Society for Computers in Education. [Peer-reviewed, Acceptance rate < 20%, International]
3. Baylor, A. L., Kim, S. (2008). The effects of agent nonverbal communication on procedural and attitudinal learning outcomes. Proceedings of Intelligent Virtual Agents (IVA), Tokyo, Japan. Lecture Notes in Artificial Intelligence 5208, (pp. 208-214), Springer. [Peer-reviewed, Acceptance rate < 20%, International]

4. Rosenberg-Kima, R. B., Plant, E. A., Baylor, A. L. & Doerr, C. (2007). Changing Attitudes and Performance with Computer-generated Social Models. Proceedings of Artificial Intelligence in Education (AI-ED), Marina Del Ray, California. *Frontiers in Artificial Intelligence and Applications*, Vol. 158, (pp. 51-58), IOS Press. [Peer-reviewed, Acceptance rate < 20%, International]
5. Rosenberg-Kima, R. B., Baylor, A. L., Plant, E. A., Doerr, C. (2007). The importance of interface agent visual presence: Voice alone is less effective in impacting young women's attitudes toward engineering. Proceedings of Persuasive 2007, Stanford, California. *Lecture Notes in Computer Science*, Vol. 4744, (pp. 214–222), Springer. [Peer-reviewed, Acceptance rate < 20%, International]
6. Baylor, A. L., Rosenberg-Kima, R. B., & Plant, E. A. (2006). Interface Agents as Social Models: The Impact of Appearance on Females' Attitude Toward Engineering. Proceedings of International Conference on Human Factors in Computing Systems (CHI 2006), Montreal, Canada. (pp. 526-531), ACM Press. [Peer-reviewed, Acceptance rate < 15%, International]
7. Baylor, A. L., & Rosenberg-Kima, R. B. (2006). Interface agents to alleviate online frustration. Proceedings of the 7th International Conference on Learning sciences, (pp.30-36), Bloomington, Indiana: ISLS. [Peer-reviewed, Acceptance rate 15-20%, International]
8. Kim, Y, Hamilton, E., Zheng, J., & Baylor, A. L. (2006). Scaffolding Learner Motivation through a Virtual Peer. Proceedings of the 7th International Conference on Learning Sciences, (pp. 335–341), Bloomington, Indiana: ISLS. [Peer-reviewed, Acceptance rate 15-20%, International]
9. Baylor, A. L., & Plant, E. A. (2005). Pedagogical agents as social models for engineering: The influence of appearance on female choice. In C-K. Looi, G. McCalla, B. Bredeweg & J. Breuker (Eds.), *Artificial intelligence in education: Supporting learning through intelligent and socially informed technology* (Vol. 125, pp. 65-72), IOS Press. [Peer-reviewed, Acceptance rate < 20%, International]
10. Baylor, A. L., Warren, D., Park, S., Shen E., & Perez, R. (2005) The impact of frustration-mitigating messages delivered by an interface agent. In C-K. Looi, G. McCalla, B. Bredeweg & J. Breuker (Eds.), *Artificial intelligence in education: Supporting learning through intelligent and socially informed technology* (Vol. 125, pp. 73-79), IOS Press. [Peer-reviewed, Acceptance rate < 20%, International]
11. Baylor, A. L., Kim, S., Son, C. & Lee, M. (2005) Designing effective nonverbal communication for pedagogical agents. In C-K. Looi, G. McCalla, B. Bredeweg & J. Breuker (Eds.), *Artificial intelligence in education: Supporting learning through intelligent and socially informed technology* (Vol. 125, pp. 744-746), IOS Press. [Peer-reviewed, Acceptance rate < 20%, International]
12. Warren, D., Shen E., Park, S., Baylor, A. L. & Perez, R. (2005). Adult Learner Perceptions of Affective Agents: Experimental data and phenomenological observations. In C-K. Looi, G. McCalla, B. Bredeweg & J. Breuker (Eds.), *Artificial intelligence in education: Supporting learning through intelligent and socially informed technology* (Vol. 125, pp. 944-946), IOS Press. [Peer-reviewed, Acceptance rate < 20%, International]
13. Baylor, A. L. (2005). Preliminary Design Guidelines for Pedagogical Agent Interface Image. Proceedings of the 10th International Conference on Intelligent User Interfaces, San Diego, California. (pp. 249-250), ACM Press. [Peer-reviewed, Acceptance rate < 15%, International]
14. Baylor, A. L. (2005). The Impact of Pedagogical Agent Image on Affective Outcomes. Proceedings of Workshop "Affective Interactions: The Computer in the Affective Loop" at the 10th International Conference on Intelligent User Interfaces, San Diego, California. (pp. 1-6), ACM Press. [Peer-reviewed, Acceptance rate < 15%, International]
15. Baylor, A. L. & Kim, Y. (2004). Pedagogical Agent Design: The Impact of Agent Realism, Gender, Ethnicity, and Instructional Role. In (Eds. J. Lester, et al) *Lecture Notes in Computer Science: Intelligent Tutoring Systems*, Volume 3220, (pp. 592-603) Berlin/Heidelberg: Springer. [Peer-reviewed, Acceptance rate < 20%, International]

16. Baylor, A. L., Shen, E. & Warren, D. (2004). Supporting learners with math anxiety: The impact of pedagogical agent emotional and motivational support. Proceedings of Workshop on Social and Emotional Intelligence in Learning Environments at the International Conference on Intelligent Tutoring Systems (ITS), Maceio, Brazil. (pp. 6-12), Springer. [Peer-reviewed, Acceptance rate < 20%, International]
17. Baylor, A. L. (2004). Designing pedagogical agents to address diversity in learning. Proceedings of the 6th International Conference on Learning sciences, Los Angeles, California. (pp. 586-587), ISLS. [Peer-reviewed, Acceptance rate < 25%, International]
18. Baylor, A. L., & Kim, Y. (2003). The Role of Gender and Ethnicity in Pedagogical Agent Perception. In G. Richards (Ed.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2003, Phoenix, Arizona. (pp. 1503-1506), Chesapeake, VA: AACE. [Peer-reviewed, Acceptance rate 25%, International]
19. Baylor, A. L., Shen, E., & Huang, X. (2003). Which Pedagogical Agent do Learners Choose? The Effects of Gender and Ethnicity. In G. Richards (Ed.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2003, Phoenix, Arizona, (pp. 1507-1510), Chesapeake, VA: AACE. [Peer-reviewed, Acceptance rate 25%, International]
20. Kim, Y., Baylor, A. L. & Reed, G. (2003). The Impact of Image and Voice with Pedagogical Agents. In G. Richards (Ed.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2003, Phoenix, Arizona, (pp. 2237-2240), Chesapeake, VA: AACE. [Peer-reviewed, Acceptance rate 25%, International]
21. Baylor, A. L. & Ebbers, S. (2003). Evidence that multiple agents facilitate greater learning. In U. Hoppe, M.F. Verdejo, J. Kay (Eds.), *Artificial Intelligence in Education: Shaping the Future of Learning Through Intelligent Technologies* (pp.377-379): IOS Press. [Peer-reviewed, International]
22. Baylor, A. L. (2003). The split-persona effect with pedagogical agents. Proceedings of Workshop "Embodied Conversational Characters as Individuals" at the Autonomous Agents & Multi-Agent Systems (AAMAS), Melbourne, Australia. [Peer-reviewed, International]
23. Baylor, A. L. & PALS Research Group (2003). The impact of three pedagogical agent roles. Proceedings of International Conference of Autonomous Agents & Multi-Agent Systems (AAMAS), Melbourne, Australia, (pp.928-929), ACM Press. [Peer-reviewed, International]
24. Baylor, A. L. & Ryu, J. (2003). The API (Agent Persona Instrument) for assessing pedagogical agent persona. Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications, Honolulu, Hawaii, (pp. 448-451). Norfolk, VA: AACE. [Peer-reviewed, International]
25. Baylor, A. L. & Ebbers, S. (2003). The pedagogical agent split-persona effect: When two agents are better than one. Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications, Honolulu, Hawaii, (pp. 459-462). Norfolk, VA: AACE. [Peer-reviewed, International]
26. Baylor, A. L., Ryu, J. & Shen, E. (2003). The effects of pedagogical agent voice and animation on learning, motivation and perceived persona. Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications, Honolulu, Hawaii, (pp. 452-458). Norfolk, VA: AACE. [Peer-reviewed, International]
27. Baylor, A. L. & Kim, Y. (2003). Validating pedagogical agent roles: Expert, Motivator, and Mentor. Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications, Honolulu, Hawaii, (pp. 463-466). Norfolk, VA: AACE. [Peer-reviewed, International]
28. Gussak, D. & Baylor, A. L. (2003). Constructing agents for self-learning: Animated agents as expressive vehicles. Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications, Honolulu, Hawaii, (pp. 477-478). Norfolk, VA: AACE. [Peer-reviewed, International]
29. Baylor, A. L. & Kitsantas, A. (2003). Preservice teacher instructional planning support for well- and ill-defined instructional problems. Proceedings of Society for Information Technology and Teacher Education International Conference, Albuquerque, New Mexico (pp. 1636-1638). Norfolk, VA: AACE. [Peer-reviewed, International]

30. Baylor, A. L. & Chang, S. (2002). Pedagogical agents as scaffolds: The role of feedback timing, number of agents, and adaptive feedback. Proceedings of 5th International Conference of the Learning Sciences, Seattle, WA, ISLS. [Peer-reviewed, International]
31. Baylor, A. L. (2001). The effects of MIMICing instructional theory with MIMIC (Multiple Intelligent Mentors Instructing Collaboratively), an agent-based learning environment. Proceedings of the National Convention of the Association for Educational Communications and Technology, Atlanta, Georgia. Annual Proceedings of Selected Research and Development Papers, Volumes 1-2 (10 pages). ERIC ED470069 [Peer-reviewed, National]
32. Baylor, A. L. (2001). Cognitive requirements for agent-based learning environments. Proceedings of International Conference of Advanced Learning Technologies (ICALT), Madison, Wisconsin, (pp. 462-463), IEEE. [Peer-reviewed, International]
33. Baylor, A. L. (2001). Investigating multiple pedagogical perspectives through MIMIC (Multiple Intelligent Mentors Instructing Collaboratively). Proceedings of Artificial Intelligence in Education (AI-ED) International Conference, San Antonio, Texas, IOS Press. [Peer-reviewed, International]
34. Baylor, A. L. & Kitsantas, A. (2001). Promoting instructional planning: An experiment. Proceedings of Society for Information Technology & Teacher Education (SITE) International Conference. Orlando, Florida. Technology and Teacher Education Annual, vol. 2, 1044-1049. Norfolk, VA: AACE. [Peer-reviewed, International]
35. Baylor, A. L. & Ritchie, D. (2001). Factors influencing technology integration: A quantitative nationwide study. Proceedings of Society for Information Technology & Teacher Education (SITE) International Conference. Orlando, Florida. Technology and Teacher Education Annual, vol. 3, pp. 2666-2671. Norfolk, VA: AACE. ***Best Research Paper*** of conference. [Peer-reviewed, International]
36. Baylor, A. L. (1999). Multiple Intelligent Mentors Instructing Collaboratively (MIMIC): Developing a theoretical framework. Proceedings of International Cognitive Technology Conference, San Francisco, CA. (ERIC document ED438790). [Peer-reviewed, International]
37. Baylor, A. L. (1999). Psychological factors influencing web navigation. Proceedings of Association for Educational Communications and Technology (AECT), Houston, TX. (ERIC document ED436173). [Peer-reviewed, National]
38. Baylor, A. L. & Kozbe, B. (1998). A personal intelligent mentor for promoting metacognition in solving logic word puzzles. Proceedings of Workshop "Current Trends and Applications of Artificial Intelligence in Education" at The Fourth World Congress on Expert Systems, Mexico City, Mexico. (ERIC document ED438791.) [Peer-reviewed, International]
39. Baylor, A. L. (1998). Disorientation on the web—Adventure or distraction? Proceedings of WebNet 98- World Conference of the WWW, Internet and Intranet, Orlando, Florida. Norfolk, VA: AACE. [Peer-reviewed, International]

Non-Refereed Publications Published

1. Baylor, A. L. (2007) Pedagogical Agents as a Social Interface. *Educational Technology*, 47(1), 11-14.
2. Kim, Y. & Baylor, A. L. (2007) Pedagogical Agents as Social Models to Influence Learner Attitudes. *Educational Technology*, 47(1), 23-28.
3. Baylor, A. L., Kitsantas, A., & Chung, H. (2001). The Instructional Planning Self-Reflective Tool (IPSRT): A Method for Promoting Effective Lesson Planning. *Educational Technology*, 41(2), 56-59. (Journal acceptance rate: 15% for articles reviewed by editor)
4. Kitsantas, A. & Baylor, A. L. & Hu, H. (2001). The Constructivist Planning Self-Reflective Tool: Facilitating a Constructivist Instructional Planning Approach. *Educational Technology*, 41(6), 39-43. (Journal acceptance rate: 15% for articles reviewed by editor)
5. Baylor, A. L. (1999). Intelligent agents as cognitive tools for education. *Educational Technology*, 39(2), 36-40. (Journal acceptance rate: 15% for articles reviewed by editor)

6. Ritchie, D. & Baylor, A. L. (1999). What Gets Results? An Analysis of Effective Technology-Integrating Schools. Technical report for CompassLearning Inc.
7. Hill, C. C., Fullerton, H. L., Baylor, A. L., Ryan, J. R. & Kuhs, T. M. (1994). A National Survey of the Frequency and Formats of Statewide Mathematics Assessment Programs. Columbia, SC: The South Carolina Center for Excellence in Assessment of Student Learning, University of South Carolina.

Presentations

Refereed Papers Presented at Conferences and Symposia

*Please note that papers listed under “Refereed Proceedings Published” were also presented, but are not duplicated here.

1. Since 2011- numerous presentations, to be updated,
2. Kim, Y-J, Baylor, A. L. (2011, April). Preliminary evidence for the effectiveness of an agent-based creativity support tool. Paper presented at AERA (American Educational Research Association), New Orleans, LA.
3. Doerr, C.E., Plant, E. A. Rosenberg-Kima, R. B., & Baylor, A. L. (2008, June). Engineering Inclusiveness: Pedagogical Agents Improve Female Students’ Attitudes Toward Engineering. Paper presented at the 7th Biennial Society for the Psychological Study of Social Issues Conference, Chicago, IL. (National)
4. Rosenberg-Kima, R. B., & Baylor, A. L., Plant, E. A., Doerr, C.E. (2008, March). The importance of interface agent visual presence and appearance in impacting young women’s attitudes toward engineering. Paper presented at AERA (American Educational Research Association), New York, NY. (National)
5. Doerr, C.E., Plant, E. A. Rosenberg-Kima, R. B., & Baylor, A. L. (2008, February) Increasing young women’s interest in engineering: Targeting autonomy, relatedness, and competence. Paper presented at the 9th Annual Meeting of the Society for Personality and Social Psychology. Albuquerque, NM. (National)
6. Kim, C., Keller, J. & Baylor, A. L. (2007, October). Effects of Agent versus Text Delivered Motivational and Volitional Messages on the Attitudes of Introductory Engineering Students, Paper presented at AECT (Association of Educational Communication and Technology), Los Angeles, CA. (National)
7. Baylor, A. L. & Rosenberg-Kima, R. (2007, April) Interface Agents to Alleviate Frustration in Online Learning. Paper presented at AERA (American Educational Research Association), Chicago, IL. (National)
8. Baylor, A. L. & Rosenberg-Kima, R. (2007, April) Interface Agents as Social Models: The Impact of Appearance on Females’ Attitude Toward Engineering. Paper presented at AERA (American Educational Research Association), Chicago, IL. (National)
9. Kim, S. & Baylor, A. L. (2007, April). The Effect of Juxtaposing Semiotic Mediation With Social Mediation on Moral Judgment Competency: Drawing Individual Growth Curves by Hierarchical Linear Modeling. Paper presented at AERA (American Educational Research Association), Chicago, IL. (National)
10. Kim, S. & Baylor, A. L. (2007, April). Semiotic Analysis: The Influence of Mediation on Moral Reasoning and Moral Judgment. Paper presented at AERA (American Educational Research Association), Chicago, IL. (National)
11. Baylor, A. L. & Plant, E. A. (2006, October). Systematic Research of Young Women’s Stereotypes and Attitudes Toward Engineering Through Computer-Based Avatars: The Impact of Appearance and Message. Paper presented at Grace Hopper Celebration of Women and Computing, San Diego, CA. (National)

12. Weiss, M. L. J., Volk, R. J., Kramer, R. K., Hawley, S. T., Whitney, S. N., Brown, P.H., Baylor, A. L., Spann, S. J. (2006, October). Utilizing a microworld environment with a pedagogical agent for decision support in breast cancer risk reduction among low literacy women: Preliminary Findings. Paper presented at Annual Meeting of Society from Medical Decision Making. Cambridge, MA. (National)
13. Park, S. Keller, J. & Baylor, A. L. (2006, October) Promoting Positive Emotion in Pedagogical Agent Embedded Learning. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Dallas, TX. (National)
14. Son, C. & Baylor, A. L. (2006, October). Handheld-Based Pedagogical Agents as a Social Interface in Independent Mobile Learning. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Dallas, TX. (National)
15. Son, C. & Baylor, A. L. (2006, October). The Effects of a Handheld-Based Pedagogical Agent on Learning, Agent Persona, and Motivation. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Dallas, TX. (National)
16. Son, C. & Baylor, A. L. (2006, October). The Impact of Pedagogical Agents' Properties: A Review of Empirical Research. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Dallas, TX. (National)
17. Kim, C. & Baylor, A. L. (2006, May). A pedagogical agent as a change agent in an organization. Paper presented at SALT (Society for Applied Learning Technology). Orlando, FL. (National)
18. Baylor, A. L., Kim, S., Son, C., & Lee, M. (2006, April). Effective Pedagogical Agent Nonverbal Communication for Different Learning Outcomes. Paper presented at AERA (American Educational Research Association), San Francisco, CA. (National)
19. Park, S. Keller, J. & Baylor, A. L. (2006, March). The Effects of Seductive Augmentation and Agent Role on Learning Interest, Achievement, and Attitude. Paper presented at AERA (American Educational Research Association), San Francisco, CA. ***Best Paper Award from AERA SIG Advanced Learning Technologies (ATL)*** (National)
20. Baylor, A. L., & Plant, E. A. (2006, March). The Influence of Computer-Based Social Models' Appearance on Undergraduate Females' Beliefs and Stereotypes Toward Engineering. Proceedings of AERA (American Educational Research Association), San Francisco, CA. (National)
21. Plant, E. A., Doerr, C., Baylor, A. L., Carter, K. (2006, January). The impact of computer-based social models on middle school students' attitudes and performance. Paper presented at SPSP (Society for Personality and Social Psychology) Annual Meeting, Palm Springs, CA. (National)
22. Baylor, A. L. & Plant, E. A. (2005, October). Pedagogical agents as social models for engineering: The influence of agent appearance. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Orlando, FL. (National)
23. Baylor, A. L. & Kim, S., Son, C., & Lee, M. (2005, October). Design considerations for pedagogical agent nonverbal communication. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Orlando, FL. (National)
24. Lee, M. & Baylor, A. L. (2005, October). Development of a Supportive Pedagogical Agent for Facilitating Shared Understanding in Computer-Supported Problem-Based Learning. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Orlando, FL. (National)
25. Lee, M. & Baylor, A. L. (2005, October). Enhancing Students' Critical Thinking Skills in Web-Based Bulletin Board Discussions with a Socratic Pedagogical Agent. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Orlando, FL. (National)
26. Kim, Y. & Baylor, A. L. (2005, April) The Impact of Affective Expression and Gender of a Learning Companion. Paper presented at AERA (American Educational Research Association). Montreal, Canada. (National)
27. Baylor, A. L. (2005, April) Pedagogical Agents as Scaffolds for Learning and Attitude Change. Paper presented at symposium "Scaffolding Learning with Hypermedia: An Exploration of Theoretical, Empirical, and Design Issues" at the American Educational Research Association (AERA) Conference, Montreal, Canada. (National)

28. Kim, Y. & Baylor, A. L. (2005, April) Pedagogical Agents as Learning Companions: Building Empathetic Relationships with Learners. Paper presented at AERA (American Educational Research Association). Montreal, Canada. (National)
29. Shen, E., Warren, D. & Baylor, A. L. (2004, October). The effect of agent affect on learning, motivation, and perceived agent persona. Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Chicago, IL. (National)
30. Kim, Y., Baylor, A. L. & Reed, G. (2004, October) Pedagogical Agents' Persona: Which Affects More, Image or Voice? Paper presented at AECT (Association for Educational Communication and Technology) International Conference. Chicago, IL. (National)
31. Lange, C. & Baylor, A. L. (2004, July) Computer-based Simulation for Constructivist Instruction in Game Theory. Paper presented at Western Economic Association International, Vancouver, BC. (Regional)
32. Lee, Y., Baylor, A. L. & Nelson, D. (2004, July). Modeling Transformation Process of Content Knowledge Through Authoring Hypertext. Paper presented at International Conference on Education and Information Systems, Technologies and Applications (EISTA 2004), Orlando, FL. (International)
33. Baylor, A. L. (2004, March). Implementing Pedagogical Agents to Support Metacognition. Paper presented at American Educational Research Association Conference, San Diego, CA. (National)
34. Lange, C. & Baylor, A. L. (2004, January). Using Computer Based Technology for Teaching Game Theory in a Constructivist Way. Paper presented at the American Economic Association Meeting, Washington, D.C. (National)
35. Baylor, A. L., Shen, E., Kim, Y. & Huang, X. (2003, October). The Effects of Pedagogical Agent Gender and Ethnicity on Student Motivation. Paper presented at TAPIA (Richard Tapia Celebration of Diversity in Computing), Atlanta, GA. (National)
36. Baylor, A. L. & Ebbers, S. (2003, October). The impact of multiple pedagogical agents on learning: An experimental study. Paper presented at AECT (Association for Educational Communication and Technology) Conference. Anaheim, CA. (National)
37. Kim, Y. & Baylor, A. L. (2003, October). Design features for developing pedagogical agents as experts, motivators, and mentors: A validation study. Paper presented at AECT (Association for Educational Communication and Technology) Conference. Anaheim, CA. (National)
38. Ryu, J. & Baylor, A. L. (2003, October). How human-like is the agent? A new instrument to assess pedagogical agent persona. Paper presented at AECT (Association for Educational Communication and Technology) Conference. Anaheim, CA. (National)
39. Baylor, A. L. & Ryu, J. (2003, October). An experimental study of pedagogical agent voice and animation. Paper presented at AECT (Association for Educational Communication and Technology) Conference. Anaheim, CA. (National)
40. Lange, C. & Baylor, A. L. (2003, June). ATMUS. Paper presented at European Applied Business Research Conference, Venice, Italy. (International)
41. Baylor, A. L. & Chang, S. (2003, April). Cognitive load issues with animated pedagogical agents: an experimental study of timing, source, and adaptivity of agent feedback. Paper presented at AERA (American Educational Research Association), Chicago, IL. (National)
42. Lange, C. & Baylor, A. L. (2003, March). A constructivist way to teach game theory. 15th Annual Lilly Conference on College Teaching—West. Pomona, CA. (Regional)
43. Gao, H., Baylor, A. L. & Shen, E. (2002, November). Strategies for designers to support collaborative learning in professional development online communities. Paper presented at AECT (Association for Educational Communication and Technology) Conference. Dallas, TX. (National)
44. Baylor, A. L. & Ryu, J. (2002, November). Effects of image and animation on pedagogical agent persona. Paper presented at AECT (Association for Educational Communication and Technology) Conference. Dallas, TX. (National)
45. Lange, C. & Baylor, A. L. (2002, July). ATMUS: A computer based tool to teach game theory. Paper presented at WEAI (Western Economic Association International) Conference. Seattle, WA. (Regional)

46. Baylor, A. L. (2002, April). Expanding metacognitive awareness of instructional planning with MIMIC (Multiple Intelligent Mentors Instructing Collaboratively), an agent-based learning environment. Paper presented at American Educational Research Association (AERA), New Orleans, LA. (National)
47. Baylor, A. L. & Kitsantas, A. (2002, April). Instructivist and constructivist self-regulatory tools for pre-service teachers: The IPSRT and CPSRT. Paper presented at American Educational Research Association (AERA), New Orleans, LA. (National)
48. Baylor, A. L. & Kitsantas, A. (2001, November). A comparison of instructivist and constructivist self-regulatory tools for instructional planning. Paper presented at Association for Educational Communication and Technology (AECT), Atlanta, GA. (National)
49. Kitsantas, A. & Baylor, A. L. (2001, November). The impact of the IPSRT (Instructional Planning Self-Reflective Tool) on pre-service teachers' skills and affect towards instructional planning. Paper presented at Association for Educational Communication and Technology (AECT) Conference, Atlanta, GA. (National)
50. Baylor, A. L., Kitsantas, A. & Hu, H. (2001, October). Introducing the IPSRT (Instructional Planning Self-Reflective Tool) and CPSRT (Constructivist Planning Self-Reflective Tool): Self-regulatory tools to promote instructivist and constructivist instructional planning for preservice teachers. Paper presented at the Association for Educational Communications and Technology (AECT) Conference, Atlanta, GA. (National)
51. Kitsantas, A. & Baylor, A. L. (2001, August). Enhancing pre-service teacher's performance, attitudes and self-efficacy beliefs regarding instructional planning. Paper presented at American Psychological Association (APA) Conference, San Francisco, CA. (National)
52. Baylor, A. L. (2001, August). Agents, Believability and Embodiment in Advanced Learning Environments. Paper presented as part of a symposium sponsored by the International Conference of Advanced Learning Technologies (ICALT), Madison, WI, IEEE Press.
53. Baylor, A. L. (2001, April). Incidental learning and perceived disorientation on WWW: Internal and external factors. Paper presented at American Educational Research Association (AERA), Seattle, Washington. (National)
54. Baylor, A. L. & Kitsantas, A. (2001, April). Self regulation in instructional planning of pre-service teachers: An experimental study. Paper presented at American Educational Research Association (AERA), Seattle, Washington. (National)
55. Baylor, A. L. & Jafari, A. (2000, February). Intelligent agents for education: Possibilities and realities. Paper presented at Association for Educational Communication and Technology (AECT), Long Beach, CA. (National)
56. Baylor, A. L. (2000, February). A framework for MIMIC, an intelligent agent-based learning environment. Paper presented at Association for Educational Communication and Technology (AECT), Long Beach, CA. (National)
57. Jafari, A. & Baylor, A. L. (2000, February). Teaching and learning in 2002. Paper presented at Association for Educational Communication and Technology (AECT), Long Beach, CA. (National)
58. Baylor, A. L. and Jafari, A. (1999, October). What are the possibilities of intelligent agents for education? Paper presented at the International Conference of Technology in Education (ICTE), Tampa, FL. (International)
59. Baylor, A. L. (1999, October). Foundations for designing MIMIC, an intelligent agent-based learning environment. Paper presented at the International Conference of Technology in Education (ICTE), Tampa, FL. (International)
60. Baylor, A. L. (1999, April). Intelligent agents for education. Paper presented at American Educational Research Association, Montreal, Canada. (National)
61. Baylor, A. L. (1999, February). Factors influencing effective use of technology in the schools. Paper presented at Association for Educational Communications and Technology (AECT), Houston, TX. (National)
62. Baylor, A. L. (1998, June). Individual differences in web navigation. Paper presented at National Educational Computer Conference (NECC), San Diego, CA. (National)

63. Baylor, A. L. (1998, April). Novice instructional design of text. Paper presented at American Educational Research Association (AERA), San Diego, CA. (National)
64. Baylor, A. L. (1998, February). Intelligent agents as cognitive tools in education. Paper presented at Association for Educational Communications and Technology (AECT), St. Louis, Missouri. (National)
65. Baylor, A. L. (1997, February). Effects of designing instruction for text on learning. Paper presented at South Carolina Educators for the Practical Use of Research (SCEPUR), Columbia, SC. (State)
66. McCormick, C. B. & Baylor, A. L. (1995, April). Thematic awareness and recall of information from text. Paper presented at American Educational Research Association (AERA), San Francisco, CA. (National)

Invited Presentations and Symposia

- Organized and led panel on “Future Research Directions for Pedagogical Agents” at the American Educational Research Association (AERA) Conference, New York City, April, 2018.
- Keynote talk “Cyberlearning and the Future of Work at the Human-Technology Frontier” at the US-China Smart Education Conference, Beijing, China, March 2018.
- Organized and led panel on “Research Directions for Affective Pedagogical Agents” at the Intelligent Virtual Agents International Conference, Stockholm Sweden, August 2017.
- Organized and led panel on “NSF Big Idea – Work at the Human-Technology Frontier: A Conversation,” AERA Conference, San Antonio TX, April 2017.
- Keynote talk “More than just an inter-‘face:’ Designing virtual humans for teaching and learning” Arizona State University, February 2017.
- Plenary presentation, “Agents with an Attitude,” eLearning Week. Seoul, Korea. September 2010.
- Plenary presentation at Royal Society of Great Britain, London, England. This 2-day meeting on “Computation of emotions in man and machines” was the *most oversold meeting in the 350+ year history of the Royal Society. (International). April 2009.
- Organized and led panel at the International Conference of Artificial Intelligence and Education (AI-ED), Brighton England on the future of pedagogical agent research. April 2009.
- Plenary presentation “Virtual Humans: Social Science Implications.” Plenary presentation at the French Academy of Sciences “Frontiers of Science Symposium,” sponsored by the French and United States National Academy of Science (NAS), Rogoff, France. November 2008.
- Keynote talk, “Anthropomorphic interface agents as persuasive technology.” Sponsored by the Annenberg School for Communication and the Center for Human Modeling and Simulation at the University of Pennsylvania, October 2008.
- Keynote talk, “Affordances and innovations with anthropomorphic interfaces.” Sponsored by the CHIME Lab, Department of Communication, Stanford University, Stanford, CA, April 2007.
- Keynote talk, “Anthropomorphic interfaces for learning and persuasion.” Sponsored by the Department of Computer Science, George Washington University, Washington, DC, March 2007.
- Keynote talk, (Withdrew at site due to illness) “Pedagogical Agent Design: Affordances and Opportunities” Sponsored by Program of Technology, Innovation and Education, Harvard University. November 2006.
- Keynote talk (with Ron Cole) ”Design of Virtual Humans.” Sponsored by Beijing University of Technology, Beijing, China. June 2006.
- Presentation “Challenging Stereotypes of Engineering with Pedagogical Agents,” JAM-05, sponsored by National Science Foundation, Washington DC. April 2005.
- Invited participant/presenter (80 total) at Frontiers of Science Symposium, sponsored by National Academies of Science, Irvine, California. October 2005.

- Organized and led invited expert panel: Baylor, A. L., Cole, R., Graesser, A. & Johnson, L. (July, 2005) Pedagogical agent research and development: Next steps and future possibilities. In C.-K. Looi, G. McCalla, B. Bredeweg & J. Breuker (Eds.), *Artificial intelligence in education: Supporting learning through intelligent and socially informed technology* (Vol. 125, p. 985). Amsterdam, The Netherlands: IOS Press.
- Invited presenter, "What we know (and don't) about the design of Pedagogical Agents." Training for Tomorrow 2004: Explore the Future of Intelligent, Adaptive, and Collaborative Training, sponsored by NASA Johnson Space Center, Houston, TX. October 2004.
- Keynote, "A Tale of Three Unexpected Teachers." FSU Graduate Student Teaching Awards Ceremony. April 2004.
- Invited plenary presentation, "Systematically designing pedagogical agents: Effects of image, animation, and agent role on learner performance and motivation." Invited presentation at Advanced Learning Technologies and Learning Networks and Their Impact on Future Aerospace Workforce, sponsored by NASA Langley Research Center, Hampton, VA. April 2003.
- Keynote, "A research agenda for pedagogical agents." Sponsored by the Tutoring Research Group, University of Memphis, Memphis, Tennessee. July 2002.
- Invited presentation, "Cognitive foundations of agent-based learning environments." Sponsored by the Agent Institute, University of Maine, Augusta, Maine. March 2001.
- Invited presentation "Teaching and technology in the American University System," sponsored by Department of Monetary Economics, University of Hanover, Shierke, Germany. May 2000.
- Keynote "How can we use intelligent agents for education?" Sponsored by Knowledge Based Systems Institute, University of Hanover, Hanover, Germany. December 1999.
- Keynote, "Disorientation on the web—Adventure or distraction?" Consortium of College and University Media Centers (CCUMC), Santa Cruz, CA. November 1998.
- Invited presentation "Technology for training: A primer." American Society of Training and Development 50th Anniversary Conference, Point Loma, CA. October 1997.

Refereed Presentations and Symposia

- Baylor, A. L. (2006, February). Challenging Stereotypes toward Engineering with Pedagogical Agents. Symposium on Overcoming Gender Stereotypes: Girls in Science, Engineering and Technology, sponsored by American Association for the Advancement of Science (AAAS). St. Louis, Missouri.
- Baylor, A. L. (2004, April). Pedagogical Agents as Scaffolds, in session, "Scaffolding Self-regulated Learning and Metacognition: Implications for the design of computer-based scaffolds," sponsored by American Educational Research Association, San Diego, CA.
- Baylor, A. L. (2004, April). Discussant for session on "Pedagogical Agent Design and Applications." sponsored by American Educational Research Association, San Diego, California.
- Baylor, A. L. (2003, June). Half-day tutorial on "Effective design of pedagogical agents" sponsored by ED-MEDIA (World Conference on Educational Multimedia, Hypermedia and Telecommunications), Honolulu, Hawaii..

Contracts and Grants

Contracts and Grants Funded

Mukherjee, A. & Baylor, A. L. "Understanding mental models of expertise in construction management using interactive adaptive simulations." Funded by *National Science Foundation: Social, Behavioral, & Economic Sciences (SBE) Directorate*. (2007-2010). This is a collaborative grant where I am the lead-PI from FSU and Mukherjee is the lead PI from Michigan Technological University. Total award (\$553,000 /\$199,574 FSU).

- Baylor, A. L. & Plant, E.A. “Pedagogical agents as social models: Challenging gender-related stereotypes of engineering.” Funded by *National Science Foundation: Education & Human Resources (EHR) Directorate*. (2004-2009). Total award (\$499,995).
- Baylor, A. L. “REU Grant Supplement to support Interdisciplinary Undergraduate Research in IT/Social Psychology.” Funded by *National Science Foundation: EHR* (2005-2009). Total award (\$57,500).
- Baylor, A. L. Information Technology Research (ITR) Grant Supplement to Investigate Agent Affect. Funded by *National Science Foundation: Computer, Information Sciences & Engineering (CISE) Directorate* (2004-2007). Total award (\$43,995).
- Baylor, A. L. Research Experiences for Undergraduates (REU) supplement. Funded by *National Science Foundation: CISE* (2004-2005). Total award (\$6,000).
- Baylor, A. L. “Systematic Innovations for EME2040: Introduction to Educational Technology.” Funded by *Council for Instruction, Florida State University* (2004). Total award (\$7,500).
- Baylor, A. L. “Research Experiences for Undergraduates (REU): Interdisciplinary pedagogical agent research.” Funded by *National Science Foundation* (2003-2004). Total award (\$10,000)
- Baylor, A. L. “Systematic experimentation of the role of pedagogical agent features in promoting learning and motivation.” Funded by *National Science Foundation: CISE*. (2002-2006). Total award (\$380,000).
- Baylor, A. L. “Experimental research with Multiple Intelligent Mentors Instructing Collaboratively (MIMIC).” Funded by *Council on Research in Education (CORE), College of Education, FSU*. (Summer 2001). Total award (\$2,500).
- Baylor, A. L. “Multiple Intelligent Mentors Instructing Collaboratively (MIMIC): An agent-based learning environment for investigating instructional theory.” Funded by *Florida State University Council on Research and Creativity* (Planning Grant). (2000-2001). Total award (\$9,360).
- Baylor, A. L. “Developing MIMIC (Multiple Intelligent Mentors Instructing Collaboratively): An agent-based environment for learning instructional design.” Funded by *First Year Assistant Professor Award, Florida State University*. (Summer, 2000). Total award (\$10,000).
- Baylor, A. L. Ritchie, D.R. “An analysis of factors associated with successful school technology integration.” Funded by *Jostens Learning Corporation*. (1998-1999). Total award (\$84,709).
- Baylor, A. L. “Societies of Intelligent Mentors (SIM): A framework for the intelligent agent-based learning environment.” Funded by *Research and Creative Scholarly Activities Award, San Diego State University*. (1998). Total award (One month summer salary).
- Baylor, A. L. “Curriculum innovations for EDTEC 470 Technologies for Teachers.” Funded by *Dean’s Grant, College of Education, San Diego State University*. (1998) Total award (\$1,850).
- Baylor, A. L. “Intelligent agents for education.” Funded by *Dean’s Grant, College of Education, San Diego State University*. (1998). Total award (\$900)
- Baylor, A. L. “Disorientation on the web--Adventure or distraction?” Funded by *Consortium of College and University Media Centers (CCUMC)*. (1997). Total award (\$2,000).
- Baylor, A. L. “Effects of designing instruction for text.” Funded by *Dean’s Grant, College of Education, San Diego State University*. (1997). Total award (\$800).

SERVICE

Member of Advisory Board

(2013-2016) George Mason University, Instructional Design and Technology graduate program.
(2012-2014) University North Texas, Department of Learning Technologies.

Guest Editing for Refereed Journals

Baylor, A. L. (Ed.) (2007). Pedagogical Agents Special Issue. *Educational Technology*, 47(1).

Solicited articles and negotiated topics with leaders in the field, focusing on translating innovative research into practical results and design guidelines. Final issue consisted of 12 articles.

Baylor, A. L. & Rossett, A. (2000). Technology and Training Special Issue. *TechTrends*, 44(5).

Editorial Board Membership(s)

Consulting editor (2001-present). *Educational Technology Research and Development*: Development Section.

Consulting editor (2002-present). *Educational Technology Research and Development*: Research Section.

Reviewer for Refereed Journals (selected)

- Computers and Human Behavior
- International Journal of Artificial Intelligence in Education
- International Journal of Human Computer Studies
- Computers and Education
- Applied Social Psychology
- TechTrends

Reviewer for Grant Applications (selected)

- Member of numerous review panels, National Science Foundation (Computer Information Science & Engineering (CISE) Directorate; Education & Human Resources (EHR) Directorate)
- Social Sciences Research Council of Canada
- Austrian Science Fund
- Indiana 21st Century Research and Technology Fund
- Office of Educational Research and Improvement (OERI)

Program and Organizing Committees for Professional Associations (selected)

Since 2016- served on numerous program committees, to be updated.

Program Committee Member, 2nd International Workshop on Affect, Meta-Affect, Data and Learning (AMADL 2016) held at ITS 2016, Zagreb, Croatia (2016).

Program Committee Member, International Conference of Artificial Intelligence in Education (AI-ED), Wellington New Zealand (2011).

Program Committee Member, Autonomous Agents and MultiAgent Systems (AAMAS) International Conference, Toronto, Canada (2010)

Organizing Committee Member, AAAI Fall Symposium “Cognitive and Metacognitive Educational Systems” (2009).

Organizing Committee Member, French-American Kavli Frontiers of Science symposium (2009).

Program Committee Member, Persuasive International Conference, Claremont, California (2009)

Program Committee Member, Intelligent User Interfaces International Conference, Sanibel Island, Florida (2009)

Program Committee Member, Persuasive International Conference, Helsinki, Finland (2008)

Program Committee Member, Intelligent Virtual Agents International Conference, Tokyo Japan (2008)

Program Committee Member, Intelligent Virtual Agents International Conference, Paris, France (2007)

Organizing Committee Member, Tapia (Celebration of Diversity in Computing) Conference, Orlando, Florida (2006-2007)

Program Committee Member, Workshop on Modeling and Scaffolding Affective Experiences to Impact Learning” at Artificial Intelligence in Education International Conference, (2006-2007)

Program Committee Member, Workshop on Assessment of Group and Individual Learning through Intelligent Visualization (AGILeViz), held at the Artificial Intelligence in Education International Conference (2006-2007)

Invited Participant, Nominated by NSF to participate as one of 12 members in a Workshop on CyberLearning: Cognitive Implications of Virtual or Web-enabled Environments. Organized by the Computing Research Association and the International Society of the Learning Sciences. Outcome was Technical Report: “Cyberinfrastructure for Education and Learning for the Future: A Vision and Research Agenda,” Computing Research Association. (2004-2005)

Program Committee Member, Workshop on Agent-Based Systems for Human Learning, held at International Joint Conference on Autonomous Agents & Multi-Agent Systems, Netherlands. (2005)

Program Committee Member, Workshop on Educational Games as Intelligent Learning Environments, held at the Artificial Intelligence in Educational International Conference. (2005)

Organizing Committee Member, Workshop on “Perceptive Animated Interfaces & Virtual Humans,” sponsored by National Science Foundation, La Jolla, CA, (2003-2004)

Reviewer, American Educational Research Association Conferences (1998-present).

Committee Member, Nominating Association for Educational Communications and Technology (AECT) President. (2003-2004)

Reviewer, Young Researcher Award for Association for Educational Communications and Technology (AECT): Research and Theory Division (1999-2002)

Reviewer, Cognitive Science Society Annual Conferences (1998-2000)