# ANDREW C. BUTLER

CURRICULUM VITAE

The University of Texas at Austin Educational Psychology 1912 Speedway, Stop D5800 Austin, TX 78712-1289 andrewbutler@austin.utexas.edu 512.471.0546 (office) 512.471.1288 (fax)

# PROFESSIONAL EXPERIENCE

- Assistant Professor, 2015-Present Educational Psychology, University of Texas at Austin
- Postdoctoral Research Scholar (NRSA Fellowship), 2012-2014 Psychology & Neuroscience, Duke University Advisor: David C. Rubin
- Postdoctoral Research Associate, 2009-2012 Psychology & Neuroscience, Duke University Advisor: Elizabeth J. Marsh
- Research Assistant, 2002-2003 Center for Research in Language, University of California, San Diego

# EDUCATION

- Ph.D., Washington University in St. Louis, 2009
  "Using repeated testing and variable encoding to promote transfer of learning"
  Dissertation Committee: Henry L. Roediger, III (chair), David A. Balota, Mark A.
  McDaniel, Jeffrey M. Zacks, R. Keith Sawyer, James V. Wertsch (members)
- M.A., Washington University in St. Louis, 2006
   Thesis: "Feedback enhances the positive effects and reduces the negative effects of multiple-choice testing"
   Advisor: Henry L. Roediger, III
- B.A., Emory University, 2002 (Summa cum laude; Psychology / Economics) Thesis: "The role of emotional tone of voice in episodic memory" Advisor: Lynne C. Nygaard

# RESEARCH INTERESTS

I am interested in the malleability of memory – the cognitive processes and mechanisms that cause memories to change or remain stable over time. More specifically, my research focuses on how the process of retrieving memories affects the content (e.g., events, specific details, narrative structure, etc.) and phenomenological characteristics (e.g., confidence, emotional intensity, vividness, etc.) of those memories. My program of research addresses both theoretical issues in cognitive psychology and practical applications to education and mental health.

# HONORS & AWARDS

Fellow, Psychonomic Society

J. Don Read Early Career Award, Society for Applied Research in Memory and Cognition, 2016

Nominated for APA Board of Scientific Affairs, 2015

Outstanding Postdoc at Duke, Duke University, 2013

"Rising Star", Association for Psychological Science, 2011-2012

Paul Pintrich Outstanding Dissertation Award, American Psychological Association Division 15 (Educational Psychology), 2010

Student Marshal, Commencement Ceremony, Washington University in St. Louis, 2010

Dean's Dissertation Fellowship, Washington University in St. Louis, 2008-2009

- Erlbaum Award in Cognitive Science, Psi Chi, The National Honor Society in Psychology, 2006-2007
- Student Leader of the Year Award, Graduate Professional Council, Washington University in St. Louis, 2006-2007
- Julia A. Gehm Scholarship for Outstanding Student Leadership, Washington University in St. Louis, 2005-2007

Honorable Mention, National Science Foundation Graduate Fellowship, 2004

# Funding

- The James S. McDonnell Foundation, "Implementing principles from the science of learning within educational practice", 2016-2021. Collaborative Activity Grant: \$4,635,718 total cost; \$816,647 sub-award. Shana K. Carpenter (PI), Andrew C. Butler, Jeffrey D. Karpicke, David B. Miele, Timothy J. Nokes-Malach, & Sarah K. "Uma" Tauber.
- Association for Psychological Science Fund for Teaching and Public Understanding of Psychological Science, "MythBusters: An intervention to correct misconceptions about psychology", 2016-2017. \$14,436 total cost. Andrew C. Butler.

- Ruth L. Kirschstein National Research Service Award, National Institute of Mental Health, "The effects of repeated retrieval on autobiographical memories" (1F32MH095302-01A1), 2012-2014. \$161,802 total cost. Andrew C. Butler; Mentor: David C. Rubin, Co-Mentor: Elizabeth J. Marsh.
- American Academy of Neurology Education Research Grant to Evaluate AAN Education Programs, "Test-enhanced learning in continuing medical education: Measuring and augmenting long-term retention from the AAN annual meeting." 2012.
  \$11,500 total cost. Douglas P. Larsen (PI) & Andrew C. Butler.
- The Spencer Foundation, "Asking students questions during learning: Retrieval practice as a mechanism for promoting transfer of science concepts" (#201100093), 2011. \$35,800 total cost. Elizabeth J. Marsh (PI) & Andrew C. Butler.
- American Academy of Neurology Educational Research Grant, "Do deep learning techniques combined with repeated testing prevent long-term forgetting? Investigation of a novel combination of cognitive and educational psychology concepts in neurological education." 2009-2010. \$10,000 total cost. Douglas P. Larsen (PI), Henry L. Roediger, III, & Andrew C. Butler.
- American Academy of Neurology Educational Research Grant, "Effects of repeated testing by simulation and written tests on long-term retention of neurological information: A randomized, controlled trial." 2008-2009. \$10,000 total cost. Douglas P. Larsen (PI), Henry L. Roediger, III, Andrew C. Butler, & Amy L. Lawson.

#### JOURNAL ARTICLES

- Butler, A. C., Rice, H. J., Wooldridge, C. L., & Rubin, D. C. (2016). Visual imagery in autobiographical memory: The role of repeated retrieval in shifting perspective. *Consciousness and Cognition*, *42*, 237-253.
- Emke, A. R., Butler, A. C., & Larsen, D. P. (2016). Effects of Team-Based Learning on short-term and long-term retention of factual knowledge. *Medical Teacher*, 38, 306-311.
- Muzyk, A. J., Fuller, S., Jiroutek, M. R., Grochowski, C. O., Butler, A. C., & May, D. B. (2015). Implementation of a flipped classroom model to teach psychopharmacotherapy to third-year Doctor of Pharmacy (PharmD) students. *Pharmacy Education*, 15, 44-53.
- Larsen, D. P., Butler, A. C., Aung, W. Y., Corboy, J. C., Friedman, D. I., & Sperling, M. R. (2015). The effects of test-enhanced learning on long-term retention in AAN annual meeting courses. *Neurology*, *84*, 748-754.

- Mullet, H. G., Butler, A. C., Verdin, B., von Borries, R., & Marsh, E. J. (2014). Delaying feedback promotes transfer of learning in a STEM classroom. *Journal of Applied Research in Memory & Cognition*, 3, 222-229.
- Butler, A. C., Marsh, E. J., Slavinsky, J. P., & Baraniuk, R. G. (2014). Integrating cognitive science and technology improves learning in a STEM classroom. *Educational Psychology Review*, *26*, 331-340.
- Zaromb, F., Butler, A. C., Agarwal, P. K., & Roediger, H. L., III (2014). Collective memories of three wars in United States history in younger and older adults. *Memory & Cognition.* 42, 383-399.
- Larsen, D. P., Butler, A. C., Lawson, A. L., & Roediger, H. L., III (2013). The importance of seeing the patient: Test-enhanced learning with standardized patients and written tests improves clinical application of knowledge. *Advances in Health Sciences Education*, 18, 409-425.
- Larsen, D. P., Butler, A. C., & Roediger, H. L., III (2013). Comparative effects of testenhanced learning and self-explanation on long-term retention. *Medical Education*, 47, 674–682.
- Butler, A. C., Godbole, N., & Marsh, E. J. (2013). Explanation feedback is better than correct answer feedback for promoting transfer of learning. *Journal of Educational Psychology*, *105*, 290-298.
- Marsh, E. J., Butler, A. C., & Umanath, S. (2012). Using fictional sources in the classroom: Applications from cognitive psychology. *Educational Psychology Review*, 24, 449-469.
- Umanath, S., Butler, A. C., & Marsh, E. J. (2012). Positive and negative effects of monitoring popular films for historical inaccuracies. *Applied Cognitive Psychology*, 26, 556-567.
- Butler, A. C., Dennis, N. A., & Marsh, E. J. (2012). Inferring facts from fiction: Reading correct and incorrect information affects memory for related information. *Memory*, 20, 487-498.
- Butler, A. C., Fazio, L. F., & Marsh, E. J. (2011). The hypercorrection effect persists over a week, but high confidence errors return. *Psychonomic Bulletin & Review*, *18*, 1238-1244.
- Roediger, H. L., III, & Butler, A. C. (2011). The critical role of retrieval practice in longterm retention. *Trends in Cognitive Sciences*, 15, 20-27.

- Butler, A. C. (2010). Repeated testing produces superior transfer of learning relative to repeated studying. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 36*, 1118-1133.
- Larsen, D. P., Butler, A. C., & Roediger, H. L., III (2009). Repeated testing improves long-term retention relative to repeated study: A randomized, controlled trial. *Medical Education*, 43, 1174–1181.
- Butler, A. C., Kang, S. H. K., & Roediger, H. L., III (2009). Congruity effects between materials and processing tasks in the survival processing paradigm. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 35*, 1477–1486.
- **Butler, A. C.**, Zaromb, F., Lyle, K. B., & Roediger, H. L., III (2009). Using popular films to enhance classroom learning: The good, the bad, and the interesting. *Psychological Science*, *20*, 1161-1168.
- Karpicke, J. D., Butler, A. C., & Roediger, H. L., III (2009). Do students practice retrieval when they study on their own? *Memory*, 17, 471-479.
- Larsen, D. P., Butler, A. C., & Roediger, H. L., III (2008). Test-enhanced learning in medical education. *Medical Education*, 42, 959-966.
- Butler, A. C., Karpicke, J. D., & Roediger, H. L., III (2008). Correcting a meta-cognitive error: Feedback increases retention of low confidence correct responses. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 34*, 918-928.
- **Butler, A. C.**, & Roediger, H. L., III (2008). Feedback enhances the positive effects and reduces the negative effects of multiple-choice testing. *Memory & Cognition, 36*, 604-616.
- Butler, A. C., Karpicke, J. D., & Roediger, H. L., III (2007) The effect of type and timing of feedback on learning from multiple-choice tests. *Journal of Experimental Psychology: Applied*, 13, 273-281.
- Arevalo, A. L., Perani, D., Cappa, S. F., Butler, A. C., Bates, E., & Dronkers, N. (2007). Action and object processing in aphasia: From nouns and verbs to the effect of manipulability. *Brain and Language*, 100, 79-94.
- Butler, A. C., & Roediger, H. L., III (2007). Testing improves long-term retention in a simulated classroom setting. *European Journal of Cognitive Psychology*, 19, 514-527.
- Butler, A. C., Marsh, E. J., Goode, M. K., & Roediger, H. L., III (2006). When additional multiple-choice lures aid versus hinder later memory. *Applied Cognitive Psychology*, *20*, 941-956.

- Bulevich, J. B., Roediger, H. L., III, Balota, D. A., & Butler, A. C. (2006). Failures to find suppression of episodic memories in the think/no-think paradigm. *Memory & Cognition*, 34, 1569-1577.
- Szekely, S., Jacobsen, T., D'Amico, S., Devescovi, A., Andonova, E., Herron, D., Lu, C., Pechmann, T., Pleh, C., Wicha, N., Federmeier, K., Gerdjikova, I., Gutierrez, G., Hung, D., Hsu, J., Iyer, G., Kohnert, K., Mehotcheva, T., Orozco-Figueroa, A., Tzeng, A., Tzeng, O., Arevalo, A., Vargha, A., Butler, A. C., Buffington, R., & Bates, E. (2004). A new on-line resource for psycholinguistic studies. *Journal of Memory and Language*, *51*, 247-250.

### MANUSCRIPTS SUBMITTED FOR PUBLICATION

Butler, A. C., Black-Maier, A. D., Raley, N. D., & Marsh, E. J. (under review). Retrieving and applying knowledge to different examples promotes transfer of learning. *Manuscript submitted for publication*.

#### MANUSCRIPTS IN PREPARATION

- Butler, A. C., Campbell, K., & Persky, A. M. (in prep). Stabilizing access to marginal knowledge in a classroom setting. *Manuscript in preparation*.
- **Butler, A. C.**, Umanath, S., Dolan, P. O., Thomas, R. C., & Marsh, E. J. (in prep). Myth Busters: A classroom intervention to correct misconceptions about psychology. *Manuscript in preparation*.
- **Butler, A. C.**, & Raley, N. D. (in prep). Towards consilience in the use of feedback to promote learning: A review of the literature. *Manuscript in preparation*.
- Wang, L., Raley, N. D., & Butler, A. C. (in prep). Investigating transfer-appropriate processing as a theoretical account for the testing effect. *Manuscript in* preparation.

#### COMMENTARIES

- **Butler, A. C.**, & Raley, N. D. (2015). The future of medical education: Assessing the impact of interventions on long-term retention and clinical care. *Journal of Graduate Medical Education*, *7*, 483-485.
- Butler, A. C., & Carpenter, S. K. (2015). Separating myth from reality in education: Introduction to the special issue. *Educational Psychology Review*, 27, 563-565.

### **CHAPTERS**

- Wang, L., & Butler, A. C. (in press). Transfer. In B. Frey (Ed.), *The SAGE Encyclopedia* of Educational Research, Measurement, and Evaluation.
- Larsen, D. P., & Butler, A. C. (2013). Test-enhanced learning. In Walsh, K. (Ed.), Oxford Textbook of Medical Education (pp. 443-452). Oxford: Oxford University Press.
- Marsh, E. J., & Butler, A. C. (2013). Memory in educational settings. In D. Reisberg (Ed.), *The Oxford Handbook of Cognitive Psychology* (pp. 299-317). Oxford: Oxford University Press.
- Roediger, H. L., III, & Butler, A. C. (2013). Retrieval practice (testing) effect. In H. Pashler (Ed.), *Encyclopedia of the Mind* (pp. 660-661). Los Angles, CA: Sage Publications, Inc.
- Roediger, H. L., III, & Butler, A. C. (2011). Paradoxes of remembering and knowing. In N. Kapur, A. Pascual-Leone, & V. Ramachandran (Eds.), *The paradoxical brain* (pp. 151-176). Cambridge: Cambridge University Press.
- McDaniel, M. A., & Butler, A. C. (2010). A contextual framework for understanding when difficulties are desirable. In A. S. Benjamin (Ed.), Successful remembering and successful forgetting: A festschrift in honor of Robert A. Bjork (pp. 175-198). New York: Psychology Press.
- Roediger, H. L., III, Zaromb, F., & Butler, A. C. (2009). The role of repeated retrieval in shaping collective memory. In P. Boyer and J. V. Wertsch (Eds.), *Memory in Mind and Culture* (pp. 29-58). Cambridge: Cambridge University Press.

#### ABSTRACTS / TECHNICAL REPORTS

- Slavinsky, J. P., Devenport, K. J., Butler, A. C., Marsh, E. J., & Baraniuk, R. G. (2013). Open online platforms advancing DSP education. *IEEE International Conference* on Acoustics, Speech, and Signal Processing (ICASSP), 8771-8775.
- Larsen, D. P., Butler, A. C., Roediger, H. L., III (2011). Testing or elaboration: Which one promotes better retention in neurological education? *Neurology*, 76, A381-A381.
- Larsen, D. P., Lawson A. L., Butler, A. C., & Roediger H. L., III (2010). Effects on knowledge retention produced by repeated testing with standardized patients in neurological education. *Neurology*, 74, A206-A206.

- Arevalo, A. L., Butler, A. C., Perani, D., Cappa, S., & Bates, E. (2005). Introducing the gesture norming study: A tool for understanding on-line word and picture processing. Technical Report CRL-0401, Center for Research in Language, University of California, San Diego.
- Arevalo, A., Perani, D., Cappa, S., Butler, A. C., & Bates, E. (2004). A deficit in naming and repeating words involving hand imagery in a group of brain-injured patients. *Brain and Language*, 91, 144.

# TALKS

- **Butler, A. C.** (2017, January). *Applying the science of learning to education: Small changes can make a big difference.* Early career award address at the biannual meeting of the Society for Applied Research in Memory and Cognition, Sydney, NSW, Australia.
- **Butler, A. C.** (2016, October). *Applying the science of learning to STEM education: Small changes can make a big difference*. Talk presented at the TASA STEM Summit Conference, Houston, TX.
- **Butler, A. C.** (2016, September). *Applying the science of learning to educational practice*. Invited talk at Washington University in St. Louis, St. Louis, MO.
- **Butler, A. C.** (2016, June). *Applying the science of learning: Small changes can make a big difference*. Talk presented at the annual UT/TASA Summer Conference on Education, Austin, TX.
- **Butler, A. C.** (2016, June). *How cognitive psychology can inform classroom teaching*. Talk presented at the annual meeting of the American College of Sports Medicine, Boston, MA.
- **Butler, A. C.**, Krumm, A., Yeager, D., & Beattie, R. (2016, March). *The subtle psychology of motivation and learning*. Symposium presented at the annual meeting of SXSWedu, Austin, TX.
- **Butler, A. C.** (2016, February). *Applying the science of learning: Effective use of technology inside and outside of the classroom*. Invited talk at Trinity University, San Antonio, TX.
- **Butler, A. C.** (2015, October). *Visual imagery in autobiographical memory: The role of repeated retrieval in shifting perspective.* Talk presented at the annual meeting of ARMADILLO, Waco, TX.
- **Butler, A. C.** (2015, October). *Applying the science of learning to educational practice*. Invited talk at Pennsylvania State University, University Park, PA.

- **Butler, A. C.** (2015, September). *Applying the science of learning to educational practice*. Invited talk at Texas A&M University, College Station, TX.
- **Butler, A. C.** (2015, September). *Applying the science of learning to educational practice*. Invited talk at Trinity University, San Antonio, TX.
- Butler, A. C., Rice, H. J., Wooldridge, C. L., & Rubin, D. C. (2015, June). Visual imagery in autobiographical memory: The role of repeated retrieval in shifting perspective. Talk presented at the biannual meeting of the Society for Applied Research in Memory and Cognition, Victoria, BC, Canada.
- Butler, A. C., Umanath, S., Dolan, P. O., Thomas, R. C., & Marsh, E. J. (2015, June). *Myth Busters: A classroom intervention to correct misconceptions about psychology*. Talk presented at the biannual meeting of the Society for Applied Research in Memory and Cognition, Victoria, BC, Canada.
- **Butler, A. C.** (2014, January). *A new approach to personalized learning*. Invited talk at Northwestern University, Evanston, IL.
- **Butler, A. C.** (2013, December). *Improving student learning through retrieval practice*. Invited talk at University of Texas - Austin, Austin, TX.
- **Butler, A. C.** (2013, December). *Improving student learning through retrieval practice*. Invited talk at Kent State University, Kent, OH.
- **Butler, A. C.** (2013, November). *Improving student learning through retrieval practice*. Invited talk at University of Illinois Chicago, Chicago, IL.
- **Butler, A. C.**, Marsh, E. J., Slavinsky, J. P., & Baraniuk, R. G. (2013, June). *Findings from a new cyberlearning system based on cognitive science*. Talk presented at the biannual meeting of the Society for Applied Research in Memory and Cognition, Rotterdam, The Netherlands.
- **Butler, A. C.** (2013, May). *Applying cognitive science to enhance educational practice.* Invited talk at the Center for Faculty Excellence at University of North Carolina, Chapel Hill, NC.
- Butler, A. C., & Baraniuk, R. G. (2013, March). *Personalized learning systems Worthy* of the hype? Talk presented at the annual meeting of SXSWedu, Austin, TX.
- **Butler, A. C.** (2012, November). *Applying cognitive science to enhance medical education*. Invited talk for Medical Education Grand Rounds at Duke University School of Medicine, Durham, NC.
- **Butler, A. C.** (2013, February). *Improving student learning through retrieval practice*. Invited talk at The Johns Hopkins University, Baltimore, MD.

- **Butler, A. C.** (2013, February). *Using feedback to correct misconceptions*. Invited talk at The Johns Hopkins University, Baltimore, MD.
- **Butler, A. C.**, Godbole, N., & Marsh, E. J. (2012, April). *Using feedback to promote transfer of learning*. Talk presented at the annual meeting of the American Educational Research Association, Vancouver, B.C., Canada.
- **Butler, A. C.** (2011, October). Using fictional sources in the classroom: Benefits and costs of learning from novels and films. Invited talk at University of North Carolina, Chapel Hill, NC.
- **Butler, A. C.** (2011, August). *Applying cognitive science to enhance educational practice: The mnemonic benefits of retrieval practice.* Invited address at the annual meeting of the American Psychological Association, Washington, DC.
- **Butler, A. C.**, Godbole, N., & Marsh, E. J. (2011, June). *Explanation feedback promotes superior transfer of learning*. Talk presented at the biannual meeting of the Society for Applied Research in Memory and Cognition, New York, NY.
- Umanath, S., **Butler, A. C.**, & Marsh, E. J. (2011, February). *Ironic effects of monitoring for misinformation in popular history films*. Talk presented at the annual meeting of the North Carolina Cognition Group, Winston-Salem, NC.
- **Butler, A. C.** (2010, November). *Applying cognitive psychology to enhance educational practice: Using testing and feedback to promote long-term retention.* Invited talk at University of North Carolina Greensboro, Greensboro, NC.
- Butler, A. C. (2010, June). *The mnemonic benefits of retrieval practice: Implications for memory theory and educational practice*. Invited talk at University of Aarhus, Aarhus, Denmark.
- **Butler, A. C.** (2010, February). *Repeated testing promotes transfer of learning*. Talk presented at the annual meeting of the North Carolina Cognition Group, Winston-Salem, NC.
- Butler, A. C. (2009, October). *Test-enhanced learning: The mnemonic benefits of retrieval practice*. Invited talk at University of North Carolina, Chapel Hill, NC.
- **Butler, A. C.**, Zaromb, F., Lyle, K. B., & Roediger, H. L., III (2009, May). *Using popular films to enhance classroom learning: The good, the bad, and the interesting*. Talk presented at the annual meeting of the Association for Psychological Science, San Francisco, CA.
- Butler, A. C. (2008, December). *Test-enhanced learning: The mnemonic benefits of retrieval practice*. Invited talk at University of Utah, Salt Lake City, UT.

- Butler, A. C. (2008, December). *Test-enhanced learning: The mnemonic benefits of retrieval practice*. Invited talk at University of Richmond, Richmond, VA.
- **Butler, A. C.**, Karpicke, J. D., & Roediger, III, H. L. (2007, July). *The effect of type and timing of feedback on learning from multiple-choice tests*. Talk presented at the biannual meeting of the Society for Applied Research in Memory and Cognition, Lewiston, ME.
- **Butler, A. C.**, Karpicke, J. D., & Roediger, III, H. L. (2007, April). *The effect of type and timing of feedback on learning from multiple-choice tests*. Talk presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- **Butler, A. C.** (2007, January). *Applying cognitive psychology to enhance educational practice*. Invited talk at Northwest Missouri State University, Maryville, MO.
- **Butler, A. C.**, & Roediger, III, H. L. (2006, May). *Testing improves long-term retention in a simulated classroom setting*. Talk presented at the annual meeting of the Midwestern Psychological Society, Chicago, IL.
- Butler, A. C., & Roediger, III, H. L. (2006, April). Exploring the mnemonic benefits of testing using complex verbal materials and situations that resemble college courses. Talk presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

#### POSTERS

- **Butler, A. C.,** & Raley, N. D. (2016, November). *A new framework for understanding how feedback promotes learning*. Poster presented at the annual meeting of the Psychonomics Society, Boston, MA.
- Raley, N. D., Butler, A. C., Cantor, A. D., & Marsh, E. J. (2016, November). Applying knowledge to difference contexts during learning promotes subsequent transfer.
   Poster presented at the annual meeting of the Psychonomics Society, Boston, MA.
- Wang., L., Raley, N. D., & Butler, A. C. (2016, November). Investigating transferappropriate processing as a theoretical account for the testing effect. Poster presented at the annual meeting of the Psychonomics Society, Boston, MA.
- Alarcón, C., Barger, M., Linnenbrink-Garcia, L., & Butler, A. C. (2016, November). Investigating the use of retrieval practice to improve the efficacy of a refutation text. Poster presented at the annual meeting of the Psychonomics Society, Boston, MA.
- Butler, A. C., Cantor, A. D., Raley, N. D., & Marsh, E. J. (2016, May). *Applying* knowledge to difference contexts during learning promotes subsequent transfer.

Poster presented at the annual meeting of the Association for Psychological Science, Chicago, IL.

- Butler, A. C., Umanath, S., Dolan, P. O., Thomas, R. C., & Marsh, E. J. (2015, April). *Myth Busters: A classroom intervention to correct misconceptions about psychology*. Poster presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- **Butler, A. C.**, Cantor, A. D., & Marsh, E. J. (2015, April). *Applying knowledge to different contexts during learning promotes subsequent transfer*. Poster presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Butler, A. C., Mullet, H. G., Verdin, B., von Borries, R., & Marsh, E. J. (2013, November). *Delaying feedback promotes transfer of learning in a STEM classroom*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, ON, Canada.
- Rose, N. S., **Butler, A. C.**, Nunes, L. D., & Roediger, H. L., III (2012, November). *Variability and testing during learning: Redundant or additive effects?* Poster presented at the annual meeting of the Psychonomic Society, Minneapolis, MN.
- **Butler, A. C.,** & Marsh, E. J. (2012, November). *Retrieval variability promotes superior transfer of learning*. Poster presented at the annual meeting of the Psychonomic Society, Minneapolis, MN.
- Umanath, S., **Butler, A. C.**, & Marsh, E. J. (2011, June). *Mnemonic effects of monitoring for misinformation in popular history films*. Poster presented at the biannual meeting of the Society for Applied Research in Memory and Cognition, New York, NY.
- Butler, A. C., Dennis, N. A., & Marsh, E. J. (2011, November). Inferring facts from fiction: Reading correct and incorrect information affects memory for related information. Poster presented at the annual meeting of the Psychonomic Society, Seattle, WA.
- Butler, A. C., Godbole, N., & Marsh, E. J. (2011, May). *Explanation feedback promotes better transfer than correct answer feedback*. Poster presented at the annual meeting of the Association for Psychological Science, Washington, DC.
- Rice, H. J., & Butler, A. C. (2010, November). Repeated retrieval slows shift from firstto third-person perspective. Poster presented at the annual meeting of the Psychonomic Society, St. Louis, MO.

- **Butler, A. C.**, Fazio, L. F., & Marsh, E. J. (2010, November). *The hypercorrection effect persists over a week, but high confidence errors return*. Poster presented at the annual meeting of the Psychonomic Society, St. Louis, MO.
- Rice, H. J., & **Butler, A. C.** (2010, June). *Repeated retrieval slows shift from first- to third-person perspective*. Poster presented at the Theoretical Perspectives on Autobiographical Memory Conference, Aarhus, Denmark.
- Butler, A. C., Zaromb, F. M., Agarwal, P. K., & Roediger, H. L., III (2010, June). Similarities and differences in younger and older adults' collective memories of U.S. history. Poster presented at the Theoretical Perspectives on Autobiographical Memory Conference, Aarhus, Denmark.
- Butler, A. C., Godbole, N. R., & Marsh, E. J. (2010, February). Increasing the complexity of the feedback message promotes superior transfer of learning. Poster presented at the annual meeting of the North Carolina Cognition Group, Winston-Salem, NC.
- **Butler, A. C.** (2009, November). *Repeated testing promotes transfer of learning*. Poster presented at the annual meeting of the Psychonomic Society, Boston, MA.
- **Butler, A. C.**, Larsen, D. P., & Roediger, H. L., III (2009, May). Using test-enhanced *learning to promote residents' long-term retention of medical information*. Poster presented at the annual meeting of the Association for Psychological Science, San Francisco, CA.
- Butler, A. C., Huelser, B. J., Caruso, C. A., & Roediger, III, H. L. (2008, May). Examining Park's (2005) computer modified multiple-choice testing procedure. Poster presented at the annual meeting of the Association for Psychological Science, Chicago, IL.
- Butler, A. C., Flanagan, P., Roediger, H. L., III, & McDaniel, M. A. (2007, November). *The benefit of generative study activities depends on the nature of the criterial test.* Poster presented at the annual meeting of the Psychonomic Society, Long Beach, CA.
- **Butler, A. C.**, & Roediger, III, H. L. (2007, August). *Feedback enhances the benefits of testing*. Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.
- **Butler, A. C.**, Karpicke, J. D., & Roediger, III, H. L. (2006, November). *The effect of type and timing of feedback on learning from multiple-choice tests*. Poster presented at the annual meeting of the Psychonomic Society, Houston, TX.

- **Butler, A. C.**, & Roediger, III, H. L. (2006, May). *Feedback neutralizes the detrimental effects of multiple-choice testing*. Poster presented at the annual meeting of the Association for Psychological Science, New York, NY.
- **Butler, A. C.**, & Roediger, III, H. L. (2005, November). *Feedback benefits correct answers made with low confidence*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, Ontario, Canada.
- **Butler, A. C.**, & Roediger, III, H. L. (2005, May). *Individual-item and summary feedback facilitate performance on a delayed critical test.* Poster presented at the annual meeting of the Association for Psychological Science, Los Angeles, CA.
- Goode, M. K., Steinle, A., Roediger, III, H. L., & **Butler, A. C.** (2005, May). *The effects* of increasing the number of lures on a multiple-choice test. Poster presented at the annual meeting of the Association for Psychological Science, Los Angeles, CA.
- Butler, A. C., Marsh, E. J., & Roediger, III, H. L. (2005, May). *Distractor items on multiple-choice tests: Helpful or harmful?* Poster presented at the annual meeting of the Midwestern Psychological Society, Chicago, IL.

# EDITORIAL / REVIEWING EXPERIENCE

Associate Editor, Journal of Applied Research in Memory and Cognition, 2016-present

Editorial Boards:

Journal of Experimental Psychology: Learning, Memory, and Cognition, 2016-present Journal of Educational Psychology, 2016-present

Guest Editor, Special Issue of Educational Psychology Review, 2015

Ad Hoc Reviewer (36 Journals):

Acta Psychologica • Advances in Physiology Education • Advances in Health Science Education • American Journal of Psychology • Applied Cognitive Psychology • BMC Medical Education • British Journal of Educational Psychology • Cognition • Cognitive, Affective, & Behavioral Neuroscience • Cognitive Research: Principles and Implications
• Cognitive Science • Computers & Education • Contemporary Educational Psychology • Current Directions in Psychological Science • Developmental Psychology • Discourse Processes • Educational Psychology • Educational Psychologist • Emotion • Experimental Psychology • Frontiers in Cognition • Instructional Science • Journal of Behavioral Decision Making • Journal of Cognitive Psychology • Journal of Educational Psychology • Journal of Experimental Psychology: Applied • Journal of Experimental Psychology: General • Journal of Experimental Psychology: Learning, Memory, & Cognition • Journal of Memory and Language • Learning and Individual Differences • Learning and Instruction • Memory & Cognition • Neuropsychological Rehabilitation • *Psychonomic Bulletin & Review • Quarterly Journal of Experimental Psychology • Review of Educational Research •* 

# PROFESSIONAL ORGANIZATIONS

American Educational Research Association
American Psychological Association
Association for Psychological Science
Psychonomic Society
Psi Chi
Society for Applied Research in Memory and Cognition
Society for the Teaching of Psychology

# **PROFESSIONAL SERVICE**

- Participant, Cognitive Science Discipline Based Education Research (CS-DBER) Workshop, National Science Foundation, 2016
- Participant, Computer-Aided Personalized Education (CAPE) Workshop, Computing Community Consortium, 2015
- Panelist, National Science Foundation, 2015
- Publications Committee, Society for Applied Research in Memory and Cognition, 2014-2015
- Member, SARMAC X Conference Planning Committee, 2012-2013
- Chair, Advances in Educational Psychology Conference (APA Division 15) Planning Committee, 2012-2013
- Chair, Ad Hoc Committee on Creating an APA Division 15 Conference, 2011-2012

Panelist, National Science Foundation, 2010

Past-President, Association for Psychological Science Student Caucus, 2007-2008

President, Association for Psychological Science Student Caucus, 2006-2007

UNIVERSITY SERVICE

Advisory Council Member, UT OnRamps, University of Texas at Austin, 2015-present

Student Evaluations Committee, University of Texas at Austin, 2015-present

Undergraduate Curriculum / Minor Committee, University of Texas at Austin, 2015present Subject Pool Committee, University of Texas at Austin, 2015-present

- Graduate Student Representative to the Washington University in St. Louis Board of Trustees, 2006-2007
- Professional and Graduate Student Coordinating Committee Member, School of Arts & Sciences, Washington University in St. Louis, 2005-2007
- Vice President, Graduate Student Senate, School of Arts & Sciences, Washington University in St. Louis, 2005-2006
- Appointed Representative for Washington University in St. Louis, National Conference on Graduate Student Leadership, November 2005

Graduate Council Member, Washington University in St. Louis, 2004-2006

# TEACHING EXPERIENCE

- Instructor, University of Texas at Austin, 2015-Present Courses: Cognition, Learning, & Motivation; Instructional Psychology; Complex Cognitive Processes; Myths & Mysteries of Memory
- Instructor, Washington University in St. Louis, 2008 Course: Introductory Psychological Statistics
- Teaching Citation, Washington University in St. Louis, 2008 Advanced pedagogical training beyond doctoral requirements
- Teaching Assistant, Washington University in St. Louis, 2006-2007 Course: Quantitative Methods I & II, Instructor: Martha Storandt
- Teaching Assistant, Washington University in St. Louis, 2005 Course: Experimental Psychology, Instructor: Pascale Michelon
- Teaching Assistant, Washington University in St. Louis, 2004 Course: Human Memory & Learning, Instructor: Kathleen B. McDermott

# **TEACHING INTERESTS**

- Human memory and learning Educational psychology Research methods Statistics
- Strategies for effective learning Higher-order learning Applied cognitive psychology

# **REFERENCES**

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