

## Curriculum Vitae

### Benjamin C. Heddy, Ph.D.

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Norman, OK 73019  
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## Educational History

- 2011-2014    **University of Southern California**  
Ph.D. Urban Education Policy  
Concentration: *Educational Psychology*  
Cognate: *Social Psychology*  
Dissertation Title: *Facilitating interest and out-of-school engagement in science in secondary school girls: Increasing the effectiveness of the TTES model through parental involvement*  
Advisor: Gale M. Sinatra, Ph.D.
- 2009-2011    **University of Nevada, Las Vegas**  
Ph.D. Educational Psychology, transferred to USC  
Advisor: Gale M. Sinatra, Ph.D.
- 2007-2009    **University of Northern Colorado**  
M.A. Educational Psychology  
Concentration: *Measurement and Assessment*  
Thesis Title: *Teaching for transformative experience in social psychology*  
Advisor: Kevin J. Pugh, Ph.D.
- 2003-2007    **Ferris State University**  
B.S. Psychology

## Research Interests

I explore cognitive and motivational aspects of learning including engagement, academic emotions, and interest development. I specialize in the investigation of learning activities that occur in everyday experience. As a second related line of research I study the mechanisms of conceptual and attitudinal change.

## Professional Employment

- 2014-present    **Assistant Professor, University of Oklahoma.** Designing and teaching educational psychology related courses. Maintaining an active program of research. Providing service to the university, community, and profession.

- 2011-2014 **Graduate Assistant, University of Southern California.** Assisted research process for Gale Sinatra, Ph.D. Worked on several research projects related to conceptual change, transformative experience, and science education.
- 2009-2011 **Graduate Assistant, University of Nevada, Las Vegas.** Assisted research process for Gale Sinatra, Ph.D. Worked on several research projects regarding motivation, and conceptual change.
- 2009-2011 **After School Instructor, Nevada Children’s Center,** Las Vegas, Nevada. Taught academic skills to children with behavioral issues who reside in urban settings. Designed a curriculum and taught classroom.
- 2007-2009 **Graduate Assistant, University of Northern Colorado.** Conducted research and entered data for Kevin J. Pugh, Ph.D. Worked on several research projects involving motivation and teaching for transformative experience.
- 2007-2009 **Behavioral Instructor, Kathleen Painter Littler Center,** Greeley, Colorado. Taught a diverse population regarding academic, social, and behavioral skills at a residential treatment center for children with behavioral issues.

## **Scholarly Publications and Presentations**

### ***Peer-Reviewed Publications***

- Cavazos, J. T., Stern, W., Stephenson, E., & **Heddy, B. C.** (in press). Myth-Busting with infographics: Do creative assignments help students learn? *Teaching of Psychology*.
- Peltier, T. K., **Heddy, B. C.**, & Peltier, C. (in press). Using conceptual change theory to help pre-service teachers understand dyslexia. *Annals of Dyslexia*.
- Heddy, B. C.**, Nelson, K. G., Husman, J., Cheng, K. C., Goldman, J. A., & Chancey, J. B. (in press). Exploring the predictive relationship between perceived instrumentality, interest, and transformative experiences in online engineering courses. *Educational Psychology*.
- Parsons, A. E., **Heddy, B. C.**, Wilson, S. N., Williams, L. A., Atkinson, L. K., & Garn, G. A. (in press). Making ‘brain food’: Converting photosynthesis into a positive learning experience through authentic instruction. *Journal of Biological Education*.
- Xie, K., **Heddy, B. C.**, & Vongkulluksn, W. (2019). Examining engagement in context using experience-sampling method: Toward a mobile learning theory of engagement. *Contemporary Educational Psychology*, 59, 101788.
- Chancey, J. B., Hong, J. Y., & **Heddy, B.C.** (2019). Transformative experience in Buddhism: A case study. *Journal of Transformative Learning*, 6(2), 27-38.
- Jeter, G., Baber, J., **Heddy, B. C.**, Wilson, S., Williams, L., Atkinson, L., Dean, S., Garn, G.,

- Lewis, C., & Stroukoff, A. (2019). Students at the center: Insights and implications of authentic, 5E instruction in high school language arts. *Frontiers in Education, 4*(91), 1-11.
- Tarabochia, S. L. & **Heddy, B. C.** (2019). Extending the “Warming Trend” to writing transfer research: Investigating transformative experiences with writing concepts. *Composition Forum, 41*.
- Xie, K., **Heddy, B. C.**, & Greene, B. A. (2019). Affordances of using mobile technology to support experience sampling method in examining college students’ engagement. *Computers & Education, 128*, 183-198.
- Goldman, J. A., **Heddy, B. C.**, & Laird, S. (2018). A Dialogue between Dewey and self-determination theory: Motivation in response to monetized education. *Education & Culture: The Journal of the John Dewey Society, 34*(2), 45-40.
- DeBacker, T. K., **Heddy, B. C.**, Kershen, J. L., Crowson, H. M., Looney, K., & Goldman, J. A. (2018). Effects of a one-shot growth mindset intervention on beliefs about intelligence and achievement goals. *Educational Psychology, 38*(6), 711-733.
- Nadelson, L. S., **Heddy, B. C.**, Jones, S., Taasoobshirazi, G., & Johnson, M. L. (2018). The dynamic model of conceptual change. *International Journal of Educational Psychology, 7*(2), 151-195.
- Heddy, B. C.**, Taasoobshirazi, G., Chancey, J. B., & Danielson, R. W. (2018). The Conceptual Change Cognitive Engagement Scale: Developing and validating an engagement instrument specifically for the conceptual change process. *Frontiers in Education, 3*(43), 1-9.
- Heddy, B. C.** & Sinatra, G. M. (2017). Transformative parents: Facilitating transformative experiences and interest with a parent involvement intervention. *Science Education, 101*(5), 765-786.
- Pugh, K. J., Bergstrom, C. M., **Heddy, B. C.**, & Krob, K. E. (2017). Teaching for transformative experiences in science: Developing and evaluating an instructional model. *Journal of Experimental Education, 85*(4), 629-657.
- Heddy, B. C.**, Sinatra, G. M., Danielson, R. W., & Graham, J. (2017). Modifying knowledge, emotions, and attitudes about genetically modified foods. *Journal of Experimental Education, 85*(3), 513-533.
- Heddy, B. C.**, Sinatra, G. M., Seli, H., Taasoobshirazi, G., & Mukhopadhyay, A. (2017). Transforming college success: Making learning meaningful to at-risk students. *Educational Psychology, 37*(5), 565-581.
- Taasoobshirazi, G., **Heddy, B. C.**, Bailey, M., & Farley, J. (2016). A multivariate model of

conceptual change. *Instructional Science*, 44(2), 125-145.

Alongi, M., **Heddy, B. C.**, & Sinatra, G. M. (2016). Teaching for transformative experiences in history: Experiencing controversial history ideas. *Journal of Social Science Education*, 15(2), 26-41.

Hong, J., **Heddy, B. C.**, Nie, Y., Monobe, G., Ruan, J., You, S., & Kambara, H. (2016). Revising and validating the Achievement Emotions Questionnaire – Teachers (AEQ-T). *International Journal of Educational Psychology*, 5(1), 80-107.

Muis, K. R., Pekrun, R., Azevedo, R., Sinatra, G. M., Trevors, G., Meier, E., & **Heddy, B. C.** (2015). The curious case of climate change: Epistemic emotions mediate relations between epistemic beliefs, learning strategies and achievement. *Learning and Instruction*, 39, 168-183.

**Heddy, B. C.** & Pugh, K. J. (2015). Bigger is not always better: Should educators aim for big transformative learning events or small transformative experiences? *Journal of Transformative Learning*, 3(1), 52-58.

Sinatra, G. M., **Heddy, B. C.**, & Lombardi, D. (2015). Engagement in science learning: How do we know it when we see it? *Educational Psychologist*, 50(1), 1-13.

**Heddy, B. C.** & Sinatra, G. M. (2013). Transforming misconceptions: Using transformative experience to promote positive affect and conceptual change in students learning about biological evolution. *Science Education*, 97(5), 723-744.

**Heddy, B. C.** & Nadelson, L. S. (2013). Variables associated to public acceptance of evolution in the United States. *Evolution: Education and Outreach*, 6(3), 1-14.

**Heddy, B. C.** & Nadelson, L. S. (2012). A global perspective of the variables associated to acceptance of evolution. *Evolution: Education and Outreach*, 5(3), 412-418.

### ***Manuscripts in Review***

Goldman, J. A., Cavazos, J., **Heddy, B. C.**, & Pugh, K. J., (in revision). Emotions, values, and engagement: Understanding academic achievement of first-generation college students.

Hamilton, N. J., **Heddy, B. C.**, Goldman, J. A., & Chancey, J. B. (in revision). Transforming the online learning experience.

Danielson, R. W., Sinatra, G. M., Seyranian, V., **Heddy, B. C.**, Marsh, J., Polikoff, M. S. (in review). An interesting measure: Validating an instrument to assess 4<sup>th</sup> grade students' interest in STEM content.

Chancey, J.B., **Heddy, B.C.**, Lippmann, M., & Meek, D. (in review). Investigating the Impact of Mindfulness-Based Interventions on Processes of Conceptual, Emotional, and Attitude Change.

Kearney, E., Torsney, B., **Heddy, B. C.**, & Symonds, J. (in review). Mindset misconceptions: Changing adolescents' ability beliefs with a refutation text one-shot intervention.

Goldman, J. A., **Heddy, B. C.**, & Cavazos, J. (in review). Exploring academic achievement of first-generation college students through expectancy value theory.

### ***Edited Book Chapters***

Lombardi, D., **Heddy, B. C.**, & Matewos, A. M. (2020). Values, attitudes, and beliefs: Cognitive filters shaping integration of multiple representations and multiple perspectives. In Van Meter, P., List, A., Lombardi, D., & Kendeou, P. (Eds.), *Handbook of learning from multiple representations and perspectives*. New York, NY: Routledge.

Pugh, K. J., Bergstrom, C. M., Wilson, L., Geiger, S., Goldman, J. A., **Heddy, B. C.**, Cropp, S., & Kriescher, D. (2019). Transformative experience: A critical review and investigation of individual factors. In Spector, J., Lockee, B., & Childress, M. (Eds.), *Learning, design, and technology. An international compendium of theory, research, practice, and policy*. Cham, CH: Springer.

### ***Peer-Reviewed Blog Posts***

**Heddy, B. C.** (2013). "What do I need science for? I'm going into fashion!": Teachers must encourage STEM learning through personal relevance. *Psychology Today*.  
<http://www.psychologytoday.com/blog/psyched/201310/what-do-i-need-science-i-m-going-fashion>

### **Presentations**

Peltier, T. K. & **Heddy, B. C.** (accepted). What do teacher know about dyslexia? It's complicated! Paper to be presented at the annual meeting of the American Psychological Association. Washington, D.C.

Peltier, T. K. & **Heddy, B. C.** (accepted). *Facilitating conceptual change with dyslexia knowledge in pre-service teachers*. Paper to be presented at the annual meeting of the International Society of the Learning Sciences. Nashville, TN.

Jeter, G., Baber, J., **Heddy, B. C.**, Wilson, S., Williams, L., Atkinson, L., Dean, S., Garn, G., Lewis, C., & Stroukoff, A. (accepted). *Students at the center: Insights and implications of authentic, 5E instruction in high school language arts*. Paper to be presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

Chancey, J. B., Hong, J., & **Heddy, B. C.** (2020). *Transformative experience and Buddhism*. Paper to presented at the annual Transformative Learning Conference. Oklahoma City, OK.

- Peltier, T. K., **Heddy, B. C.**, & Peltier, C. (2020). *Using conceptual change theory to improve preservice teacher understanding of dyslexia*. Paper presented at the annual meeting of the Pacific Coast Research Association. Coronado, CA.
- Heddy, B. C.** & Ross, K. (2019). *Transformative experience as a complex phenomenon: Capturing an elusive construct*. Paper presented at the annual meeting of the Scholarly Consortium for Innovative Psychology in Education. Savannah, GA.
- Ross, K. & **Heddy, B. C.** (2019). *Exploring the Relationships between Transformative Experience, Emotions, and Interest in Middle School Engineering Courses*. Paper presented at the annual meeting of the Scholarly Consortium for Innovative Psychology in Education. Savannah, GA.
- Goldman, J. & **Heddy, B. C.** (2019). *Transformative experience, task values, & academic achievement of first-generation college students*. Paper presented at the annual meeting of the American Psychological Association. Chicago, IL.
- Wilson, S., Terry, R., **Heddy, B. C.**, Coffey, A., & Mania-Singer, J. (2019). *Student school and career engagement: A community generated measure*. Paper presented at the annual meeting of the National Council for Community and Education Partnerships. San Francisco, CA.
- Chancey, J. B. & **Heddy, B. C.** (2019). *Examining the effects of a single-shot mindfulness intervention on conceptual change*. Paper presented at the annual meeting of the American Educational Research Association. Toronto, CA.
- Xie, K., Vongkulluksn, W. & **Heddy, B. C.** (2019). *Examining learning engagement in context using experience-sampling method*. Paper presented at the annual meeting of the American Educational Research Association. Toronto, CA.
- Chancey, J. B. & **Heddy, B. C.** (2019). *Using an internet-based mindfulness intervention to facilitate conceptual change on fluoridated water*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. Toronto, CA.
- Ross, K. & **Heddy, B. C.** (2019). *Understanding college freshman's experience of belonging*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. Toronto, CA.
- Torsney, B., Symonds, J., Kearney, E., & **Heddy, B. C.** (2019). *A one-shot mindset intervention using refutation texts*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. Toronto, CA.
- Goldman, J. A. & **Heddy, B. C.** (2019). *Teaching for transformative experience in psychology*. Paper presented at the annual meeting of the National Institute on the Teaching of Psychology. St. Pete Beach, FL.

- Cavazos, J. & **Heddy, B. C.** (2019). *Debunking myths with infographics: A transformative experience*. Paper presented at the annual meeting of the National Institute on the Teaching of Psychology. St. Pete Beach, FL.
- Bennett, L. & **Heddy, B. C.** (2018). *Police brutality: The role of insidious trauma*. Paper presented at the annual meeting of the American Psychological Association. San Francisco, CA.
- Chancey, J. B. & **Heddy, B. C.** (2018). *Mindfully changing minds: Examining the relationship between mindfulness and conceptual change*. Paper presented at the annual meeting of the American Psychological Association. San Francisco, CA.
- Goldman, J. A., **Heddy, B. C.**, Chancey, J. B., & Ge, X. (2018). *Exploring the relationships between interest, transformative experience, and emotions in middle school engineering courses*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. New York City, NY.
- Stroukoff, A., **Heddy, B.C.**, Wilson, S., Williams, L., Garn, G., Dean, S., & Atkinson, L. (2018). *Investigating the impact of authentic learning on student achievement emotions and perceived teacher mastery*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. New York City, NY.
- Chancey, J. B. & **Heddy, B. C.** (2018). *Mindfully changing minds*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. New York City, NY.
- Goldman, J. A., **Heddy, B. C.**, Pugh, K. J., Wilson, L., Cavazos, J. (2018). *Examining first-generation college students' emotions and values in response to transformative experience*. Paper presented at the annual meeting of the American Educational Research Association, New York City, NY.
- Goldman, J. A., Laird, S., & **Heddy, B.C.** (2018). *A Dialogue between Dewey and self-determination theory: Motivation in response to monetized education*. Paper presented at the annual meeting of the American Educational Research Association, New York City, NY.
- Nadelson, L. S. **Heddy, B. C.**, Jones, S., Taasoobshirazi, G., & Johnson, M. L. (2017). *The refined dynamic model of conceptual change*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. San Antonio, TX.
- Wang, Q., Greene, B. A., **Heddy, B. C.**, & Xie, K. (2017). *Use of experience-sampling: Is motivation different when students are in the moment of studying?* Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. San Antonio, TX.

- Lombardi, D., **Heddy, B. C.**, & Chancey, J. B. (2017). *Evaluations about climate change: Relations between moral convictions, plausibility, attitudes, and knowledge*. Paper presented at the Annual Meeting of the Society for Text & Discourse, Philadelphia, PA.
- Heddy, B. C.** & Lombardi, D. (2017). *The morality of climate change: Students' perceptions of the morality and plausibility of climate change*. Paper presented at the annual meeting of the American Psychological Association. Washington, D.C.
- Goldman, J. A., Wilson, L., Cavazos, J., **Heddy, B. C.**, & Pugh, K. J. (2017). *Relationship between Transformative Experience and Academic Emotions in an Intro Psychology Course*. Paper presented at the annual meeting of the American Psychological Association. Washington, D.C.
- Tarabochia, S., **Heddy, B. C.**, Chancey, J. B., & Goldman, J. A. (2017). *Facilitating TE in writing composition*. Paper presented at the bi-annual meeting of the Southwest Consortium for Innovative Psychology in Education. Las Vegas, NV.
- Goldman, J. A., **Heddy, B. C.**, Chancey, J. B., & Ge, X. (2017). *Investigating the predictive relationship between transformative experience, interest, and emotions in middle school engineering*. Paper presented at the bi-annual meeting of the Southwest Consortium for Innovative Psychology in Education. Las Vegas, NV.
- Chancey, J. B., **Heddy, B. C.**, Taasobshirazi, G., Goldman, J. A. (2017). *Developing the Conceptual Change Engagement Scale*. Paper presented at the bi-annual meeting of the Southwest Consortium for Innovative Psychology in Education. Las Vegas, NV.
- Wilson, L., Pugh, K. J., **Heddy, B. C.**, & Goldman, J. A. (2017). *Emotion and value profiles differentially predict deep engagement*. Paper presented at the bi-annual meeting of the Southwest Consortium for Innovative Psychology in Education. Las Vegas, NV.
- Crawford, A. A., **Heddy, B. C.**, & Chancey, J. B. (2017). *Assessing transformation: Faculty attitudes toward transformative learning training*. Paper presented at the annual Transformative Learning Conference. Oklahoma City, OK.
- Crawford, A. A. & **Heddy, B. C.** (2016). *Teaching for transformative experience in higher education*. Paper presented at the annual Transformative Learning Conference. Oklahoma City, OK.
- Heddy, B. C.**, Muto-Nelson, K. G., Husman, J., & Goldman, J. (2016). *Teaching for transformative experience in online engineering courses*. Paper presented at the annual meeting of the American Psychological Association. Denver, CO.
- Greene, B., **Heddy, B. C.** & Xie, K. (2016). *Comparison of self-report techniques for measuring motivation, emotion and cognitive engagement: Use of experience sampling method*. Paper presented at the bi-annual meeting of the International Conference on Motivation. Thessaloniki, Greece.



Sinatra, G. M. & **Heddy, B. C.** (2016). *Teaching evolution through transformative experiences: Promoting positive affect and conceptual change*. Paper presented at the annual meeting for the Human Behavior and Evolution Society. Vancouver, B.C., Canada.

Looney, K., **Heddy, B. C.**, DeBacker, T. K., Crowson, M., Kershner, J. L., Goldman, J. (2016). *One and done? Exploring the effectiveness of a one-shot growth mindset intervention*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. Washington, D.C.

Goldman, J. A. & **Heddy, B. C.** (2016). *Metacognitive intervention in an online format and effects on college students' academic behaviors*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. Washington, D.C.

Xie, K., Greene, B., & **Heddy, B. C.** (2016). *The affordances of using mobile technology to support experience-sampling method in examining college students' learning habits*. Paper presented at the annual meeting of the American Educational Research Association. Washington, DC.

Debacker, T. K., Kershner, J. L., **Heddy, B. C.**, & Goldman, J. (2016). *Influence of a growth mindset intervention on ninth grade students' motivation and achievement*. Paper presented at the annual meeting of the American Educational Research Association. Washington, DC.

Hong, J., **Heddy, B. C.**, Youyan, N., Monobe, G., Ruan, J., You, S., & Kambara, H. (2015). *Revising and validating the Achievement Emotions Questionnaire – Teachers (AEQ-T)*. Poster presented at the annual meeting of the American Psychological Association. Toronto, CA.

**Heddy, B. C.**, Sinatra, G. M., Greene, B., Berning, S. & Joel, J. (2015). *Increasing the effectiveness of teaching for transformative experience in science through parental involvement in an all-girl secondary school*. Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

**Heddy, B. C.**, Sinatra, G. M., Greene, B. & Mukhopdyay, A. (2015). *Investigating the role of parental values in secondary school girls value for science content*. Poster presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Alongi, M., **Heddy, B. C.** & Sinatra, G. M. (2015). *Promoting real-world engagement of history concepts beyond the secondary classroom: Teaching for transformative experience and conceptual change*. Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Muto-Nelson, K., Hilpert, J., **Heddy, B. C.** & Brem S. (2015). *Electrons certainly follow laws: Integrating complexity thinking with how learners view knowledge*. Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Danielson, R. W., Sinatra, G. M., Seyranian, V., Mukhopadhyay, A., **Heddy, B. C.**, Marsh, J. A., Polikoff, M. S., Zhou, N. & Hossepian, K. (2015). *Measuring Interest and Emotion in a 4th Grade STEM Unit*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Sinatra, G. M., Greene, J. A., **Heddy, B. C.**, Lombardi, D., Danielson, R. W., Mukhopadhyay, A., Young, T. K., & Thacker, I. (2015). *How can research in epistemic cognition inform our understanding of individual's worldviews, perceptual filters, and multiple perspectives?* Paper presented at the bi-annual meeting of the Southwest Consortium for Innovative Psychology in Education. Albuquerque, NM.

Nadelson, L. S., **Heddy, B. C.**, & Jones, S. H. (2015). *Stirring the pot and adding ingredients: A recipe for changing conceptual change*. Paper presented at the bi-annual meeting of the Southwest Consortium for Innovative Psychology in Education. Albuquerque, NM.

**Heddy, B. C.** (2015). *Facilitating transformative experiences and interest in science for secondary school girls*. Paper presented at the annual Transformative Learning Conference. Oklahoma City, OK.

**Heddy, B. C.**, Sinatra, G. M., Seli, H. & Mukhopadhyay, A. (2014). *Transformative experience as a facilitator of interest development and transfer in a college success course for at-risk students*. Poster presented at the annual meeting of the American Educational Research Association. Philadelphia, PA.

**Heddy, B. C.**, Sinatra, G. M. & Danielson, R. W. (2014). *Modifying attitudes, emotions, and conceptual knowledge about genetically modified foods*. Paper presented at the annual meeting of the American Educational Research Association. Philadelphia, PA.

Muis, K. R., Pekrun, R., Sinatra, G. M., Azevedo, R., Trevors, G., Meier, E. & **Heddy, B. C.** (2014). *The curious case of climate change: Epistemic emotions mediate relations between epistemic beliefs, learning strategies and learning outcomes*. Paper presented at the annual meeting of the American Educational Research Association. Philadelphia, PA.

**Heddy, B. C.**, Sinatra, G. M., Danielson, R. W. & Graham, J. (2013). *Conceptual change and attitude change: A dynamic interplay*. Poster presented at the annual meeting of the American Psychological Association. Honolulu, HI.

**Heddy, B. C.**, Sinatra, G. M. & Seli, H. (2013). *Transforming college success: Making learning meaningful to at-risk students*. Poster presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

**Heddy, B. C.** & Nadelson, L. S. (2013). *The variables related to public acceptance of evolution in the United States*. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

- Sinatra, G. M. & **Heddy, B. C.** (2013). The challenges of defining and measuring student engagement in science learning. In D. Lombardi (Chair), *Engagement in science learning: How do we know it when we see it?* Symposium presented at the annual meeting of the American Educational Research Association. San Francisco, CA.
- Brem, S. K., Sinatra, G. M., Stump, G. S., **Heddy, B.C.**, Reichenberg, R. & Nelson, K. G. (2013). *From molecules to mammals: Domain specificity in reasoning about emergent systems*. Paper presented at the bi-annual meeting of the European Association for Research on Learning and Instruction. Munich, Germany.
- Brem, S. K., Sinatra, G. M., Stump, G. S., Reichenberg, R., **Heddy, B. C.** & Nelson, K. G. (2013). *Triangulating ants, protector geese, and slime mold armies: Routes to misconceptions about emergence*. Paper presented at the bi-annual meeting of the European Association for Research on Learning and Instruction. Munich, Germany.
- Heddy, B. C.** & Sinatra G. M. (2012). *Transformative experience and biological evolution: Facilitating deep engagement*. Paper presented at the bi-annual meeting of the International Conference of the Learning Sciences. Sydney, Australia.
- Brem, S. K., Stump, G. S., Sinatra, G. M., Reichenberg, R. & **Heddy, B. C.** (2012). *Misconceptions regarding emergent phenomena vary by domain*. Paper presented at the annual meeting of the Cognitive Science Society. Sapporo, Japan.
- Heddy, B. C.** & Sinatra G. M. (2012). *Transforming misconceptions: Exploring the relationship between transformative experience and conceptual change*. Paper presented at the annual meeting of the American Educational Research Association. Vancouver, B.C., Canada.
- Heddy, B. C.** & Sinatra, G. M. (2011). *Utilizing transformative experiences to facilitate conceptual change*. Paper presented at the annual meeting of the National Consortium for Instruction and Cognition. New Orleans, LA.
- Heddy, B. C.** & Sinatra G. M. (2011). *Using transformative experience to promote positive affect and conceptual change in students learning about biological evolution*. Poster presented at the bi-annual meeting of the Southwest Consortium for Innovative Psychology in Education. Norman, OK.
- Heddy, B. C.** (2011). *Exploring the relationship between conceptual change and transformative experience*. Paper presented at the University of Nevada, Las Vegas Graduate Professional Student Association Forum. Las Vegas, NV.
- Heddy, B. C.** & Reynolds, R. (2010). *Exploring the effects of strategy instruction on metaphor comprehension*. Paper presented at the University of Nevada, Las Vegas Graduate Professional Student Association Forum. Las Vegas, NV.

Pugh, K. J., Schmidt, K., Russel, C. M. & **Heddy, B. C.** (2010). *Fostering transformative experiences in science: A design based study*. Poster presented at the annual meeting of the American Educational Research Association. Denver, CO.

Pugh, K. J., Schmidt, K., Koski, K. & **Heddy, B. C.** (2009). *Motivation as a goal in its own right: One teacher's experience in teaching for transformative experiences*. Paper presented at the annual meeting of the American Educational Research Association. San Diego, CA.

## **Contracts and Grants**

**Bridging Research, Understanding, and Sustaining Health (BRUSH): Inoculating Misconceptions about Oral Health in the Age of Alternative Facts.** *Principal Investigator*. National Institutes of Health. (**In Review**, \$698,316).

**Engagement with Physics In Context (EPIC) – An Investigation of Engagement with Physics in Out-of-classroom Contexts through Experience-sampling Method.** *Principal Investigator*. EHR Core Research: Fundamental Research in STEM Education. National Science Foundation (**In Review**, \$1,300,000).

**OSDE: Dyslexia Training and Module Development.** *Co-Principal Investigator*. State of Oklahoma, Department of Education. (**Funded**, \$78,626).

**Transformative Experiences in Middle School Engineering.** *Principle Investigator*. Jeannine Rainbolt College of Education Summer Research Grant. University of Oklahoma (**Funded**, \$6000).

**Using Experience Sampling Supported by Mobile Technology (ESM-Mobile) to Examine and Influence the Study Habits of College Students in STEM.** *Principal Investigator*. EHR Core Research: Fundamental Research in STEM Education. National Science Foundation (**Not Funded**, \$500,000).

**Project AWARE (Applied Weather Academics and Readiness Experiences).** *Co-Principal Investigator*. Innovative Technology Experiences for Students and Teachers (ITEST). National Science Foundation (**Not Funded**, 1,200,000).

**Integrating Game-Based Learning in Next-Generation STEM Instructional Teaching Experiences (IGNITE).** *Co-Principal Investigator*. Discovery Research PreK-12 (DRK-12). National Science Foundation (**Not Funded**, \$3,000,000).

**The Anxiety of Influence: The Impact of Literature on Understanding the Self, Motivation, and Virtue in Mentorship Experiences.** *Co-Principle Investigator*. The Self, Motivation and Virtue Project. Templeton Foundation (**Not Funded**, \$190,000).

## Teaching Experience

### *Courses Taught*

- University of Oklahoma, *EIPT 6970 (Graduate): Conceptual Change.*
- University of Oklahoma, *EIPT 6930 (Graduate): Motivation and Emotion.*
- University of Oklahoma, *EIPT 3043: Learning with Educational Technology.*
- University of Oklahoma, *EIPT 5970 (Graduate): Advanced Developmental Psychology.*
- University of Oklahoma, *EIPT 5643 (Graduate): Motivated Change (online).*
- University of Oklahoma, *EIPT 5623 (Graduate): Research into Practice (online).*
- University of Oklahoma, *EIPT 3473: Developmental Psychology of Childhood and Adolescence for Teachers.*
- University of Oklahoma, *EIPT 5183 (Graduate): Motivation and Learning in the Classroom (face-to-face, online, and hybrid).*
- University of Oklahoma, *EIPT 3483: Cognition, Motivation, and Classroom Management for Teachers.*
- University of Nevada, Las Vegas, *EPY 101: College Success.*
- University of Nevada, Las Vegas, *EPY 303: Educational Psychology (face-to-face and online).*
- University of Northern Colorado, *PSY 120: Introduction to Psychology.*

### *Published Course*

- Fall 2015      **Course Designer**, Apple iTunesU, *Cognition and Motivation.*

### *Professional Developments Conducted*

- Fall 2015      **Explain Everything Learning Community**, *Jeannine Rainbolt College of Education, University of Oklahoma.* Designed and implemented a learning community with faculty on how to integrate technology into the classroom.
- 2013-2014      **Generating STEM Interest in Secondary School Students**, *Archer Charter School.* Trained two science instructors in a diverse urban all-girl middle school on strategies to trigger and maintain student interest in STEM topics. Training took place for five consecutive weeks.
- 2012-2013      **Developing Student Interest in STEM**, *Sequoyah Charter School.* Trained two science instructors in a diverse urban middle school on strategies to trigger and maintain student interest. Training took place for ten consecutive weeks.
- Fall 2012      **Using SPSS to Analyze Educational Data**, *University of Southern California.* Taught grant funded research assistants how to use SPSS software for Brendesha Tynes, Ph.D.
- Spring 2012      **Transforming College Success**, *University of Southern California.* Facilitated a professional development workshop for graduate student teaching assistants to increase student engagement in transformative experience.

## Service

### *National*

- 2018-present **APA Coalition for Psychology in Schools and Education Member.** Design and implement plans to improve education using psychological theory.
- 2016-2019 **APA Division 15 Committee on the Development of Early Career Educational Psychologists Co-Chair.** Design opportunities to get early career educational psychologists involved in the division.
- 2015-2017 **SCIPIE Member At-Large.** Assist in all aspects of designing, recruiting participants for, and implementing a biannual research conference.
- 2014-2017 **AERA Division C Graduate Student Committee Faculty Advisor.** Provide mentorship to graduate students to engage in all necessary tasks.
- 2014-2016 **APA Division 15 Committee on the Development of Early Career Educational Psychologists.** Design opportunities to get early career educational psychologists involved in the division.
- 2013-2015 **APA Division 15 Psychology Today Editorial Committee.** Write and edit articles for the Psychology Today magazine and website.
- 2012-2014 **AERA Division C Graduate Student Committee Co-Chair.** Coordinate social media, recruit Division C members, and set up annual conference sessions.
- 2010-2012 **AERA Division C Campus Liaison.** Provide students with information on AERA, disseminate information, and write monthly newsletter.
- 2007-2009 **Educational Psychology Society Newsletter Editor.** Research topics, interview students and instructors, and write a bi-semester newsletter.

### *College*

- 2019-present **Steering Committee, University of Oklahoma.** Collaborate across departments to design a direction for the mission and vision of the college.
- 2014-present **Research Committee, University of Oklahoma.** Develop methods for generating resources with the aim of increasing research productivity within the college.

### *Department and Program*

- 2019-present **Program Coordinator, University of Oklahoma.** Coordinate all program related activities including admissions, course assignments, and student recruitment.

- 2018-present **Research Liaison**, *University of Oklahoma*. Attend the university research meeting and report information back to the department.
- 2017-present **Committee on Committee's**, *University of Oklahoma*. Develop and staff necessary committees to facilitate productivity in the department
- 2014-present **Admissions Committee**, *University of Oklahoma*. Make decisions on applicants' admittance to the masters and doctoral programs.
- 2014-present **Masters Thesis Committee**, *University of Oklahoma*. Evaluate and provide feedback on student master theses.
- 2014-2017 **Online Masters Degree Committee**, *University of Oklahoma*. Create and design an online masters program in its entirety.
- 2014-2016 **Graduate Student Experience Task Force**, *University of Oklahoma*. Design an instrument to assess and analyze graduate student experiences within the program.

### **Professional Organizations**

American Educational Research Association (AERA) – Division C, Motivation SIG  
American Psychological Association (APA) – Division 15  
European Association for Research on Learning and Instruction (EARLI) – Motivation SIG  
National Consortium for Instruction and Cognition (NCIC)  
Southwest Consortium for Innovative Psychology in Education (SCIPIE)

### **Article Reviews**

British Journal of Educational Psychology  
Contemporary Educational Psychology – Editorial Board Member  
Educational Psychologist  
Educational Psychology  
Evolution: Education and Outreach  
Frontline Learning Research  
International Journal of Science Education  
Journal of Education in Science, Environment and Health  
Journal of Educational Psychology  
Journal of Engineering Education  
Journal of the Learning Sciences  
Learning and Individual Differences  
Science Education  
The Journal of Educational Research

### **Grant Review Panels**

National Science Foundation - *EHR Core Research: Fundamental Research in STEM Education*  
Spencer Foundation - *Lyle Spencer Research Awards*

### **Community Outreach**

- 2018-2019 **Motivation Presentation**, *Norman High School, Norman, Oklahoma*. Volunteer to teach high school freshman English students about motivation so they can complete a related school project.
- 2016-2017 **Career Mentor**, *Whittier Middle School, Norman, Oklahoma*. Volunteer to give presentations to middle school students about my career as an educational psychologist and professor.
- 2011-2014 **I am Mentor**, *University of Southern California*. Volunteered as a mentor for inner city high school graduates. Provided advice and assistance applying for and succeeding in college.
- 2009-2011 **Child Haven**, *Las Vegas, Nevada*. Volunteered as a supervised visitation specialist for abused and neglected children in the inner-city. Taught parents and children appropriate behavior.

### **Awards**

- Spring 2018 **Patricia L. Hardre Graduate Mentoring Award**, *University of Oklahoma*. Selected from a committee of graduate students for my commitment to mentoring and advising masters and doctoral students. Norman, OK.
- Spring 2017 **Junior Faculty Award**, *University of Oklahoma*. Selected as the most productive junior faculty with regard to scholarship, teaching, and service, in the college of education. Norman, OK.
- Fall 2015 **Founders Award**, *Southwest Consortium for Innovative Psychology In Education*. Won first place at biannual research conference for the most innovative and interactive session format. Albuquerque, NM.
- Spring 2015 **Apple College of Education Faculty Summit Participant**, *Apple Corporation*. Selected among a competitive group of applicants to receive training on how to incorporate technology into instruction and design iTunesU courses.
- Spring 2015 **New Faculty Mentoring Program Participant**, *American Educational Research Association, Division C Learning and Instruction*. Selected to participate in a seminar that trains new faculty on how to be successful scholars. Chicago, IL.
- Spring 2015 **Dissertation of the Year Award**, *University of Southern California*. Dissertation was chosen as the best college of education dissertation of the year.



- Fall 2014 **Impactful Educator Award**, *University of Oklahoma*. Nominated by undergraduate students as a person that has made the most significant and positive contribution to their education.
- Spring 2014 **Graduate Student Mentor Award**, *University of Southern California*. Selected by my peers as an effective mentor to graduate students.
- Summer 2013 **Doctoral Student Seminar Participant**, *American Psychological Association, Division 15 Educational Psychology*. Selected to participate in a seminar that trains graduate students how to be successful scholars. Honolulu, HI.
- Spring 2013 **Graduate Student Seminar Participant**, *American Educational Research Association, Division C Learning and Instruction*. Selected to participate in a seminar that trains graduate students how to be successful scholars. San Francisco, CA.
- 2011-2014 **Rossier Deans Fellowship**, *University of Southern California*. Received the Deans fellowship from the department of Urban Education, which recognizes excellence in research and scholarship.
- Spring 2011 **Research Award**, *University of Nevada, Las Vegas*. Won first place in a research competition that included methodology, analysis, and presentation.
- Spring 2010 **Research Award**, *University of Nevada, Las Vegas*. Won third place in a research competition that included methodology, analysis, and presentation.

## References

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