

## Secil Caskurlu

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### Education

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<b>Ph.D.</b> , Learning Design and Technology, Purdue University Dissertation: Revisiting the CoI Framework through a Factor Analysis, Meta-Analysis, and Thematic Synthesis Dissertation Advisors: Drs. Jennifer Richardson and William Watson	2013-2019
<b>M. Ed.</b> , Instructional Design and Technology, University of Cincinnati, Supervisor: Kay Seo, PhD.	2011-2013
<b>B.A.</b> , Computer Education and Instructional Technologies, Hacettepe University, Ankara, Turkey	2005-2009

### Summary of Professional Qualifications

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- Taught face-to-face, online, and blended courses at the graduate level
- Lead and co-lead several research projects
- Received 2019 AECT Division of Distance Learning Best Practice Award
- Finalist for the 2017 AECT Design & Development Instructional Design Competition, AECT 2017
- Received Paper of The Year Award, SIG-Online Teaching and Learning, AERA 2017
- Received Frank B. DeBruicker Graduate Award in Educational Technology for 2016-2017, Purdue University
- Received Outstanding Research Presentation Award, SIG-Design and Technology, AERA 2016
- Received Best Concurrent Presentation Award, Organizational Training and Performance Division, AECT 2015

### Academic Appointments

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<b>Visiting Assistant Professor</b> , Dept. of Curriculum and Instruction (Learning Design and Technology Program), Purdue University	05/2019- Present
<b>Visiting Instructor</b> , Dept. of Curriculum and Instruction (Learning Design and Technology Program), Purdue University	08/2018-05/2019
<b>Graduate Research Assistant</b> , Dept. of Curriculum and Instruction (Learning Design and Technology Program), Purdue University	08/2013-08/2018
<b>Graduate Research Assistant</b> , Transdisciplinary Studies, College of Technology, Purdue University	08/2014-05/2016

### Research Experience

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<b>Visiting Assistant Professor</b> , Dept. of Curriculum and Instruction (Learning Design and Technology Program), Purdue University	05/2019-Present
<ul style="list-style-type: none"><li>• Qualitative synthesis on the Community of Inquiry Framework and</li></ul>	

student learning experiences; role: PI

- Meta-analysis on the psychometric properties of the Community of Inquiry instrument
- Systematic review on the application of qualitative synthesis educational research.
- Developing a critical appraisal to evaluate the reporting practices of qualitative studies in educational research
- Systematic review on integrated STEM and the factors that impact the implementation of integrated STEM in K-12

**Research Assistant**, Dept. of Curriculum and Instruction (Learning Design and Technology Program), Purdue University 08/2014-08/2018

- Meta-analysis on Community of Inquiry Framework and student learning outcomes; role: Co-PI
- Meta-analysis on social presence and student learning outcomes funded; role: Co-PI
- Alignment between software practitioners' needs on the job and their formal education in computing related undergraduate programs, funded

**Research Assistant**, Purdue Polytechnic Educational Research & Development, Purdue University 09/2015-05/2017

- Program evaluation and research
- Developing competency-based assessment
- Planning professional development for faculty members for implementation of competency-based education

### Peer Reviewed Publications

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**Caskurlu, S.**, Richardson, J.C., Alamri, H. A., Chartier, K., Farmer, T. S., Janakiraman, S., Strait, M., Yang, M. (submitted). Cognitive load and online course quality: Insights from instructional designers in a higher education context. *Educational Technology Research and Development*.

**Caskurlu, S.**, Richardson, J. C., Maeda, Y., & Kozan, K. (under review). Synthesis of qualitative evidence of factors influencing students' online learning experiences through the Community of Inquiry. *Educational Research Review*.

**Caskurlu, S.**, Maeda, Y., Richardson, J. C., & Lv, J. (under review). Teaching presence in relation to students' satisfaction and learning in the online environment: A narrative synthesis and meta-analysis. *Computers and Education*.

Exter, M., Ashby, I., & **Caskurlu, S.** (2019). Elusive expectations for a novel program design: Contrast between program intentions and student recruitment and retention. *The Journal of Competency-Based Education*.

**Caskurlu, S.** (2018). Confirming the subdimensions of teaching, social, and cognitive presences: A construct validity study. *The Internet and Higher Education*, 39, 1-12.

- Caskurlu, S.** & Ashby, I. (2018). Integrated learning and assessment system in competency-based higher education program. *International Journal of Learning Technology*, 13(4), 352-368.
- Kozan, K. & **Caskurlu, S.** (2018). On the N<sup>th</sup> presence for the Community of Inquiry Framework. *Computers and Education*, 122, 104-118.
- Exter, M. & **Caskurlu, S.**, Fernandez, T. (2018). Recent graduates' perceptions of how well skills and knowledge required by computing professionals are covered in their undergraduate experiences. *ACM Transactions on Computing Education*, 18(4), 1-27.
- Ashby, I., **Caskurlu, S.**, & Exter, M. (2018). Toward role profiles of faculty at a new competency-based transdisciplinary program. *The Journal of Competency-Based Education*.
- Watson, S., Watson, W.R., Yu, J. H., **Caskurlu, S.**, Janakiraman, S., & Fiock, H. (2018). Attitudinal learning and its relation to gender, age, ethnicity, enrolment purpose, and most impactful learning activity in a science of happiness MOOC. *International Journal of Learning Technology*, 13(4), 306-326.
- Richardson, J. C., Maeda, Y., Lv, J., & **Caskurlu, S.** (2017). Social presence in relation to students' satisfaction and learning in the online environment: A narrative synthesis and meta-analysis. *Computers in Human Behavior*, 71, 402-417. (Note: All authors contributed equally to this manuscript, and authors are listed in reverse alphabetical order)
- Richardson, J.C., Koehler, A., Besser, E., **Caskurlu, S.**, Lim, J. & Mueller, C. (2015). Conceptualizing and investigating instructor presence in online learning environments. *International Review of Research in Open and Distributed Learning*, 16(3), 256-297.

### **Manuscripts in Preparation**

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- Caskurlu, S.**, Kozan, K., & Guzey, S.S. (in prep). Factors that impact the implementation of integrated STEM in K-12: A systematic review.
- Maeda, Y., **Caskurlu, S.**, Kenney, R. H., & Richardson, J. C. (in prep). State of art of qualitative synthesis in education: Current and future directions.
- Maeda, Y., **Caskurlu, S.**, Kozan, K., & Richardson, J. (in prep). Psychometric properties of the CoI instrument: A meta-analysis.
- Maeda, Y., **Caskurlu, S.**, Kenney, R., Richardson, J., & Kozan, K. (in prep). Critical appraisal form for reporting quality for qualitative synthesis. *Research Synthesis Methods*.

### **Book Chapter(s)**

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- Guzey, S.S., **Caskurlu, S.**, Kozan, K. (in press). Integrated STEM education approaches and student learning. In C. Johnson, M. Mohr-Schroeder, T. Moore, & L. English (Eds.). *Handbook of research on STEM education*.

### **Conference (Online) Proceedings**

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- Caskurlu, S.**, Ashby, I., & Exter, M. (2017). The alignment between formal education and software design professionals' needs in industry: Faculty perception. Columbus, OH: ASEE.

**Caskurlu S.**, Exter, M., & Ashby, I. (2016). Importance of lifelong learning skills and degree covered in undergraduate programs: faculty and practitioners' perspective. *AERA 2016*, Apr. 8- Apr. 12, Washington, DC (Received Outstanding Research Presentation Award, Design and Technology SIG)

### **Peer Reviewed Conference Presentations**

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**Caskurlu, S.**, Richardson, J. C., Maeda, Y. (2019, April). *Factors influencing student's online learning experiences: A thematic synthesis*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.

Kozan, K., **Caskurlu S.**, Yildirim, D., Sahin, E., & Ata, A. (2019, April). *Measuring the learning outcomes of a gamified learning experience through gamified assessment*. Paper presented at the annual meeting of the American Educational Research Association, Toronto, Canada.

Kozan, K., & **Caskurlu, S.** (2018, October). *A comprehensive review of recent research revising the Community of Inquiry framework*. Paper presented at the Association for Educational Communications and Technology, Kansas City, MO.

**Caskurlu S.** & Richardson, J. (2018, April). *Validating the factor structure of the three presences of the Community of Inquiry*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Lv, J., **Caskurlu, S.**, Maeda, Y., & Richardson, J.C. (2018, April). *Evaluation of the CoI instrument: Synthesis of psychometric properties*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

**Caskurlu S.** & Watson, W. R. (2017, November). *Faculty development in competency-based education: Design considerations*. Paper presented at Association for Educational Communications and Technology, Jacksonville, FL.

Ashby, I., **Caskurlu, S.**, & Exter, M. (2017, November). *Competency-based transdisciplinary program: Evolving roles of faculty*. Paper presented at AECT, Jacksonville, FL.

**Caskurlu S.** & Ashby, I. (2017, August). *Faculty challenges in competency-based transdisciplinary education environment: First year experiences*. Presented as roundtable at the Junior Researchers of EARLI, Tampere, Finland.

Ashby, I. & **Caskurlu, S.** (2017, August). *Integrated learning and assessment system in competency-based higher education program*. Presented as roundtable at the Junior Researchers of EARLI, Tampere, Finland.

**Caskurlu, S.**, Ashby, I., & Exter, M. (2017, June). *The alignment between formal education and software design professionals' needs in industry: Faculty perception*. Paper presented at ASEE 2017, Columbus, OH.

**Caskurlu, S.** & Richardson, J. C. (2017, October). *Examining the reliability and validity of social presence subscale of community of inquiry instrument*. Paper presented at Association for Educational Communications and Technology, Las Vegas, NV.

**Caskurlu, S.**, Lv, J., Maeda, Y., & Richardson, J.C. (2017, April). *A meta-analysis of studies examining the Community of Inquiry*. Paper presented at the annual meeting of the American

Educational Research Association, San Antonio, TX. (Received Paper of the Year Award, Online Teaching and Learning-SIG)

Exter M., **Caskurlu S.**, Ashby, I., & Dionne, R. (2016, October). *Designing and assessing competencies in a new transdisciplinary studies in technology program*. Paper presented at Association for Educational Communications and Technology, Las Vegas, NV.

Ashby, I., **Caskurlu, S.**, & Exter, M. (2016, October). *Emergence of self-regulation skills in a competency-based education environment: Students' perception*. Paper presented at Association for Educational Communications and Technology, Las Vegas, NV

**Caskurlu S.**, Exter, M., & Ashby, I. (2016, April). *Importance of lifelong learning skills and degree covered in undergraduate programs: faculty and practitioners' perspective*. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC. (Received Outstanding Research Presentation Award, Design and Technology SIG)

**Caskurlu, S.**, Richardson, J.C., & Maeda, Y., Lv, J. (2015, November). *The relationship between social presence in online learning and student's satisfaction and learning: A meta-analysis*. Paper presented at AECT, Indianapolis, IN.

Exter, M., & **Caskurlu, S.** (2015, November). *Professional skills for computing professionals: are universities meeting student and industry need?*. Paper presented at Association for Educational Communications and Technology, Indianapolis, IN. (Received Best Concurrent Presentation Award, Organizational Training and Performance Division)

Exter M., Ashby, I., **Caskurlu, S.** (2015, November). *Why students choose to join and leave a new transdisciplinary, competency-based degree program*. Paper presented at Association for Educational Communications and Technology, Indianapolis, IN.

Richardson, J.C., Koehler, A., Besser, E., **Caskurlu, S.**, Lim, J. & Mueller, C. (2015, November). *Conceptualizing and investigating instructor presence in online learning environments*. Paper presented at Association for Educational Communications and Technology, Indianapolis, IN.

**Caskurlu, S.** (2014, November). *Using augmented reality in education*. Presented as roundtable at Association for Educational Communications and Technology, Jacksonville, FL.

**Caskurlu, S.** (2014, March). *Online training program for community ESL tutors*. Poster presented at the 8<sup>th</sup> Annual Graduate Student Educational Research Symposium (AGSERS), Purdue University, West Lafayette, IN

### **Invited Presentations/Workshops**

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**Caskurlu, S.**, & Ashby, I. (2018, October). *From competency definition to assessment design: Preparing for competency-based education*. Workshop conducted at the Association for Educational Communications and Technology, Kansas City, MO.

**Caskurlu, S.**, & Ashby, I. (2018, May). *Teaching online in three steps*. Workshop conducted at the Asbury Theological Seminary, Wilmore, KY.

Exter, M., **Caskurlu, S.**, & Ashby, I. (2017, March). *Using digital badges in competency-based degree programs*. Presented at Australasian Council on Open, Distance and e-Learning 73: Digital Badges and Credentials, Monash College. Melbourne, Australia

**Caskurlu, S.** (2017, January). *Assessment in competency-based education*. Presented at the Transdisciplinary Studies in Technology, Purdue University, West Lafayette, IN

Exter, M., **Caskurlu, S.** (2016, October). *Design education research group research Agenda*. Presented at the Learning Design and Technology Doctoral Seminar, Purdue University, West Lafayette, IN.

Maeda, Y., Richardson J. C., **Caskurlu, S.**, & Lv, J. (2016). *A meta-analysis of social presence in online learning in relation to student's satisfaction and learning*. Paper presented at the Career and Technical Education, Department of Curriculum and Instruction, Purdue University. West Lafayette, IN.

Richardson, J.C., Maeda, Y., **Caskurlu, S.**, & Lv, J. (2016, March). *The relationship between social presence in online learning and students' satisfaction and learning: A meta-analysis*. Paper presented at the 16th Annual IST Conference, Indiana University, Bloomington, IN.

## **Research Interests**

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- Online teaching and learning
- Community of Inquiry framework
- Applying principles of cognitive science in online learning
- Assessment of instructional designer competencies
- Human computer interaction
- Application of systematic reviews in educational research
- Competency-based education

## **Teaching Experience**

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**Visiting Assistant Professor**, Dept. of Curriculum and Instruction, Learning Design and Technology Program, College of Education, Purdue University 05/2019- Present

- Courses Taught
  - EDCI 675 – Advanced Instructional Strategies (Face-to-face) – Fall 2019
  - EDCI 572 – Learning Systems Design (Face-to-face) – Fall 2019
  - EDCI- 591 – Individualized Competency Earning (Online) – Summer 2019, Fall 2019
  - EDCI 6002 - Demonstrating Professional Competencies in LDT (Online) – Summer 2019
- Courses Created & Redesigned
  - EDCI 675 EDCI 675 – Advance Instructional Strategies (Face-to-face)

**Visiting Instructor**, Dept. of Curriculum and Instruction, Learning Design and Technology Program, College of Education, Purdue University 08/2018-05/2019

- Course Taught
  - EDCI 591 – Foundational Readings in the Instructional Design and Technology – Spring 2019
  - EDCI 572 – Learning Systems Design (Face-to-face) – Fall 2018
  - EDCI 590 - Demonstrating Professional Competencies in LDT (Online) – Fall 2018, Spring 2019
  - EDCI- 590 – Individualized Competency Earning (Online) – Spring 2019
- Courses Created & Redesigned
  - EDCI 591 – Foundational Readings in the Instructional Design and Technology (Face-to-face)
  - EDCI 590 - Demonstrating Professional Competencies in LDT (Online)
  - EDCI- 590 – Individualized Competency Earning (Online)

**Co-Instructor**, Dept. of Curriculum and Instruction, Learning Design and Technology Program, College of Education, Purdue University

- EDCI-673 Issues in Learning Design and Technology with Dr. Jennifer Richardson (Face-to-face) – Spring 2018
- EDCI-59100 Online Teaching and Learning with Dr. Jennifer Richardson, Fall 2016 (Blended) – Fall 2016

**Computer Teacher**, Sehitle Elementary School, Kirikkale, Turkey 09/2009- 10/2010

- Taught basic PC Skills, Windows WP, MS Office, MS Paint, Windows Movie Maker, Basic HTML
- Assisted teachers on instructional technologies and troubleshooting computer problems including network in a computer lab.

### **Instructional Design & Consulting Experience**

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**Instructional Designer & Project Manager**, United Way 08/2019-Present

- Designing and developing face-to-face and self-paced training for volunteer leaders
- Supervising and mentoring graduate students to design and develop face-to-face and self-paced training materials for volunteer leaders

**Instructional Designer**, Purdue University, Supervisor: Dr. Jennifer Richardson 08/2016-Present

- Working as part of a team at Purdue University to create an online resource repository to support faculty at Purdue University for teaching and learning online
- Developing job aids and training materials for teaching and learning online

**Instructional Designer**, Whiteboard Video Project under supervision of Dr. Tim Newby and Dr. Richard Makadok, Purdue University 04/2016-08/2018

- Worked with subject matter experts, script writers, and animators to design and develop interactive whiteboard video lectures for Strategic Management Course

**Faculty Consultant**, Dept. of Curriculum and Instruction, Learning Design and Technology Program, Purdue University 09/2013-08/2018

- Courses offered by different programs (e.g., Educational Studies, Curriculum and Instruction, Entrepreneurship)
- Assisted faculty in design and development of online courses in Blackboard
- Developed training materials grounded in evidence-based pedagogical and technical principles of online teaching and learning
- Trained faculty in use of Web2.0 tools and video editing software
- Developed video tutorials for students demonstrating how to use Web2.0 tools, software (e.g. VoiceThread)
- Edited existing video lectures and developed new video lectures as needed

**Instructional Designer**, Transdisciplinary Studies in Technology, Purdue University, May 2016 - May 2017 05/2016-05/2017

- Conducted job-task analysis and needs analysis
- Worked with subject matter experts and program administrators to develop faculty development goals, and module objectives
- Applied competency-based training principles and adult learning theories to design and develop the faculty development content, materials, and job aids
- Worked with research and program evaluation team to conduct program evaluation, and identify and define program competencies

**Instructional Designer**, Lindberg College of Business, University of Cincinnati, September 2012 - May 2013 09/2012-05/2013

- Assisted faculty members in conversion of campus-based courses to an online format
- Developed online course modules and assessments
- Conducted workshops for faculty members and teaching assistants for pedagogical and technical aspects of teaching online
- Developed online training materials for teaching online

## **Honors & Awards**

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**Best Practice Award**, 2019 AECT Division of Distance Learning, AECT 2019  
2019, Las Vegas, NV



<b>Mentee</b> , Early Career Mentoring Program of SIG Design and Technology, AERA 2019, Toronto, Canada	2019
<b>Travel Scholarship Award</b> , SIG Design and Technology, AERA 2019, Toronto, Canada	2019
<b>TUBITAK (The Scientific and Research Council of Turkey) Article Award</b> , On the N <sup>th</sup> presence for the Community of Inquiry Framework	2019
<b>Finalist</b> in the 2017 AECT Design & Development Instructional Design Competition, AECT 2017, Jacksonville, FL.	2017
<b>Mentee</b> , Early Career Symposium organized by the Research and Theory Division, AECT 2017, Jacksonville, FL.	2017
<b>Paper of The Year Award</b> , SIG-Online Teaching and Learning, AERA 2017, Apr. 27,-May, 1, San Antonio, TX.	2017
<b>Mentee</b> , Early Career Mentoring Program of SIG Design and Technology, AERA 2017, San Antonio, TX.	2017
<b>Frank B. DeBruicker Graduate Award in Educational Technology</b> for 2016-2017, Purdue University	2016
<b>Outstanding Research Presentation Award</b> , SIG-Design and Technology, AERA 2016, Apr.7-Apr. 13, Washington, DC.	2016
<b>Learning Design and Technology Graduate Student Travel Award</b> , 2016, 2017 & 2018, Purdue University, West Lafayette, IN	2016-2018
<b>Best Concurrent Presentation Award</b> , Organizational Training and Performance Division, AECT 2015, Nov. 3-Nov. 7, Indianapolis, IN.	2015
<b>College of Education Graduate Student Travel Award</b> , Purdue University	2014-2017
<b>University Graduate Scholarship</b> , University of Cincinnati	2011-2013
<b>The Ministry of National Education Scholarship</b> (for graduate study with full tuition and monthly stipend), Turkish Government.	2011-2014

### **Professional Development**

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Participated Service-Learning Community of Practice Course Sessions	08/28/2019-04/22/2020
<ul style="list-style-type: none"> <li>Participated series of course sessions on service-learning community of practice</li> </ul>	
Selected as a mentee of Early Career Mentoring Program of SIG Design and Technology, AERA 2017, San Antonio, TX.	04/27/2017-05/01/2017
<ul style="list-style-type: none"> <li>Received one-one mentoring from Dr. Heather Leary on setting up a research agenda, networking, and preparing for academic jobs.</li> </ul>	
Write Winning Grants Workshop, Purdue University	11/05/2018
<ul style="list-style-type: none"> <li>Participated a full-day workshop that focused on both practical and conceptual aspects important to the proposal writing process, including idea development, identification of the most appropriate granting agency, how to write for reviewers, and tips and strategies</li> </ul>	

that are of proven value in presenting an applicant's case to reviewers.	
Selected as a mentee of Early Career Symposium organized by Research and Theory Division, AECT 2017, Jacksonville, FL.	11/07/2017-11/08/2017
<ul style="list-style-type: none"> <li>Received one-two personalized mentoring from Dr. Andrew Walker in the instructional design and technology field on the topics of setting up a research agenda, searching for research funding, managing work, scholarship, and personal life, and focusing on appropriate professional development given research interest and career goals.</li> </ul>	
Attendee of National STEM Education Research and Practice Summit	10/17/2017
Selected as a mentee of Early Career Mentoring Program of SIG Design and Technology, AERA 2017, San Antonio, TX.	04/27/2017-05/01/2017
<ul style="list-style-type: none"> <li>Received one-one personalized mentoring from Dr. Steven R. Terrell on setting up a research agenda, publishing, and networking.</li> </ul>	
Preparing for Future Faculty, The Graduate School of Purdue University	01/2017-05/2017
<ul style="list-style-type: none"> <li>Enrolled one semester professional development course to explore faculty roles, responsibilities, and development opportunities at different types of higher education institutions.</li> </ul>	
Teaching for Competencies Using Performance Assessment Workshop, Alverno College, Milwaukee, WI.	06/06/2016 - 06/08/2016
<ul style="list-style-type: none"> <li>Participated three-day hands-on workshop to explore designing and implementing assessment methods in competency-based education.</li> </ul>	
Implementation of Assessment Centers Observation, Lipscomb College, Nashville, TN	06/27/2016
<ul style="list-style-type: none"> <li>Observed implementation of assessment centers in action and gained insight from experienced Lipscomb College faculty and staff with experience in implementing assessment centers.</li> </ul>	
Attendee of the Competency-Based Education Summit by Desire to Learn, Chicago, IL	09/15/2016

## **Professional Service**

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### **Service to Department/University**

Mentoring incoming graduate students, Learning Design and Technology, Purdue University (research design and analysis, instructional design)	08/2018- Present
Research coordinator for Purdue Graduate Student Education Council	2018-2019
Design and Develop an online resource repository to support online teaching and learning (PORTAL), Purdue University	08/2016-Present
Technology trainer, Career and Technical Education Workshop, Purdue University	Summer 2014, 2015
Treasurer of the Purdue Turkish Student Association, Purdue University	Fall 2014

President of the Purdue Turkish Student Association, Purdue University	Spring 2015
Secretary for the Purdue Association of Learning Design and Technology (PALDT), Purdue University	2014-2015

### **Reviewer**

Computers and Education	2018-Present
AECT (Association for Educational Communications and Technology)	2016-Present
AERA (American Educational Research Association)	2016-Present

### **Community Service**

United Way, Instructional Designer and Project Manager	2019-
Bridge to Turkey Fund, Indiana Giving Circle Lead Organizer	2015-Present

### **Professional Memberships**

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AECT (Association for Educational Communications and Technology)	2012-Present
AERA (American Educational Research Association)	2012-Present

### **Computer Knowledge and Skills**

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- Programming Languages: C, C++, Visual Basic, & HTML 5
- Web and Graphic Design: Adobe Photoshop, Dreamweaver, Fireworks, Flash, & Captivate,
- Office Programs: Microsoft Office
- Data Analysis Programs: SPSS, CMA, LISREL, AMOS, & QSR NVivo
- Others: Camtasia, Snagit, Jing, Articulate Storyline, Video Scribe, & various Web 2.0 tools