

# GÜRSU AŞIK

MATHEMATICS EDUCATION

SELF-REGULATION AND METACOGNITION

STEM EDUCATION

ENGAGEMENT AND LEARNING

## Contact:

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## Work:

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Assistant Professor  
Bahçeşehir University, Faculty of Educational Science  
2017 – Present

ÖGAM – BAUSTEM Center, Vice-Director  
2016 – Present

## Education:

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**PhD, 2015:** Marmara University, Institute of Educational Sciences, Secondary School Mathematics Education Program.

*Dissertation:* **A Design Study on Metacognitive Training in Problem Solving**

*Advisor:* Assoc.Prof. Emin Aydın

**MS, 2009:** Boğaziçi University, Institute of Graduate Studies in Science and Engineering, Secondary School Science and Mathematics Education Program.

*Dissertation:* **A model study to examine the relationship between metacognitive and motivational regulation, and metacognitive experiences during problem solving in mathematics.**

*Advisor:* Prof.Dr. Emine Erktin

**Integrated BS & MS, 2006:** Boğaziçi University, Department of Secondary School Science and Mathematics Education, Teaching Mathematics Program.

## Professional experience:

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Research assistant: 2007-2016

Boğaziçi University, Faculty of Education, Department of Primary Education,

EARLI Special Interest Group (SIG) 16: Metacognition, JURE assistant coordinator  
2013-2015

Teaching assistant: 2013-2016.

Boğaziçi University, Faculty of Education, Department of Primary Education,  
*Courses:*

- *Research Methods in Math & Science Education,*
- *Introduction to Statistical Analysis,*
- *Cognition and Metacognition in Primary Years (GRAD course)*

## Publications & presentations:

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### Book Chapter:

Aşık, G. (2012). Sayar, Söyler Sıralarım: Budur Benim Sayı Algım [I count, I identify and I order: All about my number sense]. In E. A. Acar & G. Karadeniz (Eds.) *An In-depth View for Early Childhood Period* (in Turkish). 275-285. Özgün Kök Yayıncılık, Ankara.

Aşık, G., Doğanca Küçük, Z., Çorlu, M. S. (2017). STEM-FETEMM Eğitiminde Ölçme Değerlendirme Yaklaşımı. :M. S. Çorlu ve Ez. Çallı (Ed.) *STEM Kuram ve Uygulamalarıyla Fen, Teknoloji, Mühendislik ve Matematik Eğitimi- Öğretmenler için Temel Kılavuz*. Pusula Yayıncılık, İstanbul.

### Journals:

Aşık, G., Doğanca Küçük, Z., Helvacı, B. & Corlu, M. S. (2017). Integrated teaching project: a sustainable approach to teacher education, *Turkish Journal of Education*, 6(4), 200-215. DOI: 10.19128/turje.332731

Asik, G. & Yilmaz, Z. (2017). Design-based research and teaching experiment methods in mathematics education: Differences and Similarities. *Journal of Theory & Practice in Education*, 13(2), 343-367.

Asik, G. & Sevimli, E. (2015). Investigation of students' metacognitive calibration within the context of math achievement: Case of engineering students. *Boğaziçi University Journal of Education*, 32(2), 19-36.

Erktin, E., Aşık, G., Adagideli, F., Aşık, M., Erdoğan, N., & Tekin, Ş. (2011). Cognitive and metacognitive approaches in mathematics education: A case of in-service training. *MAT-DER Matematik Eğitimi Dergisi* (1), 41-51.

### Full-text Proceedings:

Erktin, E., Aşık, G., Adagideli, F., Aşık, M., Erdoğan, N., & Tekin, Ş. (2011). Cognitive and metacognitive approaches in mathematics education: A case of in-service training. *10<sup>th</sup> Mathematics Symposium*, Turkey's Mathematicians Association, September 2011, Işık University, Istanbul, Turkey.

Asik, G. & Ozcallı, M. (2008). Curiousitivism: A New Model to Learning. *Teaching and Learning 2008 Conference*, International Association for the Scientific Knowledge (IASK), May 2008, Aveiro, Portugal.

Aşık, G., Deren, M. & Özçallı, M. (2008). Lovely Math Project: Drama Applications in Teaching Mathematics. *International Congress of Drama/Theatre in Education*, Ankara University, November 2008, Ankara, Turkey.

Aşık, G., Deren, M., & Özçallı, M. (2008). Lovely Math Project: Results of a four-year-project. *7<sup>th</sup> Mathematics Symposium & Exhibitions*, Turkey's Mathematicians Association, November 2008, İzmir, Turkey.

### Conference Presentations:

Asik, G., Aydin, E., & Erktin, E. (2015). *Fostering self-questioning to improve mathematical word problem solving*. European Educational Research Conference (ECER)-2015, 7-11 September 2015, Budapest, Hungary.

Asik, G. & Erktin, E. (2015). A development study of a metacognitive oriented problem solving intervention program: results, limitations and discussion [Üstbiliş Odaklı Problem Çözme Destek Programı Geliştirme Çalışması: Sonuç, Problem ve Kısıtlamalar]. 2. *Türk Bilgisayar ve Matematik Eğitimi Sempozyumu*, 16-18 May 2015, Adıyaman, Turkey. (**Best paper award**).

Asik, G. (2014). Middle grade students' use of metacognitive and self-questioning strategies in solving mathematical word problems. 18. *Junior Researchers of EARLI 2014 Conference*, 30th June - 4th July 2014, Nicosia, Cyprus.

Asik, G. & Erktin, E. (2013). Self-addressed questioning to promote metacognition for effective mathematical problem solving. *EARLI European Association for Research on Learning and Instruction (EARLI) 15<sup>th</sup> Biennial Conference*, August 2013, Munich, Germany.

Asik, G. & Erktin, E. (2013). Self-addressed questioning and metacognitive strategy use for effective problem solving [Etkin problem çözmede kendi kendine soru sorma ve üstbilişsel strateji kullanımı]. 1. *Türk Bilgisayar ve Matematik Eğitimi Sempozyumu*, June 2013, Trabzon, Turkey.

Asik, G. & Erktin, E. (2012). 8<sup>th</sup> grade students' metacognitive experiences on mathematical word problems [8. Sınıf öğrencilerinin matematik problemlerine ilişkin üstbilişsel deneyimleri]. X. *UFBMEK Fen Bilimleri ve Matematik Eğitimi Kongresi*, June 2012, Niğde, Turkey.

Asik, G. & Doganca, Z. (2012). Failure to understand stock-flow thinking: Is metacognition possible explanation to this phenomenon? *5<sup>th</sup> Biennial Meeting of EARLI Special Interest Group 16: Metacognition*, September 2012, Milano, Italy.

Asik, G. (2010). An analysis of teachers' self-efficacy beliefs and how students perceive their attitudes in class, *World Council of Comparative Education Society WCCES XIV World Congress*, June 2010, Istanbul, Turkey.

Aşık, G. & Erktin, E. (2010). The investigation of 8<sup>th</sup> grade students' problem solving performance in the framework of a self-regulatory model. IX. *UFBMEK Fen Bilimleri ve Matematik Eğitimi Kongresi*, September 2010, Izmir, Turkey. (poster).

Aşık, G. & Erkin, E. (2010). Metacognition and motivation in problem solving: the missing link, *4<sup>th</sup> Biennial Meeting of EARLI Special Interest Group 16: Metacognition*, Mayıs 2010, Muenster, Germany.

Aşık, G. (2008). Issues in Turkish Education System. *Gifted Education and Science Education in Israel: Academic Visit*, 24-30 April 2008, Beit-Berl College, Israel.

Aşık, G., Özçalı, M. & Özden, T. (2006). Lovely Math Project, *I. National Student Symposium in Mathematics Education*, Dokuz Eylül University, September 2006, İzmir, Turkey.

### Symposiums:

Aşık, G., Adagideli, F., & Zachariou, A. (2014). *Self-regulatory and Metacognitive Processes in Children's Task Performance*. 18th Junior Researchers of EARLI 2014 Conference, 30th June - 4th July 2014, Nicosia, Cyprus.

### Projects:

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**2015:** "Metacognitive oriented mathematical word problem solving". Trainer in in-service training for middle school mathematics teachers (September). Kocaeli, Turkey.

Project granted by The Scientific and Technological Research Council of Turkey (TUBITAK) and Ministry of Education (MoNE).

**2014:** Trainer in "Sustainable Environment in Karadeniz" Project [*Çevremiz temiz, Çevremiz Karadeniz*]. (May-June). Project Grant no: 213B638. Düzce, İstanbul. Project granted by TUBITAK.

**2013:** Supervision and organization of a thematic summer camp: mathematics. Academic Consultant, Boğaziçi University, İstanbul. Project granted by the Ministry of Youth and Sport of Turkish Republic.

**2012:** Design and development of the "TUBITAK Science Camp". Academic Consultant, TÜSSİDE, Gebze. <http://bilimkampi.tusside.gov.tr/> Project granted by TUBITAK.

### Memberships & Organizations

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**2010 - Present:** European Association for Research on Learning and Instruction (EARLI) membership.  
- EARLI Special Interest Group 16 (Metacognition) membership

**2014:** 6th EARLI-SIG 16: Metacognition Biennial Conference, Istanbul.  
Local Organizing & Scientific Committee Member

**2000-2008:** Boğaziçi University, Education and Research Community (EREC) Membership.

**2005:** The Head of EREC.

**2004-2006:** EREC- Lovely Math Project, Project Coordinator.

**2004:** The Vice Chairman of EREC.

**2004:** EREC- Boğaziçi Education Days, Project Coordinator.

**2003-2005:** EREC- Children Art Festival Organization Committee Member.

**2003:** EREC- Personnel Children's Education Project, Project Coordinator.

## Teaching Experience

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*Bahçeşehir University (Graduate)*

**EDT 5007** Product and Process Evaluation in Educational Technology

*Boğaziçi University (Undergraduate, 2016-2017, part time instructor)*

**PRED 465** School Experience in Teaching Math and Science II

**PRED 466** Practice Teaching in Mathematics

**PRED 468** Seminar on Practice Teaching in Mathematics