

## Asst. Prof. BAŐAK BARAK

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Anadolu University, EŐİTİM BİLİMLERİ ENSTİTÜSÜ, MATEMATİK EŐİTİMİ ANABİLİM DALI, Turkey 2010 - 2018

Postgraduate, Balıkesir University, Institute Of Science, Turkey 2005 - 2007

Undergraduate, Balıkesir University, Necatibey Faculty Of Education, Department Of Secondary School Science And Mathematics Branch Education, Turkey 2000 - 2005

### Dissertations

Doctorate, Ortaokul Matematik Öğretmen Adaylarının İspat Yapma Süreçlerinin İncelenmesi, Anadolu University, EŐİTİM BİLİMLERİ ENSTİTÜSÜ, MATEMATİK EŐİTİMİ ANABİLİM DALI, 2018

### Research Areas

Teacher Training For Elementary Sch. Edu. in Mathematics, Teacher Training

### Academic Titles / Tasks

Assistant Professor, Anadolu University, EŐİTİM FAKÜLTESİ, MATEMATİK VE FEN BİLİMLERİ EŐİTİMİ BÖLÜMÜ, 2018 - Continues

Research Assistant, Anadolu University, EŐİTİM FAKÜLTESİ, MATEMATİK VE FEN BİLİMLERİ EŐİTİMİ BÖLÜMÜ, 2007 - 2018

### Courses

Development of Mathematical Proof, Undergraduate, 2023 - 2024, 2022 - 2023

Geometry, Undergraduate, 2023 - 2024, 2022 - 2023

Practice Teaching II, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Research in Area of Specialization, Postgraduate, 2023 - 2024, 2022 - 2023

Thesis, Postgraduate, 2023 - 2024, 2022 - 2023

Graduation Project, Undergraduate, 2023 - 2024

Term Project, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Mathematical Reasoning, Postgraduate, 2023 - 2024, 2021 - 2022, 2020 - 2021  
Seminar, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Cultural Activities, Undergraduate, 2022 - 2023  
The Foundations of Mathematics, Undergraduate, 2023 - 2024, 2022 - 2023  
Mathematics Learning and Teaching Approaches, Undergraduate, 2023 - 2024, 2022 - 2023  
Community Services, Undergraduate, 2022 - 2023  
Practice Teaching I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022  
The Foundations of Mathematics II, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Logical Reasoning, Undergraduate, 2022 - 2023, 2021 - 2022  
Community Service Practices, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Mathematics II, Undergraduate, 2021 - 2022, 2020 - 2021  
Mathematics I, Undergraduate, 2021 - 2022, 2020 - 2021  
The Foundations of Mathematics I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Mathematics Learning and Teaching Approaches, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020  
Teaching Practice, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Career Planning, Undergraduate, 2020 - 2021  
Community Services, Undergraduate, 2019 - 2020, 2018 - 2019  
Analysis II, Undergraduate, 2019 - 2020, 2018 - 2019  
School Experience, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Analysis II, Undergraduate, 2018 - 2019  
Analysis I, Undergraduate, 2019 - 2020, 2018 - 2019  
Development of Mathematical Proof, Undergraduate, 2018 - 2019  
Analysis I, Undergraduate, 2018 - 2019

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The Erroneous Derivative Examples of Eleventh Grade Students**  
Gür H., Barak B.  
Kuram ve Uygulamada Eğitim Bilimleri, vol.7, no.1, pp.473-480, 2007 (SSCI)

## Articles Published in Other Journals

- I. **Matematiksel Muhakeme Üzerine 2007-2021 Yılları Arasında Türkiye'de Yapılan Lisansüstü Tezlerin İncelenmesi**  
BARAK B.  
Uluslararası Eğitim Bilimleri Dergisi, vol.9, no.32, pp.236-266, 2022 (Peer-Reviewed Journal)
- II. **ORTAOKUL MATEMATİK ÖĞRETMENİ ADAYLARININ PROBLEM ÇÖZMEDEKİ FONKSİYONEL DÜŞÜNME BECERİLERİ**  
KABAE T., BARAK B.  
The Journal of International Education Science, 2017 (Peer-Reviewed Journal)
- III. **Research of Middle School Pre Service Mathematics Teachers Mathematical Literacy on PISA Items**  
KABAE T., BARAK B.  
Türk Bilgisayar ve Matematik Eğitim Dergisi, vol.7, no.2, pp.321-349, 2016 (Peer-Reviewed Journal)
- IV. **Öğrencilerin Limit Kavramına Yönelik Kavram İmajları ve Kavram Tanımları**  
KABAE T., BARAK B., ÖZDAŞ A.  
Anadolu Journal of Educational Sciences International, vol.5, no.1, pp.88-114, 2015 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Ortaokul Matematik Öğretmen Adaylarının Üstbilişsel Farkındalıklarının Geliştirilmesine Yönelik Bir Eylem Araştırması: Sorunlar ve Çözümler**  
Barak B., Barut B.  
International Education Congress 2024, Diyarbakır, Turkey, 18 September - 21 October 2024, pp.699-703
- II. **A Framework for Metacognitive Awareness in Problem Solving**  
Barut B., Barak B.  
7th International Conference on Teaching, Learning and Education (ICTLE), Kobenhavn, Denmark, 3 - 06 November 2023, pp.3
- III. **INVESTIGATION OF PRE-SERVICE ELEMENTARY MATHEMATICS TEACHERS' UNDERSTANDING OF PROPOSITIONS' LOGICAL STRUCTURES**  
BARAK B.  
45th Conference of the International Group for the Psychology of Mathematics Education, Alicante, Spain, 18 - 23 July 2022, vol.4, pp.174
- IV. **Ortaokul Matematik Öğretmeni Adaylarının İspatlama Süreçlerinin İncelenmesi**  
BARAK B.  
4th International Symposium of Turkish Computer and Mathematics Education, İzmir, Turkey, 26 September 2019
- V. **Ortaokul Matematik Öğretmeni Adaylarının Ortaokul Düzeyinde İspatlamaya İlişkin Kavramsallaştırmaları**  
BARAK B.  
EJER Congress 2019, Ankara, Turkey, 19 June 2019, pp.1416-1417
- VI. **Ortaokul matematik öğretmeni adaylarının kavram bilgilerini kanıtlama sürecinde kullanma durumlarının incelenmesi.**  
KABAEEL T., BARAK B.  
EJERCONGRESS 2018, Antalya, Turkey, 2 - 05 May 2018, vol.1, pp.1150-1152
- VII. **Ortaokul matematik öğretmeni adaylarının kanıtlama becerileri.**  
BARAK B., KABAEEL T.  
EJERCONGRESS 2018, 2 - 05 May 2018, vol.1, pp.1153-1154
- VIII. **Proving abilities of pre service middle school mathematics teachers The function concept case**  
BARAK B., KABAEEL T.  
Proceedings of the 40th Conference of the International Group for the Psychology of Mathematics Education, Szeged, Hungary, 3 - 07 August 2016
- IX. **Pre service middle school mathematics teachers functional thinking abilities in solving problems**  
BARAK B., KABAEEL T.  
8th Annual International Conference on Education and New Learning Technologies, Barcelona, Spain, 4 - 06 July 2016
- X. **Ortaokul matematik öğretmeni adaylarının fonksiyon kavramı bağlamında problem çözme becerileri**  
KABAEEL T., BARAK B.  
3. Uluslararası Avrasya Eğitim Araştırmaları Kongresi, Muğla, Turkey, 31 May - 03 June 2016
- XI. **Middle school prospective mathematics teachers assessments on PISA items**  
BARAK B., KABAEEL T.  
XVIII Congress AMSE-AMCE-WAER Teaching and Training Today for Tomorrow, Eskişehir, Turkey, 30 May - 02 June 2016
- XII. **Middle school prospective mathematics teachers mathematical literacy**  
BARAK B., KABAEEL T.  
14th International JTEFS/BCC Conference Sustainable Development, Culture, Education, Konya, Turkey, 12 - 14 May 2016
- XIII. **Ortaokul Matematik Öğretmeni Adaylarının Matematik Okuryazarlık Becerilerinin PISA Soruları Üzerinden İncelenmesi**  
KABAEEL T., BARAK B.  
2. Türk Bilgisayar ve Matematik Eğitimi Sempozyumu, Adıyaman, Turkey, 16 - 18 May 2015

- XIV. **Students Concept Images about Limit of a Function at Infinity**  
BARAK B., KABAEL T.  
37th Conference of the International Group for the Psychology of Mathematics Education, 28 July - 02 August 2013
- XV. **Pre Service Mathematics Teachers Abilities in some PISA Items**  
KABAEL T., BARAK B.  
4 rd International Conference on New Horizons in Education, 25 - 27 June 2013
- XVI. **Öğrencilerin Limit Konusundaki Kavram İmajları ve Kavram Tanımları**  
KABAEL T., BARAK B.  
9. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Turkey, 23 - 25 September 2010

## **Supported Projects**

- Barut B., Barak B., Project Supported by Higher Education Institutions, Developing Metacognitive Awareness of Middle School Presevice Mathematics Teachers, 2023 - 2024
- Barak B., Project Supported by Higher Education Institutions, Ortaokul Matematik Öğretmeni Adaylarının Önermelerin Mantıksal Yapısını Anlama Durumlarının İncelenmesi, 2022 - 2023
- Kabael T., Süral İ., Barak B., Project Supported by Higher Education Institutions, İlköğretim Matematik Öğretmenliği Öğrencilerinin Geliştirdikleri Öğretim Materyallerinin WEB Ortamında Paylaşımı, 2018 - 2019
- KABAEL T., BARAK B., Project Supported by Higher Education Institutions, Ortaokul matematik öğretmen adaylarının problem çözme ve kanıtlama becerileri arasındaki ilişki, 2016 - 2017
- KABAEL T., BARAK B., Project Supported by Higher Education Institutions, Ortaokul Matematik Öğretmeni Adaylarının Kanıtlama Becerileri, 2015 - 2016