

## Asst. Prof. DUYGU YILMAZ ERGÜL

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AIC-6804-2022

Yoksis Researcher ID: 194689

### Education Information

Doctorate, Gazi University, Eğitim Bilimleri Enstitüsü, Fen Bilgisi Eğitimi (Dr), Turkey 2014 - 2020

Postgraduate, Gazi University, Eğitim Bilimleri Enstitüsü, Fen Bilgisi Eğitimi (YI) (Tezli), Turkey 2011 - 2014

Undergraduate, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 2006 - 2010

### Dissertations

Doctorate, Dönüştürücü öğrenme ortamında fen bilgisi öğretmen adaylarının teknolojik pedagojik alan bilgilerinin gelişimi, Gazi University, Eğitim Bilimleri Enstitüsü, 2020

Postgraduate, Teknolojik Pedagojik Alan Bilgisinin Belirlenmesi: Çoklu Durum Çalışması, Gazi University, Eğitim Bilimleri Enstitüsü, Fen Bilgisi Eğitimi (YI) (Tezli), 2014

### Research Areas

Social Sciences and Humanities

### Academic Titles / Tasks

Assistant Professor, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi, 2023 - Continues

Research Assistant, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2013 - Continues

### Courses

Ethics and Ethics in Education, Undergraduate, 2021 - 2022

Bilim Tarihi ve Felsefesi, Undergraduate, 2020 - 2021

Dijital Eğitsel İçerik Hazırlama, Undergraduate, 2020 - 2021

### Articles Published in Other Journals

- I. **Analyzing Instructional Strategies in Science Education: A Dual Approach Combining Systematic Review and Secondary Qualitative Data Analysis**  
Irmak Ş., Yılmaz Ergül D.  
e-Kafkas Eğitim Araştırmaları Dergisi, vol.11, no.4, pp.597-616, 2024 (Peer-Reviewed Journal)
- II. **Development and Validation of the Teachers' Digital Competence Scale (TDiCoS)**  
Yılmaz Ergül D., Taşar M. F.  
JOURNAL OF LEARNING AND TEACHING IN DIGITAL AGE, vol.8, no.1, pp.148-160, 2023 (Peer-Reviewed Journal)
- III. **Dönüştürücü Öğrenme Teorisine Dayalı Bir TPAB Geliştirme Eğitiminin Öğretmen Adaylarına Katkısı: Çoklu Durum Çalışması**  
Yılmaz Ergül D., Taşar M. F.  
Gazi Eğitim Fakültesi Dergisi, vol.42, no.3, pp.2037-2080, 2022 (Peer-Reviewed Journal)
- IV. **Eliciting prospective science teachers' teaching orientations by using a card sorting activity**  
Yılmaz Ergül D., Taşar M. F.  
Action Research and Innovation in Science Education, vol.3, no.2, pp.27-37, 2020 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **STEM Eğitiminde Değerlendirme Yaklaşımları**  
YILMAZ ERGÜL D., IRMAK M., YANIŞ KELLEÇİ H.  
in: STEM Eğitimi Perspektif, Süreç ve Uygulamalar, Anagün, S. Ş.; Özden, M., Editor, Vizetek, pp.245-276, 2023
- II. **Technological Pedagogical Content Knowledge (TPACK) in Physics Education**  
TAŞAR M. F., YILMAZ ERGÜL D.  
in: The International Handbook of Physics Education Research: Teaching Physics, Taşar, Mehmet Fatih; Heron, Paula R. L., Editor, AIP Publishing, pp.1-30, 2023
- III. **Fen Öğretiminde Teknopedagojik Yaklaşım**  
Irmak M., Yılmaz Ergül D.  
in: 21. Yüzyılda Fen Bilimleri Öğretimi, Çavaş Pınar, Anagün Şengül S, Editor, Anı Yayıncılık, Ankara, pp.37-64, 2021

## Refereed Congress / Symposium Publications in Proceedings

- I. **Science Teaching Orientations of Pre-Service Teachers in a Transformative Learning Environment**  
YILMAZ ERGÜL D., TAŞAR M. F.  
The 15th Conference of the European Science Education Research Association (ESERA), Nevşehir, Turkey, 28 August - 01 September 2023
- II. **Rationales for the Strategies Used by Science Teachers While Teaching 'Variables That Affect the Brightness of a Light Bulb**  
IRMAK Ş., YILMAZ ERGÜL D., YALVAÇ ERTUĞRUL E.  
15th Biennial Conference of the European Science Education Research Association (ESERA), Nevşehir, Turkey, 28 August - 01 September 2023
- III. **The Influence of History of Science Supported Activities on University Students' Nature of Science Beliefs**  
KANLI U., YILMAZ ERGÜL D., YANIŞ KELLEÇİ H., KOŞTUR H. İ.  
The 15th Conference of the European Science Education Research Association (ESERA 2023), Nevşehir, Turkey, 24 August 2023
- IV. **Examining physics teachers' technological pedagogical content knowledge after a professional development program: Multiple case study**  
ŞENTÜRK M. L., IRMAK M., ERCAN J., YILMAZ D., TAŞAR M. F.  
National Association for Research in Science Teaching (NARST), 13 November 2016 - 23 March 2019
- V. **Fen Bilimleri Öğretmenliği Programı Öğrencilerinin Organ Diseksiyonu Tekniğine Yönelik Görüşleri**

YILMAZ ERGÜL D., YENİKALAYCI N.

IX Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Turkey, 4 - 07 September 2016

- VI. **Changes in Physics Teachers Cognitive Structures about Using Educational Animations and Simulations**  
IRMAK M., YILMAZ D., ERCAN J., ŞENTÜRK M., TAŞAR M. F.  
11th Biennial Conference of the European Science Education Research Association (ESERA), Helsinki, Finland, 31 August - 04 September 2015
- VII. **PHYSICS TEACHERS DEVELOPMENT OF TECHNOLOGY PEDAGOGY AND CONTENT KNOWLEDGE A MIXED METHOD STUDY**  
TAŞAR M. F., ERCAN J., merve lütfiye ş., YILMAZ D., IRMAK M.  
iSER World Conference, 10 - 12 June 2015
- VIII. **The VOPLE Project**  
TAŞAR M. F., ŞENTÜRK M., YILMAZ D., ERCAN J., IRMAK M., UŞAK M.  
iSER 2015 WORLD CONFERENCE on EDUCATION, 10 - 12 June 2015
- IX. **Physics Teachers Development of Technology Pedagogy and Content Knowledge A Mixed Methods Study**  
TAŞAR M. F., ERCAN J., ŞENTÜRK M., YILMAZ D., IRMAK M.  
iSER 2015 WORLD CONFERENCE on EDUCATION, İstanbul, Turkey, 10 - 12 June 2015
- X. **Examining a Teacher s Integration of Animations and Simulations in Physics Teaching after Professional Development Program**  
ERCAN J., YILMAZ D., ŞENTÜRK M., IRMAK M., TAŞAR M. F.  
American Educational Research Association (AERA) Annual Meeting, Chicago, United States Of America, 15 - 21 April 2015
- XI. **The effect of teaching practices in science exhibits on pre-service science teachers' attitudes toward teaching profession**  
YILMAZ ERGÜL D., BARDAK Ş., ERCAN J., KAYACAN K.  
IX. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Turkey, 14 - 17 September 2014
- XII. **Determining technological pedagogical content knowledge: multiple case study**  
YILMAZ ERGÜL D., TAŞAR M. F.  
International Science Education Conference, 12 - 15 March 2014
- XIII. **Graduate students' understandings about weight loss: a self-study**  
Ercan J., YILMAZ ERGÜL D., TAŞAR M. F.  
International Society of Educational Research World Conference, 17 - 21 February 2014
- XIV. **Fostering physics teachers' development of TPACK through a professional development program**  
ŞENTÜRK M. L., TAŞAR M. F., YILMAZ ERGÜL D., ERCAN J., IRMAK M.  
International Society of Educational Research World Conference, 3 - 07 February 2014
- XV. **A virtual online physics learning environment (VOPLE) closely aligned with curriculum outcomes**  
TAŞAR M. F., KANDİL İNGEÇ Ş., TİMUR B., ŞEN A. İ., UŞAK M., ŞENTÜRK M. L., YILMAZ ERGÜL D., ERCAN J., IRMAK M.  
International Society of Educational Research World Conference, 2 - 05 February 2014
- XVI. **Newton meets momentum currents – a passion play**  
Hermann F., Pohlig M., Agnes C., YILMAZ ERGÜL D., Jale E.  
The World Conference on Physics Education, 10 - 15 June 2012

## Scientific Refereeing

JOURNAL OF INDIVIDUAL DIFFERENCES, National Scientific Refreed Journal, December 2021

Anadolu Journal of Educational Sciences International , National Scientific Refreed Journal, March 2021

eğitim ve Toplum Araştırmaları Dergisi, National Scientific Refreed Journal, January 2021

## **Metrics**

Publication: 23

Citation (Scopus): 3

H-Index (Scopus): 1