

## Prof. Dr. YEZDAN BOZ

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: ABB-9002-2020

ScopusID: 14821798100

Yoksis Araştırmacı ID: 164450

### Eğitim Bilgileri

Doktora, University of Warwick, Science Education, Birleşik Krallık 1998 - 2003

### Yabancı Diller

İngilizce, C1 İleri

### Araştırma Alanları

Sosyal ve Beşeri Bilimler

### Akademik Unvanlar / Görevler

Prof. Dr., Orta Doğu Teknik Üniversitesi, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2015 - Devam Ediyor

Doç. Dr., Orta Doğu Teknik Üniversitesi, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2010 - 2015

Yrd. Doç. Dr., Orta Doğu Teknik Üniversitesi, Eğitim Fakültesi, Ortaöğretim Fen Ve Matematik Alanlar Eğitimi Bölümü, 2004 - 2010

Araştırma Görevlisi, Orta Doğu Teknik Üniversitesi, Eğitim Fakültesi, Ortaöğretim Fen Ve Matematik Alanlar Eğitimi Bölümü, 2003 - 2004

### Yönetilen Tezler

BOZ Y., Investigating the relationship between chemistry achievement and self-regulatory learning strategies among high school students, Yüksek Lisans, H.GİZEM(Öğrenci), 2022

TEKSÖZ G., BOZ Y., An analysis of secondary school chemistry curriculum in terms of education for sustainable development: A case from Turkey, Yüksek Lisans, C.TÜRKMEN(Öğrenci), 2018

BOZ Y., Interaction between experienced chemistry teachers' science teaching orientations and other components of pedagogical content knowledge in mixtures, Doktora, B.EKİZ(Öğrenci), 2016

BOZ Y., Examination of interaction between pre-service chemistry teachers' pedagogical content knowledge and content knowledge in electrochemistry, Doktora, E.SELCAN(Öğrenci), 2016

BOZ Y., Effect of structuring cooperative learning based on conceptual change approach on students' understanding of the concepts of mixtures and their motivation, Doktora, H.BELGE(Öğrenci), 2013

BOZ Y., Examination of chemistry teachers topic-specific nature of pedagogical content knowledge in electrochemistry and radioactivity, Doktora, S.AYDIN(Öğrenci), 2012

BOZ Y., Effect of case based learning on 10th grade students' understanding of gas concepts, their attitude and motivation, Doktora, E.YALÇINKAYA(Öğrenci), 2010

BOZ Y., Effect of cooperative learning based on conceptual change conditions on motivation and understanding of reaction rate, Doktora, Ö.TAŞTAN(Öğrenci), 2009

BOZ Y., Conceptual change text oriented instruction to facilitate conceptual change in rate of reaction concepts, Yüksek Lisans, C.BALCI(Öğrenci), 2006

## **SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayımlanan Makaleler**

- I. **Revealing the development of interaction among components of pedagogical content knowledge in teaching chemical equilibrium**  
Öztay E. S., Ekiz-Kiran B., BOZ Y.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.24, sa.2, ss.624-636, 2023 (SCI-Expanded)
- II. **Teaching concerns, self-efficacy beliefs and constructivist learning environment of pre-service science teachers: a modelling study**  
BOZ Y., Cetin-Dindar A.  
EUROPEAN JOURNAL OF TEACHER EDUCATION, cilt.46, sa.2, ss.274-292, 2023 (SSCI)
- III. **Development of pre-service teachers' pedagogical content knowledge and the factors affecting that development: a longitudinal study**  
Can H. B., BOZ Y.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.23, sa.4, ss.980-997, 2022 (SCI-Expanded)
- IV. **A closer examination of the STEM characteristics of the STEM activities published in NSTA journals**  
Aydın Günbatar S., Kiran B. E., BOZ Y., Roehrig G. H.  
RESEARCH IN SCIENCE & TECHNOLOGICAL EDUCATION, 2022 (SSCI)
- V. **Development of pre-service teachers' pedagogical content knowledge through a PCK-based school experience course**  
Ekiz Kiran B., BOZ Y., Öztay E. S.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.22, sa.2, ss.415-430, 2021 (SCI-Expanded)
- VI. **Interactions between the science teaching orientations and components of pedagogical content knowledge of in-service chemistry teachers**  
Ekiz Kiran B., BOZ Y.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.21, sa.1, ss.95-112, 2020 (SCI-Expanded)
- VII. **Effect of practicum courses on pre-service teachers' beliefs towards chemistry teaching: a year-long case study**  
BOZ Y., Ekiz Kiran B., Öztay E. S.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.20, sa.3, ss.509-521, 2019 (SCI-Expanded)
- VIII. **Development of pre-service chemistry teachers' technological pedagogical content knowledge**  
DİNDAR A. Ç., BOZ Y., Sonmez D. Y., Celep N. D.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.19, sa.1, ss.167-183, 2018 (SCI-Expanded)
- IX. **Mediated Effects of Technology Competencies and Experiences on Relations among Attitudes Towards Technology Use, Technology Ownership, and Self Efficacy about Technological Pedagogical Content Knowledge**  
Yerdelen-Damar S., BOZ Y., Aydın-Gunbatar S.  
JOURNAL OF SCIENCE EDUCATION AND TECHNOLOGY, cilt.26, sa.4, ss.394-405, 2017 (SCI-Expanded)

- X. **Investigating the relationships among students' self-efficacy beliefs, their perceptions of classroom learning environment, gender, and chemistry achievement through structural equation modeling**  
BOZ Y., Yerdelen-Damar S., Aydemir N., Aydemir M.  
RESEARCH IN SCIENCE & TECHNOLOGICAL EDUCATION, cilt.34, sa.3, ss.307-324, 2016 (SSCI)
- XI. **Structuring Cooperative Learning for Motivation and Conceptual Change in the Concepts of Mixtures**  
Can H. B., BOZ Y.  
INTERNATIONAL JOURNAL OF SCIENCE AND MATHEMATICS EDUCATION, cilt.14, sa.4, ss.635-657, 2016 (SSCI)
- XII. **The effect of case-based instruction on 10th grade students' understanding of gas concepts**  
Yalcinkaya E., BOZ Y.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.16, sa.1, ss.104-120, 2015 (SCI-Expanded)
- XIII. **Modelling between epistemological beliefs and constructivist learning environment**  
Cetin-Dindar A., KIRBULUT Z. D., BOZ Y.  
EUROPEAN JOURNAL OF TEACHER EDUCATION, cilt.37, sa.4, ss.479-496, 2014 (SSCI)
- XIV. **Examination of the topic-specific nature of pedagogical content knowledge in teaching electrochemical cells and nuclear reactions**  
Aydın S., Friedrichsen P. M., BOZ Y., Hanuscin D. L.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.15, sa.4, ss.658-674, 2014 (SCI-Expanded)
- XV. **Are Pre-Service Mathematics Teachers' Teaching Concerns Related to Their Epistemological Beliefs?**  
BOZ N., BOZ Y.  
CROATIAN JOURNAL OF EDUCATION-HRVATSKI CASOPIS ZA ODGOJ I OBRAZOVANJE, cilt.16, sa.2, ss.335-362, 2014 (SSCI)
- XVI. **The nature of integration among PCK components: A case study of two experienced chemistry teachers**  
Aydın S., BOZ Y.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.14, sa.4, ss.615-624, 2013 (SCI-Expanded)
- XVII. **Review of Studies Related to Pedagogical Content Knowledge in the Context of Science Teacher Education: Turkish Case**  
Aydın S., Boz Y.  
KURAM VE UYGULAMADA EGITIM BILIMLERI, cilt.12, sa.1, ss.475-512, 2012 (SSCI)
- XVIII. **Is case-based learning an effective teaching strategy to challenge students' alternative conceptions regarding chemical kinetics?**  
Yalcinkaya E., TAŞTAN KIRIK Ö., BOZ Y., Yildiran D.  
RESEARCH IN SCIENCE & TECHNOLOGICAL EDUCATION, cilt.30, sa.2, ss.151-172, 2012 (SSCI)
- XIX. **Examination of pre-service chemistry teachers' preferences for creating constructivist learning environment Kimya öğretmen adaylarının yapılandırmacı öğrenme ortamı oluşturmaya yönelik tercihlerinin incelenmesi**  
Aydın S., BOZ Y., SUNGUR S., Çetin G.  
Hacettepe Eğitim Dergisi, cilt.42, ss.36-47, 2012 (SSCI)
- XX. **Cooperative learning instruction for conceptual change in the concepts of chemical kinetics**  
TAŞTAN KIRIK Ö., BOZ Y.  
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, cilt.13, sa.3, ss.221-236, 2012 (SCI-Expanded)
- XXI. **Do Pre-service Chemistry Teachers Reflect their Beliefs about Constructivism in their Teaching Practices?**  
Uzuntiryaki E., BOZ Y., Kirbulut D., Bektas O.  
RESEARCH IN SCIENCE EDUCATION, cilt.40, sa.3, ss.403-424, 2010 (SSCI)
- XXII. **Factors that are influential in pre-service chemistry teachers' choices of instructional strategies in the context of methods of separation of mixtures: A case study**  
Aydın S., Boz N., BOZ Y.  
Asia-Pacific Education Researcher, cilt.19, sa.2, ss.251-270, 2010 (SSCI)
- XXIII. **The nature of the relationship between teaching concerns and sense of efficacy**  
BOZ Y., BOZ N.

- EUROPEAN JOURNAL OF TEACHER EDUCATION, cilt.33, sa.3, ss.279-291, 2010 (SSCI)
- XXIV. **The Contribution of Constructivist Instruction Accompanied by Concept Mapping in Enhancing Pre-service Chemistry Teachers' Conceptual Understanding of Chemistry in the Laboratory Course**  
Aydın S., Aydemir N., BOZ Y., Cetin-Dindar A., BEKTAŞ O.  
JOURNAL OF SCIENCE EDUCATION AND TECHNOLOGY, cilt.18, sa.6, ss.518-534, 2009 (SCI-Expanded)
- XXV. **Effectiveness of Conceptual Change Text-oriented Instruction on Students' Understanding of Energy in Chemical Reactions**  
Tastan O., Yalcinkaya E., BOZ Y.  
JOURNAL OF SCIENCE EDUCATION AND TECHNOLOGY, cilt.17, sa.5, ss.444-453, 2008 (SCI-Expanded)
- XXVI. **Turkish student teachers' concerns about teaching**  
BOZ Y.  
EUROPEAN JOURNAL OF TEACHER EDUCATION, cilt.31, sa.4, ss.367-377, 2008 (SSCI)
- XXVII. **Turkish prospective chemistry teachers' beliefs about chemistry teaching**  
Boz Y., Uzuntiryaki E.  
INTERNATIONAL JOURNAL OF SCIENCE EDUCATION, cilt.28, sa.14, ss.1647-1667, 2006 (SSCI)

### **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Interaction between pre-service chemistry teachers' pedagogical content knowledge and content knowledge in electrochemistry**  
Öztay E. S., BOZ Y.  
Journal of Pedagogical Research, cilt.6, sa.1, ss.245-269, 2022 (Scopus)
- II. **Investigation of relations among middle school (Junior high school) students' gender, learning approaches, perceptions of learning environment and science achievement Ortaokul öğrencilerinin cinsiyeti, öğrenme yaklaşımı, yapılandırmacı öğrenme ortamı algıları ve fen bilgisi başarıları arasındaki ilişkilerin incelenmesi**  
BOZ Y., Yerdelen-Damar S., Belge-Can H.  
Elementary Education Online, cilt.17, sa.3, ss.1268-1282, 2018 (Scopus)
- III. **A Closer Examination of TPACK-Self-efficacy Construct: Modeling Elementary Pre-service Science Teachers' TPACK-Self efficacy**  
AYDIN S., BOZ Y., YERDELEN DAMAR S.  
İlköğretim Online, 2017 (Hakemli Dergi)
- IV. **Lise öğrencilerinin epistemolojik inançları**  
AYDEMİR N., AYDEMİR M., BOZ Y.  
kastamonu eğitim dergisi, cilt.21, sa.4, ss.1305-1316, 2013 (Hakemli Dergi)
- V. **Is case based instruction effective in enhancing high school students motivation toward chemistry**  
ERDUR BAKER Ö., BOZ Y., YALCINKAYA E.  
Science Education International, cilt.23, ss.102-116, 2012 (Hakemli Dergi)
- VI. **Pre service chemistry teachers expectations and experiences in the school experience course**  
KIRBULUT Z. D., BOZ Y., KUTUCU E. S.  
australian journal of teacher education, cilt.37, sa.2, ss.41-57, 2012 (Scopus)
- VII. **4th 6th and 8th grade Turkish elementary students epistemological beliefs**  
BOZ Y., AYDEMİR M., AYDEMİR N.  
ilköğretim online, cilt.10, sa.3, ss.1191-1201, 2011 (Hakemli Dergi)
- VIII. **evaluation of eleventh grade Turkish pupils comprehension of general chemistry concepts**  
BELGE CAN H., BOZ Y.  
asia-pacific forum on science learning and teaching, 2011 (Scopus)
- IX. **Prospective chemistry teachers awareness of students alternative conceptions**  
BOZ N., BOZ Y.  
journal of Turkish science education, cilt.8, sa.4, ss.29-42, 2011 (Hakemli Dergi)

- X. **Pre service chemistry teachers ideas about reaction mechanism**  
TAŞTAN KIRIK Ö., YALÇINKAYA E., BOZ Y.  
journal of Turkish science education, cilt.7, sa.1, ss.47-60, 2010 (Hakemli Dergi)
- XI. **Pre Service Elementary Science Teachers Science Teaching Efficacy Beliefs and Their Sources**  
AYDIN S., BOZ Y.  
ilköğretim online, cilt.9, sa.2, ss.694-704, 2010 (Hakemli Dergi)
- XII. **High school students conceptions about energy in chemical reactions**  
YALÇINKAYA E., TAŞTAN KIRIK Ö., BOZ Y.  
pamukkale üniversitesi eğitim fakültesi dergisi, cilt.26, ss.1-11, 2009 (Hakemli Dergi)
- XIII. **Turkish prospective chemistry teachers alternative conceptions about acids and bases**  
BOZ Y.  
school science and mathematics, 2009 (Hakemli Dergi)
- XIV. **Kimya ve matematik öğretmen adaylarının öğretmen olma nedenleri**  
BOZ Y., BOZ N.  
kastamonu eğitim dergisi, cilt.16, sa.1, ss.137-144, 2008 (Hakemli Dergi)
- XV. **A qualitative case study of prospective chemistry teachers knowledge about instructional strategies**  
**Introducing particulate theory**  
BOZ N., BOZ Y.  
journal of science teacher education, 2008 (Scopus)
- XVI. **Turkish Pre Service Teachers Beliefs About the Importance of Teaching Chemistry**  
UZUNTİRYAKI E., BOZ Y.  
AUSTRALIAN JOURNAL OF TEACHER EDUCATION, cilt.32, 2007 (ESCI)
- XVII. **Pre service teachers views about use of textbooks**  
UZUNTİRYAKI E., BOZ Y.  
Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, cilt.31, ss.212-220, 2006 (Hakemli Dergi)
- XVIII. **Turkish Pupils Conceptions of the Particulate Nature of Matter**  
BOZ Y.  
journal of science education and technology, 2006 (Scopus)
- XIX. **Öğretmen adaylarının ders kitabı kullanımıyla ilgili görüşleri**  
KONDAKÇI E., BOZ Y.  
hacettepe üniversitesi eğitim fakültesi dergisi, cilt.31, ss.212-220, 2006 (Hakemli Dergi)
- XX. **Do prospective teachers get enough experiences in school placements**  
BOZ N., BOZ Y.  
journal of education for teaching, 2006 (Scopus)
- XXI. **A review on the practical work in school science**  
BOZ Y., BOZ N.  
eğitim ve bilim, cilt.30, sa.136, ss.61-67, 2005 (Hakemli Dergi)
- XXII. **Investigating formative assessment**  
BOZ N., BOZ Y.  
eğitim ve bilim, cilt.30, sa.138, ss.63-69, 2005 (Hakemli Dergi)
- XXIII. **İlköğretim ikinci kademe ve ortaöğretim öğrencilerinin yoğunlaşma konusundaki kavram yanlışları**  
BOZ Y.  
hacettepe üniversitesi eğitim fakültesi dergisi, cilt.28, ss.48-54, 2005 (Hakemli Dergi)
- XXIV. **Turkish pupils conceptions of the conservation of mass during phase changes**  
BOZ Y.  
science education international, cilt.14, sa.3, 2003 (Hakemli Dergi)

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Development of Pre-Service Chemistry Teachers'xx Technological Pedagogical Content Knowledge**

ÇETİN DİNDAR A., BOZ Y.

13th conference European Science Education Research Association (ESERA), 26 - 30 Ağustos 2019

**II. Pre-service Chemistry Teachers' Beliefs about Effective Chemistry Teaching: A Longitudinal Case Study**

BOZ Y., KUTUCU E. S., EKİZ KIRAN B.

Educational Researches and Publications Associations (ERPA), İstanbul, Türkiye, 28 Haziran - 01 Temmuz 2018

**III. Expectations of Pre-Service Secondary Science Teachers from Their Mentors in School Experiences**

EKİZ KIRAN B., KUTUCU E. S., SOYSAL C., BOZ Y.

ECER, Kopenhag, Danimarka, 21 - 25 Ağustos 2017

**IV. THE RE-DESIGN OF A SCHOOL EXPERIENCE COURSE: A SYNTHESIS OF PCK PRACTICES FOR PROFESSIONAL DEVELOPMENT OF PRE-SERVICE CHEMISTRY TEACHERS**

KUTUCU E. S., EKİZ KIRAN B., BOZ Y.

ECER, Kopenhag, Danimarka, 21 - 25 Ağustos 2017

**V. Pre-Service Chemistry Teachers' Reflections On Their Student Teaching Experiences**

EKİZ KIRAN B., KUTUCU E. S., BOZ Y.

ICES 2017, 20 - 23 Nisan 2017

**VI. Kimya öğretmen adaylarının kimya bilgilerini kullanarak günlük hayat olaylarını açıklama düzeyleri**

EKİZ KIRAN B., KUTUCU E. S., KILINÇ S., SOYSAL C., BOZ Y.

12. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Türkiye, 28 - 30 Eylül 2016

**VII. Örnek olaya dayalı öğrenme yönteminin 10 sınıf lise öğrencilerinin kimyaya karşı tutumlarına etkisi**

YALÇINKAYA E., BOZ Y.

IV. Ulusal Kimya Eğitimi Kongresi, Türkiye, 7 - 10 Eylül 2015

**VIII. Assessing pre service chemistry teachers perceptions of mentors pedagogical content knowledge through school experience course**

KUTUCU E. S., EKİZ B., BOZ Y.

ECER, 7 - 11 Eylül 2015

**IX. Modeling Elementary Science Teachers TPACK**

AYDIN S., YERDELEN DAMAR S., BOZ Y.

NARST, Amerika Birleşik Devletleri, 11 - 14 Nisan 2015, ss.202

**X. Modeling Relations of Attitudes towards Technology Use Technology Competencies Ownership and Experiences to TPACKSelfEfficacy**

YERDELEN DAMAR S., AYDIN S., BOZ Y.

NARST, Amerika Birleşik Devletleri, 11 - 14 Nisan 2015, ss.202-203

## Desteklenen Projeler

ERDUR BAKER Ö., ÖZEL D., BOZ Y., Yükseköğretim Kurumları Destekli Proje, Okullarda Öğretmene Yönelik Şiddet: Sıklığı, Doğası ve İlişkili Değişkenleri, 2017 - 2017

BOZ Y., ERDUR BAKER Ö., Yükseköğretim Kurumları Destekli Proje, Öğretmen Adaylarının Afet ile İlgili Kavram Yanılgılarının Tespit Edilmesi, 2013 - 2013

BOZ Y., Yükseköğretim Kurumları Destekli Proje, Kavramsal Değişim Koşullarına Dayalı İşbirlikçi Öğrenme Durumlarının 9. Sınıf Öğrencilerinin Karışım Konusu İle İlgili Kavramları Anlama Üzerine Etkisi, 2012 - 2012

BOZ Y., Yükseköğretim Kurumları Destekli Proje, Öğretmen Adaylarının Epistemolojik İnanç Ve Özyeterlilik Yapılandırıcı Öğrenme Yaklaşımını Kullanmaları Üzerine Bir Modelleme Çalışması., 2011 - 2011

BOZ Y., Yükseköğretim Kurumları Destekli Proje, Örnek Olaya Dayalı Öğrenme Yönteminin 11.sınıf Öğrencilerinin Reaksiyon Hızı Konusundaki Kavram Yanılgılarını Giderme., 2009 - 2009

## Metrikler

Yayın: 70

Atıf (WoS): 330

Atıf (Scopus): 468

H-İndeks (WoS): 11

H-İndeks (Scopus): 13

## **Akademi Dışı Deneyim**

METU

METU