Prof. YEZDAN BOZ

Personal Information

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ScopusID: 14821798100
Yoksis Researcher ID: 164450

Education Information

Doctorate, University of Warwick, Science Education, United Kingdom 1998 - 2003

Foreign Languages

English, C1 Advanced

Research Areas

Social Sciences and Humanities

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Education, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2015 - Continues
Associate Professor, Middle East Technical University, Faculty of Education, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2010 - 2015
Assistant Professor, Middle East Technical University, Faculty of Education, Ortaöğretim Fen Ve Matematik Alanlar Eğitimi Bölümü, 2004 - 2010
Research Assistant, Middle East Technical University, Faculty of Education, Ortaöğretim Fen Ve Matematik Alanlar Eğitimi Bölümü, 2003 - 2004

Advising Theses

BOZ Y., Investigating the relationship between chemistry achievement and self-regulatory learning strategies among high school students, Postgraduate, H.GİZEM(Student), 2022
TEKSÖZ G., BOZ Y., An analysis of secondary school chemistry curriculum in terms of education for sustainable development: A case from Turkey, Postgraduate, C.TÜRKMEN(Student), 2018
BOZ Y., Interaction between experienced chemistry teachers' science teaching orientations and other components of

pedagogical content knowledge in mixtures, Doctorate, B.EKİZ(Student), 2016
BOZ Y., Examination of interaction between pre-service chemistry teachers' pedagogical content knowledge and content knowledge in electrochemistry, Doctorate, E.SELCAN(Student), 2016
BOZ Y., Effect of structuring cooperative learning based on conceptual change approach on students' understanding of the concepts of mixtures and their motivation, Doctorate, H.BELGE(Student), 2013
BOZ Y., Examination of chemistry teachers' topic - specific nature of pedagogical content knowledge in electrochemistry and radioactivity /, Doctorate, S.AYDIN(Student), 2012
BOZ Y., Effect of case based learning on 10th grade students' understanding of gas concepts, their attitude and motivation, Doctorate, E.YALÇINKAYA(Student), 2010
BOZ Y., Effect of cooperative learning based on conceptual change conditions on motivation and understanding of reaction rate, Doctorate, Ö.TAŞTAN(Student), 2009
BOZ Y., Conceptual change text oriented instruction to facilitate conceptual change in rate of reaction concepts, Postgraduate, C.BALCI(Student), 2006

Published journal articles indexed by SCI, SSCI, and AHCI

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, vol.24, no.2, pp.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, vol.46, no.2, pp.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, vol.23, no.4, pp.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 Kıran B., BOZ Y., Öztay E. S.
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, vol.22, no.2, pp.415-430, 2021 (SCI-Expanded)

VI. **Interactions between the science teaching orientations and components of pedagogical content knowledge of in-service chemistry teachers**
Ekiz Kıran B., BOZ Y.
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, vol.21, no.1, pp.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 Kıran B., Öztay E. S.
CHEMISTRY EDUCATION RESEARCH AND PRACTICE, vol.20, no.3, pp.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, vol.19, no.1, pp.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., Aydin-Gunbatar S.

JOURNAL OF SCIENCE EDUCATION AND TECHNOLOGY, vol.26, no.4, pp.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, vol.34, no.3, pp.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, vol.14, no.4, pp.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, vol.16, no.1, pp.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, vol.37, no.4, pp.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, vol.15, no.4, pp.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, vol.16, no.2, pp.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, vol.14, no.4, pp.615-624, 2013 (SCI-Expanded)

XVII. **Review of Studies Related to Pedagogical Content Knowledge in the Context of Science Teacher Education: Turkish Case**
Aydin S., Boz Y.
KURAM VE UYGULAMADA EGITIM BILIMLERI, vol.12, no.1, pp.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, vol.30, no.2, pp.151-172, 2012 (SSCI)

XIX. **Examination of pre-service chemistry teachers' preferences for creating constructivist learning environment Kimya öğretmen adaylarinin yapilandirmaci öğrenme ortami oluşturmaya yönelik tercihlerinin incelenmesi**
Aydin S., BOZ Y., SUNGUR S., Çetin G.
Hacettepe Egitim Dergisi, vol.42, pp.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, vol.13, no.3, pp.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, vol.40, no.3, pp.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**
Aydin S., Boz N., BOZ Y.
Asia-Pacific Education Researcher, vol.19, no.2, pp.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, vol.33, no.3, pp.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, vol.18, no.6, pp.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, vol.17, no.5, pp.444-453, 2008 (SCI-Expanded)

XXVI. **Turkish student teachers' concerns about teaching**
BOZ Y.
EUROPEAN JOURNAL OF TEACHER EDUCATION, vol.31, no.4, pp.367-377, 2008 (SSCI)

XXVII. **Turkish prospective chemistry teachers' beliefs about chemistry teaching**
Boz Y., Uzuntiryaki E.
INTERNATIONAL JOURNAL OF SCIENCE EDUCATION, vol.28, no.14, pp.1647-1667, 2006 (SSCI)

Articles Published in Other Journals

I. **Interaction between pre-service chemistry teachers' pedagogical content knowledge and content knowledge in electrochemistry**
Öztay E. S., BOZ Y.
Journal of Pedagogical Research, vol.6, no.1, pp.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, vol.17, no.3, pp.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 (Peer-Reviewed Journal)

IV. **Lise öğrencilerinin epistemolojik inançları**
AYDEMİR N., AYDEMİR M., BOZ Y.
kastamonu eğitim dergisi, vol.21, no.4, pp.1305-1316, 2013 (Peer-Reviewed Journal)

V. **Is case based instruction effective in enhancing high school students motivation toward chemistry**
ERDUR BAKER Ö., BOZ Y., YALCINKAYA E.
Science Education International, vol.23, pp.102-116, 2012 (Peer-Reviewed Journal)

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, vol.37, no.2, pp.41-57, 2012 (Scopus)

VII. **4th 6th and 8th grade Turkish elementary students epistemological beliefs**
BOZ Y., AYDEMİR M., AYDEMİR N.
ilköğretim online, vol.10, no.3, pp.1191-1201, 2011 (Peer-Reviewed Journal)

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, vol.8, no.4, pp.29-42, 2011 (Peer-Reviewed Journal)

X. **Pre service chemistry teachers ideas about reaction mechanism**
TAŞTAN KIRIK Ö., YALÇINKAYA E., BOZ Y.
journal of Turkish science education, vol.7, no.1, pp.47-60, 2010 (Peer-Reviewed Journal)

XI. **Pre Service Elementary Science Teachers Science Teaching Efficacy Beliefs and Their Sources**
AYDIN S., BOZ Y.
ilköğretim online, vol.9, no.2, pp.694-704, 2010 (Peer-Reviewed Journal)

XII. **High school students conceptions about energy in chemical reactions**
YALÇINKAYA E., TAŞTAN KIRIK Ö., BOZ Y.
pamukkale üniversitesi eğitim fakültesi dergisi, vol.26, pp.1-11, 2009 (Peer-Reviewed Journal)

XIII. **Turkish prospective chemistry teachers alternative conceptions about acids and bases**
BOZ Y.
school science and mathematics, 2009 (Peer-Reviewed Journal)

XIV. **Kimya ve matematik öğretmen adaylarının öğretmen olma nedenleri**
BOZ Y., BOZ N.
kastamonu eğitim dergisi, vol.16, no.1, pp.137-144, 2008 (Peer-Reviewed Journal)

XV. **A qualitative case study of prospective chemistry teachers knolwedge 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**
UZUNTİRYAKİ E., BOZ Y.
AUSTRALIAN JOURNAL OF TEACHER EDUCATION, vol.32, 2007 (ESCI)

XVII. **Pre service teachers views about use of textbooks**
UZUNTİRYAKİ E., BOZ Y.
Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, vol.31, pp.212-220, 2006 (Peer-Reviewed Journal)

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, vol.31, pp.212-220, 2006 (Peer-Reviewed Journal)

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, vol.30, no.136, pp.61-67, 2005 (Peer-Reviewed Journal)

XXII. **Investigating formative assessment**
BOZ N., BOZ Y.
eğitim ve bilim, vol.30, no.138, pp.63-69, 2005 (Peer-Reviewed Journal)

XXIII. **İlköğretim ikinci kademe ve ortaöğretim öğrencilerinin yoğunlaşma konusundaki kavram yanılgıları**
BOZ Y.
hacettepe üniversitesi eğitim fakültesi dergisi, vol.28, pp.48-54, 2005 (Peer-Reviewed Journal)

XXIV. **Turkish pupils conceptions of the conservation of mass during phase changes**
BOZ Y.
science education international, vol.14, no.3, 2003 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

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 August 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, Turkey, 28 June - 01 July 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, Denmark, 21 - 25 August 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, Denmark, 21 - 25 August 2017

V. **Pre-Service Chemistry Teachers' Reflections On Their Student Teaching Experiences**
EKİZ KIRAN B., KUTUCU E. S., BOZ Y.
ICES 2017, 20 - 23 April 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, Turkey, 28 - 30 September 2016

VII. **Örnek olaya dayalı öğrenme yönteminin 10 sınıf lise öğrencilerinin kimyaya karşı tutumlarına etkisi**
YALÇINKAYA E., BOZ Y.
IV. Ulusal Kimya Eğitimi Kongresi, Turkey, 7 - 10 September 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 September 2015

IX. **Modeling Elementary Science Teachers TPACK**
AYDIN S., YERDELEN DAMAR S., BOZ Y.
NARST, United States Of America, 11 - 14 April 2015, pp.202

X. **Modeling Relations of Attitudes towards Technology Use Technology Competencies Ownership and Experiences to TPACKSelfEfficacy**
YERDELEN DAMAR S., AYDIN S., BOZ Y.
NARST, United States Of America, 11 - 14 April 2015, pp.202-203

Supported Projects

ERDUR BAKER Ö., ÖZEL D., BOZ Y., Project Supported by Higher Education Institutions, Okullarda Öğretmene Yönelik Şiddet: Sıklığı, Doğası ve İlişkili Değişkenleri, 2017 - 2017

BOZ Y., ERDUR BAKER Ö., Project Supported by Higher Education Institutions, Öğretmen Adaylarının Afet ile İlgili Kavram Yanılgılarının Tespit Edilmesi, 2013 - 2013

BOZ Y., Project Supported by Higher Education Institutions, Kavramsal Değişim Koşullarına Dayalı İşbirlikçi Öğrenme Durumlarının 9. Sınıf Öğrencilerinin Karışımlar Konusu İle İlgili Kavrnamları Anlama Üzerine Etkisi., 2012 - 2012

BOZ Y., Project Supported by Higher Education Institutions, Öğretmen Adaylarının Epistemolojik İnanç Ve Özyeterlilik Yapılandırmacı Öğrenme Yaklaşımını Kullanmaları Üzerine Bir Modelleme Çalışması., 2011 - 2011

BOZ Y., Project Supported by Higher Education Institutions, Örnek Olaya Dayalı Öğrenme Yönteminin 11.sınıf Öğrencilerinin Reaksiyon Hızı Konusundaki Kavram Yanılgılarını Giderme., 2009 - 2009

Metrics

Publication: 70
Citation (WoS): 330
Citation (Scopus): 468
H-Index (WoS): 11
H-Index (Scopus): 13

Non Academic Experience

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