

## Prof. AYTEN PINAR BAL

### Personal Information

Office Phone: [+90 322 338 6076](tel:+903223386076) Extension: 39

Email: [apinar@cu.edu.tr](mailto:apinar@cu.edu.tr)

Web: <https://avesis.cu.edu.tr//apinar>

Address: Çukurova Üniversitesi Eğitim Fakültesi Matematik ve Fen Bilimleri Öğretmenliği Bölümü Sarıçam/ADANA

### International Researcher IDs

ORCID: 0000-0003-1695-9876

Publons / Web Of Science ResearcherID: I-9349-2018

Yoksis Researcher ID: 102527

### Education Information

Doctorate, Cukurova University, Eğitim Fakültesi, Eğitim Programları Ve Öğretim, Turkey 2004 - 2009

Postgraduate, Cukurova University, Eğitim Fakültesi, Eğitim Programları Ve Öğretim, Turkey 1999 - 2002

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, İlköğretim Beşinci Sınıf Matematik Öğretiminde Uygulanan Ölçme Ve Değerlendirme Yaklaşımlarının Öğretmen ve Öğrenci Görüşleri Doğrultusunda Değerlendirilmesi, Cukurova University, Eğitim Fakültesi, Eğitim Programları Ve Öğretim, 2009

Postgraduate, İlköğretim Beşinci Sınıf Öğrencilerinin Matematiksel Kavrama Ve İşlem Becerileri Arasındaki Farkın Bazı Değişkenler Açısından Değerlendirilmesi, Cukurova University, Eğitim Fakültesi, Eğitim Programları Ve Öğretim, 2002

### Research Areas

Social Sciences and Humanities, Education, Elementary School Education, Teacher Training For Elementary Sch. Edu. in Mathematics

### Academic Titles / Tasks

Professor, Cukurova University, Eğitim Fakültesi, İlköğretim, 2023 - Continues

Associate Professor, Cukurova University, Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi, 2016 - 2023

Lecturer PhD, Cukurova University, Eğitim Fakültesi, İlköğretim, 2009 - 2013

Lecturer, Cukurova University, Eğitim Fakültesi, İlköğretim, 1999 - 2009

## Academic and Administrative Experience

Head of Department, Cukurova University, 2022 - Continues

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

### I. Improving Primary School Prospective Teachers' Understanding of the Mathematics Modeling Process

BAL A. P., DOĞANAY A.

KURAM VE UYGULAMADA EGITIM BILIMLERI, vol.14, no.4, pp.1375-1384, 2014 (SSCI)

## Articles Published in Other Journals

### I. Mathematical Literacy of Middle School Students Improving Awareness Levels: Design-Based A Research

Bedir S. G., BAL A. P.

Everant Journals, vol.6, no.12, pp.7525-7534, 2023 (Peer-Reviewed Journal)

### II. ORTAOKUL ÖĞRENCİLERİNİN PISA TÜRÜNDEKİ PROBLEMLERİ KURMA BECERİLERİNİN İNCELENMESİ

Bedir S. G., BAL A. P.

EJONS International Journal on Mathematic, Engineering and Natural Sciences, pp.467-481, 2023 (Peer-Reviewed Journal)

### III. The Effect of Mathematical Modelling Activities on Students Mathematical Modelling Skills in the Context of STEM Education

Armutcu Y., BAL A. P.

INTERNATIONAL JOURNAL OF CONTEMPORARY EDUCATIONAL RESEARCH, vol.10, 2023 (Peer-Reviewed Journal)

### IV. Investigation of Secondary School Students' Strategies for Solving Routine and Non-Routine Problems

OR M. B., Bal A. P.

Bartın Üniversitesi Eğitim Fakültesi Dergisi, vol.12, no.1, pp.1-15, 2023 (Peer-Reviewed Journal)

### V. Developing the Mathematical Thinking Scale for Gifted Students

ER Z., DİNÇ ARTUT P., BAL A. P.

Pegem Eğitim ve Öğretim Dergisi, vol.13, no.3, pp.215-227, 2023 (ESCI)

### VI. Investigation of the relationship between problem-solving achievement and perceptions of students

BAL A. P., OR M. B.

Pedagogical Research, vol.8, no.1, 2023 (Peer-Reviewed Journal)

### VII. Developing the Self-Efficacy Scale for Middle School Students Estimation Skills: Validity and Reliability

ER Z., DİNÇ ARTUT P., BAL A. P.

Pegem Eğitim ve Öğretim Dergisi, vol.13, no.2, pp.314-327, 2023 (ESCI)

### VIII. Distance education evaluation scale: Teacher dimension.

Çıplak H., BAL A. P., Arslan N.

Pedagogical Research, vol.8, no.1, pp.1-13, 2023 (Peer-Reviewed Journal)

### IX. Examination of the Studies Made on Technological Pedagogical Content Knowledge in the Years of 2010-2021

YILMAZ R., BAL A. P.

Gaziantep University Journal of Educational Sciences Gaziantep Üniversitesi Eğitim Bilimleri Dergisi, vol.6, no.2, pp.54-70, 2022 (Peer-Reviewed Journal)

### X. Yenilenmiş Bloom Taksonomisine Göre Ortaokul Matematik Ders Kitaplarındaki Soruların İncelenmesi

BAL A. P., YILMAZ R.

Bartın University Journal of Educational Research,, vol.6, no.2, pp.94-107, 2022 (Peer-Reviewed Journal)

- XI. **Problem-solving and students' use of metacognitive skills.**  
BAL A. P., DOĞANAY A.  
Educational Policy Analysis and Strategic Research, vol.17, no.4, pp.142-163, 2022 (Peer-Reviewed Journal)
- XII. **The Effect of Mathematical Modeling Activities Based on STEM Approach on Mathematics Literacy of Middle School Students**  
Armutcu Y., BAL A. P.  
International Journal of Educational Studies in Mathematics (IJESIM), vol.9, no.4, pp.233-253, 2022 (Peer-Reviewed Journal)
- XIII. **Development of self-efficacy scale of differentiated instruction for teachers**  
BAL A. P., YILMAZ R., Ataş V.  
Journal of Research and Advances in Mathematics Education, vol.7, no.2, pp.93-104, 2022 (Peer-Reviewed Journal)
- XIV. **Development of the Estimation Skills SelfEfficiency Scale for Pre-Service Teachers**  
ER Z., DİNÇ ARTUT P., BAL A. P.  
International Journal on Social and Education Sciences, vol.4, no.2, pp.200-217, 2022 (Peer-Reviewed Journal)
- XV. **Investigation of primary school students solving arithmetic verbal problems**  
BAL A. P., DİNÇ ARTUT P.  
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY (IRAN), vol.16, no.1, pp.76-84, 2022 (Scopus)
- XVI. **Opinions of classroom teacher candidates on STEM education**  
BAL A. P.  
Kastamonu Eğitim Dergisi, vol.30, no.1, pp.196-204, 2022 (Peer-Reviewed Journal)
- XVII. **Primary school teachers and students' opinions of the first-grade mathematics curriculum in a Turkish context**  
BAL A. P., GEZGİN İ.  
Education Quarterly Reviews, vol.5, no.2, pp.164-179, 2022 (Peer-Reviewed Journal)
- XVIII. **Investigation of the Relationship between Estimation Skill, Estimation Skill Self-efficacy, and Academic Achievement of Secondary School Students**  
ER Z., DİNÇ ARTUT P., BAL A. P.  
International Journal on Social and Education Sciences, vol.4, no.1, pp.149-163, 2022 (Peer-Reviewed Journal)
- XIX. **EXAMINING TEACHERS' VIEWS ON STEM EDUCATION**  
BAL A. P., Bedir S. G.  
European Journal of Education Studies, vol.8, no.3, pp.327-341, 2021 (Peer-Reviewed Journal)
- XX. **Examination of Semantic Structures Used by Teacher Candidates to Transform Algebraic Expressions into Verbal Problems**  
BAL A. P.  
Education Quarterly Reviews, vol.4, no.3, pp.484-494, 2021 (Peer-Reviewed Journal)
- XXI. **DEVELOPING THE SECONDARY SCHOOL MATHEMATICS CURRICULUM EVALUATION SCALE: STUDENT DIMENSION**  
BAL A. P., Arslan U.  
Akdeniz Eğitim Araştırmaları Dergisi, vol.15, no.37, pp.26-40, 2021 (Peer-Reviewed Journal)
- XXII. **ORTAOKUL ÖĞRENCİLERİNİN PROBLEM ÇÖZME ALGILARI İLE MATEMATİK BAŞARILARI ARASINDAKİ İLİŞKİNİN İNCELENMESİ**  
OR M. B., BAL A. P.  
Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, vol.30, no.2, pp.154-165, 2021 (Peer-Reviewed Journal)
- XXIII. **Scale for Evaluating Primary School Mathematics Curriculum According to Stufflebeam's CIPP Model**  
çopur e., Türkmenoğlu M., DİNÇ ARTUT P., BAL A. P.  
International Journal of Educational Spectrum, vol.3, no.2, pp.150-175, 2021 (Peer-Reviewed Journal)
- XXIV. **PROBLEMS ENCOUNTERED IN THE APPLICATION PROCESS OF 1st GRADE MATHEMATICS CURRICULUM AND SOLUTION SUGGESTIONS**  
GEZGİN İ., BAL A. P.  
Elektronik Sosyal Bilimler Dergisi (elektronik), vol.20, no.77, pp.17-39, 2021 (Peer-Reviewed Journal)

- XXV. **Lise Matematik Öğretim Programını Değerlendirmeye Yönelik Bir Ölçek Geliştirme Çalışması: CIPP Modeli**  
BAL A. P., Kocaman Üdüm D.  
Erzincan Üniversitesi Eğitim Fakültesi Dergisi, vol.23, no.2, pp.498-514, 2021 (Peer-Reviewed Journal)
- XXVI. **SINIF ÖĞRETMENLİĞİ LİSANS ÖĞRENCİLERİNİN MATEMATİK ÖĞRETİMİNE İLİŞKİN TUTUM VE KAYGI DÜZEYLERİNİN İNCELENMESİ**  
BAL A. P.  
Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi, vol.20, no.4, pp.1608-1622, 2020 (Peer-Reviewed Journal)
- XXVII. **Investigation of Technological Pedagogical Field Knowledge Levels of Mathematics Teachers**  
BAL A. P., Bedir S. G.  
International Journal of Educational Studies in Mathematics, vol.7, no.3, pp.198-213, 2020 (Peer-Reviewed Journal)
- XXVIII. **Attitudes and Beliefs of Primary School Teaching Undergraduate Students towards Mathematics and Their Effects on Mathematics**  
BAL A. P.  
CUKUROVA UNIVERSITY FACULTY OF EDUCATION JOURNAL, vol.49, no.2, pp.826-841, 2020 (ESCI)
- XXIX. **ORTAOKUL ÖĞRENCİLERİNİN PROBLEM ÇÖZMEYE YÖNELİK YANSITICI DÜŞÜNME BECERİLERİNİN VE MATEMATİK BAŞARILARI ARASINDAKİ İLİŞKİNİN İNCELENMESİ**  
BAL A. P.  
Elektronik Sosyal Bilimler Dergisi (elektronik), vol.19, no.75, pp.1063-1074, 2020 (Peer-Reviewed Journal)
- XXX. **The Effect of the Differentiated Teaching Approach in the Algebraic Learning Field on Students Academic Achievements**  
BAL A. P.  
EURASIAN JOURNAL OF EDUCATIONAL RESEARCH, vol.63, pp.185-204, 2016 (Scopus)
- XXXI. **Fen ve teknoloji ile sınıf öğretmenliği öğrencilerinin epistemolojik inanç ve öğrenme stillerinin incelenmesi**  
DEMİR Ö., BAL A. P.  
Elektronik Eğitim Bilimleri Dergisi, vol.3, no.5, pp.12-30, 2014 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **An overview of program evaluation approaches in education**  
GEZGİN İ., BAL A. P.  
in: International Research in Education II, Elif Bengü, Editor, : Eğitim Yayınevi Tic. Ltd. Şti, Konya, pp.21-42, 2022
- II. **Investigation of STEM awareness levels of classroom teacher candidates in terms of problem solving and gender variables.**  
BAL A. P.  
in: Internalization of STEM Education, Dr. Augusto Z. Macalalag, Dr. Ismail Sahin, Dr. Joseph Johnson, Dr. Ali Bicer, Editor, ISTES Organization, Monument, CO, pp.141-158, 2022
- III. **Blended Learning**  
BAL A. P., Köse R. B.  
in: InsacSocial and Education Sciences, Mehmet Dalkılıç ve Betül Serbest Yılmaz, Editor, Duvar Kitapevi, İzmir, pp.567-578, 2021
- IV. **STEM EDUCATION AND MATHEMATICAL MODELING**  
BAL A. P., Armutcu Y.  
in: ACADEMIC RESEARCH & REVIEWS IN EDUCATIONAL SCIENCES, DENİZ BESTE ÇEVİK KILIÇ, Editor, Serüven Yayınevi, İzmir, pp.1-16, 2021

## Refereed Congress / Symposium Publications in Proceedings

- I. **INVESTIGATION OF GEOMETRIC REPRESENTATIONS ON THE SUBJECT OF FRACTIONS IN TURKIYE AND CANADA TEXTBOOKS**  
Umay S., BAL A. P.  
2. INTERNATIONAL CANKAYA SCIENTIFIC STUDIES CONGRESS, Ankara, Turkey, 28 September 2023, pp.338-345
- II. **PATTERN GENERALIZATION STRATEGIES OF 7TH GRADE STUDENTS**  
YÜZBAŞIOĞLU S., BAL A. P.  
2. INTERNATIONAL CANKAYA SCIENTIFIC STUDIES CONGRESS, Ankara, Turkey, 28 September 2023
- III. **INVESTIGATION OF PRIMARY SCHOOL MATHEMATICS TEACHERS' OPINIONS ON GAME-BASED MATHEMATICS TEACHING**  
AKKURT Ş., BAL A. P.  
2. INTERNATIONAL CANKAYA SCIENTIFIC STUDIES CONGRESS, Ankara, Turkey, 28 September 2023, pp.346-357
- IV. **Development of math thinking scale for special students: validity and reliability.**  
ER Z., DİNÇ ARTUT P., BAL A. P.  
International Conference on Studies in Education and Social Sciences (ICSSES) November 10-13, 2022, Antalya, Turkey, Antalya, Turkey, 10 November 2022
- V. **Examination of special talent students' perceptions for homework.**  
er Z., DİNÇ ARTUT P., BAL A. P.  
International Conference on Studies in Education and Social Sciences (ICSSES) November 10-13, 2022, Antalya, Turkey, Antalya, Turkey, 10 November 2022
- VI. **DEVELOPING THE AN ESTIMATION SKILLS SELF-EFFICACY SCALE: VALIDITY AND RELIABILITY**  
BAL A. P., DİNÇ ARTUT P.  
INTERNATIONAL ONLINE CONFERENCE ON MATHEMATICS EDUCATION, İstanbul, Turkey, 26 May 2021
- VII. **Development of Self-Efficacy Scale of Differentiated Instruction for Teachers**  
BAL A. P.  
[https://edu.icomaas.com/wp-content/uploads/2021/02/ICOME21\\_Abstract-Book.pdf](https://edu.icomaas.com/wp-content/uploads/2021/02/ICOME21_Abstract-Book.pdf), İstanbul, Turkey, 26 May 2021
- VIII. **A Study Of Attitude Scale For Secondary School Students 'xxuse Of Eba-Contented Activities**  
Rabia Betül K., Raziye K., BAL A. P.  
2. Uluslararası Fen, Matematik, Girişimcilik ve Teknoloji Eğitimi Kongresi, Eskişehir, Turkey, 19 - 22 November 2020, vol.372
- IX. **Investigation Of The Mathematical Modeling Activities Of Class Teacher Candidates In TheStem Context**  
Rabia Betül K., Raziye K., BAL A. P.  
2nd International Conference on Science, Mathematics, Entrepreneurship and Technology Education, Eskişehir, Turkey, 19 - 22 November 2020, pp.353
- X. **Awareness Of Primary School Teacher Candidates For Stem Education**  
Rabia Betül K., Raziye K., BAL A. P.  
2. Uluslararası Fen, Matematik, Girişimcilik ve Teknoloji Eğitimi Kongresi, 19-22 Kasım 2020, Eskişehir, Turkey, 19 - 22 November 2020, pp.249
- XI. **Development Of Mathematical Values Scale: Validity And Reliability**  
Rabia Betül K., Raziye K., BAL A. P.  
2. Uluslararası Fen, Matematik, Girişimcilik ve Teknoloji Eğitimi Kongresi, Eskişehir, Turkey, 19 - 22 November 2020, pp.371-372
- XII. **Sınıf Öğretmeni Adaylarının STEM'e Yönelik Tutumları**  
Armutcu Y., BAL A. P.  
VIIth INTERNATIONAL EURASIANEDUCATIONAL RESEARCH CONGRESS, Turkey, 10 - 13 September 2020, pp.977-983
- XIII. **Sınıf Öğretmeni Adaylarının Stem Eğitimi Uygulamalarına Yönelik Tutumlarının FarkındalıklarınınVe Matematik Başarı Durumlarının İncelenmesi**  
Rabia Betül K., Raziye K., BAL A. P.  
EJERCongress 2020 Bildiri Özetleri Kitabı /, Eskişehir, Turkey, 10 - 13 September 2020, pp.804-806

- XIV. **MATEMATİĞİ NASIL ÖĞRENMEK İSTERİZ?**  
ARTUT P., BAL A. P.  
ÇUKUROVA II. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALAR KONGRESİ, Adana, Turkey, 26 - 28 April 2019, pp.41-47
- XV. **MATEMATİKSEL DÜŞÜNME BİLEŞENLERİNE GÖRE ÖĞRETMEN ADAYLARININ MATEMATİKSEL DÜŞÜNME BECERİLERİNİN İNCELENMESİ**  
ARTUT P., BAL A. P.  
ÇUKUROVA II. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALAR KONGRESİ KONGRE KÜNYESİ KONGRE ADI ÇUKUROVA II. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALAR KONGRESİ, Adana, Turkey, 26 - 28 April 2019, vol.1, pp.48-55
- XVI. **EĞİTSEL MATEMATİK OYUNLARA YÖNELİK SINIF ÖĞRETMENLERİNİN GÖRÜŞLERİNİN İNCELENMESİ**  
ARTUT P., BAL A. P.  
6. INTERNATIONAL CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL MEDICAL SCIENCES, 8 - 10 March 2019, pp.253-261
- XVII. **The Effect of Differentiated Instruction on Mathematical Attitudes of Students**  
BAL A. P., ikinci o.  
6TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Budapest, Hungary, 15 - 18 August 2017, vol.1, pp.238
- XVIII. **The Analysis of Mistakes and Solution Strategies Applied in Algebraic Verbal Problems**  
BAL A. P., Karacaoğlu A.  
6th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA-2017), Budapest, Hungary, 15 August 2017 - 18 August 2017, vol.1, pp.319
- XIX. **Teachers perceptions about written examination preparation process**  
BAL A. P., SADIK F.  
VI. International Eurasian Conference on Mathematical Sciences and Applications (IECMSA), Budapest, Hungary, 15 - 18 August 2017, vol.1, pp.318
- XX. **Examining Teacher Candidates' Thinking Skills**  
ARTUT P., BAL A. P.  
6 TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Budapest, Hungary, 15 - 18 August 2017, pp.262-263
- XXI. **Learning Implementations about Cooperative Learning Method: A Case Study in Türkiye**  
ARTUT P., BAL A. P.  
6 TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Budapest, Hungary, 15 - 18 August 2017, pp.258-259
- XXII. **Examination of Geometrical Transformation in Precehoolers According to Age levels**  
ERDEN Ş., BAL A. P.  
69th OMEP World Assembly and International Conference, Opatjia, Croatia, 19 - 24 June 2017
- XXIII. **Sınıf Öğretmenleri Gerçekçi Cevap Vermeyi Gerektiren Problemlere Yaklaşımı**  
ARTUT P., BAL A. P.  
6th International Conference of Strategic Research in Social Science and Education 2, 12 - 14 May 2017
- XXIV. **Comparison of Spatial Visualization and Geometric Thinking Abilities of Preservice Teachers**  
BAL A. P., ÇİLİNGİR E.  
International Conference on Mathematics and Mathematics Education-ICMME 2017, Şanhurfa, Turkey, 11 - 13 May 2017, pp.1
- XXV. **Matematik Öğretmenlerinin Ölçme ve Değerlendirmeye İlişkin Görüşleri ve Sınavlarda Sordukları Sorular Üzerine Bir Değerlendirme**  
SADIK F., BAL A. P.  
IV International Eurasian Educational Research Congress, Denizli, Turkey, 11 - 13 May 2017, vol.1, pp.81-94
- XXVI. **Matematik Öğretiminde Farklılaştırılmış Öğretim Yaklaşımının Öğretmen Adaylarının Tutumlarına Etkisi**  
BAL A. P., ARTUT P.

- 2nd International Scientific Researches Congress on Humanities and Social Sciences, İstanbul, Turks And Caicos Islands, 20 - 23 April 2017, pp.75
- XXVII. **ANALYSIS OF WORD PROBLEMS STRUCTURES BASED ON ADDITION AND SUBTRACTION IN PRIMARY MATH TEXTBOOKS**  
ARTUT P., BAL A. P.  
2nd International Scientific Researches Congress on Humanities and Social Sciences, İstanbul, Turkey, 20 - 23 April 2017, pp.73
- XXVIII. **The Impact of Differentiated Instructional Approach on the Attitudes of Teacher Candidates in Mathematics Teaching1**  
BAL A. P., ARTUT P.  
2nd International Scientific Researches Congress on Humanities and Social Sciences, İstanbul, Turkey, 20 - 23 April 2017, pp.75
- XXIX. **An application example on the realistic mathematics education**  
ARTUT P., BAL A. P.  
2nd International Conference on Social Sciences & Education Research (ICCSER), İstanbul, Turkey, 4 - 06 November 2016
- XXX. **THE ANALYSIS OF ALGEBRAIC WORD PROBLEM SOLVING STRATEGIES AND MISTAKES**  
Karacaoğlu A., BAL A. P.  
2nd International Conference on Social Sciences and Education Research, İstanbul, Turkey, 4 - 06 November 2016, pp.88
- XXXI. **The Effect of Pedagogic Formation Training on Vocational Attitudes of Mathematics Teacher Candidates**  
BAL A. P.  
2nd International Conference on Social Sciences and Education Research, İstanbul, Turkey, 4 - 06 November 2016, pp.87
- XXXII. **Sınıf Öğretmeni Adaylarının Matematik Öğretimi Dersinde Farklılaşmış Öğretim Yaklaşımını Uygulama Süreçleri**  
BAL A. P.  
IIIrd INTERNATIONAL EURASIAN EDUCATIONAL RESEARCH CONGRESS, Muğla, Turkey, 31 May - 03 June 2016
- XXXIII. **SIXTH GRADE STUDENTS VIEWS ON COMPUTER ASSISTED MATHEMATICS EDUCATION**  
Uçar G., BAL A. P., ÖZSEZER M. S.  
International Conference on Education in Mathematics, Science & Technology (ICEMST), Turkey, 18 - 21 May 2016
- XXXIV. **ALTINCI SINIF ÖĞRENCİLERİNİN BİLGİSAYAR DESTEKLİ MATEMATİK ÖĞRETİMİNE YÖNELİK GÖRÜŞLERİ**  
ÖZSEZER M. S., BAL A. P., Uçar G.  
International Conference on Education in Mathematics, Science Technology, Muğla, Turkey, 19 - 22 May 2016, pp.1
- XXXV. **THE REPRESENTATIONS OF PRE-SERVICE ELEMENTARY TEACHERS APPLIED IN SOLVING NON-ROUTINE MATHEMATICAL PROBLEMS**  
BAL A. P.  
International Conference on Education in Mathematics, Science & Technology (ICEMST), Muğla, Turkey, 19 - 22 May 2016, vol.1, no.1, pp.758-765
- XXXVI. **The Analysis of 6 8 Grades Students Algebraic Word Problem Solving Strategies and Errors**  
Karacaoğlu A., BAL A. P.  
The 3rd International Congress on Curriculum and Instruction, Adana, Turkey, 22 - 24 October 2015, pp.427-429
- XXXVII. **7 Sınıf Öğrencilerinin Çokgenlerde Ve Özel Dörtgenlerde Yaptıkları Kavram Yanılgılarının İncelenmesi**  
Özkan M., BAL A. P.  
EJER CONGRESS 2015, Ankara, Turkey, 8 - 10 June 2015, pp.655-656
- XXXVIII. **Cebir Öğrenme Alanında Farklılaştırılmış Eğitim Yaklaşımının Akademik Başarı Üzerindeki Etkisi**  
BAL A. P.  
EJER CONGRESS 2015, Ankara, Turkey, 8 - 10 June 2015, pp.657-658

- XXXIX. **STUDENTS ALGEBRAIC THINKING LEVELS AND THE LEVELS OF USE OF THEREPRESENTATIONS**  
Deniz Sevcan Ö., BAL A. P.  
International Conference on education in mathematics, science & techology, Antalya, Turkey, 23 - 26 April 2015, pp.90
- XL. **EXAMINING OF PROBLEMS PARTAKING IN SECONDARYSCHOOL TEXTBOOKS IN ACCORDANCE WITH THE OPINIONS OF TEACHERS**  
BAL A. P., ARTUT P., ÖKŞEN D. S., ALIÇ C.  
International Conference on Education in Mathematics, Science & Technology (ICEMST), Antalya, Turkey, 23 - 26 April 2015, pp.531-537
- XLI. **EXAMINING OF PROBLEMS PARTAKING IN HIGH SCHOOL TEXTBOOKS IN ACCORDANCE WITH THE OPINIONS OF TEACHERS**  
BAL A. P., ARTUT P., Sevcan Deniz Ö., Canselin A.  
International Conference on Education in Mathematics, Science & Technology (ICEMST-2015), Antalya, Turkey, 23 - 25 April 2015, pp.531-537
- XLII. **Matematik Öğretmen Adaylarının Öğretim Teknolojileri Ve Materyal Geliştirme Dersinde Geliştirdikleri Materyallere İlişkin Görüşlerinin İncelenmesi**  
ÖKŞEN D. S., BAL A. P.  
International Conference on Education in Mathematics, Science & Technology (ICEMST), April 23 - 26, 2015  
Antalya, Turkey, Antalya, Turkey, 23 - 26 April 2015, pp.645-650
- XLIII. **EXAMINING OF PROBLEMS PARTAKING IN MATHS TEXTBOOKS OF NINTH GRADE**  
ARTUT P., BAL A. P., Canselin A., Deniz Sevcan Ö.  
International Conference on Education in Mathematics, Science & Technology, Antalya, Turkey, 23 - 25 April 2015, vol.48, pp.437-445
- XLIV. **Examining Pre service Elementary Teachers Changing Beliefs within the Context of Mathematics Education Course**  
BAL A. P.  
7th World Conference on Educational Sciences, Atina, Greece, 5 - 07 February 2015, pp.240
- XLV. **Skills Of Using And Transform Multiple Representations Of The Prospective Teachers**  
BAL A. P.  
7th World Conference on Educational Sciences, Athens, Greece, 5 - 07 February 2015, vol.197, pp.582-588
- XLVI. **Pedagojik Formasyon Eğitimi Sertifika Programının Matematik Öğretmen Adaylarının Mesleki Tutumlarına Olan Etkisi**  
BAL A. P., KARACAOĞLU A.  
XI. Ulusal Fen Bilimleri Matematik Eğitimi Kongresi, Atina, Turkey, 11 - 14 September 2014
- XLVII. **6 7 ve 8 Sınıf Öğrencilerinin Cebirsel Düşünmesi Düzeyleri**  
BAL A. P., KARACAOĞLU A.  
XI. Ulusal Fen Bilimleri Matematik Eğitimi Kongresi, Atina, Turkey, 11 - 14 September 2014
- XLVIII. **Cebirsel Tutum Ölçeği Geçerlik ve Güvenirlik Çalışması**  
BAL A. P., KARACAOĞLU A.  
XI. Ulusal Fen Bilimleri Matematik Eğitimi Kongresi, Atina, Turkey, 11 - 14 September 2014
- XLIX. **The Representations Of Pre Service Elementary Teachers Used İn Solving Mathematical Problems**  
UYAR G., BAL A. P.  
International Conference On Education in Mathematics, Science & Technology, Konya, Turkey, 16 - 18 May 2014, pp.1022-1027
- L. **Solution Strategies Used by Both Mathematics and Classroom Teachers about Non Routine Problem Types**  
UYAR G., BAL A. P.  
International Conference On Education in Mathematics, Science & Technology, Konya, Turkey, 16 - 18 May 2014, pp.897-902
- LI. **The Effects Of Problem Based Learning Technique On Sixth Grade Students Attitudes Toward Mathematics**



UYAR G., BAL A. P.

International Conference On Education in Mathematics, Science & Technology, Konya, Turkey, 16 - 18 May 2014, pp.961-964

- LII. **ÖĞRETMENLERİN RUTİN OLMAYAN MATEMATİKSEL PROBLEMLERİ ÇÖZMEDE KULLANDIKLARI STRATEJİLER**  
BAL A. P.  
ICEMST, Konya, Turkey, 16 May 2014 - 18 May 2014
- LIII. **Öğretmen Adaylarının Matematiksel Problem Çözmede Kullandıkları Temsiller**  
BAL A. P.  
1. Türk Bilgisayar Ve Matematik Eğitimi Sempozyumu, Trabzon, Turkey, 20 - 22 June 2013
- LIV. **Öğretmen adaylarının geometrik düşünme düzeyleri ve geometrik tutumları**  
BAL A. P.  
1. uluslararası Eğitim ve Programları ve öğretim kongresi, 5 - 08 October 2011
- LV. **İlköğretim Matematik Öğretim Programının Ölçme Değerlendirilme Boyutuna ilişkin Öğretmen görüşleri**  
BAL A. P., ARTUT P.  
8. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Bolu, Turkey, 27 - 30 August 2008
- LVI. **İlköğretim Matematik Öğretiminde Kullanılan Öğretim Stratejilerinin Çoklu Zeka Kuramı Açısından Analizi**  
BAL A. P., ARTUT P.  
8. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Bolu, Turkey, 27 - 30 August 2008
- LVII. **İlköğretim Matematik dersindeki öğretmen rolünün oluşturmaya göre değerlendirilmesi”, 8. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Bolu, 2008**  
ARTUT P., BAL A. P.  
8. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, Bolu, Turkey, 27 - 29 August 2008
- LVIII. **Yeni ilköğretim 6. sınıf matematik programının pilot uygulamasının değerlendirilmesi.**  
ARTUT P., BAL A. P.  
15. Ulusal Eğitim Bilimleri Kongresi, Turkey, 13 - 15 September 2006
- LIX. **Öğretmen Adaylarının Matematik Dersindeki Güdülenme Düzeyleri İle Akademik Başarıları Arasındaki İlişkinin İncelenmesi**  
BAL A. P., İFLAZOĞLU SABAN A.  
III. Ulusal Sosyal Bilimler Eğitimi Kongresi, Adana, Turkey, 18 - 20 June 2007, pp.454-463
- LX. **The Instructional Strategies Used in Mathematics Teaching And Analysis Of These Strategies In Terms of Multiple Intelligence Theory**  
İFLAZOĞLU SABAN A., BAL A. P.  
9 th International Conference of EAEN, Adana, Turkey, 28 - 30 June 2007, pp.400-417
- LXI. **İlköğretim Öğrencilerinin Ordinal Sıra Sayılar İçeren Problemleri Çözme Becerileri**  
ARTUT P., TARIM K., BAL A. P.  
VI. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi, İstanbul, Turkey, 9 - 11 September 2004, pp.596-604

## Supported Projects

SADIK F., BAL A. P., Project Supported by Higher Education Institutions, Matematik Öğretmenlerinin Ölçme ve Değerlendirmeye İlişkin Görüşleri ve Sınavlarda Sordukları Sorular Üzerine Bir Değerlendirme, 2013 - 2016

## Metrics

Publication: 182

Citation (WoS): 16

Citation (Scopus): 33

H-Index (WoS): 3

H-Index (Scopus): 4