

## Prof. AYHAN KÜRŞAT ERBAŞ

### Personal Information

**Office Phone:** [+90 312 210 3652](tel:+903122103652)

**Fax Phone:** [+90 312 210 7971](tel:+903122107971)

**Email:** [erbas@metu.edu.tr](mailto:erbas@metu.edu.tr)

**Web:** <https://avesis.metu.edu.tr/erbas>

**Address:** Orta Doğu Teknik Üniversitesi Eğitim Fakültesi Matematik ve Fen Bilimleri Eğitimi Bölümü 06800 Ankara - TÜRKİYE

### Education Information

Doctorate, University of Georgia, College of Education, Mathematics Education, United States Of America 1999 - 2004

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Turkey 1997 - 1999

Undergraduate Double Major, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Mathematics, Turkey 1995 - 1997

Undergraduate, Middle East Technical University, Faculty Of Education, Turkey 1992 - 1997

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Teachers' Knowledge of Student Thinking and their Instructional Practices in Algebra, University Of Georgia, Mathematics Education, 2004

Postgraduate, An Investigation of students performances, difficulties and misconceptions in elementary algebra, Middle East Technical University, Graduate School of Natural and Applied Sciences, Fen Bilimleri Eğitimi (Dr), 1999

### Research Areas

Educational Technology, Teacher Training For Elementary Sch. Edu. in Mathematics, Education in Mathematics, Teacher Training, Teacher Training For Secondary School, Teacher Training in Science and Math. at Second. Sch. Lev.

### Academic Titles / Tasks

Professor, Middle East Technical University, Faculty Of Education, Mathematics And Science Education, 2015 - Continues  
Associate Professor, Middle East Technical University, Faculty Of Education, Mathematics And Science Education, 2010 - 2015

Assistant Professor, Middle East Technical University, Faculty Of Education, Mathematics And Science Education, 2005 - 2010

Lecturer PhD, Middle East Technical University, Faculty Of Education, Mathematics And Science Education, 2004 - 2005

### Courses

Educational Statistics, Postgraduate, 2019 - 2020  
Technology in Math Education, Postgraduate, 2018 - 2019  
Special Studies, Postgraduate, 2018 - 2019, 2019 - 2020  
Advanced Studies, Doctorate, 2018 - 2019, 2019 - 2020

## Advising Theses

Erbaş A. K. , ÇETİNKAYA B., Towards defining biology teacher educator competencies: A delphi study, Doctorate, F.KOYUNCU(Student), 2020

Erbaş A. K. , An analysis of the opportunities to learn afforded by the tasks in a ninth grade Turkish mathematics textbook, Postgraduate, İ.BAYRAKTAR(Student), 2019

Erbaş A. K. , Prospective teachers' interpretation of multiplicative situations with fractions, Postgraduate, M.NUR(Student), 2019

ERBAŞ A. K. , Exploring secondary mathematics teachers' conceptions of mathematical literacy, Doctorate, M.GENÇ(Student), 2017

ERBAŞ A. K. , Mathematics in context: An ethnographic study with middle school students working as street-marketers, barbers, and bakers, Postgraduate, B.AYIK(Student), 2016

ERBAŞ A. K. , Cognitive analysis of students' learning of trigonometry in dynamic geometry environment: A teaching experiment, Doctorate, Z.ŞAHİN(Student), 2015

ERBAŞ A. K. , Cognitive analysis of students' learning of trigonometry in dynamic geometry environment : a teaching experiment, Doctorate, Z.Şahin(Student), 2015

ERBAŞ A. K. , An Investigation of pre-service mathematics teachers' mathematizing during a mathematical modeling task, Postgraduate, M.Kol(Student), 2014

ERBAŞ A. K. , An Investigation of prospective secondary mathematics teachers' thinking about mathematical modeling and pedagogy of modeling throughout a modeling course, Doctorate, H.Korkmaz(Student), 2014

ERBAŞ A. K. , Students' intuitively-based misconceptions in probability: Teachers' awareneses and teaching practices in middle and high schools, Doctorate, M.FATİH(Student), 2014

ERBAŞ A. K. , Students' intuitively-based misconceptions in probability: teachers' awareneses and teaching practices in middle and high schools, Doctorate, M.Fatih(Student), 2014

ERBAŞ A. K. , An investigation of pre-service secondary mathematics teachers' knowledge of students' thinking through analyzing student work, Doctorate, M.GÖZDE(Student), 2014

ERBAŞ A. K. , An Investigation of pre-service secondary mathematics teachers' knowledge of students' thinking through analyzing student work, Doctorate, M.Gözde(Student), 2014

ERBAŞ A. K. , ÇETİNKAYA B., A comparative analysis of mathematics teacher content knowledge examinations in Turkey and Texas, Postgraduate, N.YILMAZ(Student), 2014

ERBAŞ A. K. , An investigation of pre-service mathematics teachers' mathematizing during a mathematical modeling task, Postgraduate, M.KOL(Student), 2014

ERBAŞ A. K. , An investigation of prospective secondary mathematics teachers' thinking about mathematical modeling and pedagogy of modeling throughout a modeling course, Doctorate, H.KORKMAZ(Student), 2014

ERBAŞ A. K. , ÇETİNKAYA B., An Investigation of teachers' noticing of students' mathematical thinking in the context of a professional development program, Doctorate, S.Baş(Student), 2014

ERBAŞ A. K. , Pre-service elementary mathematics teachers' understanding of derivative through a model development unit, Doctorate, M.KERTİL(Student), 2014

ERBAŞ A. K. , Teacher learning in and from practice : A case of a secondary mathematics teacher, Doctorate, E.GÜL(Student), 2013

ERBAŞ A. K. , KORKMAZ B., Teachers' knowledge of content and students about the function concept and its interrelation with student learning outcomes in vocational high schools, Doctorate, V.Hatisaru(Student), 2013

ÇETİNKAYA B., ERBAŞ A. K. , An Investigation of prospective teachers' mathematical modelling processes and their views about factors affecting these processes, Doctorate, A.Şen(Student), 2013

ERBAŞ A. K. , Teacher learning in and from practice : the case of a secondary mathematics teacher, Doctorate,

E.Gül(Student), 2013

ERBAŞ A. K. , Assessment of preservice mathematics teachers' knowledge for teaching statistics, Doctorate,

O.MERCİMEK(Student), 2013

ERBAŞ A. K. , ÇETİNKAYA B., An investigation of prospective teachers' mathematical modelling processes and their views about factors affecting these processes, Doctorate, A.ŞEN(Student), 2013

ERBAŞ A. K. , Teachers' knowledge of content and students about the function concept and its interrelation with student learning outcomes in vocational high schools, Doctorate, V.HATISARU(Student), 2013

ERBAŞ A. K. , ÇETİNKAYA B., An investigation of teachers' noticing of students' mathematical thinking in the context of a professional development program, Doctorate, S.BAŞ(Student), 2013

ERBAŞ A. K. , YILDIRIM U., Physics teachers beliefs related to Turkish high school physics curriculum: A multiple case study, Doctorate, S.KAPUCU(Student), 2012

ÇAKIROĞLU E., ERBAŞ A. K. , Middle school mathematics teachers' use of textbooks and integration of textbook tasks into practice: a mixed methods study, Doctorate, M.Özgeldi(Student), 2012

ERBAŞ A. K. , The contribution of personality, motivation, academic risk-taking and metacognition to the creative ability in mathematics, Doctorate, S.BAŞ(Student), 2012

ERBAŞ A. K. , An Investigation of in-service secondary mathematics teachers' evolving knowledge through professional development activities based on modeling perspective, Doctorate, A.Aydoğan(Student), 2012

ERBAŞ A. K. , The Contribution of personality, motivation, academic risk-taking, and metacognition to the creative ability in mathematics, Doctorate, S.Baş(Student), 2012

ERBAŞ A. K. , YILDIRIM U., Physics teachers' beliefs related to Turkish high school physics curriculum: a multiple case study, Doctorate, S.Kapucu(Student), 2012

ERBAŞ A. K. , An investigation of in-service secondary mathematics teachers evolving knowledge through professional development activities based on modeling perspective, Doctorate, A.AYDOĞAN(Student), 2012

ÇETİNKAYA B., ERBAŞ A. K. , Pre-service elementary mathematics teachers' views about using graphing calculators in elementary school algebra: the case of using Classpad, Postgraduate, M.Kaplan(Student), 2011

ERBAŞ A. K. , ÇETİNKAYA B., Pre-service elementary mathematics teachers' views about using graphing calculators in elementary school algebra: The case of using classpad, Postgraduate, M.KAPLAN(Student), 2010

ERBAŞ A. K. , A comparative analysis of perimeter, area and volume topics in the selected sixth, seventh and eighth grades mathematics textbooks from Turkey, Singapore and The United States, Postgraduate, S.ÖZDOĞAN(Student), 2010

ERBAŞ A. K. , Students' strategies, episodes and metacognitions in the context of pisa 2003 mathematical literacy items, Postgraduate, S.Okur(Student), 2008

ERBAŞ A. K. , Students' strategies, episodes and metacognitions in the context of Pisa 2003 mathematical literacy items, Postgraduate, S.OKUR(Student), 2008

ERBAŞ A. K. , Students' learning of quadratic equations through use of interactive whiteboard and graphing software, Postgraduate, M.İNCE(Student), 2008

ERBAŞ A. K. , Using technology in preventing and remedying seventh grade students' misconceptions in forming and solving linear equations, Postgraduate, G.EREK(Student), 2008

ERBAŞ A. K. , The effects of computer based instruction on seventh grade students' spatial ability, attitudes toward geometry, mathematics and technology, Postgraduate, Ş.BOYRAZ(Student), 2008

ERBAŞ A. K. , Effects of graphing calculators on eighth grade students' achievement in graphs of linear equations and concept of slope, Postgraduate, Y.ÖNÜR(Student), 2008

ERBAŞ A. K. , The effect of dynamic geometry use together with open-ended explorations in sixth grade students' performances in polygons and similarity and congruency of polygons / , Postgraduate, A.AYDOĞAN(Student), 2007

ERBAŞ A. K. , A survey of teachers' implementations of new elementary school mathematics curriculum in sixth grade, Postgraduate, M.Ulubay(Student), 2007

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

1. **Facilitating a Sustainable Transformation of Sociomathematical Norms Through Mathematical Modeling Activities**

Yenmez A. A. , ERBAŞ A. K.

INTERNATIONAL JOURNAL OF SCIENCE AND MATHEMATICS EDUCATION, 2022 (Journal Indexed in SSCI)

- II. **Developing prospective teachers' covariational reasoning through a model development sequence**  
Kertil M., Erbaş A. K. , Çetinkaya B.  
MATHEMATICAL THINKING AND LEARNING, vol.21, pp.207-233, 2019 (Journal Indexed in SSCI)
- III. **Tracing Teacher Learning through Shifts in Discourses: The Case of a Mathematics Teacher**  
Ilhan E. G. C. , ERBAŞ A. K.  
EURASIA JOURNAL OF MATHEMATICS SCIENCE AND TECHNOLOGY EDUCATION, vol.13, no.6, pp.1919-1942, 2017 (Journal Indexed in SSCI)
- IV. **Mathematical Knowledge for Teaching the Function Concept and Student Learning Outcomes**  
Hatisaru V., ERBAŞ A. K.  
INTERNATIONAL JOURNAL OF SCIENCE AND MATHEMATICS EDUCATION, vol.15, no.4, pp.703-722, 2017 (Journal Indexed in SSCI)
- V. **Understanding Prospective Teachers' Mathematical Modeling Processes in the Context of a Mathematical Modeling Course**  
Sen Zeytun A., Çetinkaya B., Erbaş A. K.  
EURASIA JOURNAL OF MATHEMATICS SCIENCE AND TECHNOLOGY EDUCATION, vol.13, pp.691-722, 2017 (Journal Indexed in SSCI)
- VI. **Discourse Analysis of Interpersonal Meaning to Understand the Discrepancy between Teacher Knowing and Practice**  
Ilhan E. G. C. , ERBAŞ A. K.  
EURASIA JOURNAL OF MATHEMATICS SCIENCE AND TECHNOLOGY EDUCATION, vol.12, no.8, pp.2237-2251, 2016 (Journal Indexed in SSCI)
- VII. **Pre-service Teachers' Developing Conceptions about the Nature and Pedagogy of Mathematical Modeling in the Context of a Mathematical Modeling Course**  
Çetinkaya B., Kertil M., Erbaş A. K. , Korkmaz H., Alacacı C., Çakıroğlu E.  
MATHEMATICAL THINKING AND LEARNING, vol.18, pp.287-314, 2016 (Journal Indexed in SSCI)
- VIII. **The Contribution of Personality Traits, Motivation, Academic Risk-Taking and Metacognition to the Creative Ability in Mathematics**  
Erbaş A. K. , Bas S.  
CREATIVITY RESEARCH JOURNAL, vol.27, pp.299-307, 2015 (Journal Indexed in SSCI)
- IX. **Performance and Difficulties of Students in Formulating and Solving Quadratic Equations with One Unknown**  
KABAR M. G. D. , ERBAŞ A. K.  
EDUCATIONAL SCIENCES-THEORY & PRACTICE, vol.15, no.4, pp.1137-1150, 2015 (Journal Indexed in SSCI)
- X. **Learning Mathematics with Interactive Whiteboards and Computer-Based Graphing Utility**  
ERBAŞ A. K. , Ince M., Kaya S.  
EDUCATIONAL TECHNOLOGY & SOCIETY, vol.18, no.2, pp.299-312, 2015 (Journal Indexed in SSCI)
- XI. **Relational Understanding of the Derivative Concept through Mathematical Modeling: A Case Study**  
Sahin Z., Yenmez A. A. , Erbaş A. K.  
EURASIA JOURNAL OF MATHEMATICS SCIENCE AND TECHNOLOGY EDUCATION, vol.11, pp.177-188, 2015 (Journal Indexed in SSCI)
- XII. **Mathematical Modeling in Mathematics Education: Basic Concepts and Approaches**  
ERBAŞ A. K. , KERTİL M., ÇETİNKAYA B., ÇAKIROĞLU E., ALACACI C., Bas S.  
KURAM VE UYGULAMADA EGİTİM BİLİMLERİ, vol.14, no.4, pp.1621-1627, 2014 (Journal Indexed in SSCI)
- XIII. **Matematik eğitiminde matematiksel modelleme Temel kavramlar ve farklı yaklaşımlar Mathematical modeling in mathematics education Basic concepts and different approaches**  
Erbaş A. K. , Kertil M., Çetinkaya B., Çakıroğlu E., Alacacı C., Baş S.  
Kuram Ve Uygulamada Egitim Bilimleri, vol.14, pp.1607-1627, 2014 (Journal Indexed in SSCI)
- XIV. **An Evaluation of Environmental Responsibility and Its Associated Factors: Reflections from PISA 2006**

ERBAŞ A. K. , TEKSÖZ G., Tekkaya C.

EGITIM ARASTIRMALARI-EURASIAN JOURNAL OF EDUCATIONAL RESEARCH, vol.12, no.46, pp.41-62, 2012  
(Journal Indexed in SSCI)

- XV. **A Comparison of Mathematics Textbooks from Turkey, Singapore, and the United States of America**  
Erbaş A. K. , Alacacı C., Bulut M.  
KURAM VE UYGULAMADA EGITIM BILIMLERI, vol.12, no.3, pp.2324-2329, 2012 (Journal Indexed in SSCI)
- XVI. **Researching students' strategies, episodes, and metacognitions in mathematical problem solving**  
ERBAŞ A. K. , Okur S.  
QUALITY & QUANTITY, vol.46, no.1, pp.89-102, 2012 (Journal Indexed in SCI)
- XVII. **The effect of inquiry-based explorations in a dynamic geometry environment on sixth grade students' achievements in polygons**  
Erbaş A. K. , Yenmez A. A.  
COMPUTERS & EDUCATION, vol.57, pp.2462-2475, 2011 (Journal Indexed in SCI)
- XVIII. **Psychometric Properties of the Turkish Adaptation of the Mathematics Teacher Efficacy Belief Instrument for In-Service Teachers**  
Cetinkaya B., ERBAŞ A. K.  
SPANISH JOURNAL OF PSYCHOLOGY, vol.14, no.2, pp.956-966, 2011 (Journal Indexed in SSCI)
- XIX. **Teachers' Knowledge about Ninth Grade Students' Ways of Algebraic Thinking**  
Bas S., ERBAŞ A. K. , ÇETİNKAYA B.  
EGITIM VE BILIM-EDUCATION AND SCIENCE, vol.36, no.159, pp.41-55, 2011 (Journal Indexed in SSCI)
- XX. **Mathematics Teachers' Covariational Reasoning Levels and Predictions about Students' Covariational Reasoning Abilities**  
Sen Zeytun A., Centinkaya B., ERBAŞ A. K.  
KURAM VE UYGULAMADA EGITIM BILIMLERI, vol.10, no.3, pp.1601-1612, 2010 (Journal Indexed in SSCI)
- XXI. **Mathematics teachers' covariational reasoning levels and predictions about students' covariational reasoning abilities**  
Şen Zeytun A., ÇETİNKAYA B., ERBAŞ A. K.  
Kuram ve Uygulamada Egitim Bilimleri, vol.10, no.3, pp.1601-1612, 2010 (Journal Indexed in SSCI)
- XXII. **Unpacking the inequality among Turkish schools: Findings from PISA 2006**  
Alacaci C., Erbaş A. K.  
INTERNATIONAL JOURNAL OF EDUCATIONAL DEVELOPMENT, vol.30, pp.182-192, 2010 (Journal Indexed in SSCI)
- XXIII. **Matematik öğretmenlerinin kovaryasyonel düşünme düzeyleri ve öğrencilerinin kovaryasyonel düşünme becerilerine ilişkin tahminleri Mathematics teachers covariational reasoning levels and their predictions about students covariational reasoning abilities**  
ŞEN ZEYTUN A., ÇETİNKAYA B., ERBAŞ A. K.  
Educational Sciences: Theory and Practice, vol.10, pp.1573-1612, 2010 (Journal Indexed in SSCI)
- XXIV. **Student Difficulties and Misconceptions in Solving Simple Linear Equations**  
Erbaş A. K. , Cetinkaya B., Ersoy Y.  
EGITIM VE BILIM-EDUCATION AND SCIENCE, vol.34, no.152, pp.44-59, 2009 (Journal Indexed in SSCI)
- XXV. **Effect of Dynamic Geometry Environment on Immediate and Retention Level Achievements of Seventh Grade Students**  
UBUZ B., Ustun I., Erbas A. K.  
EGITIM ARASTIRMALARI-EURASIAN JOURNAL OF EDUCATIONAL RESEARCH, vol.9, no.35, pp.147-164, 2009  
(Journal Indexed in SSCI)
- XXVI. **GEOGRAPHICAL REGIONS AS A SILENT PREDICTOR OF RESPONSIBLE ENVIRONMENTAL BEHAVIOUR**  
TEKSÖZ G., Tekkaya C., ERBAŞ A. K.  
HACETTEPE UNIVERSITESI EGITIM FAKULTESI DERGISI-HACETTEPE UNIVERSITY JOURNAL OF EDUCATION, no.36, pp.249-259, 2009 (Journal Indexed in SSCI)
- XXVII. **The effect of a dynamic geometry environment on immediate and retention level achievements of seventh grade students**  
UBUZ B., ÜSTÜN I., ERBAŞ A. K.

- Egitim Arastirmalari-Eurasian Journal Of Educational Research, vol.35, pp.147-164, 2009 (Journal Indexed in SSCI)
- XXVIII. **Öğrencilerin Basit Doğrusal Denklemlerin Çözümünde Karşılaştıkları Güçlükler ve Kavram Yanılgıları**  
**Student Difficulties and Misconceptions in Solving Simple Linear Equations**  
Erbaş A. K. , Çetinkaya B., Ersoy Y.  
Egitim Ve Bilim-Education And Science, vol.34, pp.44-59, 2009 (Journal Indexed in SSCI)
- XXIX. **Implementation of the New Turkish Primary Education Mathematics Curriculum in the Sixth Grade: A Survey of Teachers' Views**  
ERBAŞ A. K. , Ulubay M.  
NEW EDUCATIONAL REVIEW, vol.16, pp.51-75, 2008 (Journal Indexed in SSCI)

## Articles Published in Other Journals

- I. **Secondary mathematics teachers' noticing of students' mathematical thinking through modeling-based teacher investigations**  
Bas-Ader S., ERBAŞ A. K. , ÇETİNKAYA B., Alacaci C., ÇAKIROĞLU E.  
MATHEMATICS EDUCATION RESEARCH JOURNAL, 2021 (Journal Indexed in ESCI)
- II. **Pre-service secondary mathematics teachers' anticipation and identification of students' thinking in the context of modelling problems\***  
Kabar M. G. D. , ERBAŞ A. K.  
INTERNATIONAL JOURNAL OF MATHEMATICAL EDUCATION IN SCIENCE AND TECHNOLOGY, vol.52, no.2, pp.208-236, 2021 (Journal Indexed in ESCI)
- III. **Secondary mathematics teachers' conceptions of the barriers to the development of mathematical literacy**  
Genç M., Erbaş A. K.  
International Journal for Mathematics Teaching and Learning, vol.21, no.2, pp.143-173, 2020 (Refereed Journals of Other Institutions)
- IV. **Secondary mathematics teachers' conceptions of mathematical literacy**  
Genc M., ERBAŞ A. K.  
International Journal of Education in Mathematics, Science and Technology, vol.7, no.3, pp.222-237, 2019 (Journal Indexed in ESCI)
- V. **Mathematics teachers' knowledge and skills about questioning in the context of modeling activities**  
Yenmez A. A. , Erbaş A. K. , Çakıroğlu E., Çetinkaya B., Alacaci C.  
TEACHER DEVELOPMENT, vol.22, pp.497-518, 2018 (Journal Indexed in ESCI)
- VI. **Developing teachers' models for assessing students' competence in mathematical modelling through lesson study**  
Yenmez A. A. , Erbaş A. K. , Çakıroğlu E., Alacaci C., Çetinkaya B.  
INTERNATIONAL JOURNAL OF MATHEMATICAL EDUCATION IN SCIENCE AND TECHNOLOGY, vol.48, pp.895-912, 2017 (Journal Indexed in ESCI)
- VII. **Validation of the mathematical knowledge for teaching statistics instrument**  
Mercimek O., Erbaş A. K.  
Cumhuriyet International Journal of Education, vol.6, pp.173-184, 2017 (Other Refereed National Journals)
- VIII. **Evolution of Mathematics Teachers' Pedagogical Knowledge when They are Teaching through Modeling**  
Yenmez A. A. , Erbaş A. K. , Alacaci C., Çakıroğlu E., Çetinkaya B.  
INTERNATIONAL JOURNAL OF EDUCATION IN MATHEMATICS SCIENCE AND TECHNOLOGY, vol.5, pp.317-332, 2017 (Journal Indexed in ESCI)
- IX. **Pre-service Elementary Mathematics Teachers' Ways of Thinking about Rate of Change in the Context of a Modeling Activity**  
Kertil M., Erbaş A. K. , Çetinkaya B.  
Turkish Journal of Computer and Mathematics Education (TURCOMAT), vol.8, no.1, pp.188-217, 2017 (Other

Refereed National Journals)

- X. **Exploring prospective secondary mathematics teachers' interpretation of student thinking through analysing students' work in modelling**  
Kabar M. G. D. , Erbaş A. K. , Çetinkaya B., Çakıroğlu E., Alacacı C.  
MATHEMATICS EDUCATION RESEARCH JOURNAL, vol.28, pp.349-378, 2016 (Journal Indexed in ESCI)
- XI. **Our inability to solve problems and mathematical modeling**  
Erbaş A. K. , Çetinkaya B.  
Türkiye Bilimler Akademisi (TÜBA)-Günce, vol.51, pp.72-75, 2016 (National Non-Refereed Journal)
- XII. **Investigating prospective mathematics teachers' pedagogical approaches in response to students' errors in the context of mathematical modeling activities Matematik öğretmen adaylarının öğrenci hatalarına yönelik pedagojik yaklaşımlarının matematiksel modelleme etkinlikleri bağlamında incelenmesi**  
Didiş M. G. , Erbaş A. K. , Çetinkaya B.  
Elementary Education Online, vol.15, pp.1367-1384, 2016 (Refereed Journals of Other Institutions)
- XIII. **Öğrenci çalışmalarını incelemenin öğrenci düşünme şekillerini anlamadaki rolü ile ilgili matematik öğretmen adaylarının düşünceleri Pre service mathematics teachers views regarding the role of examining students work in understanding students ways of thinking**  
DİDİŞ M. G. , ERBAŞ A. K. , ÇETİNKAYA B., ÇAKIROĞLU E., ALACACI C.  
Turkish Journal of Computer and Mathematics Education, vol.6, no.2, pp.139-162, 2015 (Other Refereed National Journals)
- XIV. **Öğrenci çalışmalarını incelemenin öğrenci düşünme şekillerini anlamadaki rolü ile ilgili matematik öğretmen adaylarının düşünceleri**  
Didiş M. G. , Erbaş A. K. , Çetinkaya B., Çakıroğlu E., Alacacı C.  
Turkish Journal of Computer and Mathematics Education, vol.6, pp.139-162, 2015 (Other Refereed National Journals)
- XV. **Prospective secondary mathematics teachers interpretations of students thinking**  
Didiş M. G. , Erbaş A. K. , Çetinkaya B., Çakıroğlu E.  
RESEARCH IN MATHEMATICS EDUCATION, vol.16, pp.77-78, 2014 (Refereed Journals of Other Institutions)
- XVI. **Endüstri meslek lisesi öğrencilerinin fonksiyon kavramını anlamadüzeylerinin incelenmesi**  
Hatsaru V., ERBAŞ A. K.  
Kastamonu Eğitim Dergisi, vol.21, no.3, pp.865-882, 2013 (Refereed Journals of Other Institutions)
- XVII. **Exploring the Quality of the Mathematical Tasks in the New Turkish Elementary School Mathematics Curriculum Guidebook the Case of Algebra**  
UBUZ B., ERBAŞ A. K. , ÇETİNKAYA B., ÖZGELDİ M.  
ZDM - Mathematics Education, vol.42, pp.483-491, 2010 (Refereed Journals of Other Institutions)
- XVIII. **Reexamining Archimedes quadrature of the parabola with dynamic geometry**  
ERBAŞ A. K.  
Mathematics and Computer Education, vol.43, pp.165-180, 2009 (Refereed Journals of Other Institutions)
- XIX. **What learner centered professional development looks like The pilot studies of the InterMath professional development project**  
Orrill C. H. , Brown S., Erbaş A. K. , Galloway C., Glazer E., Lawler B., Umberger Patton S., Bleich L., Ledford S., Polly D.  
The Mathematics Educator, vol.16, pp.4-13, 2006 (Refereed Journals of Other Institutions)
- XX. **Professional development through technology integrated problem solving From InterMath to T Math**  
ERBAŞ A. K. , ÇAKIROĞLU E., AYDIN U., BEŞER Ş.  
The Mathematics Educator, vol.16, pp.35-46, 2006 (Refereed Journals of Other Institutions)
- XXI. **Çoklu Gösterimlerle Problem Çözme ve Teknolojinin Rolü**  
Erbaş A. K.  
The Turkish Online Journal of Educational Technology, vol.4, pp.88-92, 2005 (Refereed Journals of Other Institutions)
- XXII. **Kassel Projesi Cebir Testinde bir grup Türk Öğrencinin Genel Başarısı ve Öğrenme Güçlükleri**

Ersoy Y., Erbaş A. K.

İlköğretim-Online (Elementary Education Online), vol.4, pp.18-39, 2005 (Refereed Journals of Other Institutions)

XXIII. **Predicting turkish ninth grade students algebra performance**

ERBAŞ A. K.

Mathematics Educator, vol.15, pp.25-34, 2005 (Refereed Journals of Other Institutions)

## Books & Book Chapters

- I. **Lise matematik konuları için günlük hayattan modelleme soruları**  
Erbaş A. K. , Çetinkaya B., Alacacı C., Çakıroğlu E., Aydoğan Yenmez A., Şen Zeytun A., Korkmaz H., Kertil M., Didiş M. G. , Baş S., et al.  
Türkiye Bilimler Akademisi, Ankara, 2016
- II. **Matematik eğitiminde matematiksel modelleme**  
Kertil M., Çetinkaya B., Erbaş A. K. , Çakıroğlu E.  
in: Matematik eğitiminde teoriler, E. Bingölbali, S. Arslan, & İ. Ö. Zembat, Editor, Pegem A Yayıncılık, Ankara, pp.539-563, 2016
- III. **Matematik eğitiminde matematiksel modelleme**  
KERTİL M., ÇETİNKAYA B., ERBAŞ A. K. , ÇAKIROĞLU E.  
in: Matematik eğitiminde teoriler, Bingölbali, Arslan, Zembat, Editor, PEGEM AKADEMİ, pp.539-563, 2016
- IV. **Değişim oranı olarak türev ve tarihsel gelişimi**  
Çetinkaya B., Erbaş A. K. , Alacacı C.  
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- V. **Tarihi gelişimi ve önemi ile polinomlar**  
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- VII. **Ortaöğretim Matematik 12**  
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- I. **Professional competencies that mathematics teacher educators should have: Reflections from a workshop**  
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39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education , Indiana, United States Of America, 5 - 08 October 2017, pp.491-494
- II. **Matematik öğretmen, yetiştirmek için gerekli matematik bilgisi: Ne bilmeli? Ne düzeyde bilmeli? Ne şekilde bilmeli?**  
ERBAŞ A. K. , ÇETİNKAYA B., ALACACI C., KOYUNCU F., ÇELİKDEMİR K., KOL M., YILMAZ N., CANSU KURT Ü.  
3. Türk Bilgisayar ve Matematik Eğitimi Sempozyumu Bildiri Özetleri Kitabı, Afyon, Turkey, 17 - 19 May 2017, pp.60-61
- III. **Matematik öğretmen adaylarının Riemann toplamıyla ilgili kavramsal anlayışları**  
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3. Türk Bilgisayar ve Matematik Eğitimi Sempozyumu Bildiri Özetleri Kitabı, Turkey, 17 - 19 May 2017, pp.129-131
- IV. **Lise matematik öğretmenlerinin matematik okuryazarlığı bağlamında matematik öğretim programına ilişkin görüşleri**  
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- V. **Matematik öğretmen eğitimcisi yeterlikleri: Öğretmenlerin, doktora öğrencilerinin ve öğretmen eğitimcilerinin öncelikleri**  
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- VI. **An investigation of eight grade students' misconceptions regarding the concept of variable**  
Karacı G., Erbaş A. K.  
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- VII. **An investigation of middle school mathematics teachers' knowledge for teaching algebra**  
Yılmaz N., ERBAŞ A. K.  
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- X. **Development of Teaching Materials**  
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- XII. **Ortaokul Matematik Öğretmen Adaylarının Dikey Matematikselleştirme Sürecinin Bir Matematiksel Modelleme Etkinliği Bağlamında İncelenmesi**  
KOL M., ERBAŞ A. K. , ÇETİNKAYA B.  
Türk Bilgisayar ve Matematik Eğitimi Sempozyumu - 2, Turkey, 16 - 18 May 2015
- XIII. **Investigating students perceptions of mathematics and mathematics teachers through their drawings**  
MERVE NUR K., ERBAŞ A. K.  
International Society of Educational Research (ISER) World Conference on Education, İstanbul, Turkey, 10 - 12 June 2015, pp.26
- XIV. **Ortaokul matematik öğretmen adaylarının dikey matematikselleştirme sürecinin bir matematiksel modelleme etkinliği bağlamında incelenmesi**  
KOL M., ERBAŞ A. K. , ÇETİNKAYA B.  
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- XV. **Öğretmen adaylarının iki niceliğin eş zamanlı değişimini içeren durumları modellerken grafik oluşturma ve yorumlama süreçlerinin incelenmesi**  
KERTİL M., ÇETİNKAYA B., ERBAŞ A. K.  
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- XVI. **Prospective Secondary Mathematics Teachers' Interpretations of Students' Thinking**  
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British Society for Research into Learning Mathematics (BSRLM), 9 - 10 November 2013, vol.33, pp.19-24

- XVII. **Lise matematik öğretmenlerinin modelleme ve modellemenin matematik öğretiminde kullanılmasına yönelik düşünceleri Bir hizmet içi eğitim programının etkisi**  
ÖREN VURAL D., ÇETİNKAYA B., ERBAŞ A. K. , ALACACI C., ÇAKIROĞLU E.  
I. Türk Bilgisayar ve Matematik Eğitimi Sempozyumu, Turkey, 20 - 22 June 2013
- XVIII. **Teachers as investigators of students' written work: Does this approach provide an opportunity for professional development?**  
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Eighth congress of the European Society of Research in Mathematics Education (CERME 8), 6 - 10 February 2013, pp.2936-2945
- XIX. **Matematik öğretiminde matematik tarihinin yeri Türk Portekiz İspanyol ve Fransız matematik öğretmenlerinin görüşleri**  
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X. Ulusal Fen ve Matematik Eğitimi Kongresi, Niğde, Turkey, 27 - 30 June 2012, pp.467
- XX. **Lise öğrencilerinin cebirsel sözel problemleri çözümedeki başarısı**  
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- XXII. **A SURVEY OF MATHEMATICS EDUCATION DOCTORAL PROGRAMS IN TURKEY**  
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- XXIII. **INVESTIGATING PRE-SERVICE TEACHERS' UNDERSTANDING OF RATE OF CHANGE AND DERIVATIVE GRAPHS THROUGH A MODEL DEVELOPMENT SEQUENCE**  
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- XXIV. **USING HISTORY OF MATHEMATICS IN TEACHING MATHEMATICS: TEACHERS' VIEWS**  
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7th Congress of the European-Society-for-Research-in-Mathematics-Education (ERME), Rzeszow, Poland, 9 - 13 February 2011, pp.1521-1530
- XXVII. **STUDENTS' REASONING IN QUADRATIC EQUATIONS WITH ONE UNKNOWN**  
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- XXVIII. **TYPE RELEARNING QUADRATIC EQUATIONS WITH INTERACTIVE WHITE BOARD AND A GRAPHING SOFTWARE**  
ERBAŞ A. K. , Ince M.  
35th Annual Conference of the International-Group-for-the-Psychology-of-Mathematics-Education (PME), Ankara, Turkey, 10 - 15 July 2011, pp.292
- XXIX. **Students' perceptions of the concept of function: The case of Turkish students attending vocational**

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Hatisaru V., ERBAŞ A. K.

2nd World Conference on Educational Sciences (WCES-2010), İstanbul, Turkey, 4 - 08 February 2010, vol.2, pp.3921-3925

- XXX. **Pre-service physics teachers'xx difficulties in constructing mathematical models of simple harmonic motion**  
SenZeytun A., ÇETİNKAYA B., YILDIRIM U., ERBAŞ A. K.  
14th International Conference on the Teaching of Mathematical Modelling and Applications, 27 - 31 July 2009
- XXXI. **6(TH) GRADE MATHEMATICS TEACHERS' CONCERNS ABOUT A REFORMED MATHEMATICS CURRICULUM**  
ÇETİNKAYA B., Oren D., Aydın U., ERBAŞ A. K.  
33rd Conference of the International-Group-for-the-Psychology-of-Mathematics-Education, Thessaloniki, Greece, 19 - 24 July 2009, vol.1, pp.353
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BAŞ S., ÇETİNKAYA B., YILDIRIM U., ERBAŞ A. K.  
14th International Conference on the Teaching of Mathematical Modelling and Applications, Hamburg, Germany, 27 - 31 July 2009, pp.16
- XXXIII. **Technology-enhanced math investigations: Facilitating the design and implementation of TEMIs into the classroom**  
Polly D., Orrill C., Erbas A. K. , Ledford S.  
World Conference on Educational Multimedia, Hypermedia and Telecommunications, Lugano, Switzerland, 21 - 26 June 2004, pp.3157-3160
- XXXIV. **Dokuzuncu sınıf öğrencilerinin eşitlik çözümündeki başarıları ve olası kavram yanlışları**  
Erbaş A. K. , Ersoy Y.  
V. Ulusal Fen Bilimleri Eğitimi Kongresi, Ankara, Turkey, 16 - 18 September 2002, pp.225
- XXXV. **İlköğretim okullarında cebir öğretimi Öğrenmede güçlükler ve öğrenci başarıları**  
ERBAŞ A. K. , ERSOY Y.  
Cumhuriyetin 75. Yılında İlköğretim Sempozyumu, Ankara, Turkey, 27 - 21 November 1998, pp.171-179

### **Supported Projects**

Erbaş A. K. , TUBITAK Project, A Comparative Analysis of Turkish Singapore and American 6th and 7th Grades Mathematics Textbooks, 2008 - 2009

Erbaş A. K. , Project Supported by Higher Education Institutions, T Math Teknoloji Destekli Matematik Öğretimi Ve Öğretmen Eğitimi, 2005 - 2007

### **Activities in Scientific Journals**

Eurasian Journal of Educational Research ( <http://ejer.com.tr> ), Assistant Editor, 2016 - Continues

International Journal of Educational Studies in Mathematics, Committee Member, 2014 - Continues

Türk Bilgisayar ve Matematik Eğitimi Dergisi, Committee Member, 2015 - 2021

### **Memberships / Tasks in Scientific Organizations**

Turkish Young Academy of Sciences, Member, 2019 - Continues, Turkey

Matematik Eğitimi Derneği, Member, 2013 - Continues, Turkey

Matematikçiler Derneği, Member, 2007 - Continues, Turkey

## Tasks In Event Organizations

Erbaş A. K. , International Pegem Conference on Education (IPCEDU-2020), Scientific Congress, Turkey, Eylül 2020

Erbaş A. K. , VIIth INTERNATIONAL EURASIAN EDUCATIONAL RESEARCH CONGRESS, Scientific Congress, Eskişehir, Turkey, Eylül 2020

Erbaş A. K. , 4th International Symposium of Turkish Computer and Mathematics Education, Scientific Congress, İzmir, Turkey, Eylül 2019

Erbaş A. K. , Sungur S., Çakıroğlu J., VIth International Eurasian Educational Research Congress, Scientific Congress, Ankara, Turkey, Haziran 2019

Erbaş A. K. , Vth International Eurasian Educational Research Congress, Scientific Congress, Antalya, Turkey, Mayıs 2018

Erbaş A. K. , The 27th International Congress on Educational Sciences, Scientific Congress, Turkey, Nisan 2018

## Citations

Total Citations (WOS):239

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## Invited Talks

Matematik Okuryazarlığı, Okuma Becerileri ve PISA, Conference, Ankara Üniversitesi, Turkey, June 2019

Matematik Eğitiminde Teknolojik Araçların Kullanımı, Workshop, Kanguru Türkiye, Turkey, April 2019

## Awards

Erbaş A. K. , Çetinkaya B., Çakıroğlu E., TÜBİTAK Proje Performans Ödülü (PPÖ), Türkiye Bilimsel Ve Teknolojik Araştırma Kurumu (Tübitak), November 2018

Erbaş A. K. , Young Scientist Award Program (2012), Türkiye Bilimler Akademisi, June 2013

Erbaş A. K. , Young researcher achievement award, Orta Doğu Teknik Üniversitesi, April 2009