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Department of Mathematics and Science Education
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EDUCATION

Ph.D. Mathematics Education, University of Georgia, Athens, Georgia, USA, August 2004;

with *Certificate in Interdisciplinary Qualitative Studies*

Dissertation title: “Teachers’ knowledge of student thinking and their instructional practices in algebra” (supervisor: Prof. Dr. James W. WILSON)

M.S. Mathematics Education, Middle East Technical University, Turkey, July 1999

Thesis title: “An investigation into students’ performances, difficulties and misconceptions in elementary algebra” (supervisor: Prof. Dr. Yaşar ERSOY)

B.S. Mathematics Education, Middle East Technical University, Turkey, July 1997

B.S. Mathematics (Double Major), Middle East Technical University, Turkey, July 1997

ACADEMIC POSITIONS

Professor, Department of Mathematics and Science Education, Middle East Technical University, Ankara, Turkey (Dec 2015 – present)

Associate Professor, Department of Secondary Science and Mathematics Education, Middle East Technical University, Ankara, Turkey (May 2010 – Dec 2015)

Assistant Professor, Department of Secondary Science and Mathematics Education, Middle East Technical University, Ankara, Turkey (May 2005 – May 2010)

Instructor, Department of Secondary Science and Mathematics Education, Middle East Technical University, Ankara, Turkey (November 2004 – May 2005)

Adjunct Faculty, Brenau University, Gainesville, GA, USA (Fall 2003, Spring 2001)

Educational Specialist, the Intermath Project (<http://intermath.coe.uga.edu>), Language and Performance Support Laboratory (LPSL), University of Georgia, Athens, GA, USA (Fall 2001-Summer 2004)

Graduate Teaching Assistant, Department of Mathematics Education, University of Georgia, Athens, GA, USA (Spring 2002, Summer 2004)

Other Professional Experience

Instructor, Ahmet Yesevi University, TURKEY (Instructor of “Numerical Methods” and/or “Discrete Mathematical Structures” courses taught via distance education: Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2014, Spring 2015, Fall 2015, Spring 2016, Fall 2016).

Atılım University, Ankara, TURKEY (Instructor of the course “Instructional Technology and Material Development” and/or “Teaching Practice”), TURKEY (Spring 2012, Spring 2013, Spring 2014, Fall 2014, Spring 2015)

Temporary Instructor for Professional Development, Rockdale County Public Schools, Conyers, GA, USA (Spring 2003, Spring 2004)

Substitute Teacher for Algebra-II, Morgan County High School, Madison, GA, USA (Spring 2002, Spring 2003)

WebMaster & Content Developer, Contextual Teaching and Learning in Mathematics project (<http://jwilson.coe.uga.edu/CTL/CTL>), Department of Mathematics Education, University of Georgia, Athens, GA, USA (Spring 2001)

RESIDENT INSTRUCTION AND CONTINUING EDUCATION

(* Undergraduate Course; ** Graduate Course; *** Professional Development for-Credit Course)

- * SSME 455 – Mathematical Modeling for Teachers (METU, Turkey)
- * SSME 400 – Computer Applications in Science & Mathematics Education (METU, Turkey)
- * SSME 518 – Instructional Technology and Material Development (METU, Turkey)
- * SSME 534 – School Experience in Science and Mathematics Education (METU, Turkey)
- * SSME 513 – School Experience in Secondary Education I (METU, Turkey)
- * ELE 301 – Research Methods (METU, Turkey)
- ** SSME 550 – Technology in Mathematics Education (METU, Turkey)
- ** SSME 704 – Teaching and Learning of School Algebra (METU, Turkey)
- * Öğretim Teknolojileri ve Materyal Tasarımı [Instructional Technology and Material Development] (Atılım University, TURKEY)
- * TBIL 301 – Sayısal Yöntemler [Numerical Methods] (Ahmet Yesevi University, TURKEY):
- * TBIL 301 – Kesikli Matematiksel Yapılar [Discrete Mathematical Structures] (Ahmet Yesevi University, TURKEY)
- * MS 101 – College Algebra (Brenau University, Gainesville, GA, USA)
- * MS 111 – Pre-Calculus/Trigonometry (Brenau University, Gainesville, GA, USA)
- * MS 207 – Problem Solving (Brenau University, Gainesville, GA, USA)

- *** Modeling in Algebra (Rockdale County Public Schools, Conyers, GA, USA)
- *** Modeling in Geometry (Rockdale County Public Schools, Conyers, GA, USA)

SCHOLARLY ACTIVITIES

A. Publications

Journal Papers (International) (* Indexed in SSCI– Social Science Citation Index)

1. * Hatisaru, V., & **Erbas, A. K.** (2017). Mathematical knowledge for teaching the function concept and student learning outcomes. *International Journal of Science and Mathematics Education*, 15(4), 703-722. <https://dx.doi.org/10.1007/s10763-015-9707-5>
2. Aydogan-Yenmez, A., **Erbaş, A. K.**, Cakiroglu, E., Alacaci, C., & Çetinkaya, B. (2017). Developing teachers' models for assessing students' competence in mathematical modeling. *International Journal of Mathematical Education in Science and Technology*. <https://dx.doi.org/10.1080/0020739X.2017.1298854>
3. Aydogan Yenmez, A., **Erbas, A. K.**, Alacaci, C., Cakiroglu, E., & Cetinkaya, B. (2017). Evolution of mathematics teachers' pedagogical knowledge when they are teaching through modeling. *International Journal of Education in Mathematics, Science and Technology*, 5(4), 317-332. <https://dx.doi.org/10.18404/ijemst.296552>
4. * Sen-Zeytun, A., Cetinkaya, B., & **Erbas, A. K.** (2017). Understanding prospective teachers' mathematical modeling processes in the context of a mathematical modeling course. *Eurasia Journal of Mathematics, Science & Technology Education*, 13(3): 691–722. <https://dx.doi.org/10.12973/eurasia.2017.00639a>
5. * Cetinkaya, B., Kertil, M., **Erbas, A. K.**, Korkmaz, H., Alacaci, C., & Cakiroglu, E. (2016). Pre-service teachers' developing conceptions about mathematical modeling and teaching in the context of a mathematical modeling course. *Mathematical Thinking and Learning*, 18(4), 287–314. <https://dx.doi.org/10.1080/10986065.2016.1219932>
6. Didis, M. G., **Erbas, A. K.**, Cetinkaya, B., Cakiroglu, E., & Alacaci, C. (2016). Exploring prospective secondary mathematics teachers' interpretation of student thinking through analysing students' work in modelling. *Mathematics Education Research Journal*, 28(3), 349–378. <https://dx.doi.org/10.1007/s13394-016-0170-6>
7. * Çelebi-İlhan, E. G., & **Erbaş, A. K.** (2016). Discourse analysis of interpersonal meaning to understand the discrepancy between teacher knowing and practice. *Eurasia Journal of Mathematics, Science & Technology Education*, 12(8), 2237–2251. <https://dx.doi.org/10.12973/eurasia.2016.1274a>
8. * **Erbas, A. K.**, & Bas, S. (2015). The contribution of personality traits, motivation, academic risk-taking and metacognition to the creative ability in mathematics. *Creativity Research Journal*, 27(4), 299–307. <https://dx.doi.org/10.1080/10400419.2015.1087235>
9. * Didis, M. G., & **Erbas, A. K.** (2015). Performance and difficulties of students in formulating and solving quadratic equations with one unknown. *Educational Sciences: Theory and Practice*, 15(4), 1137–1150. <https://dx.doi.org/10.12738/estp.2015.4.2743>

10. * **Erbaş, A. K.**, Ince, M., & Kaya, S. (2015). Learning mathematics with interactive whiteboards and computer-based graphing utility. *Educational Technology & Society*, 18(2), 124–138.
11. * Şahin, Z., Yenmez-Aydoğan, A., & **Erbaş, A. K.** (2015). Relational understanding of the derivative concept through mathematical modeling: A case study. *Eurasia Journal of Mathematics, Science & Technology Education*, 11(1), 177–188. <https://dx.doi.org/10.12973/eurasia.2015.1149a>
12. * **Erbaş, A. K.**, Kertil, M., Çetinkaya, B., Çakiroğlu, E., Alacacı, C., & Baş, S. (2014). Matematik eğitiminde matematiksel modelleme: Temel kavramlar ve farklı yaklaşımlar (Mathematical modeling in mathematics education: Basic concepts and approaches). *Educational Sciences: Theory and Practice*, 14(4), 1607–1627. <https://dx.doi.org/10.12738/estp.2014.4.2039> [Review article]
13. Didis, M. K., **Erbaş, A. K.**, Cetinkaya, B., & Cakiroglu, E. (2014). Prospective secondary mathematics teachers' interpretations of students' thinking. *Research in Mathematics Education*, 16(1), 77–78. <https://dx.doi.org/10.1080/14794802.2013.849863>
14. * **Erbaş, A. K.**, & Okur, S. (2012). Researching students' strategies, episodes, and metacognitions in mathematical problem solving. *Quality and Quantity*, 46(1), 89–102. <https://dx.doi.org/10.1007/s11135-010-9329-5>
15. * **Erbaş, K.**, Tuncer-Teksoz, G., & Tekkaya, C. (2012). An evaluation of environmental responsibility and associated factors: Reflections from PISA 2006. *Eurasian Journal of Educational Research*, 46, 41–62.
16. * **Erbaş, A. K.**, Alacacı, C., & Bulut, M. (2012). Türk, Singapur ve Amerikan matematik ders kitaplarının bir karşılaştırması [A Comparison of Mathematics Textbooks from Turkey, Singapore and the United States of America]. *Educational Sciences: Theory and Practice*, 12(3), 2311–2329.
17. * **Erbaş, A. K.**, & Aydogan-Yenmez, A. (2011). The effect of inquiry-based explorations in a dynamic geometry environment on sixth grade students' achievements in polygons. *Computers & Education*, 57(4), 2462–2475. <https://dx.doi.org/10.1016/j.compedu.2011.07.002>
18. * Cetinkaya, B., & **Erbaş, A. K.** (2011). Psychometric properties of the Turkish adaptation of the Mathematics Teacher Efficacy Belief Instrument for In-Service Teachers. *The Spanish Journal of Psychology*, 14(2), 956–966. https://dx.doi.org/10.5209/rev_SJOP.2011.v14.n2.41
19. * Baş, S., **Erbaş, A. K.**, & Çetinkaya, B. (2011). Öğretmenlerin dokuzuncu sınıf öğrencilerinin cebirsel düşünme yapılarıyla ilgili bilgileri [Teachers' knowledge about ninth grade students' ways of algebraic thinking]. *Education and Science*, 36(159), 41–55.
20. * Alacacı, C., & **Erbaş, A. K.** (2010). Unpacking the inequality among Turkish schools: Findings from PISA 2006. *International Journal of Educational Development*, 30(2), 182–192. <https://dx.doi.org/10.1016/j.ijedudev.2009.03.006>
21. * Sen-Zeytun, A., Cetinkaya, B., & **Erbaş, A. K.** (2010). 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]. *Educational Sciences: Theory and Practice*, 10(3), 1573–1612.
22. Ubuz, B., **Erbas, A. K.**, Cetinkaya, B., & Ozgeldi, M. (2010). Exploring the quality of the mathematical tasks in the new Turkish elementary school mathematics curriculum guidebook: the case of algebra. *ZDM-Mathematics Education*, 42, 483–491. <https://dx.doi.org/10.1007/s11858-010-0258-5>
 23. **Erbas, A. K.** (2009). Reexamining Archimedes' quadrature of the parabola with dynamic geometry. *Mathematics and Computer Education*, 43(2), 165–180.
 24. * Ubuz, B., Üstün, I., & **Erbaş, A. K.** (2009). The Effect of a dynamic geometry environment on immediate and retention level achievements of seventh grade students. *Eurasian Journal of Educational Research*, 35, 147–164.
 25. * Teksoz, G., Tekkaya, C., & **Erbas, A. K.** (2009). Geographical regions as a silent predictor of responsible environmental behavior. *Hacettepe University Journal of Education*, 36, 249–259.
 26. * **Erbaş, A. K.**, Çetinkaya, B., & Ersoy, Y. (2009). Öğrencilerin basit doğrusal denklemlerin çözümünde karşılaştıkları güçlükler ve kavram yanlışları [Student difficulties and misconceptions in solving simple linear equations]. *Education and Science*, 34(152), 44–59.
 27. * **Erbas, A. K.**, & Ulubay, M. (2008). Implementation of the new Turkish primary education mathematics curriculum in the sixth grade: A survey of teachers' views. *The New Educational Review*, 16(3-4), 51–75.
 28. **Erbas, A. K.**, Cakiroglu, E., Aydın, U., & Beser, S. (2006). Professional development through technology-integrated problem solving: From InterMath to T-Math. *The Mathematics Educator*, 16, 35–46.
 29. Orrill, C., & The InterMath Team (Brown, S., **Erbas, A. K.**, Galloway, C., etc.). (2006). What learner-centered professional development looks like: The pilot studies of the InterMath professional development project. *The Mathematics Educator*, 16, 4–13.
 30. **Erbas, A. K.** (2005). Predicting Turkish ninth grade students' algebra performance. *The Mathematics Educator*, 15(1), 25–34.
 31. **Erbas, A. K.**, Ledford, S., Orrill, C. H., & Polly, D. (2005). Promoting problem solving across geometry and algebra by using technology. *Mathematics Teacher*, 98(9), 599–603.
 32. **Erbas, A. K.**, Ledford, S., Polly, D., & Orrill, C. H. (2004). Engaging students through technology: Using technology-enhanced investigations in the middle grades. *Mathematics Teaching in the Middle School*, 9(6), 300–305.
 33. Glazer, E. M., & **Erbas, A. K.** (2003). Using technology to enhance the locus of critical points of ratios of polynomial functions. *Mathematics and Computer Education*, 37(2), 175–183.

Articles in Press

34. * Çelebi-İlhan, E. G., & **Erbaş, A. K.** (in press). Tracing teacher learning through shifts in discourses: The case of a mathematics teacher. *Eurasia Journal of Mathematics, Science & Technology Education*.
35. Aydoğan-Yenmez, A., **Erbaş, A. K.**, Cakiroglu, E., Çetinkaya, B., & Alacacı, C. (in press). Mathematics teachers' knowledge and skills about questioning in the context of modeling activities. *Teacher Development*.

Journal Papers (National)

1. Mercimek, O., & **Erbaş, A. K.** (2017). Validation of the mathematical knowledge for teaching statistics instrument. *Cumhuriyet International Journal of Education*, 6(1), 173-184.
2. Kertil, M., **Erbaş, A. K.**, & Çetinkaya, B. (2017). İlköğretim matematik öğretmen adaylarının değişim oranı ile ilgili düşünme biçimlerinin bir modelleme etkinliği bağlamında incelenmesi [Pre-service elementary mathematics teachers' ways of thinking about rate of change in the context of a modeling activity]. *Turkish Journal of Computer and Mathematics Education*, 8(1), 188–217. <https://dx.doi.org/10.16949/turkbilmat.304212>
3. Didis, M. K., **Erbaş, A. K.**, & Çetinkaya, B. (2016). Matematik öğretmen adaylarının öğrenci hatalarına yönelik pedagojik yaklaşımlarının matematiksel modelleme etkinlikleri bağlamında incelenmesi [Investigating prospective mathematics teachers' pedagogical approaches in response to students' errors in the context of mathematical modeling activities]. *İlköğretim-Online [Elementary Education Online]*, 15(4), 1367–1384. <https://dx.doi.org/10.17051/ieo.2016.75429>
4. **Erbaş, A. K.**, & Çetinkaya, B. (2016). Problem çözememe problemimiz ve matematiksel modelleme [Our inability to solve problems and mathematical modeling]. *Türkiye Bilimler Akademisi (TÜBA)-Günce [Turkish Academy of Sciences, TÜBA Diary]*, 51, 72–75. <http://www.tuba.gov.tr/upload/flash/gunce51/main.swf> [Invited paper, non-peer-reviewed]
5. Didiş, M. G., **Erbaş, A. K.**, Çetinkaya, B., Çakiroğlu, E., & Alacacı, C. (2015). 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]. *Turkish Journal of Computer and Mathematics Education*, 6(2), 139–162. <https://dx.doi.org/10.16949/turcomat.50978>
6. Hatisaru, V., & **Erbaş, A. K.** (2013). Endüstri meslek lisesi öğrencilerinin fonksiyon kavramını anlama düzeylerinin incelenmesi [Investigating industrial vocational high school students' understanding of the function concept]. *Kastamonu Eğitim Dergisi [Kastamonu Education Journal]*, 21(3), 865–882. <http://79.123.169.199/ojs/index.php/Kefdergi/article/view/12>
7. Ersoy, Y., & **Erbaş, A. K.** (2005). Kassel Projesi Cebir Testinde bir grup Türk öğrencinin genel başarıları ve öğrenme güçlükleri [Performances and difficulties of a group of Turkish students in Kassel Project algebra test]. *İlköğretim-Online [Elementary Education Online]*, 4(1), 18–39.
8. **Erbaş, A. K.** (2005). Çoklu gösterimlerle problem çözme ve teknolojinin rolü [The role of technology in problem solving through multiple representations]. *The Turkish Online Journal of Educational Technology*, 4(4), 88–92.

Book Chapters (International)

1. **Erbaş, A. K.**, Ledford, S. D., Orrill, C. H., & Polly, D. (2013). Supporting pattern exploration and algebraic reasoning through the use of spreadsheets. In D. Polly (Ed.), *Common Core Mathematics Standards and implementing digital technologies* (pp. 228–233). Hershey, PA: IGI Global. <https://dx.doi.org/10.4018/978-1-4666-4086-3.ch015>
2. Sztajn, P., Anthony, H., Chae, J., **Erbaş, A. K.**, Hembree, D., Keum, J., Klerlein, J., Pekkan, Z. (2004). NAEP, TIMSS and PISA: What can we learn? In P. Kloosterman, & F. Lester (Eds.), *Results and Interpretations of the 1990 through 2000 Mathematics Assessments of the National Assessment of Educational Progress* (pp. 383–418). Reston, VA: NCTM.

Book Chapters (National)

1. Kertil, M., Çetinkaya, B., Erbaş, A. K., & Çakıroğlu, E. (2016). Matematik eğitiminde matematiksel modelleme [Mathematical modeling in mathematics education]. In E. Bingölbali, S. Arslan, & İ. Ö. Zembat (Eds.), *Matematik eğitiminde teoriler [Theories in mathematics education]* (pp. 539–563). Ankara: PEGEM Akademi.
2. **Erbaş, A. K.**, Çetinkaya, B., & Alacacı, C. (2013). Tarihi gelişimi ve önemi ile polinomlar [*Polynomials: Their importance and historical development*]. M. F. Özmantar, H. Şandır, A. Delice, E. Bingölbali, & İ. Ö. Zembat (Eds.), *Tanımları ve tarihsel gelişimleriyle matematiksel kavramlar [Mathematical concepts: Definitions and historical developments]* (pp. 371–386). Ankara: Pegem Akademi.
3. Çetinkaya, B., **Erbaş, A. K.**, & Alacacı, C. (2013). Değişimi hesaplama: Türev kavramı ve tarihsel gelişimi [*Evaluating change: The concept of differentiation and its historical development*]. M. F. Özmantar, H. Şandır, A. Delice, E. Bingölbali, & İ. Ö. Zembat (Eds.), *Tanımları ve tarihsel gelişimleriyle matematiksel kavramlar [Mathematical concepts: Definitions and historical developments]* (pp. 530–555). Ankara: Pegem Akademi.
4. Alacacı, C., **Erbaş, A. K.**, & Çetinkaya, B. (2013). Koni kesitleri ve koni kesitlerinin tarihsel gelişimi [*Conic sections and their historical development*]. M. F. Özmantar, H. Şandır, A. Delice, E. Bingölbali, & İ. Ö. Zembat (Eds.), *Tanımları ve tarihsel gelişimleriyle matematiksel kavramlar [Mathematical concepts: Definitions and historical developments]* (pp. 291–308). Ankara: Pegem Akademi.

Books

1. **Erbaş, A. K.**, Çetinkaya, B., Alacacı, C., Çakıroğlu, E., Aydoğan Yenmez, A., Şen Zeytun, A., Korkmaz, H., Kertil, M., Didiş, M. G., Baş, S., & Şahin, Z. (2016). *Lise matematik konuları için günlük hayattan modelleme soruları [Real-life modeling tasks for high school mathematics]*. Ankara: Türkiye Bilimler Akademisi [Turkish Academy of Sciences]. <https://satis.tuba.gov.tr/lise-matematik-konulari-icin-guenluek-hayattan-modelleme-sorulari>

Textbooks

1. Aydın, N., Biberöglü, B., **Erbaş, A. K.** (2016). *Ortaöğretim Matematik 12: İleri Düzey* [Mathematics for Grade 12: Advanced Level]. Ankara, Türkiye: Aydın Yayıncılık.
2. Aydın, N., **Erbaş, A. K.**, & Kaya, M. (2012). *Matematik 10: Ders kitabı* [Mathematics for Grade 10]. Ankara, Türkiye: Aydın Yayıncılık.
3. Aydın, N., **Erbaş, A. K.**, & Biberöglü, B. (2011). *Matematik 9: Ders kitabı* [Mathematics for Grade 9]. Ankara, Türkiye: Aydın Yayıncılık.
4. Aydın, N., & **Erbaş, A. K.** (2010). *Matematik 11: Ders kitabı* [Mathematics for Grade 11]. Ankara, Türkiye: Aydın Yayıncılık.
5. Aydın, N., & **Erbaş, A. K.** (2008). *Matematik 12: Ders kitabı* [Mathematics for Grade 12]. Ankara, Türkiye: Aydın Yayıncılık.
6. Aydın, N., Asma, N., & **Erbaş, A. K.** (2008). *Matematik 10: Ders kitabı* [Mathematics for Grade 10]. Ankara, Türkiye: Aydın Yayıncılık.

(Supplementary/Companion Textbooks & Workbooks)

1. Aydın, N., **Erbaş, A. K.**, Biberöglü, B., & Camus, A. (2008). *Matematik: 9. sınıf konu anlatımlı matematik* [Mathematics for Grade 9]. Ankara, Türkiye: Aydın Yayıncılık.
2. Aydın, N., **Erbaş, A. K.**, & Biberöglü, B. (2006). *Matematik: 9. sınıf yardımcı ders kitabı* [Mathematics for Grade 9]. Ankara, Türkiye: Aydın Yayıncılık.

Editorial Work (Textbooks)

1. **Erbaş, A. K.**, Çetinkaya, B., Güven, B., Karataş, İ., & Çınkır, Z. (Eds.). (2013). *Ortaöğretim Matematik 9. Sınıf: 1. Kitap* [Mathematics for Grade 9: Book 1]. Ankara, Türkiye: Milli Eğitim Bakanlığı Yayınları [Turkish Ministry of National Education].
2. **Erbaş, A. K.**, Çetinkaya, B., Güven, B., Karataş, İ., & Çınkır, Z. (Eds.). (2013). *Ortaöğretim Matematik 9. Sınıf: 2. Kitap* [Mathematics for Grade 9: Book 2]. Ankara, Türkiye: Milli Eğitim Bakanlığı Yayınları [Turkish Ministry of National Education].
3. **Erbaş, A. K.**, Çetinkaya, B., Güven, B., Karataş, İ., & Çınkır, Z. (Eds.). (2013). *Ortaöğretim Matematik 9. Sınıf: 3. Kitap* [Mathematics for Grade 9: Book 3]. Ankara, Türkiye: Milli Eğitim Bakanlığı Yayınları [Turkish Ministry of National Education].
4. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 1: Ders kitabı* [Elementary School Mathematics, Grade 1: Student Textbook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Boz, S., Özçelik U., & Kaygusuz, Ç.)
5. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 1: Öğrenci çalışma kitabı* [Elementary School Mathematics, Grade 1: Student Workbook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Boz, S., Özçelik U., & Kaygusuz, Ç.)

6. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 1: Öğretmen kılavuz kitabı* [Elementary School Mathematics, Grade 1: Teacher Guidebook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Boz, S., Özçelik U., & Kaygusuz, Ç.)
7. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 2: Ders kitabı* [Elementary School Mathematics, Grade 2: Student Textbook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Coşkuntürk, N., Göğün, Y., Boz, S., Özçelik U., Baykal-Yelli, B., & Kaygusuz, Ç.)
8. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 2: Öğrenci çalışma kitabı* [Elementary School Mathematics, Grade 2: Student Workbook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Coşkuntürk, N., Göğün, Y., Boz, S., Özçelik U., Baykal-Yelli, B., & Kaygusuz, Ç.)
9. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 2: Öğretmen kılavuz kitabı* [Elementary School Mathematics, Grade 2: Teacher Guidebook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Coşkuntürk, N., Göğün, Y., Boz, S., Özçelik U., Baykal-Yelli, B., & Kaygusuz, Ç.)
10. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 3: Ders kitabı* [Elementary School Mathematics, Grade 3: Student Textbook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Coşkuntürk, N., Göğün, Y., & Baykal-Yelli, B.)
11. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 3: Öğrenci çalışma kitabı* [Elementary School Mathematics, Grade 3: Student Workbook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Coşkuntürk, N., Göğün, Y., & Baykal-Yelli, B.)
12. **Erbaş, A. K.** (Ed.) (2010). *İlköğretim matematik 3: Öğretmen kılavuz kitabı* [Elementary School Mathematics, Grade 3: Teacher Guidebook]. İstanbul, Türkiye: MEB Devlet Kitapları [Turkish Ministry of National Education]. (Authors: Coşkuntürk, N., Göğün, Y., & Baykal-Yelli, B.)
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9. Didiş, M. G., **Erbaş, A. K.**, Çetinkaya, B., Çakıroğlu, E., & Alacacı, C. (2014, Eylül). Uygulamaya dayalı eğitim materyallerini incelemenin öğrenci düşünme şekillerini anlamadaki rolü ile ilgili matematik öğretmen adaylarının düşünceleri. *XI. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi (UFBMEK-XI) [the Eleventh National Science and Mathematics Education Congress] Bildiri Özetleri Kitabı* (s. 1241), Çukurova Üniversitesi, Adana, 11-14 Eylül 2014.
10. Vural, D. Ö., Çetinkaya, B., **Erbaş, A. K.**, Alacacı, C., & Çakıroğlu, E. (2013, Haziran). Lise matematik öğretmenlerinin modelleme ve modellemenin matematik öğretiminde kullanılmasına yönelik düşünceleri: Bir hizmet içi eğitim programının etkisi. *1. Türk Bilgisayar ve Matematik Eğitimi Sempozyumu [1st Turkish Computer and Mathematics Education Symposium] Özetler Kitabı* (s.33). Trabzon, Türkiye: Karadeniz Teknik Üniversitesi.
11. Şahin, Z., Aydoğan Yenmez, A., & **Erbaş, A. K.** (2013, Haziran). Dinamik geometri yazılımlarının öğrencilerin trigonometri öğrenimlerindeki öz-düzenleme stratejilerine etkisi: Bir öğrenme deneyi. *1. Türk Bilgisayar ve Matematik Eğitimi Sempozyumu [1st Turkish Computer and Mathematics Education Symposium] Özetler Kitabı* (s.82), Karadeniz Teknik Üniversitesi, Trabzon, Türkiye.
12. **Erbaş, A. K.** (2013, Mayıs). Ortaöğretim Matematik Dersi (9, 10, 11 ve 12. Sınıflar) Öğretim Programı: Neler götürdü, neler getire(bile)cek? Ş. Mirasyedioğlu (Moderatör), *Müfredatlar, Panel: Matematikçiler Derneği, 12. Matematik Sempozyumu [Society of Mathematicians, 12th Mathematics Symposium]*, Hacettepe Üniversitesi, Ankara, Türkiye.
13. Aydoğan-Yenmez, A., **Erbaş, A. K.**, Çetinkaya, B., Çakıroğlu E., & Alacacı, C. (2012). Matematik öğretiminde matematiksel modelleme sorularının kullanımı: Öğrencilerin öğrenme çıktıları üzerine öğretmen görüşleri. *X. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [the 10th National Science and Mathematics Education Congress] Bildiri Özetleri Kitabı*, Nigde, Turkey, June 27-30, 2012 (p. 455): Nigde University, Turkey.
14. Didiş, M. G., & **Erbaş, A. K.** (2012). Lise öğrencilerinin cebirsel sözel problemleri çözümedeki başarısı. *X. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [the 10th National Science and Mathematics Education Congress] Bildiri Özetleri Kitabı*, Nigde, Turkey, June 27-30, 2012 (p. 430): Nigde University, Turkey.
15. Hatisaru, V., & **Erbaş, A. K.** (2012a). Matematik öğretiminde matematik tarihinin yeri: Türk, Portekiz, İspanyol ve Fransız matematik öğretmenlerinin görüşleri. *X. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [the 10th National Science and Mathematics Education Congress] Bildiri Özetleri Kitabı*, Nigde, Turkey, June 27-30, 2012 (p. 467): Nigde University, Turkey.
16. Hatisaru, V., & **Erbaş, A. K.** (2012b). Matematik eğitiminde endüstri meslek liselerinde yaşanan sorunlar ve çözüm önerileri. *X. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [the 10th National Science and Mathematics Education Congress] Bildiri Özetleri Kitabı*. Nigde, Turkey, June 27-30, 2012 (p. 501): Nigde University, Turkey.

17. Kertil, M., Cetinkaya, B., & **Erbaş, A. K.** (October, 2012). Öğretmen adaylarının MS-Excel yardımıyla kovaryasyonel düşünme süreçlerinin incelenmesi. In the *Abstracts of the 6th International Computer and Instructional Technologies Symposium* (p. 307). Gaziantep, Turkey.
18. Aydoğan-Yenmez, A., Şahin, Z., & **Erbaş, A. K.** (2011, Eylül). Türev ve değişim oranının kavramsallaştırılması: Matematik eğitimi yüksek lisans öğrencileri ile bir durum çalışması. *10. Matematik Sempozyumu [Society of Mathematicians, 10th Mathematics Symposium]* (ss. 32-33). Işık Üniversitesi, İstanbul: Matematikçiler Derneği.
19. Aydoğan-Yenmez, A., **Erbaş, A. K.**, Çetinkaya, B., & Şen-Zeytun, A. (2011). Gerçekten kanser mi, değil mi? *Eğitimde iyi örnekler konferansı 2011 [Good Practices in Education Conference-2011]* (ss. 38-39). Sabancı Üniversitesi, İstanbul: Eğitim Reformu Girişimi.
20. Alacacı, C., & **Erbaş, A. K.** (2008). PISA 2006 sonuçlarına göre Türkiye’de okul niteliklerinin öğrenci başarısına etkisi. In *the Abstracts of VIII. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [the Eighth National Science and Mathematics Education Congress]*, Bolu, Turkey, August 27-29, 2008 (p. 276): Bolu Abant İzzet Baysal University, Turkey.
21. Baş, S., **Erbaş, A. K.**, & Çetinkaya, B. (2008). Dokuzuncu sınıf öğrencilerinin cebirsel örüntüler konusundaki düşünme yapılarıyla ilgili öğretmen bilgilerinin modellenmesi. In *the Abstracts of VIII. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [the Eighth National Science and Mathematics Education Congress]*, Bolu, Turkey, August 27-29, 2008 (p. 445): Bolu Abant İzzet Baysal University, Turkey.
22. Aydoğan, A., & **Erbaş, A. K.** (2008). Dinamik geometri yazılımları ile açık uçlu araştırmaların altıncı sınıf öğrencilerinin çokgenler ve çokgenlerde eşlik-benzerlik öğrenimine etkisi. In *the Abstracts of VIII. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [the Eighth National Science and Mathematics Education Congress]*, Bolu, Turkey, August 27-29, 2008 (p. 254): Bolu Abant İzzet Baysal University, Turkey.
23. Şen, A., Çetinkaya, B., & **Erbaş, A. K.** (2008). Matematik öğretmenlerinin öğrencilerin kovaryasyonel düşünme yapıları hakkındaki bilgileri. In *the Abstracts of VIII. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi [the Eighth National Science and Mathematics Education Congress]*, Bolu, Turkey, August 27-29, 2008 (p. 243): Bolu Abant İzzet Baysal University, Turkey.
24. Erbaş, A. K., & **Ersoy, Y.** (2002). Dokuzuncu sınıf öğrencilerinin eşitlik çözümündeki başarıları ve olası kavram yanlışları (9th grade students’ performances and misconceptions in solving equations). In *the Proceedings of V. Ulusal Fen Bilimleri Eğitimi Kongresi [the Fifth National Science Education Congress]*, Ankara, Turkey, September 16-18, 2002 (p. 225): METU, Turkey.
25. Ersoy, Y., & **Erbaş, A. K.** (2000). Cebir öğretiminde öğrencilerin güçlükleri-II: Yanlışlarla ilgili öğretmen görüşleri [Students’ difficulties in Algebra-II: Teacher views about students’ errors]. In *the Proceedings of IV. Fen Bilimleri Eğitimi Kongresi [the Fourth National Science Education Congress]* (pp. 625-629). Ankara, Turkey: Millî Eğitim Bakanlığı Yayınları [Ministry of National Education].
26. Erbaş, K., & **Ersoy, Y.** (1999). Ata 18ârdim ediniz! [Help the horse!]. In *the Proceedings of III. Ulusal Fen Bilimleri Eğitimi Sempozyumu [the Third National Science Education Symposium]* (23-25 Eylül)

1998, KTÜ, Turkey) (pp. 80-84): Ankara, Turkey: Millî Eğitim Bakanlığı Yayınları.

27. Ersoy, Y., & **Erbaş, K.** (1998). İlköğretim okullarında cebir öğretimi: Öğrenmede güçlükler ve öğrenci başarıları [Algebra education in primary and elementary schools: Learning difficulties and student achievements]. In *the Proceedings of Cumhuriyetin 75. Yılında İlköğretim Sempozyumu* [Symposium on the Elementary Education in the 75th Anniversary of the Republic] (pp. 171-179). 27-28 Kasım 1998, Başkent Öğretmenevi, Ankara.
28. Erbaş, A. K., & **Ersoy, Y.** (2006, September). Teknolojinin matematik eğitimine entegrasyonu ve öğretmen eğitimi. In *the Abstracts of VII. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi* [the Seventh National Science and Mathematics Education Congress], Ankara, Turkey, September 7-9, 2006 (p. 535): Gazi University, Turkey.
29. Çakıroğlu, E., **Erbaş, A. K.**, Kurt, G., & Beşer, S. (2006, September). İstatistik eğitiminde veriye dayalı tahmin: Basketbol Heyecanı. In *the Abstracts of VII. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi* [the Seventh National Science and Mathematics Education Congress], Ankara, Turkey, September 7-9, 2006 (p. 214): Gazi University, Turkey.
30. **Erbaş, A. K.**, Çakıroğlu, E., Ören, D., Aydın, U., & Semirhan, G. (2006, September). Çoklu temsil ve teknolojiye dayalı matematiksel problem çözme. In *the Abstracts of VII. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresi* [the Seventh National Science and Mathematics Education Congress], Ankara, Turkey, September 7-9, 2006 (p. 523): Gazi University, Turkey.
31. Ören, D., Utkun, A., **Erbaş, A. K.**, & Çakıroğlu, E. (2006, September). Çoklu gösterimlerle problem çözmeye teknolojinin rolü. In F. Aysan (Ed.), *Abstracts of I. Ulusal Matematik Eğitimi Öğrenci Sempozyumu* [The First National Mathematics Education Graduate Students Symposium], İzmir, Turkey, September 4-6, 2006 (p. 63): Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi.
32. **Erbaş, A. K.**, & Ersoy, Y. (2005, March). Türkiye’de öğretmenler teknoloji ile öğretiyor. In *the Abstracts of İstek Vakfı Okulları 1. Fen – Matematik Öğretmenleri Sempozyumu* [1st Science and Mathematics Teachers Symposium of İstek Foundation Schools] (p. 3). İstanbul: İSTEK İstanbul Eğitim ve Kültür Vakfı.
33. **Erbaş, A. K.**, & Ersoy, Y. (2000). Cebir öğretiminde öğrencilerin güçlükleri-I: Yanlışlar, yanlışlar ve yorumlar. In *the Abstracts of presentations and posters of IV. Fen Bilimleri Eğitimi Kongresi’ 2000* [the Fifth Science Education Congress – 2000] (p. 130). Beytepe, Ankara: Hacettepe Üniversitesi Eğitim Fakültesi.
34. **Erbaş, A. K.**, & Ersoy, Y. (1998, September). Doğal sayılarda dört işlemler ve yanıtımlı alıştırmalar. Poster presented at the *III. Ulusal Fen Bilimleri Eğitimi Sempozyumu* [the Third National Science Education Symposium] (23-25 Eylül 1998 KTÜ Trabzon) (p. 358). Ankara, Turkey: Millî Eğitim Bakanlığı Yayınları.

B. Grants Received & Research Projects Involved

1. Turkish Scientific and Technical Research Council (TÜBİTAK). (2015-2018). *Matematik Öğretmen Eğitimcisi Yeterliklerinin Belirlenmesi ve Matematik Öğretmen Eğitimcilerinin Yeterlik Alguları* [Defining and

- Assessing Mathematics Teacher Educator Competencies*]. Grant number 115K510. [Erbas, A. K. as researchers]
2. Turkish Scientific and Technical Research Council (TÜBİTAK). (2010-2013). *Ortaöğretim Matematik Eğitiminde Matematiksel Modelleme: Hizmet İçi ve Hizmet Öncesi Öğretmen Eğitimi* [Mathematical Modeling in Secondary Mathematics Education: Preservice and Inservice Teacher Education]. Grant number 110K250. [Erbas, A. K. as principal investigator]
 3. Turkish Scientific and Technical Research Council (TÜBİTAK). (2008-2009). *6. Ve 7. Sınıf Türk Matematik Ders Kitaplarının Amerikan ve Singapur Ders Kitapları ile Karşılaştırmalı bir Analizi* [A Comparative Analysis of Turkish, Singapore and American 6th and 7th Grades Mathematics Textbooks]. Grant number 107K547. [Erbas, A. K. as principal investigator]
 4. *Orta Öğretim Projesi (UPI I)- Öğretmen Yeterlikleri ve Performans Yönetim Süreci* [Secondary Education Project – Secondary Teacher Competencies and Performance Management] (2008-2009). Supported by Turkish Ministry of National Education and World Bank, 4767 TU, [Erbas, A. K. as advisor and researcher for the secondary mathematics teacher competencies).
 5. Middle East Technical University. (2006-2007). *Preservice Physics Teachers' Knowledge of Students' Thinking in Physics*. Supported by the METU Scientific Research Projects, grant number BAP-2008-05-01-00-01. [Erbas, A. K. as researcher].
 6. Middle East Technical University. (2005-2007). *T-Math: Technology Supported Mathematics Teaching and Teacher Education*. Supported by the METU Scientific Research Projects, grant number BAP-2005-07-02-08. [Erbas, A. K. as principal investigator]
 7. Middle East Technical University. (2006-2007). *The Effects of Graphing Calculators on Students' Achievements in Mathematics*. Supported by the METU Scientific Research Projects, grant number BAP-2006-07-03-00-09. [Erbas, A. K. as principal investigator]
 8. Middle East Technical University. (2007-2008). *Understanding Teachers in Reform Process: Sixth Grade Mathematics Teachers' Personal Characteristics and their Concerns Related to the Reform in Elementary Mathematics Programs*. Supported by the METU Scientific Research Projects, grant number BAP-2007-05-01-00-02. [Erbas, A. K. as researcher]
 9. National Science Foundation (NSF). (1999-2004). *InterMath: Technology and the Teaching and Learning of Middle Grades Mathematics*. Supported by the United States of America National Science Foundation, grant number ESI9876611. [Erbas, A. K. as educational specialist]

C. Thesis Supervision (completed)

(Erbas, A. K. as the sole major professor unless otherwise specified)

Ph.D. Dissertations

1. Genc, M. (2017). *Exploring secondary mathematics teachers' conceptions of mathematical literacy* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
2. Şahin, Z. (2015). *Cognitive analysis of students' learning of trigonometry in dynamic geometry environment: a teaching experiment* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.

3. Öcal, F. (2014). *Students' intuitively-based misconceptions in probability: Teachers' awareness and teaching practices in middle and high schools* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
4. Korkmaz, H. (2014). *An investigation of prospective secondary mathematics teachers' thinking about mathematical modeling and pedagogy of modeling throughout a modeling course* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
5. Kertil, M. (2014). *Pre-service elementary mathematics teachers' understanding of derivative through a model development unit* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
6. Didiş, G. (2014). *An investigation of pre-service secondary mathematics teachers' knowledge of students' thinking through analyzing student work* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
7. Baş, S. (2014). *An investigation of teachers' noticing of students' mathematical thinking in the context of a professional development program* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
8. Oktay, M. (2013). *Assessment of preservice mathematics teachers' knowledge for teaching statistics* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
9. Hatisaru, V. (2013). *Teachers' knowledge of content and students about the function concept and its interrelation with student learning outcomes in vocational high schools* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
10. Çelebi-İlhan, G. (2013). *Teacher learning in and from practice: The case of a secondary mathematics teacher* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
11. Şen-Zeytun, A. (2013). *An investigation of prospective teachers' mathematical modeling processes and their views about factors affecting these processes* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey. (Erbaş, A. K. as co-advisor. Advisor: Dr. Bülent Çetinkaya)
12. Aydoğan-Yenmez, A. (2012). *An investigation of in-service secondary mathematics teachers' evolving knowledge through professional development activities based on modeling perspective* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
13. Baş, S. (2012). *The Contribution of personality, motivation, academic risk-taking, and metacognition to the creative ability in mathematics* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
14. Kapucu, S. (2012). *Physics teachers' beliefs related Turkish high school physics curriculum: a multiple case study* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey. (Dr. Ufuk YILDIRIM as co-advisor)
15. Özgeldi, M. (2012). *Middle school mathematics teachers' use of textbooks and integration of textbook tasks into practice: a mixed methods study* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey. (Erbaş, A. K. as co-advisor. Advisor: Dr. Erdinç Çakıroğlu)

M.S. Theses

1. Geçen, B. (2016). *Mathematics in context: an ethnographic study with middle school students working as*

- street-marketers, barbers, and bakers* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
2. Kol, M. (2014). *An investigation of pre-service mathematics teachers' mathematizing during a mathematical modeling task* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 3. Yılmaz, N. (2014). *A comparative analysis of mathematics teacher content knowledge examinations in Turkey and Texas* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 4. Kaplan, M. (2011). *The use of graphing calculators in mathematics education: Views of pre-service teachers* (Unpublished master's thesis). Ankara, Turkey. (Erbas, A. K. as co-advisor. Advisor: Dr. Bülent Çetinkaya)
 5. Özdoğan, S. (2010). *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* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 6. Boyraz, Ş. (2008). *The effects of computer based instruction on seventh grade students' spatial ability, attitudes towards geometry, mathematics and technology* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 7. Erek, G. (2008). *Using technology in preventing and remedying seventh grade students' misconceptions in forming and solving linear equations* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 8. İnce, M. (2008). *Students' learning of quadratic equations through use of interactive whiteboard and graphing software* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 9. Onür, Y. (2008). *Effects of graphing calculators on eight grade students' achievement in graphs of linear equations and concept of slope* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 10. Okur, S. (2008). *Students' strategies, episodes and metacognitions in the context of PISA 2003 mathematical literacy items* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 11. Aydoğan, A. (2007). *The effect of dynamic geometry use together with open-ended explorations in sixth grade students' performances in polygons and similarity and congruency of polygons* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
 12. Ulubay, M. (2007). *A survey of teachers' implementations of new elementary school mathematics curriculum in sixth grade* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.

E. Consulting Work

Ortaöğretim Matematik Dersi (9, 10, 11 ve 12. Sınıflar) Öğretim Programı [Secondary Mathematics (grades 9-12th grades) Curriculum Development]. (2012-2013). TÜBİTAK & Milli Eğitim Bakanlığı [the Scientific and Technological Research Council of Turkey & Turkish Ministry of National Education].

http://ttkb.meb.gov.tr/dosyalar/programlar/ortaogretim/12/matematik_9-12.rar

Eğitimin niteliğini arttırmak amacıyla başarı tespitine yönelik" sınav hazırlanması [preparation of achievement exams for grades 5 through 11 for the purposes of determining students achievement and increasing the quality of education]. (2012-2013). TÜBİTAK & Milli Eğitim Bakanlığı [The Scientific and Technological Research Council of Turkey & Turkish Ministry of National Education].

MEB Eğitim Bilişim Ağı üzerinden yayınlanmak üzere e-ders videoları ve animasyonlar hazırlanması [Preparation of e-lecture video and animations to be published over Ministry of National Education “Education Informatics Network www.eba.gov.tr”]. (2012). TÜBİTAK & Milli Eğitim Bakanlığı [The Scientific and Technological Research Council of Turkey & Turkish Ministry of National Education]. MEB Eğitim Bilişim Ağı: www.eba.gov.tr

Her Çocuk Başarır – Öğrenci Yeterlilikleri (1-8. Sınıflar Matematik) [Secondary Education Project – Student (Mathematical) Competencies for grades 1 through 8]. (2011-2012). Milli Eğitim Bakanlığı, Yenilik ve Eğitim Teknolojileri Genel Müdürlüğü. <http://www.hercocukbasarir.gov.tr/>

Konya Bilim Merkezi - Temel Adımlar Sergisi (Konya Science Center - First Steps Exhibition) (2011), the Scientific and Technological Research Council of Turkey (TÜBİTAK). <http://www.kbm.org.tr/>

Orta Öğretim Projesi (UPİ I)-Öğretmen Yeterlilikleri ve Performans Yönetim Süreci – Matematik Öğretmeni Özel Alan Yeterlilikleri [Secondary Education Project – Secondary Teacher Competencies and Performance Management, Secondary Mathematics Teacher Competencies]. (2008-2009). Milli Eğitim Bakanlığı, Öğretmen Yetiştirme ve Eğitimi Genel Müdürlüğü. <http://otmg.meb.gov.tr/yeterlikdos/MATEMAT%C4%B0K/MATEMAT%C4%B0K.pdf>

Orta Öğretim Projesi (UPİ I)-İlköğretim Matematik Öğretmeni Yeterlilikleri (Revizyon) [Secondary Education Project – Secondary Teacher Competencies and Performance Management, Revision of Elementary Mathematics Teacher Competencies]. (2011). Milli Eğitim Bakanlığı, Öğretmen Yetiştirme ve Eğitimi Genel Müdürlüğü.

SBS (6-8. sınıflar), DPY sınav sorularının hazırlanması (Preparation of 6-8th Grades SBS and DYP exams). (2010). Milli Eğitim Bakanlığı, Eğitim Teknolojileri Genel Müdürlüğü.

Canlı SBS Denemeleri (Live SBS Trial Exams). (2009). SEBİT Eğitim ve Bilgi Teknolojileri.

F. Organizing Conferences & Reviewing Manuscripts and Proposals

Conference Organization

- Member of local organizing committee for iSER 2014 World Conference, October 29-November 2, 2014, Cappadocia, Turkey (<http://iser-icer.net>)
- Member of local organizing committee for the 8th Congress of European Research in Mathematics Education (<http://cerme8.metu.edu.tr>)
- Member of local organizing committee for the 35th Conference of the International Group for the Psychology of Mathematics Education (<http://www.pme35.metu.edu.tr>)
- Member of organizing committee for the 6th, 7th, 8th, and 9th Mathematics Symposiums (2007, 2008, 2009, 2010) by Mathematicians Association of Turkey (<http://www.matder.org.tr>)

Journal Editorial and Editorial Board Membership (* Indexed in SSCI, ** Indexed in ESCI)

- ** Section Editor (Mathematics Education), “Eurasian Journal of Educational Research (EJER)” (<https://mc04.manuscriptcentral.com/ejer> ; <http://www.ejer.com.tr>)

- Editorial Board Member, “*Journal of Computer and Education Research*” (<http://dergipark.ulakbim.gov.tr/jcer>)
- Editorial Board Member, “*International Journal of Educational Studies in Mathematics*” (<http://www.ijesim.com>)
- Editorial Board Member, “*Turkish Journal of Computer and Mathematics Education (TURCOMAT)*” (<http://www.dergipark.ulakbim.gov.tr/turkbilmat/index>)

Past Editorialships

- 2014-2016, Editor, “*IEJME- Mathematics Education* (formerly known as International Electronic Journal of Mathematics Education)” (<http://www.mathedujournal.com>; <http://www.iejme.com>)
- 2014-2016, Section Editor (Mathematics Education), “*EURASIA Journal of Mathematics Science & Technology Education*” (<http://www.ejmste.com>)

Journal Reviewer

- Educational Technology & Society
- Learning and Individual Differences
- Computers & Education
- Eurasian Journal of Educational Research
- Turkish Studies (Taylor & Francis)
- EURASIA Journal of Mathematics Science & Technology Education
- Education & Science [Eğitim ve Bilim]
- Educational Sciences: Theory & Practice
- Journal of Mathematics Science & Technology Education
- Turkish Journal of Computer and Mathematics Education
- Elementary Education Online [İlköğretim Online]
- Hacettepe University Journal of Education [Hacettepe Üniversitesi Eğitim Fakültesi Dergisi],
- International Electronic Journal of Mathematics Education
- Electronic Journal of Science and Mathematics Education of Necatibey Faculty of Education [Necatibey Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi (EFMED)]
- Ankara University Journal of Faculty of Educational Sciences [Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi]
- The Mathematics Educator

Conference proposal reviewer and/or member of scientific board (Selected)

- 3rd International Eurasian Educational Research Congress, Muğla Sıtkı Koçman University, Muğla, Turkey, May 31-June 3, 2016.
- 2nd International Eurasian Educational Research Congress, Hacettepe University, Istanbul, Turkey, June 8-10, 2015.
- Turkish Computer and Mathematics Education Symposium-2, Adıyaman University, Adıyaman, Turkey, May 16-18, 2015.
- 1st Eurasian Educational Research Congress, Istanbul University, Istanbul, Turkey, April 24-26, 2014.
- Turkish Computer and Mathematics Education Symposium-1, Karadeniz Technical University Trabzon, Turkey, June 20-22, 2013.
- The Eighth Congress of European Research in Mathematics Education (CERME-8), Antalya, Turkey, February 6-10, 2013.
- Uygulamalı Eğitim Kongresi (Applied Education Congress), Middle East Technical University, September 13-15, 2012
- 3. Uluslararası Eğitim Bilimleri Kongresi, Doğu Akdeniz Üniversitesi (3rd International Educational Sciences Conference, East Mediterranean University), Cyprus, June 22-25, 2011
- The Twenty Fourth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Athens, GA, October 26-29, 2002
- Sixth Mathematics Symposium, Ankara, Turkey, November 29 – December 1, 2007
- Seventh Mathematics Symposium, Ankara, Turkey, November 13-15, 2008
- Eight Mathematics Symposium, Ankara, Turkey, November 12-14, 2009

Project Proposal Reviewer

- Panel member and panel director for numerous project proposals submitted to the Scientific and Technological Research Council of Turkey (TÜBİTAK, www.tubitak.gov.tr), 2008 –
- External specialist for various project and training proposals submitted to the Turkish National Agency (www.ua.gov.tr) to be supported by European Union funds, 2011 –
- Reviewer for METU Scientific Research Projects (BAP), 2004 –

G. Recognition and Outstanding Achievement

- Turkish Academy of Sciences, TUBA, [GEBIP-Distinguished Young Scientist Award](#), 2012.
- Young researcher achievement award (Genç Araştırmacı Başarı Ödülü), Middle East Technical University, 2009.

- Academic performance award (Performans Ödülü), Middle East Technical University, 2014.
- Academic performance award (Performans Ödülü), Middle East Technical University, 2013.
- Academic performance award (Performans Ödülü), Middle East Technical University, 2011.
- Academic performance award (Performans Ödülü), Middle East Technical University, 2010.
- Dissertation Completion Fellowship, University of Georgia, 2003–2004.
- Full Scholarship for Ph.D. Study in the USA, Turkish Ministry of Education (Milli Eğitim Bakanlığı Yurtdışı Yükseköğrenim Bursu), 1999–2004.
- Certificate of Honor, Turkish Ministry of National Education, 1999.
- Participant (as an undergraduate student) in the Summer School on Number Theory and Its Applications organized by Bilkent University International Center of Advanced Studies-BICAS (Ankara, Turkey), Scientific and Technical Research Council of Turkey, and International Centre for Theoretical Physics, Trieste, Italy, July 1996. Delivered by world famous mathematicians, the talks in the summer school were on various topics in number theory and related subjects in coding theory covering contemporary developments, aimed at research oriented mathematicians and intended to provide bridges between textbook material and research papers: Yildirim, C. Y. & Stepanov, S. A. (Eds.), *Number theory and its applications: Proceedings of a summer school at Bilkent University*. New York, NY: Marcel Dekker, Inc.
- President’s Honor/High Honor List (Şeref ve Yüksek Şeref Listesi), Middle East Technical University, 1993/1994/1995/2009

H. Memberships

- Matematik Eğitimi Derneği (Turkish Mathematics Education Association) - <http://www.tmed.org.tr>
- Matematikçiler Derneği (Mathematicians Association of Turkey) - <http://www.matder.org.tr>
- International Group for the Psychology of Mathematics Education - <http://igpme.org>
- European Society for Research in Mathematics Education - <http://www.mathematik.uni-dortmund.de/~erme/>

I. Selected Invited Presentations, Speaks, and Seminars

- *Somut araç-gereçlerle matematiksel düşünme ve problem çözme etkinlikleri [Mathematical thinking and problem solving activities with hands-on tools]*, Türkiye Bilimler Akademisi (TÜBA-Turkish Academy of Sciences) Bilim Eğitimi Programı “III. Uygulamalı Bilim Eğitimi Kursu”, [4th Hands-on Science Education], September 5-9, 2016, Muğla Sıtkı Koçman University, Muğla, Turkey. <http://www.tuba.gov.tr/news/tuba-iv-uygulamali-bilim-egitimi-kursu-mugla-dabasladi/id/1555>

- *Matematik öğretim programlarında günlük hayat uygulamaları ve modelleme [Real-life applications and modeling in mathematics curricula]*, Türkiye Bilimler Akademisi (TÜBA-Turkish Academy of Sciences) Bilim Eğitimi Programı “III. Uygulamalı Bilim Eğitimi Kursu”, [3rd Hands-on Science Education], February 26, 2016, Akdeniz University, Antalya, Turkey. <http://www.tuba.gov.tr/news/tuba-bilim-egitimi-programi-iii-uygulamali-bilim-egitimi-kursu-gerceklestirildi/id/1464>
- *Training course on preparation and evaluation of mathematics textbooks.* (2015). Khazar University & Azerbaijan Ministry of National Education, November 13-22, 2015, Baku, Azarbaijan. <http://hisaxanli.org/?p=7827&lang=en>
- *Matematik öğretim programlarında günlük hayat uygulamaları ve modelleme [Real-life applications and modeling in mathematics curricula]*, Türkiye Bilimler Akademisi (TÜBA- Turkish Academy of Sciences) Bilim Eğitimi Programı “II. Uygulamalı Bilim Eğitimi Kursu” [2nd Hands-on Science Education], September 2, 2015, Atatürk University, Erzurum, Turkey. <https://www.facebook.com/turkiyebilimlerakademisi/videos/976284705767573/>
- *Ortaöğretim 9-12. sınıf matematik dersi öğretim programı [Mathematics curriculum for secondary schools—Grades 9-12].* (2014, April). Invited Colloquium at the Osmangazi Üniversitesi, Eskişehir, Turkey.
- *Türkiye’de matematik ve fen bilimleri alanlarında öğrenci performansı ve başarılarının belirleyicileri: TIMSS 2011 Analizi [Factors effecting Turkish students’ performances and achievements in science and mathematics: An analysis of TIMSS 2011].* (September 5, 2013). Invited Colloquium at the Eğitim Reformu Girişimi, Istanbul, Turkey. www.youtube.com/watch?v=FDZznIn6L9k
- *Ortaöğretim 9-12. sınıf matematik dersi öğretim programının tanıtımı [Mathematics curriculum for secondary schools—Grades 9-12].* (2013, September). MEB: Eğitim Bilişim Ağı. <http://www.eba.gov.tr/video/izle/396271d8e82c13aa94574b8bd34d31690325d81ed6002>
- *Sosyal bilim insanları için TÜBİTAK proje imkanları [Turkish Scientific and Technical Research Council grant opportunities for social scientist].* (2011, February). Invited Colloquium for the Dicle University, Diyarbakır, Turkey.
- *Matematiksel modelleme ve problem çözümede teknoloji kullanımı [Using technology for mathematical modeling and problem solving].* (2009, November). Invited speaker for the “Matematik Öğrenme ve Bilişim Teknolojileri-Learning Mathematics and Information Communication Technologies” panel. 8th Mathematics Symposium. Mathematicians Association, Ankara, Turkey.
- *Teknoloji destekli matematik (öğretmen) eğitimi: T-Math Projesi [Technology supported mathematics (teacher) education: T-Math Project].* (2006, March). Invited Colloquium for the Gazi University Departments of Elementary and Secondary Mathematics Education: Ankara, Turkey.
- *Teachers’ knowledge of student thinking and their instructional practices in algebra.* (2004, June). Invited

Colloquium for the Mathematics Education Student Association, University of Georgia: Athens, GA, the US.

- *Teknoloji destekli matematik eğitimi: Ortaöğretim (9-12. sınıflar)* [Technology supported math education in secondary schools: Grades 9-12]. (2008, May). TED Ankara College Foundation, Ankara, Turkey.
- Teknoloji destekli matematik eğitimi: İlköğretim (6-8. sınıflar) [Technology supported math education in middle school: Grades 6-8] (2008, August). TED Ankara College Foundation, Ankara, Turkey.
- *T-Math geometri atölyesi: Teknoloji destekli geometri öğretimi* [T-Math geometry workshop: Technology supported geometry education]. (2007, August). Bahçeşehir College, İstanbul, Turkey.
- *Matematik eğitiminde teknoloji kullanımı, modelleme ve problem çözme* [Using technology in mathematics education for modeling and problem solving]. (2009, September). MEB Mersin Hizmetiçi Eğitim Enstitüsü. Ministry of National Education, Department of Secondary Education.
- *9-12. sınıflar matematik öğretim programı ve uygulaması* [Mathematics curriculum for grades 9-12 and its implementation]. (2009, September). Ministry of National Education, Department of Secondary Education.

J. Service (Selected)

- Since 2004, I have served as chair or member on dozens of committees for master's theses and doctoral dissertation.
- Departmental ERASMUS/Exchange students and Foreign Student Admission Coordinator, Department of Secondary Science and Mathematics Education, Middle East Technical University (2005 – present)
- Subcommittee member, 2011-2016 METU Strategic Plan, Education and Training Policies – Undergraduate Education (Subcommittee for “Competency levels of the students admitted to the undergraduate programs”), Middle East Technical University (2011)
- Elected Member of the Faculty Board, Faculty of Education, Middle East Technical University (2013-2015)
- Member of the “Education” subcommittee, Department for Foreign Diploma Equivalency, Higher Education Council (YÖK) (2013 – present)
- Advisory Board Member, Science Society Projects, TUBITAK-the Scientific and Technological Research Council of Turkey (2012 – 2013)