#### Res. Asst. RUKİYE AYAN CİVAK

#### **Personal Information**

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# International Researcher IDs

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#### **Education Information**

Doctorate, Middle East Technical University, Faculty of Education, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 2014 - Continues

Postgraduate, Middle East Technical University, Faculty of Education, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 2011 - 2014

Undergraduate, Middle East Technical University, Faculty of Education, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 2005 - 2010

# Foreign Languages

English, C1 Advanced

### **Dissertations**

Postgraduate, Middle school students' achievement levels, solution strategies, and reasons underlying their incorrect answers in linear and non-linear problems, Middle East Technical University, Faculty of Education, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2014

## **Research Areas**

Education, Elementary School Education, Teacher Training in Science and Math. at Second. Sch. Lev.

#### **Academic Titles / Tasks**

Research Assistant, Middle East Technical University, Faculty of Education, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2011 - Continues

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

I. Middle School Students' Reasoning in Nonlinear Proportional Problems in Geometry AYAN R., Bostan M.

# Articles Published in Other Journals

I. Middle school students' proportional reasoning in real life contexts in the domain of geometry and measurement

Ayan R., Işıksal Bostan M.

International Journal of Mathematical Education in Science and Technology, vol.50, no.1, pp.65-81, 2019 (ESCI)

II. Middle school students' proportional reasoning in real life contexts in the domain of geometry and measurement

AYAN R., IŞIKSAL BOSTAN M.

INTERNATIONAL JOURNAL OF MATHEMATICAL EDUCATION IN SCIENCE AND TECHNOLOGY, vol.50, no.1, pp.65-81, 2019 (ESCI)

# Refereed Congress / Symposium Publications in Proceedings

I. Portakal Tadı Yoğun Olan Karışımları Belirleme: Yedinci Sınıf Öğrencilerinin Orantısal Düşünme Stratejileri

Ayan Civak R., Isıksal Bostan M.

Uluslararası Fen, Matematik, Girişimcilik ve Teknoloji Eğitimi Kongresi, İzmir, Turkey, 12 - 14 April 2019, pp.786-792

II. The Impact of an Authentic Intervention on Students' Proportional Reasoning Skills

ISIKSAL BOSTAN M., AYAN CİVAK R., YEMEN KARPUZCU S., BAKTEMUR G.

International Conference on Advance Research in Teaching and Education, 10 - 12 May 2019

III. Orantısal akıl yürütmeye ilk adımlar: yedinci sınıf öğrencilerinin birimleri birleştirme ve yinelemedeki gösterimleri

Yemen Karpuzcu S., Isıksal Bostan M., Ayan Civak R.

International Conference on Science, Mathematics, Entrepreneurship and Technology Education, İzmir, Turkey, 12 - 14 April 2019, pp.499-500

IV. Erken Orantısal Akıl Yürütmeye Yönelik Varsayıma Dayalı Bir Öğrenme Rotası Geliştirme

Ayan Civak R., Isıksal Bostan M., Yemen Karpuzcu S.

International Conference on Science, Mathematics, Entrepreneurship and Technology Education, İzmir, Turkey, 12 - 14 April 2019, pp.584-585

V. A math teacher's participation in a classroom design research: teaching of ratio and proportion AYAN CİVAK R., ISIKSAL BOSTAN M., STEPHAN M.

Eleventh Congress of the European Society for Research in Mathematics Education (CERME11), 6 - 10 February 2019

VI. Artırılmış Gerçeklik Destekli Matematik Eğitimi Tutum Ölçeğinin Geçerlik Ve Güvenirlik Çalışması ÖZÇAKIR B., ÖZDEMİR D., NAMLI Ş., AYAN R.

2. Uluslararası Uzaktan Öğrenme ve Yenilikçi Eğitim Teknolojileri Konferansı, Ankara, Turkey, 12 - 13 December 2018

VII. Contextual Problems as Conceptual Anchors?: A Study of Two Classrooms.

REINKE L., AYAN R., CASTO A., STEPHAN M.

the Fortieth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, 15 - 18 November 2018

VIII. Coaching for the 5 Practices through Lesson Imaging

CASTO A., AYAN R., STEPHAN M., REINKE L.

Fortieth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, 15 - 18 November 2018

IX. Development of Mathematics Teaching Efficacy Belief: The Case of Novice Middle School Teachers ISIKSAL BOSTAN M., AYAN R.

European Conference on Educational Research (ECER), 4 - 07 September 2018

X. Real Life Contexts in Mathematics Textbooks: Are They Helpful in Making Mathematics More Realistic?

AYAN R.

European Conference on Educational Research (ECER) 2018, 4 - 07 September 2018

XI. Investigating Teachers' Experiences and Perceptions on the Difficulties in the Teaching and Learning of Ratio and Proportion in 7th Grade: A Phenomenological Study

AYAN R.

European Conference on Educational Research (ECER), 4 - 07 September 2018

XII. STRUCTURING OF WITHIN AND BETWEEN RATIOS WITH THE HELP OF HORIZONTAL AND VERTICAL RATIO TABLES

AYAN R., ISIKSAL BOSTAN M., STEPHAN M.

41st Conference of the International Group for the Psychology of Mathematics Education, 17 - 22 July 2017

XIII. MATHEMATICS TEACHING EFFICACY: DOES HAVING EXPERIENCE REALLY MATTERS? ISIKSAL BOSTAN M., AYAN R.

9th International Conference on Education and New Learning Technologies, 3 - 05 July 2017

XIV. Pre-service Teachers' Views Regarding Classification of Mathematical Tasks Based on Level of Cognitive Demands

AYTEKİN E., AYAN R., Işıksal Bostan M.

IV rd International Eurasian Educational Research Congress, Denizli, Turkey, 11 May 2017 - 14 January 2018

XV. A Systematic Review of Research on Learning Trajectories in Mathematics Education AYAN R., AYTEKİN E.

IV rd International Eurasian Educational Research Congress, Denizli, Turkey, 11 May 2017 - 14 January 2018

XVI. Pre-service Teachers'xx Views Regarding Classification of Mathematical Tasks Based on Level of Cognitive Demands

AYTEKİN E., AYAN R., ISIKSAL BOSTAN M.

IVth International Euroasian Educational Research Congress, 11 - 14 May 2017, pp.1053-1054

XVII. AN INVESTIGATION OF 7TH AND 8TH GRADE STUDENTS REASONING AND MISCONCEPTIONS IN ORDERING DECIMALS

AYTEKİN E., AYAN R., IŞIKSAL BOSTAN M.

40TH CONFERENCE OF THE INTERNATIONAL GROUP FOR THE PSYCHOLOGY OF MATHEMATICS EDUCATION, 3 - 07 August 2016

XVIII. MIDDLE SCHOOL STUDENTS MIS INTERPRETATIONS IN LENGTH TO VOLUME RELATIONSHIPS AYAN R., IŞIKSAL BOSTAN M.

13TH INTERNATIONAL CONGCONGRESS ON MATHEMATICAL EDUCATION, Hamburg, Germany, 24 - 31 July 2016

## **Supported Projects**

Işıksal Bostan M., Yemen Karpuzcu S., TUBITAK Project, "7. Sınıf Oran ve Orantı Konusunun Anlamlı ve Kapsamlı Olarak Öğretilmesi için Varsayıma Dayalı Öğrenme Rotasının ve ilgili Öğretimsel Etkinlik Dizisinin Geliştirilmesi (Orantısal Düşünme Projesi)", 2018 - 2019

IŞİKSAL BOSTAN M., AYAN R., Project Supported by Higher Education Institutions, Ortaokul 5, 6 ve 7. Sınıf Öğrencilerinin Çarpımsal Düşünme ile İlgili Bilgileri, 2016 - 2016

IŞIKSAL BOSTAN M., AYAN R., Project Supported by Higher Education Institutions, İlköğretim Öğrencilerinin Düşünmelerinde Doğrusallığın Baskınlığı, 2013 - 2013

# Metrics

Publication: 21 Citation (WoS): 19 Citation (Scopus): 18 H-Index (WoS): 3 H-Index (Scopus): 2