

# TURJE

2012

[www.turje.org](http://www.turje.org)

January, 2023

Volume 12, Issue 1

ISSN: 2147-2858



Mustafa Sümen, 2022, Çağlayancerit - Kahramanmaraş / TÜRKİYE

In this issue our readers will find;

A study on educational software development through gamification in guitar education  
by *Tuncay Aras & Ajda Aylin Can*

Academics' perspective on out-of-school learning environments  
by *Aysegül Aslan, Demet Batman, & Ümmü Gülsüm Durukan*

Components of collective argumentation in geometric construction tasks  
by *Esra Demiray, Mine Işıksal-Bostan, & Elif Saygı*

Journal Name: **Turkish Journal of Education** **Türk Eğitim Dergisi**

Acronym: **TURJE**

Turkish and English Quarterly Publishing Scientific Peer Reviewed Online Journal

Türkçe ve İngilizce olarak üç ayda bir yayımlanan Bilimsel Hakemli Elektronik Dergi

eISSN: 2147-2858

Year: 2023

Volume: 12 Issue: 1

URL: [www.turje.org](http://www.turje.org), Email: [turjeorg@gmail.com](mailto:turjeorg@gmail.com), Telephone: +90344-300-1310

Address: Azerbaycan Bulvarı 64/22 46040 Onikişubat Kahramanmaraş TÜRKİYE

Turkish Journal of Education (TURJE) seeks to bridge and integrate the intellectual, methodological, and substantive diversity of educational scholarship, and to encourage a vigorous dialogue between educational scholars and practitioners.

TURJE publishes researches, theoretical statements, philosophical arguments, and critical syntheses.

**First published in 2012**

Table of Contents **İçindekiler**

Research Articles

A study on educational software development through gamification in guitar education Tuncay Aras, Ajda Aylin Can	1-27
Academics' perspective on out-of-school learning environments Ayşegül Aslan, Demet Batman, Ümmü Gülsüm Durukan	28-49
Components of collective argumentation in geometric construction tasks Esra Demiray, Mine Işıksal-Bostan, Elif Saygı	50-71

Editorial Board **Editörler Kurulu**

Editor(s) in Chief

Prof.Dr. Bayram Coştu (Yıldız Technical University, Türkiye)

Assoc.Prof.Dr. Ümrان Betül Cebesoy (Uşak University, Türkiye)

Field Editors of Volume (12) Issue (1)

Prof.Dr. Bayram Coştu (Yıldız Technical University, Türkiye)

Prof.Dr. Kadir Bilen (Alanya Alaaddin Keykubat University, Türkiye)

Assoc.Prof.Dr. Fadime Ulusoy (Kastamonu University, Türkiye)

Assoc.Prof.Dr. Ramazan Yirci (Kahramanmaraş Sütçüimam University, Türkiye)

Assoc.Prof.Dr. Reyhan Ağçam (Kahramanmaraş Sütçüimam University, Türkiye)

Assoc.Prof.Dr. Salim Sever (Ankara University, Türkiye)

Dr. Betül Tekerek (Kahramanmaraş Sütçüimam University, Türkiye)

## Editorial Board Editörler Kurulu

Field Editors	
<b>Computer Education and Instructional Technology</b> Prof.Dr. Hakan Tüzün (Hacettepe University, Türkiye) <b>Curriculum Development in Education</b> Assoc.Prof.Dr. Mustafa Cem Babadoğan (Ankara University, Türkiye) <b>Educational Informatics</b> Dr. Adem Tekerek (Gazi University, Türkiye) <b>Education Management</b> Assoc.Prof.Dr. Ramazan Yirci (Kahramanmaraş Sütçüimam University, Türkiye) Assoc.Prof.Dr. Olcay Yavuz (Southern Connecticut State University, USA) <b>Educational Psychology</b> Prof.Dr. Selahiddin Öğülmüş (Ankara University, Türkiye) <b>Foreign Languages Education</b> Assoc.Prof.Dr. Reyhan Ağcam (Kahramanmaraş Sütçüimam University, Türkiye) Dr. Amal BouZeineddine (American University of Beirut, Lebanon) <b>Mathematics Education</b> Assoc.Prof.Dr. Fadime Ulusoy (Kastamonu University, Türkiye) Dr. Betül Tekerek (Kahramanmaraş Sütçüimam University, Türkiye) <b>Measurement and Evaluation in Education</b> Assoc.Prof.Dr. Erkan Hasan Atalmış (Kahramanmaraş Sütçüimam University, Türkiye) <b>Music Education</b> Assoc.Prof.Dr. Salim Sever (Ankara University, Türkiye) <b>Physical Education and Sport</b> Prof.Dr. Ökkeş Alpaslan Gençay (Kahramanmaraş Sütçüimam University, Türkiye)	<b>Psychological Counseling and Guidance</b> Assoc.Prof.Dr. Lea Ferrari (University of Padova, Italy) Assoc.Prof.Dr. Ramin Aliyev (Hasan Kalyoncu University, Türkiye) <b>Science Education</b> Prof.Dr. Bayram Coştu (Yıldız Technical University, Türkiye) Prof.Dr. Kadir Bilen (Alanya Alaaddin Keykubat University, Türkiye) Assoc.Prof.Dr. Ümrان Betül Çebesoy (Uşak University, Türkiye) <b>Social Sciences Education</b> Prof.Dr. Ahmet Nalçacı (Kahramanmaraş Sütçüimam University, Türkiye) Assoc.Prof.Dr. Mustafa Sever (Ankara University, Türkiye) <b>Special Education</b> Dr. Şule Güçyeter (Uşak University, Türkiye) <b>STEM Education</b> Prof.Dr. M.Sencer Çorlu (Bahçeşehir University, Türkiye) Dr. Defne Yabaş (Bahçeşehir University, Türkiye) <b>Technology &amp; Engineering Education</b> Prof.Dr. Abdullah Togay (Gazi University, Türkiye) Prof.Dr. Mehmet Tekerek (Kahramanmaraş Sütçüimam University, Türkiye) <b>Turkish Language Education</b> Prof.Dr. Kasım Yıldırım (Muğla Sıtkı Koçman University, Türkiye)
International Advisory Board	
Prof.Dr. Edward Reeve, Utah State University, USA Prof.Dr. Kurt Henry Becker, Utah State University, USA Prof.Dr. Safure Bulut, Middle East Technical University, Türkiye Prof.Dr. Süleyman Sadi Seferoğlu, Hacettepe University, Türkiye Assoc. Prof.Dr. Sun Young Han, Sungkyunkwan University, South Korea	
Language Editors	
Dr. Gözde Balıkçı (Kahramanmaraş Sütçüimam University, Türkiye) Dr. Stefan Rathert (Kahramanmaraş Sütçüimam University, Türkiye) Dr. Yunus Emre Akbana (Kahramanmaraş Sütçüimam University, Türkiye) Mohammed Mubarique (Çankaya University, Ari College, Türkiye) Şerife Durna (Kahramanmaraş Sütçüimam University, Türkiye)	
Statistics Editors	
Dr. Arif Selim Eren (Kahramanmaraş Sütçüimam University, Türkiye) Dr. Kübra Coşar (Ankara Haci Bayram Veli University, Türkiye)	
Pre-review Editor	
Dr. Ferhat Karakaya (Yozgat Bozok University, Türkiye)	
Technical Editor	
Recep Başarıcı (Hacettepe University, Türkiye)	
Secretaries	
Elif Nihan Yılmaz (Middle East Technical University, Türkiye) Özge Nur Özsunkar (Kahramanmaraş Sütçüimam University, Türkiye)	
Graphical Design	
Arif Gürler (Kahramanmaraş Sütçüimam University, Türkiye)	

## Reviewers of the Issue Sayı Hakemleri

### Reviewers of the Volume (12) Issue (1)

- Dr. Aykut Emre Bozdoğan (Gaziosmanpaşa University)  
Dr. Ayşe Savran Gencer (Pamukkale University)  
Dr. Betül Karagöz Dursun (İnönü University)  
Dr. Mehmet Fatih Özmantar (Gaziantep University)  
Dr. Melihan Ünlü (Aksaray University)  
Dr. Mustafa Doğan (Selçuk University)  
Dr. Mustafa Ürey (Trabzon University)  
Dr. Serkan Özay (Niğde Ömer Halisdemir University)  
Dr. Sevgi Aydın Günbatır (Yüzüncü Yıl University)  
Dr. Stefan Rathert (Kahramanmaş Sütçüimam University)  
Dr. Tuğba Uygun (Alanya Alaaddin Keykubat University)  
Dr. Ümran Betül Cebesoy (Usak University)  
Dr. Yunus Emre Akbana (Kahramanmaş Sütçüimam University)

To join our Editorial or Reviewer Team  
Please send your CV to: [turjeorg@gmail.com](mailto:turjeorg@gmail.com)

## Indexing Dizinler



Emerging Sources Citation Index (ESCI), Web of Science™ Core Collection  
(Since January, 2015)



ERIC: Education Resources Information Center  
(Since January, 2018)



APA PsycInfo  
(Since January, 2020)



EBSCO Education Source  
(Since January, 2013)



TR Index  
(Since January, 2019)



ERIH PLUS European Reference Index for the Humanities (ERIH) to NSD  
(Since January, 2017)

Turkish Journal of Education is a DOAJ Indexing Open Access Journal



Turkish Journal of Education is licensed to the public under a Creative Commons Attribution 4.0 license.