

ISSN: 2148-6123 • PERJOURNAL.COM



PARTICIPATORY EDUCATIONAL RESEARCH

VOLUME 9 • ISSUE 4 • JULY 2022



Participatory Educational Research (PER)

ISSN: 2148-6123

Double Blind Peer Review International Academic Journal

Volume 9, Issue 4
July 2022

Indexed in Eric, Scopus, Ebsco, Turkish Educational Index, Idealonline, Silit,
Rootindex, Asos Index

OWNER & PUBLISHER

Dr. Özgen KORKMAZ

Amasya University, Technology Faculty, Department of Computer Engineering
Amasya/Turkey

Dr. Recep ÇAKIR

Amasya University, Education Faculty, Department of Computer Education and Instructional Technology
Amasya/Turkey

EDITOR IN CHIEF

Dr. Özgen KORKMAZ (Amasya University, Instructional Technology, Turkey)

EDITORS

Dr. Recep ÇAKIR (Amasya University, Instructional Technology, Turkey)

Dr. Norma NEL (University of South Africa, Educational Psychology, South Africa)

Dr. Norma ROMM (University of South Africa, Adult Basic Education and Youth Development, South Africa)

Dr. Emrah AKMAN (Ordu University, Turkey)

Dr. Pınar AYYILDIZ (Ankara Medipol University, Turkey)

Dr. Volkan KUKUL (Amasya University, Turkey)

LANGUAGE EDITOR

Dr. Pınar AYYILDIZ (Ankara Medipol University)

PUBLICATION EDITOR

Lec. S. Serkan TAN (Amasya University, Turkey)

EDITORIAL BOARD

Dr. Ahmet MAHİROĞLU (Gazi University, Turkey)

Dr. Aykut Emre BOZDOĞAN (Gaziosmanpaşa University, Science Education, Turkey)

Dr. Buket AKKOYUNLU (Hacettepe University, Turkey)

Dr. Chi-Jen HUANG (National Chiayi University, Taiwan)

Dr. Dimiter G. VELEV (University of National and World Economy, Bulgaria)

Dr. Dragana Martinovic (University of Windsor, Canada)

Dr. Deniz DERYAKULU (Ankara University, Turkey)

Dr. Dorian Stoilescu (University of Western Sydney NSW, Australia)

Dr. Ertuğrul USTA (Necmettin Erbakan University, Instructional Technology, Turkey)

Dr. Fok PING-KWAN (Hong Kong Institute of Education, Hong Kong)

Dr. Gail CARUTH (Texas A&M University-Commerce, USA)

Dr. Hafize KESER (Ankara University, Turkey)

Dr. Halil İbrahim YALIN (Gazi University, Turkey)

Dr. Hsueh-hua CHUANG (National Sun Yat-sen University, Taiwan)

Dr. H. Ferhan ODABAŞI (Anatolia University, Turkey)

Dr. Helen R. ABADIANO (Central Connecticut State University, USA)

Dr. Esteban Vazquez Cano (Universidad Nacional de Educación a Distancia, Spain)

Dr. Inés LOZANO-CABEZAS (University of Alicante, Spain)

Dr. Janet MCINTYRE (Flinders University Adelaide Area, Australia)

Dr. Javier Fombona CADAVIECO (Universidad de Oviedo, Spain)

Dr. Jeffrey L. DEREVENSKY (McGill University, Canada)

Dr. Jeonghee NAM (Pusan National University, Korea)

Dr. John HAMMOND (University of Canberra, Australia)

Dr. José GIJON PUERTA (Universidad de Granada, Spain)

Dr. Kristóf FENYVESI (University of Jyväskylä, Finland)

Dr. Ldm Lebeloane (University of South Africa, South Africa)

Dr. Linpu WANG (Zhejiang International Studies University, China)

Dr. Maria Angeles Pascual Sevillano (Universidad de Oviedo, Spain)

Dr. Marcos Jesús IGLESIAS-MARTINEZ (University of Alicante, Spain)

Dr. Margaret MURUGAMI (Kenyatta University, Kenya)

Dr. Michelle FINESTONE (University of Pretoria, South Africa)

Dr. Mike DIBOLL (University of Sussex, UK)

Dr. Mary C. HERRING (University of Northern Iowa, USA)

Dr. Mitchell BECK (Central Connecticut State University, USA)

Dr. Murat GUNEL (TED University, Turkey)

Dr. Oktay AKBAŞ (Kırıkkale University, Turkey)

Dr. Oluyemi STEPHENS (University of South Africa, South Africa)

Dr. Orhan KARAMUSTAFAOĞLU (Amasya University, Turkey)



Dr. Petra ENGELBRECHT (Canterbury Christ Church University, UK).
Dr. Pieter Hertzog dU TOIT (University of Pretoria, South Africa).
Dr. Raymond LEBLANC (University of Ottawa, Canada)
Dr. Rachel OUTHRED (Oxford Policy Management, UK)
Dr. Revathy PARAMESWARAN (P.S. Senior Secondary school, India)
Dr. Ruth Gannon COOK (DePaul University, USA)
Dr. Soner M. ÖZDEMİR (Mersin University, Turkey)
Dr. Sofia D. ANASTASIADOU (University of West Macedonia, Greece)
Dr. Steve SHARRA (Michigan State University, USA)
Dr. Susana Agudo Prado (Universidad de Oviedo, Spain)
Dr. Süleyman YAMAN (Ondokuz Mayıs University, Turkey)
Dr. Ufuk KARAKUŞ (Gazi University, Turkey)
Dr. Veronica McKay (University of South Africa, South Africa)
Dr. Yurdal DİKMENLİ (Ahi Evran University, Kırşehir)
Dr. Zsolt LAVICZA (Cambridge University, UK)

REVIEWER OF THE ISSUE

Ali Fuat YENİÇERİOĞLU (Kocaeli Un, Turkey)	Feride KARACA (Marmara Un, Turkey)
Ali ÖZKAYA (Akdeniz Un, Turkey)	Gamze ERDEM COŞGUN (Amasya Un, Turkey)
Arzu AKAR GENÇER (Kırklareli Un, Turkey)	Gönül Türkan DEMİR (Amasya Un., Turkey)
Aykut Emre BOZDOĞAN (Gaziosmanpaşa Un, Turkey)	Hakan GÜLDAL (Trakya Un, Turkey)
Ayşe KALYON (Trabzon Un, Turkey)	Hasan Hüseyin MUTLU (Ordu Un, Turkey)
Ayşe KIZILDAĞ (Aksaray Un, Turkey)	Hatice DARGA (Mehmet Akif Ersoy Un, Turkey)
Bahadır KILCAN (Gazi Un, Turkey)	Hüseyin ÇALIŞKAN (Sakarya Un, Turkey)
Begümhan YÜKSEL (Akdeniz Un, Turkey)	Kemal BAYTEMİR (Amasya Un, Turkey)
Berkan ÇELİK (Van Yüzüncü Yıl Un, Turkey)	Mehmet DÖNMEZ (Metu, Turkey)
Bülent AKBABA (Gazi Un, Turkey)	Meltem AKIN KÖSTERELİOĞLU (Amasya Un, Turkey)
Bülent AKSOY (Gazi Un, Turkey)	Mete Yusuf USTABULUT (Presidency, Turkey)
Canan LAÇİN ŞİMŞEK (Sakarya Un, Turkey)	Mustafa ÜREY (Karadeniz Technical Un, Turkey)
Ceren BAŞTEMUR KAYA (Nerşehir Un, Turkey)	Mücahit ÖZTÜRK (Aksaray Un, Turkey)
Cezmi ÜNAL (Gaziosmanpaşa Un., Turkey)	Müge AKBAĞ (Marmara Un, Turkey)
Cheng Meng CHEW (Universiti Sains, Malaysia)	Mükerrem AKBULUT TAŞ (Çukurova Un, Turkey)
Çağrı ÖZTÜRK DEMİRBAŞ (Ahi Evran Un, Turkey)	Nilüfer ATMAN USLU (Manisa Celal Bayar Un, Turkey)
Daniela POPA (Transilvania University of Brasov, Romania)	Orhan CURAOĞLU (Bolu Abant İzzet Baysal Un, Turkey)
Davut ELMACI (Amasya Un, Turkey)	Ömer Faruk SÖNMEZ (Gaziosmanpaşa Un, Turkey)
Demet BATMAN (Trabzon Un, Turkey)	Özlem OKTAY (Atatürk Un, Turkey)
Derya BAŞER (Abant İzzet Baysal Un, Turkey)	Rafael JULIUS (Universiti Teknologi Mara, Malaysia)
Duygu ALBYRAK (İhsan Doğramacı Bilkent Un, Turkey)	M. Rais RİDWAN (Universitas Negeri Yogyakarta, Indonesia)
Ecenaz ALEMDAĞ (Trabzon Un, Turkey)	Seyfullah GÖKOĞLU (Bartın Un, Turkey)
Elif KEMALOĞLU ER (Adana Alpaslan Türkeş Science and Technology Un, Turkey)	Sri Adi WİDODO (Universitas Sarjanawiyata Tamansiswa, Indonesia)
Emrah SOYKAN (Near East University, TRNC)	Süleyman GÖKSOY (Düzce Un, Turkey)
Erkan GÖKTAŞ (Selçuk Un, Turkey)	Şule BAŞTEMUR (Ordu Un, Turkey)
Esin AVCI (Giresun Un, Turkey)	Şule Betül TOSUNTAŞ (Uludağ Un, Turkey)
Esra Benli ÖZDEMİR (Ministry of National Education, Turkey)	Tanju DEVECİ (Khalifa Un, UAE)
Esra YECAN (Pamukkale Un, Turkey)	Ümit DİLEKÇİ (Batman Un, Turkey)
Fatih TÜRKAN (Muş Alpaslan Un, Turkey)	Yasemin GÖDEK (Ministry of Youth and Sport, Turkey)
Fatma ALTUN (Trabzon Un, Turkey)	Yasin ÖZTÜRK (Karadeniz technical Un, Turkey)
Ferdi BAHADIR (Erzincan Binali Yıldırım Un, Turkey)	
Ferhat KARAKAYA (Yozgat Bozok Un, Turkey)	

TABLE OF CONTENTS

Controversial issues: A mixed study with middle school students http://dx.doi.org/10.17275/per.22.1.9.4 <i>Durdane ÖZTÜRK</i>	1-18
Game Therapy Studies: A Review and Meta-Analysis Sample http://dx.doi.org/10.17275/per.22.77.9.4 <i>Suna TARKOÇIN, Mehmet SAĞLAM</i>	19-32
Investigating Animation-Based Achievement Tests According to Various Variables http://dx.doi.org/10.17275/per.22.78.9.4 <i>Elif GÜVEN DEMİR, Yücel ÖKSÜZ</i>	33-52
Understanding Home Math Environments and Math Talks of Children with Low and Middle Socioeconomic Status http://dx.doi.org/10.17275/per.22.79.9.4 <i>İrem GÜRGAH OĞUL, Yaşare AKTAŞ ARNAS</i>	53-70
Views of the Students Learning Turkish as a Foreign Language on Distance Education during the COVID-19 Pandemic http://dx.doi.org/10.17275/per.22.80.9.4 <i>Nurettin KARTALLIOĞLU</i>	71-91
Teaching Practices Under the Shadow of COVID-19 http://dx.doi.org/10.17275/per.22.81.9.4 <i>Serkan KELEŞOĞLU, Alper YETKİNER</i>	92-110
Teacher Anxiety Scale for Organizing Trips to Out-of-School Learning Environments: Development and Validity of the Scale http://dx.doi.org/10.17275/per.22.82.9.4 <i>Selçuk ARIK, Aykut Emre BOZDOĞAN</i>	111-130
Augmented Reality (AR) in Language Learning: A Principled Review of 2017-2021 http://dx.doi.org/10.17275/per.22.83.9.4 <i>Nermin PUNAR ÖZÇELİK, Gonca EKŞİ, Meltem Huri BATURAY</i>	131-152
Bibliometric Profile of an Emerging Journal: Participatory Educational Research http://dx.doi.org/10.17275/per.22.84.9.4 <i>Rumiye ARSLAN, Keziban ORBAY, Metin ORBAY</i>	153-171
Investigating Pre-Service Teachers' Behavioral Intentions to Use Web 2.0 Gamification Tools http://dx.doi.org/10.17275/per.22.85.9.4 <i>Zeynep TURAN, Sevda KÜÇÜK, Sinem KARABEY</i>	172-189
Teachers' organizational commitment to internal and external stakeholders of the school http://dx.doi.org/10.17275/per.22.86.9.4 <i>Ayça KAYA</i>	190-212
Teacher Candidates' Perceptions of the European Union (EU): A Scale Development Study and Perceptions Levels http://dx.doi.org/10.17275/per.22.87.9.4 <i>Yurdal DİKMENLİ</i>	213-230
Investigation of Secondary School Students' Perceptions on the Concept of Health Through the Word Association Test http://dx.doi.org/10.17275/per.22.88.9.4 <i>Burcu KARAMAN, Ufuk KARAKUŞ</i>	231-249
A study on improving the awareness of science teachers about out-of-school learning http://dx.doi.org/10.17275/per.22.89.9.4 <i>Canan LAÇİN ŞİMŞEK, Aysun ÖZTUNA KAPLAN</i>	250-269
Evaluation of the reflections of pandemic (COVID-19) on university education from the perspective of faculty http://dx.doi.org/10.17275/per.22.90.9.4 <i>İpek Beyza ALTIPARMAK, Gülçin CEBECİOĞLU</i>	270-288
Focusing on Adolescents' Emotional Awareness: Instrument Validation and Evaluation of a Training Program http://dx.doi.org/10.17275/per.22.91.9.4 <i>Fatma İNCEMAN KARA, Galip YÜKSEL</i>	289-306
Views of School Counselors on Dating Violence http://dx.doi.org/10.17275/per.22.92.9.4 <i>Sare TERZİ ILHAN, Şerife IŞIK</i>	307-321



Ways to Evaluate Teachers' Professional Performance in the Context of Performance Based Payment Policies http://dx.doi.org/10.17275/per.22.93.9.4 <i>Semra AKSOY, Sevilay ŞAHİN</i>	322-342
Grammar Anxiety Scale: The Validity and Reliability Study http://dx.doi.org/10.17275/per.22.94.9.4 <i>Esra EKİNCİ ÇELİKPAZU, Fazilet TAŞDEMİR</i>	343-366
An Examination of Curiosity and Academic Self-Concept among Students of Category "A" Senior High Schools in the Central Region of Ghana http://dx.doi.org/10.17275/per.22.95.9.4 <i>Mark AMPONSAH, Inuusah MAHAMA, Ebenezer TAKYİ-WADİEH</i>	367-378
How usable is Coursera? A usability analysis through eye-tracking and authentic tasks http://dx.doi.org/10.17275/per.22.96.9.4 <i>Hasan TANIŞ, Arif AKÇAY, Nursel YILMAZ, Mehmet Fatih YİĞİT, Hakan TÜZÜN</i>	379-395
A meta-analysis study on the effectiveness of a cooperative learning model on vocational high school students' mathematics learning outcomes http://dx.doi.org/10.17275/per.22.97.9.4 <i>M. Rais RİDWAN, Samsul HADİ, Jailani Jailani</i>	396-421
Reflections from an Out-Of-School Learning Course: The Development of Pre-Service Science Teachers http://dx.doi.org/10.17275/per.22.98.9.4 <i>Ümmü Gülsüm Durukan, Ayşegül Aslan, Aykut Emre Bozdoğan</i>	422-444
Mathematics Learning from Concrete to Abstract (1968-2021): A Bibliometric Analysis http://dx.doi.org/10.17275/per.22.99.9.4 <i>Chin Huan, Chew Cheng Meng, Menaga Suseelan</i>	445-468
The Effects of Studies in the Field of Science on Scientific Process Skills: A Meta-Analysis Study http://dx.doi.org/10.17275/per.22.100.9.4 <i>Özge KOL, Süleyman YAMAN</i>	469-494