## **Educational Sciences: Theory & Practice**

Peer-reviewed and International Journal of Educational Sciences

Volume: 18 • Number: 4 • 2018 • ISSN: 1303-0485 • eISSN: 2148-7561

## Owner & General Manager **Fatma Hatice Durmus**

#### Editorial Board

#### Halil Eksi (Editor-in-Chief, Prof. of Education)

Denartment of Educational Sciences Marmara University Istanbul Turkey

# Ahmet Akin (Senior Associate Editor, PhD, Prof. of Education)

Department of Educational Sciences, Sakarva University, Sakarva, Turkey Subject Area: Educational psychology

#### Bulent Dilmac (Senior Associate Editor, PhD. Assoc. Prof. of Education) Department of Educational Sciences, Necmettin Erbakan University, Konya, Turkey Subject Area: Educational psychology

Osman Tolga Aricak (Senior Associate Editor, PhD, Prof. of Psychology) Department of Psychology, Hasan Kalyoncu University, Gaziantep, Turkey Subject Area: Psychological counseling and guidance

# Fulya Cenkseven Onder (Senior Associate Editor, PhD, Assoc. Prof. of Education)

Department of Educational Sciences, Cukurova University, Adana, Turkey Subject Area: Psychological counseling and guidance

# Mustafa Otrar (Senior Associate Editor, PhD, Asst. Prof. of Education)

Department of Educational Sciences, Marmara University, Istanbul, Turkey Subject Area: Psychological counseling and guidance

## Engin Karadag (Senior Associate Editor, PhD. Prof. of Education)

Department of Educational Sciences, Eskisehir Osmangazi University, Eskisehir, Turkey Subject Area: Educational administration and supervision

## Mesut Sagnak (Senior Associate Editor, PhD, Assoc. Prof. of Education) nt of Educational Sciences, Ömer Halisdemir University, Niğde, Turkey Subiect Area: Educational administration and supervision

Yusuf Alpaydin (Senior Associate Editor, PhD, Asst. Prof. of Education) Department of Educational Sciences, Marmara University, Istanbul, Turkey Subject Area: Educational planning

### Murat Kayri (Senior Associate Editor, PhD, Assoc. Prof. of Education) Department of Computer Engineering, Ratman University, Ratman, Turkey Subject Area: Measurement and evaluation in education

## Ismail Karakaya (Senior Associate Editor, PhD, Assoc. Prof. of Education) Department of Educational Sciences, Gazi University, Ankara, Turkey

Subject Area: Measurement and evaluation in education

#### Sedat Yuksel (Senior Associate Editor, PhD. Prof. of Education) Department of Educational Sciences, Uludag University, Bursa, Turkey

Subject Area: Curriculum and instruction

## Ahmet Doganay (Senior Associate Editor, PhD, Prof. of Education)

Department of Educational Sciences, Cukurova University, Adana, Turkey Subject Area: Curriculum and instruction

## Adem Baspinar (Senior Associate Editor, MA in Sociology) Department of Sociology, Kirklareli University, Kirklareli, Turkey Subject Area: Sociology of education

Ahmet Kara (Senior Associate Editor, PhD, Prof. of Economics) Department of Economics, Istanbul Commerce University, Istanbul, Turkey Subject Area: Economics of education

#### Mesut Sackes (Senior Associate Editor, PhD. Assoc. Prof. of Education) Department of Educational Sciences, Balikesir University, Balikesir, Turkey Subject Area: Early childhood education

### Lucia M. Flevares (Senior Associate Editor, PhD. Experience Programs Teacher)

Center of Science and Industry, The Ohio State University, Columbus, OH, USA Subject Area: Early childhood education

## Hasan Avcioglu (Senior Associate Editor, PhD, Prof. of Special Education) Department of Educational Sciences, Abant İzzet Baysal University, Bolu, Turkey Subject Area: Special education

## Cevriye Ergul (Senior Associate Editor, PhD, Assoc. Prof. of Special Education)

Department of Educational Sciences, Ankara University, Ankara, Turkey Subject Area: Special education

#### Suleyman Nihat Sad (Senior Associate Editor, PhD, Assoc. Prof. of **Education**)

Department of Educational Sciences, Inonu University, Malatya, Turkey Subject Area: Foreign language education

#### Nihat Bayat (Senior Associate Editor, PhD. Asst. Prof. of Education) Department of Educational Sciences, Akdeniz University, Antalya, Turkey Subject Area: Turkish language education

Yuksel Goktas (Senior Associate Editor, PhD, Prof. of Education) Department of Educational Sciences, Ataturk University, Erzurum, Turkey Subject Area: Computer education and instructional technologies

#### Vehbi Aytekin Sanalan (Senior Associate Editor, PhD, Asst. Prof. of Education)

Department of Educational Sciences, Erzincan University, Erzincan, Turkey Subject Area: Computer education and instructional technologies

#### Erkan Dinc (Senior Associate Editor, PhD, Assoc. Prof. of Education) Department of Educational Sciences, Usak University, Usak, Turkey Subject Area: Social sciences education

Evup Artvinli (Senior Associate Editor, PhD, Assoc, Prof. of Education) Department of Educational Sciences, Eskisehir Osmangazi University, Eskisehir, Turkey Subject Area: Social sciences education, geography education

## Ahmet Katilmis (Senior Associate Editor, PhD, Asst. Prof. of Education) Department of Educational Sciences, Marmara University, Istanbul, Turkey

Subject Area: Social sciences education, history education Mehmet Ali Corlu (Senior Associate Editor, PhD, Prof. of Education) Department of Educational Sciences, Istanbul Commerce University, Istanbul, Turkey Subject Area: Science education

## Mustafa Sozbilir (Senior Associate Editor, PhD, Prof. of Education) Department of Educational Sciences, Ataturk University, Erzurum, Turkey

Subject Area: Science education Burak Feyzioglu (Senior Associate Editor, PhD, Asst. Prof. of Education)
Department of Educational Sciences, Adnan Menderes University, Aydın, Turkey

## Subject Area: Science education Murat Saulam (Senior Associate Editor, PhD. Assoc. Prof. of Education) Department of Educational Sciences, Ege University, Izmir, Turkey

## Subject Area: Science education Mehmet Ali Gulpinar (Senior Associate Editor, MD, PhD, Assoc. Prof. of Medicine)

Marmara University, Department of Medicine, Istanbul, Turkey
Subject Area: Medical & health education

# Sencer Corlu (Senior Associate Editor, PhD, Assoc. Prof. of Mathematics Education) BAUSTEM Center at Bahçeşehir University, Istanbul, Turkey

Subject Area: Integrated STEM education

#### Yuksel Dede (Senior Associate Editor, PhD, Prof. of Mathematics Education) Department of Educational Sciences, Gazi University, Ankara, Turkey Subject Area: Mathematics education

Ali Eraslan (Senior Associate Editor, PhD, Prof. of Mathematics Education) Department of Educational Sciences, Ondokuz Mayis University, Samsun, Turkey Subject Area: Mathematics education

## Bekir Gur (Senior Associate Editor, PhD, Asst. Prof. of Education)

Department of Computer Engineering, Yıldırım Beyazıt University, Ankara, Turkey Subject Area: Higher education studies

## International Editorial Board

Abdussalam Al Naddaf (Mutah University, Jordan) Ahmet Saban (Necmettin Erbakan University, Turkey) Ana Cardoso Allen Gomes (University of Aveiro, Portugal) Asmund L. Stromnes (Universitetet i Tromso, Norway) Fouad Abd-El-Khalick (University of Illinois at Urbana-Champaign, USA) George Psacharopoulos (Emirutus, University of Illinois, USA) Guõmundur Heiõar Frímannsson (University of Akureyri, Iceland) Hasan Bacanli (Biruni University, Turkey) Haydar Oztas (Necmettin Erbakan University, Turkey) Irfan Erdogan (Istanbul University, Turkey) Jerry P. Becker (Southern Illinois University, USA) John Lidstone (Queensland University of Technology, Australia) Kevin C. Wise (Southern Illinois University Carbondale, USA) Kola Soyibo (The University West Indies at Mona, Jamaica) Lyn English (Queensland Technology University, Australia) Margaret Robertson (La Trobe University, Australia) Mehmet Bahar (Abant Izzet Baysal University, Turkey) Mitja Sardoc (Educational Research Institute, Slovenia) Moshe Barak (Ben-Gurion Negev University, Israel) Mustafa Baloglu (Hacettepe University, Turkey) Norman G. Lederman (Illinois Institute of Technology, USA) Pavol Prokop (Trnava University, Slovakia) Phyllis Erman (Washington State University, USA)

Saouma BouJaoude (American University of Beirut, Lebanon)
Sibylle Reinfried (Teacher Training University of Central Switzerland)

Soner Durmus (Abant Izzet Baysal University, Turkey)

Sven Erik Nordenbo (University of Aarhus, Denmark)

Uwe Gellert (Freie Universität Berlin, Germany)

Vladimir Gorbanyov (Moscow State Institute of International Relations, Russia)

\* In alphabetical order

Educational Sciences: Theory & Practice is an international, peer-reviewed, and bimonthly (Published in February, April, June, August, October, and December) journal of the EDAM (Educational Consultancy & Research Center).

Type of Publication: Periodical • Proofreading & Editing: A. Kevin Collins, John Zacharias Crist

Distribution: Kızkulesi Kultur Merkezi (+90 216) 341-0865 • Nobel (+90 312) 434-3897

Graphic Design: Semih Edis • Press: Limit Ofset, Litros Yolu, 2. Matbaacılar Sitesi, ZA-13, Topkapı / İstanbul, Phone: (+90 216) 567-4535

Address & Correspondence: Educational Consultancy & Research Center, Kavacık Mah. Portakal Çıkmazı Sok. No: 11/2 Beykoz 34810, Istanbul, Turkey • Phone: (+90 216) 481-3023