

BES

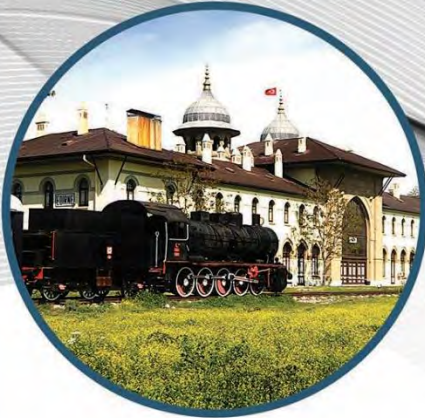
2018



13 International Balkan Education & Science Congress

Trakya University Faculty of Education

www.bes2018.org



SEPTEMBER

6-8
2018

Trakya University
Balkan Congress Center
EDİRNE

PROCEEDINGS

Trakya University Faculty of Education
Edirne / Turkey
02842120808
bes2018@trakya.edu.tr



13th International Balkan Education and Science Congress

6-8 September 2018

Trakya University – Edirne

<http://bes2018.org>

PROCEEDINGS

ISBN: 978-975-374-228-3

Editors

Assoc. Prof. Dr. Yılmaz ÇAKICI
Assist. Prof. Dr. Yıldırım TUĞLU

HONORARY BOARD

- Prof.Dr. Erhan TABAKOĞLU, Rector of Trakya University
Prof. Damir BORAS, PhD, Rector of Zagreb University
Prof.Dr. Ivan TODOROV, Rector of Stara Zagora Trakia University
Prof. Nikola JANKULOVSKI PhD, Rector of Ss. Cyril and Methodius University
Prof.Dr. Ridvan CANIM, Dean of Trakya Universitesi Faculty of Education
Prof.Dr. Emil SULEJMANI, Dean of Ss. Cyril and Methodius University Faculty of Pedagogy
Prof. Ivan PRSKALO, PhD, Dean of Zagreb University Faculty of Education
Prof.Dr. Petar Dinev PETROV, Dean of Stara Zagora Trakia University Faculty of Education

ORGANIZING COMMITTEE

- Assoc. Prof. Dr. Yılmaz ÇAKICI, Trakya University, Turkey
Dr. Yıldırım TUĞLU, Trakya University, Turkey
Prof. Biljana KAMCEVSKA PhD, Ss. Cyril and Methodius University, Macedonia
Prof. Metodi GLAVCE PhD, Ss. Cyril and Methodius University, Macedonia
Prof. Slagana JAKIMOVİK PhD, Ss. Cyril and Methodius University, Macedonia
Assoc. Prof. Dr. Cem ÇUHADAR, Trakya University, Turkey
Assoc. Prof. Dr. İbrahim COŞKUN, Trakya University, Turkey
Assoc. Prof. Siniša Opić, PhD, Zagreb University
Assoc. Prof. Dr. Tuncer BÜLBÜL, Trakya University, Turkey
Assist. Prof. Dr. Anna ARNAUDOVA, Trakia University, Bulgaria
Dr. Gökhan ILGAZ, Trakya University, Turkey
Dr. Hakan GÜLDAL, Trakya University, Turkey
Assist. Prof. Lidija Cvikić, PhD, Zagreb University
Assist. Prof. Marko Badrić, PhD, Zagreb University
Dr. Muharrem ÖZDEN, Trakya University
Assist Prof. Dr. Petar VALKOV, Trakia University, Bulgaria
Dr. Şahin DÜNDAR, Trakya University, Turkey
Assist Prof. Dr. Zlatka ZHELYAZKOVA, Trakia University, Bulgaria
Lec. Alper ASLAN, Trakya University, Turkey
Lec. Sezgin KONDAL, Trakya University, Turkey
Lec. Tonguç BAŞARAN, Trakya University, Turkey

CONGRESS SECRETARY

Res. Assist. Dr. Ali BATTAL, Trakya University
Res. Assist. Dr. Erdem DEMİRÖZ, Trakya University
Res. Assist. Erhan VATANSEVER, Trakya University
Res. Assist. Gül KURUM, Trakya University
Res. Assist. İlyas SÖNMEZ, Trakya University
Res. Assist. Tuğba TÜRK, Trakya University
Yıldıray ERCAN, Trakya University

ADVISORY COMMITTEE

Prof.Dr. Abdullah KUZU, Anadolu University, Turkey
Prof. Dr. Ali Balcı, Ankara University
Prof.Dr. Buket AKKOYUNLU, Çankaya University, Turkey
Prof. Damir BORAS, PhD, Zagreb University, Croatia
Prof. Emilj SULEJMANI PhD, Ss. Cyril and Methodius University, Macedonia
Prof.Dr. Emine AHMETOĞLU, Trakya University, Turkey
Prof.Dr. Hafize KESER, Ankara University, Turkey
Prof.Dr. Hatice Ferhan ODABAŞI, Anadolu University, Turkey
Prof.Dr. Hikmet ASUTAY, Trakya University, Turkey
Prof. Ivan PRSKALO, PhD, Zagreb University, Croatia
Prof. Dr. İnayet Aydın, Ankara University
Prof. Dr. İsmail Güven, Ankara University
Prof. Dr. Kasım Karakütük, Ankara University
Prof. Maya RAUNIK KIRKOV PhD, Ss. Cyril and Methodius University, Macedonia
Prof.Dr. Muhlise COŞKUN ÖGEYİK, Trakya University, Turkey
Prof. Dr. Ömer Adıgüzel, Ankara University
Prof.Dr. Servet BAYRAM, Yeditepe University, Turkey
Prof.Dr. Sevinç SAKARYA MADEN, Trakya University, Turkey
Prof. Dr. Yasemin Karaman Kepenekçi, Ankara University
Prof.Dr. Yeşim FAZLIOĞLU, Trakya University, Turkey
Assoc. Prof. Dr. Aylin BEYOĞLU, Trakya University, Turkey
Assoc. Prof. Dr. Eylem BAYIR, Trakya Üniversitesi, Turkey
Assoc. Prof. Dr. Handan KÖKSAL, Trakya University, Turkey
Assoc. Prof. Dr. Hasan ÖZGÜR, Trakya University, Turkey

Assoc. Prof. Dr. Hristo SALDZHIEV, Trakia University, Bulgaria

Assoc. Prof. Dr. İbrahim COŞKUN, Trakya University, Turkey

Assoc. Prof. Dr. İsmail KILIÇ, Trakya University, Turkey

Assoc. Prof. Dr. Mukadder SEYHAN YÜCEL, Trakya University, Turkey

Assoc. Prof. Dr. Nesrin GÜNAY, Trakya University, Turkey

Assoc. Prof. Dr. Nilgün TOSUN, Trakya University, Turkey

Assoc. Prof. Dr. Nuran EKİCİ, Trakya University, Turkey

Assoc. Prof. Dr. Vanya PETROVA, Trakia University, Bulgaria

Assoc. Prof. Dr. Zülfiye Gül ERCAN, Trakya University, Turkey

SCIENTIFIC BOARD

Prof.Dr. Abdullah KUZU, Anadolu University, Turkey

Prof. Adnan KAHIL PhD, Ss. Cyril and Methodius University, Macedonia

Prof. Aida ISLAM PhD, Ss. Cyril and Methodius University, Macedonia

Prof.Dr. Antonina KOLEVA, Trakia University, Bulgaria

Prof. Bujar SAITI PhD, Ss. Cyril and Methodius University, Macedonia

Prof. Emilj SULEJMANI PhD, Ss. Cyril and Methodius University, Macedonia

Prof. Dr. Emine AHMETOĞLU, Trakya University

Prof. Elizabeta BANDILOVSKA PhD, Ss. Cyril and Methodius University, Macedonia

Prof.Dr. Filiz KABAPINAR, Marmara University, Turkey

Prof. Florina SHEHY PhD, Ss. Cyril and Methodius University, Macedonia

Prof.Dr. Gültekin ÇAKMAKÇI, Hacettepe University, Turkey

Prof.Dr. Hatice Ferhan ODABAŞI, Anadolu University, Turkey

Prof.Dr. Hikmet ASUTAY, Trakya University, Turkey

Prof. Dr. Kürşad Yılmaz, Duplupınar University

Prof. Ivan PRSKALO, PhD, Zagreb University, Croatia

Prof. Lulzim ADEMI PhD, Ss. Cyril and Methodius University, Macedonia

Prof. Maya RAUNIK KIRKOV PhD, Ss. Cyril and Methodius University, Macedonia

Prof. Mito SPASEVSKI PhD, Ss. Cyril and Methodius University, Macedonia

Prof.Dr. Nurettin ŞİMŞEK, Ankara University, Turkey

Prof. Dr. Muhlise COŞKUN ÖGEYİK, Trakya University

Prof.Dr. Mustafa SÖZBİLİR, Atatürk University, Turkey

Prof. Dr. Petar PETROV, Trakia University, Bulgaria

Prof. Rozalina POPOVA KOSKAROVA PhD, Ss. Cyril and Methodius University, Macedonia

Prof.Dr. Serhat İREZ, Marmara University, Turkey

Prof.Dr. Sevinç SAKARYA MADEN, Trakya University, Turkey

- Prof. Dr. Tacettin PINARBAŞI, Atatürk University, Turkey
Prof. Dr. Tanya BORISOVA, Trakia University, Bulgaria
Prof. Dr. Tolga ARICAK, Hasan Kalyoncu University, Turkey
Prof. Vesna MAKASEVSKA PhD, Ss. Cyril and Methodius University
Prof. Dr. Yücel KABAPINAR, Marmara University, Turkey
Assoc. Prof. Dr. Ani ZLATEVA, Trakia University, Bulgaria
Assoc. Prof. Dr. Aylin BEYOĞLU, Trakya University, Turkey
Assoc. Prof. Dr. Binali Tunç, Mersin University, Turkey
Assoc. Prof. Dr. Durmuş EKİZ, Karadeniz Teknik University, Turkey
Assoc. Prof. Dr. Ebru Oğuz, Mimar Sinan University, Turkey
Assoc. Prof. Dr. Elena LAVRENTSOVA, Trakia University, Bulgaria
Assoc. Prof. Dr. Eylem BAYIR, Trakya University, Turkey
Assoc. Prof. Dr. Gencho VALCHEV, Trakia University, Bulgaria
Assoc. Prof. Dr. Güven Özdem, Giresun University, Turkey
Assoc. Prof. Dr. Handan KÖKSAL, Trakya University, Turkey
Assoc. Prof. Dr. İbrahim COŞKUN, Trakya University, Turkey
Assoc. Prof. Dr. Levent DENİZ, Marmara University, Turkey
Assoc. Prof. Dr. Lina YORDANOVA, Trakia University, Bulgaria
Assoc. Prof. Dr. Maria TENEVA, Trakia University, Bulgaria
Assoc. Prof. Dr. Mehmet Barış HORZUM, Sakarya University, Turkey
Assoc. Prof. Dr. Mukadder SEYHAN YÜCEL, Trakya University, Turkey
Assoc. Prof. Dr. Mübin KIYICI, Sakarya University, Turkey
Assoc. Prof. Dr. Nesrin GÜNAY, Trakya University, Turkey
Assoc. Prof. Dr. Nilgün TOSUN, Trakya University, Turkey
Assoc. Prof. Siniša Opić, PhD, Zagreb University, Croatia
Assoc. Prof. Dr. Taner ALTUN, Karadeniz Teknik University, Turkey
Assoc. Prof. Dr. Valentina SHARLANOVA, Trakia University, Bulgaria
Assoc. Prof. Dr. Veselina IVANOVA, Trakia University, Bulgaria
Assoc. Prof. Dr. Zülfiye Gül ERCAN, Trakya University, Turkey
Assist. Prof. Dr. Aslıhan OSMANOĞLU, Trakya University
Assist. Prof. Dr. Ayfer UZ, Trakya University, Turkey
Assist. Prof. Dr. Belgin UZUNOĞLU YEGÜL, Trakya University
Assist. Prof. Dr. Birol YİĞİT, Trakya University, Turkey
Assist. Prof. Dr. Demirali Yaşar ERGİN, Trakya University
Assist. Prof. Dr. Deniz Mertkan GEZGİN, Trakya University
Assist. Prof. Dr. Dilber TEZEL, Trakya University, Turkey

- Assist. Prof. Dr. Dilek GİRİT, Trakya University, Turkey
- Assist. Prof. Dr. Draženko Tomić, Zagreb University
- Assist. Prof. Dr. Ebru SELÇİOĞLU DEMİRSÖZ, Trakya University
- Assist. Prof. Dr. Elif Bengi ÜNSAL ÖZBERK, Trakya University
- Assist. Prof. Dr. Emel SİLAHSIZOĞLU, Trakya University
- Assist. Prof. Dr. Emran OĞUZHAN DİNÇER, Trakya University
- Assist. Prof. Dr. Emre GÜVENDİR, Trakya University
- Assist. Prof. Dr. Eren Halil ÖZBERK, Trakya University
- Assist. Prof. Dr. Ezgi AKŞİN YAVUZ, Trakya University
- Assist. Prof. Dr. Fatih GÜNAY, Trakya University
- Assist. Prof. Dr. Fatma AKGÜN, Trakya University
- Assist. Prof. Dr. Funda GÜNDOĞDU ALAYLI, Trakya University
- Assist. Prof. Dr. Gökhan ILGAZ, Trakya University
- Assist. Prof. Dr. Hakan GÜLDAL, Trakya University
- Assist. Prof. Dr. Hasan ÖZYILDIRIM, Trakya University
- Assist. Prof. Dr. Hüsnü CEYLAN, Trakya University
- Assist. Prof. Dr. Hüsnüye DURMAZ, Trakya University
- Assist. Prof. Dr. İbrahim DİNÇELİ, Trakya University
- Assist. Prof. Dr. Kenan ÖZDİL, Trakya University
- Assist. Prof. Dr. Levent VURAL, Trakya University
- Assist. Prof. Dr. Lidija Cvikić, Zagreb University
- Assist. Prof. Dr. Lütfiye AKYOL, Trakya University
- Assist. Prof. Dr. Marko Badrić, Zagreb University
- Assist. Prof. Dr. Marko Čaleta, Zagreb University
- Assist. Prof. Dr. Mehmet YAVUZ, Trakya University
- Assist. Prof. Dr. Mehtap KODAMAN, Trakya University
- Assist. Prof. Dr. Meltem ACAR GÜVENDİR, Trakya University
- Assist. Prof. Dr. Muharrem ÖZDEN, Trakya University
- Assist. Prof. Dr. Murat ÇELTEK, Trakya University
- Assist. Prof. Dr. Musa ULUDAĞ, Trakya University
- Assist. Prof. Dr. Nuran EKİCİ, Trakya University
- Assist. Prof. Dr. Nurcan ÖZKAN, Trakya University
- Assist. Prof. Dr. Oya ONAT KOCABIYIK, Trakya University
- Assist. Prof. Dr. Özlem TUZCU, Trakya University
- Assist. Prof. Dr. Predrag Oreški, Zagreb University
- Assist. Prof. Dr. Sabri Can SANNAV, Trakya University

Assist. Prof. Dr. Seda DONAT BACIOĞLU, Trakya University

Assist. Prof. Dr. Selma DENEME, Trakya University

Assist. Prof. Dr. Selmin ÇUHADAR, Trakya University

Assist. Prof. Dr. Serbüent PAKSUZ, Trakya University

Assist. Prof. Dr. Suat YAPALAK, Trakya University

Assist. Prof. Dr. Şahin DÜNDAR, Trakya University

Assist. Prof. Dr. Tamara Turza-Bogdan, Zagreb University

Assist. Prof. Dr. Tuncay ÖZTÜRK, Trakya University

Assist. Prof. Dr. Veysi AKIN, Trakya University

Assist. Prof. Dr. Vladimir Legac, Zagreb University

Assist. Prof. Dr. Yar Ali METE, Trakya University

Assist. Prof. Dr. Yıldırım BAYAZIT, Trakya University

Assist. Prof. Dr. Yıldırım TUĞLU, Trakya University

Assist. Prof. Dr. Yücel Atila ŞEHİRLİ, Trakya University

Assist. Prof. Dr. Zerrin BALKAÇ, Trakya University

Lec. Dr. Coşkun DOĞAN, Trakya University

Senior Lec. Darinka Kiš-Novak, PhD, Zagreb University, Croatia

Dr. Ali BATTAL, Trakya University

Dr. Aynur GICI VATANSEVER, Trakya University

Dr. Emine Pınar PAKSUZ, Trakya University

Dr. Erdem DEMİRÖZ, Trakya University

Dr. Figen GİRGİN, Trakya University

Dr. Işıl Gamze YILDIZ, Trakya University

Dr. İhsan METİNNAM, Trakya University

Dr. Mehpare SAKA, Trakya University

Dr. Melike BULUT ALBABA, Trakya University

Dr. Sinem DÜNDAR, Trakya University

Dr. Sümeyye KONUK, Trakya University

Dr. Tuğba SOLAK, Trakya University

Dr. Tuğba TÜRK, Trakya University

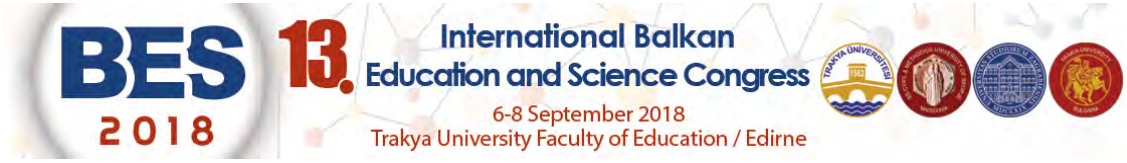
TABLE OF CONTENTS

| | |
|--|-----|
| Düz Anlatım Yöntemi İle Gösterip Yaptırma Yönteminin Ortaokul 8. Sınıf Öğrencilerinin Kübizmi Öğrenmeleri Üzerindeki Etkisi..... | 1 |
| Karar Ağacı Algoritmalarının Eğitsel Veriler Üzerindeki Performanslarının İncelenmesi..... | 6 |
| Tarih Öğretiminde Yerel Tarih Kullanımı..... | 11 |
| Uygulamalı Bir Eğitim Olarak Ahiliğin Eğitim Tarihinde Yeri ve Önemi..... | 17 |
| Interactive Learning About Plants And Achievement in Learning Natural Science of The Students of Faculty of Teacher Education of The University of Zagreb..... | 27 |
| Carpe Diem! Primary School Students (Grades 1-4) From The County of Međimurje..... | 32 |
| Primary School Students' Communication Using Whatsapp Application..... | 38 |
| Child And Some Philosophical Moments in The Work Of Štefaninija Štefa Jurkić (1895. - 1971.)..... | 55 |
| Relations Between Traditional And Contemporary Teaching..... | 60 |
| Meetings with The Bulgarian Teacher (Conclusions And Summaries of Teacher Trainings)..... | 69 |
| Integration of Native Language with Other Subjects in The Primary Education System of The Republic of Macedonia..... | 83 |
| Turkish Words in the Bosnian-Herzegovinian Magazine Krščanska Obitelj (1900-1902)..... | 90 |
| The Romani in the Macedonian Educational System..... | 97 |
| Özel Eğitim Öğretmenlerinin 2005, 2015 ve 2017 Programlarındaki Ses/Harf Gruplarına İlişkin Görüşleri..... | 106 |
| Teaching Mathematics by Solving Problems..... | 114 |
| Batı Trakya ve Bulgaristan Türklerince Söylenilen Türkülerde Geçen Yer Adları..... | 119 |
| Meslek Lisesi Öğrencilerinin Etik Davranışlarına İlişkin Öğretmen Görüşleri..... | 132 |
| Batı Trakya ve Bulgaristan Türklerince Söylenen Türkülerde Renk Unsuru..... | 138 |
| The importance of the educational mission of Saint Clement of Ohrid viewed through the prism of his complex words (compound words)..... | 153 |
| Kosova'da öğrenim gören öğrenciler arasında nomofobi yaygınlığı..... | 160 |
| Kaşgarlı Mahmud'un Dil Öğretimine Katkıları..... | 167 |
| Öğretmenler Dil/Konuşma Güçlüğü Olan Öğrencilerle Çalışmaya Hazır Mı?..... | 174 |
| Annelerin Çocuklarında Görülen Kekemelik Hakkındaki Görüşleri..... | 180 |

| | |
|--|-----|
| Proje Tabanlı Öğrenme Sürecinde Ortaokul Öğrencilerinin Proje Çalışmalarına Yönelik Görüşlerinin Değerlendirilmesi..... | 185 |
| İlişkide Yetkinlik Ölçeği: Kapsamlı Versiyonunun Türkçe Formunun Geçerliği ve Güvenirliği..... | 195 |
| Türkiye’de Yükseköğretim Gören Uluslararası Öğrencilerin Karşılaştıkları Yönetsel Sorunlar..... | 200 |
| Application of didactic games with a holistic approach in preschool education and science in the Republic of Macedonia/86 | 206 |
| Otizm Spektrum Bozukluğu olan bireylerde oral motor bozukluklar ve beslenme problemleri | 211 |
| Öğretmenlerin derslerinde kullandıkları öz-düzenlemeli öğrenme aktivitelerinin incelenmesi | 216 |
| Mak Dizdar’ın “Modra Rjeka” adlı şiirinin analizi | 225 |
| İslam ve Ortodoks İnançlara Mensup Öğrencilerde Umut Duygusu | 230 |
| Türkçe, İngilizce ve Almanca diller arası geçişlerin ‘sözlük’ metaforu aracılığıyla betimlenmesi | 235 |
| The influence of music in learning music notions | 249 |
| Music games – children’s rhymes | 255 |
| The religious affiliation of the students of the Faculty of Pedagogy of “St.Kliment Ohridski” - Skopje and their relationship to religious diversity | 263 |
| Evliya Çelebi’nin Seyahatnâme’sine göre Balkanlardaki eğitim kurumları | 270 |
| Üniversite öğrencilerinin minnettarlık ve alçakgönüllülük düzeylerinin duyarlık düzeylerini yordaması ... | 277 |
| Duygusal dışavurum amaçlı psiko-eğitim programının ergenlerin depresyon, anksiyete ve stres düzeyine etkisi | 282 |
| Tarihi deney ve modellerin tekrarlanması tekniğinin lise öğrencilerinin bilimin doğası anlayışları üzerine etkisi | 288 |
| Educational priorities toward textual competence through children’s literature in the training of future preschool teachers | 293 |
| Engelli bireylerin Trakya bölgesindeki yerel basında temsili | 298 |
| The Turkish color nominations in Macedonian and Albanian | 303 |
| Docimologic competencies of the elementary teachers in the functional language literacy | 307 |
| Enriching the elementary school students’ vocabulary with the help of folk literature | 312 |
| Sosyobilimsel konuların öğretimine yönelik bir öğrenme ve öğretme çerçevesi: Fen bilimleri öğretmenleri ile bir Delphi çalışması | 317 |
| Analyzing multiple-choice questions validity | 323 |

| | |
|---|-----|
| Comparative analysis of mathematics instruction carried out with and without playing activities with students from grades I-III in several primary schools in Skopje and the surroundign area | 349 |
| The essence of the notion of the student's question | 354 |
| Sınıf öğretmenliği öğretmen adaylarının kimya konularında sahip oldukları alternatif kavramlar | 362 |
| eDnevnik – satisfaction of teachers and parents | 368 |
| Hayatımızdaki asitler ve bazlar: Ortaokul öğrencilerinin günlük hayattaki maddelere bakışı | 377 |
| Eğitsel oyun geliştiriyorum! Fen bilimleri eğitiminde eğitsel oyun geliştirmenin öğrenci tutumlarına etkisi | 382 |
| The integrated curriculum and social education in preschool and primary school education | 388 |
| The Integrated Curriculum and the Pedagogical-didactical Potential of Physical Education | 397 |
| Görsel-Motor Becerilerin Geniş Kapsamlı Değerlendirilmesi Testinin Beş-Altı Yaş Türk Çocuklarına Uyarlaması Çalışması | 404 |
| Interaction as a Process of Learning and Teaching In Early Childhood Education | 418 |
| Türkiye’de 2008-2017 Yılları Arasında Üstün Yetenekliler/Üstün Zekâhlar Konusunda Yapılan Lisansüstü Eğitim Tezlerinin İncelenmesi | 431 |
| Türkiye’de 2008-2018 Yılları Arasında Özel Öğrenme Güçlüğü Olan Bireyler Konusunda Yapılan Tezlerin İncelenmesi | 460 |
| Matematik Öğretmenlerinin Sonlu Bir Aralığın Uç Noktalarında Fonksiyon Türevine ve Teğetine Ait Görüşlerinin İncelenmesi | 470 |
| Problem based learning in dental student`s science education | 459 |
| The Need and the Ways of Realizing the Educational Competencies of the Teachers | 467 |
| Critical Literacy and University Students’ Approaches to Learning | 471 |
| Action Research as Teaching Strategy for Individualization of Learning | 477 |
| How to Travel from Difficult to Challenge | 482 |
| Problem Solving Teaching and Learning-Challenge for Critical and Creative Thinking | 487 |
| A Study of the Opinions of the Students from the Specialty "Geriatric Care" about working with the biography | 492 |
| Kamu ve Özel Eğitim Kurumlarında Çalışan Ortaöğretim Fen Bilimleri Öğretmenlerinin İş Doyumları ve Özyeterlik Düzeylerinin Çeşitli Değişkenler Açısından İncelenmesi | 499 |
| Intercultural Notes in the Textbooks for Grade V in the Nine Year-long Education | 505 |
| Yabancı Dil Öğretimi ve Çizgi Romanlar | 513 |

| | |
|---|-----|
| Introducing And Maintaining Humanistic Concepts In The Primary Education | 523 |
| Türkiye’de 2012-2017 Yılları Arasında Alman Diline Yönelik Yapılmış Lisansüstü Çalışmaların Değerlendirilmesi | 532 |
| Öğretmen, Öğretmen Adayı ve Öğretim Elemanı Bakış Açısıyla Türk Eğitim Sisteminin Sorunlarının Önem Sırasının Belirlenmesi | 538 |
| İlköğretim Okullarındaki Öğretmenlerin Görüşlerine Göre Örgütsel Adalet ve Örgütsel İklim Arasındaki İlişki | 543 |
| Biyoloji Öğretmenlerinin Sosyobilimsel Konular Hakkındaki Pedagojik Alan Bilgilerinin Demografik Değişkenler Açısından İncelenmesi | 548 |
| İlkokul 4. Sınıf ve Sınıf Eğitimi Son Sınıf Öğrencilerinde Metaforik Algı Olarak Sınıf Öğretmeni | 554 |
| Lise Öğrencilerinin Klasik Genetik Bilgileri, Sosyo-bilimsel Genetik Problemlere Yaklaşımları İle Dünya Görüşleri Arasındaki İlişkinin İncelenmesi | 563 |
| Sanal Cinsel Zorbalık Mağduriyet Eğilimi Ölçeği | 569 |
| Türkçede Kullanılan Arapça ve Farsça Kaynaklı Dini Sözcüklerin ve Sözcük Gruplarının Boşnakçadaki Kullanımları Üzerine | 575 |
| Boşnakçadaki İsimler Üzerinde Kullanılan Türkçe İsimden İsim Yapım Ekleriyle İlgili Bir İnceleme | 585 |
| Trakya Üniversitesi Web Sayfasının Kullanılabilirlik Analizi | 595 |
| Hetero-Stereotypes of Macedonian and Turkish Ethnic Groups in Ethnically Mixed Schools and the Existence of Discrimination: Attitudes of Teachers and Parents | 604 |
| Content Analysis of Reading Books in Serbian Language Used in Elementary School in the Republic of Macedonia: Cultural and Religious Contents | 609 |
| Öğrencilerin Öğretimsel Etkinliklerde Mobil İnternet Kullanım Tutumlarının Teknoloji Kabul Modeline Göre İncelenmesi | 614 |
| Mesleki Müzik Öğrenimi Gören Görme Engelli Öğrencilerin Müzik Eğitimi Sürecinde Karşılaştıkları Problemlerin Saptanması | 664 |
| Öğrencilerin Scratch’te Kullandıkları Kod Kavrama Stratejilerin İncelenmesi: Bir Göz İzleme Çalışması . | 671 |
| Sağlık Yönetimi Lisans Bölümlerindeki Akademik İstihdamda Uzmanlaşma: Yığılma Katsayılarıyla Bir Uygulama | 677 |
| Teaching and evaluating scientific process skills of secondary science students | 684 |
| Fen ve Sosyal Bilgiler Öğretiminde Müzik Zekâsını Kullanmak: Örnek Uygulamalar | 690 |
| Eğitim bilimciler, öğretmen adayları ve öğretmenlerin teori, strateji, yöntem ve model kavramları arasındaki farklara ilişkin düşünceleri | 704 |



| | |
|--|------------|
| Yeni Nesil Web Teknolojilerinin Eğitimde Kullanımı | 713 |
| Education on Diversity: Teaching and Learning | 720 |
| Language Teacher Education & The Paradigm of Language Related Courses | 724 |
| “Engelsiz Üniversite” Kavramına İlişkin Öğretim Elemanlarının Metaforik Algıları | 730 |
| Eğitimde Teknoloji Kullanımının Olumlu ve Olumsuz Etkileri | 736 |
| Otizm Spektrum Bozukluğu Olan Çocukların Sosyal İletişim Becerileri | 746 |
| Öğretmen Adaylarının TBİP Yeterlikleri ve Teknoloji Entegrasyonu Öz-Yeterlik Algılarının İncelenmesi . | 753 |
| Hemşirelik lisans öğrencilerinde kullanılmak üzere Jebsen-Taylor el fonksiyon testinin değerlendirilmesi: yakın geleceğe bakış | 762 |
| Otizm Spektrum Bozukluğu Olan Çocuklara Sosyal Beceri Öğretiminde Kullanılan Güç Kartı Stratejisi İle Yapılmış Çalışmaların İncelenmesi | 720 |
| Matematik Öğretmen Adaylarının Matematik Sevgisi ile Duygusal Zekaları Arasındaki İlişki | 730 |

Action Research as Teaching Strategy for Individualization of Learning

Dean ILIEV^a, Daniela ANDONOVSKA-TRAJKOVSKA^b, Fariz FARIZI^c

Abstract

The paper presents different ways of individualization of pupils' learning by using different models of action research. The first part is consisted of theory regarding relationship among action research models, individualization of learning and teaching strategies. The Method is a place for determination of the methodological aspects of the research. The research question is: Are there any benefits from using action research during teaching for pupils' learning? The used methodology is: descriptive, quantitative, based on questioning as a research technique. The general hypothesis is: By using different models of action research as a teaching strategy, the individualization of pupils' learning can be improved. 20 Primary school teachers and their classes are selected as sample of the conducted research. The data was collected by using questionnaires, interview and participatory observation of pupils and classrooms as research techniques. The discussion about the results is based on statistical-quantitative techniques: average, means, standard deviation and ranking. The results prove that the general hypothesis is confirmed. Hence, we concluded that the teachers who understand and use action research in their teaching practice employ more types of individualized pupils' learning. Therefore, action research can be used by teachers as a teaching strategy for innovation and improvement of pupils' learning.

Keywords: Action research, Teaching strategy, Pupils learning, Individualization of learning.

1. INTRODUCTION

The action research (AR) is a creation of the modern world for the purpose of modern living that is based on adaptation and change of the theory, contexts and situations in order to improve our own practice. It is difficult to give precise and static definition of AR, because it is "...fluid, open and responsive" (Koshy, 2005: 5) process; "collaborative, critical and self-critical inquiry by practitioners..." (Zuber-Skerritt, 1996:2). AR helps in "creating the learning environment, interacting with your students, developing lesson plans, assigning homework, and almost everything you do in your daily routine of teaching..." (Pelto, 2010: 4). In addition, it is essential that AR has become "in a wide variety of intellectual and social practice domains, an important alternative to traditional and positivistic ways of linking knowledge, ways of knowing, and knowledge production with social progress" (Rowell, 2017: 7).

If we perceive the learning process as "essential for those who intend to develop activities that will have the potential to lead to effective learning, taking place in classroom" (Pritchard, 2009: 1), and the process of "replacing transmission instruction with transactional instruction" (Koenig, 2010: 1) we can argue that the most reasonable step for improvement of the learning and teaching

^a University "St. Kliment Ohridski" Bitola, Faculty of Education Bitola, Republic of Macedonia, dean.iliev@uklo.edu.mk

^b University, "St. Kliment Ohridski" Bitola, Faculty of Education Bitola, Republic of Macedonia, dandonovskatrajkovska@yahoo.com

^c OU "Dervish Tzara" Dolno Palchiste, Republic of Macedonia, fariz-f@hotmail.com

is to use some creative, practical and transformative strategy. We have improved the essence of AR through widening of its usage as teaching strategy (more in Iliev, 2017).

2. METHODOLOGY

The research question was: Are there any benefits from using AR during teaching for pupils' learning? The used methodology is descriptive with quantitative and qualitative aspect of the problem. The general hypothesis of the research is: By using different models of AR as teaching strategy, the individualization of pupils learning can be improved. Two actions were implemented during the AR: *Building the teachers' knowledge and understanding of the action research models as a form of individualization of learning and teaching* and *practicing AR models in the classroom as a strategy for individualization of learning and teaching*. 20 Primary school teachers and their pupils (N=324) were selected to participate in this AR as research sample. The data was collected by using questionnaires, interview and participatory observation of pupils and classroom activities. Pupils and teachers were surveyed, the teachers were also interviewed and the pupils were observed during the lessons. The data from the questionnaire is calculated in frequencies, average and standard deviation.

3. FINDINGS

The teachers were asked to present their perception about the processes of individualization of teaching and learning during the implementation of the two actions as steps of the AR by selection of one category (Strongly disagree; Disagree; Partly agree; Agree and Fully agree) for each given statement. The steps were implemented consecutively, and the results are presented in Table 1.

Table 1: Teachers' Perception of the Processes of Individualization of the Teaching and Learning

| Statements | Initial perception | | Perception after the first action | | Perception after the second action | |
|--|--------------------|----------|-----------------------------------|----------|------------------------------------|----------|
| | X | Σ | χ | Σ | χ | Σ |
| Pupils learn according to their personal dynamic and intensity. | 2.300 | 1.187 | 2.850 | 1.388 | 4.100 | 1.300 |
| Pupils are satisfied with the organization of the learning context. | 2.800 | 1.400 | 3.300 | 1.552 | 4.650 | 0.572 |
| Pupils can reach their own capacities during teaching in the classroom. | 2.650 | 1.459 | 3.350 | 1.590 | 3.600 | 1.685 |
| Pupils are actively engaged in the processes of cooperative learning. | 2.000 | 1.449 | 3.550 | 1.596 | 3.900 | 1.480 |
| Pupils participate in the activities according to their own capacities. | 1.700 | 1.308 | 3.000 | 1.789 | 4.350 | 1.152 |
| There is a peer support for the learning processes provided in the classroom | 1.250 | 0.698 | 1.950 | 1.322 | 4.300 | 1.100 |
| Pupils are willing to collaborate with the others during learning. | 2.800 | 1.749 | 3.450 | 1.627 | 4.250 | 1.043 |

| | | | | | | |
|--|-------|-------|-------|-------|-------|-------|
| My classroom is a place for individual growth. | 1.550 | 1.071 | 3.150 | 1.621 | 3.450 | 1.532 |
| Pupils can create personal expectation from the teaching and learning process. | 1.900 | 1.375 | 3.750 | 1.445 | 4.100 | 1.179 |
| My classroom promotes research activities of every pupil. | 1.250 | 0.887 | 2.550 | 1.830 | 3.950 | 1.203 |
| Pupils can construct their knowledge in the classroom. | 3.000 | 1.732 | 3.250 | 1.699 | 4.150 | 1.314 |

The similar statement were given to the sampled pupils (N=324), and they were asked to present their perception of the individualization of the teaching and learning during the implementation of the two actions as steps of the AR. The results are given in Table 2.

Table 2: Pupils' Perception of the Individualization of the Teaching and Learning Processes

| <i>Statements</i> | Initial perception | | Perception after the first action | | Perception after the second action | |
|---|--------------------|----------|-----------------------------------|----------|------------------------------------|----------|
| | χ | Σ | χ | Σ | χ | Σ |
| I learn according to my personal dynamics and intensity. | 2.441 | 1.438 | 2.809 | 1.432 | 3.410 | 1.397 |
| I am satisfied with the organization of the context of learning. | 2.373 | 1.388 | 2.543 | 1.345 | 3.272 | 1.372 |
| I can reach my own capacities during teaching in the classroom. | 2.725 | 1.477 | 2.778 | 1.501 | 2.877 | 1.543 |
| I am actively engaged in the processes of cooperative learning. | 1.809 | 1.327 | 2.475 | 1.609 | 2.963 | 1.737 |
| I participate in the activities according to my own capacities. | 1.966 | 1.226 | 2.756 | 1.457 | 3.003 | 1.543 |
| I am supported by other pupil/s in the classroom in the learning processes. | 2.559 | 1.237 | 2.895 | 1.345 | 2.941 | 1.425 |
| I am willing to collaborate with the others during learning. | 2.809 | 1.006 | 2.975 | 1.138 | 3.306 | 1.406 |
| My classroom is a place for individual growth. | 2.778 | 1.189 | 3.136 | 1.255 | 3.806 | 1.055 |
| I can create personal expectation from the teaching and learning process. | 2.531 | 1.686 | 2.892 | 1.611 | 3.515 | 1.417 |
| My research activities are promoted in the classroom. | 2.148 | 1.498 | 2.818 | 1.622 | 3.198 | 1.488 |
| I can construct my knowledge in the classroom. | 2.577 | 1.396 | 2.830 | 1.612 | 3.818 | 1.470 |

The teachers were interviewed at the beginning and at the end of the project, and the most frequently used statements for description of the students' activities at the beginning and at the end of the AR are as following:

- **Statements of the teachers at the beginning of the action research:** The pupils: raise hands; ask maximum two questions per lesson; write in their notebooks on their own; are active listeners; use their books; can give suggestions; participate in group work; are directed to the content and ask for examples of their everyday life.

- *Statements of the teachers at the end of the action research:* The pupils are: motivated to participate in the activities; are engaged with all of their potentials; learn in their own ways; are focused in their research activities; create constructive proposals; set the hypothesis; learn together; enjoy during learning; collaborate with others as part of mutual growth; participate in designing of the classroom and make decisions on their own learning.

The pupils were observed during the lessons in 20 classrooms at the beginning, after the first and after the second action. The results from the observation are given in Table 3.

Table 3: Check List of the most Frequent Pupil Activities during Action Research

| <i>Activities of pupils during lessons</i> | <i>At initial stage¹⁹⁴</i> | <i>After the first action</i> | <i>After the second action</i> |
|--|---------------------------------------|-------------------------------|--------------------------------|
| The pupils raise hands. | XXXX | XXX | XXXX |
| The pupils ask maximum two questions per class. | XXX | XX | X |
| The pupils write in their notebook on their own. | XXXX | XXX | XX |
| The pupils are active listeners. | XXXX | XXX | XXX |
| The pupils use their books. | XXX | X | XX |
| The pupils can give suggestions. | X | XXXX | XXXX |
| The pupils participate in group work. | XX | XXX | XXXX |
| The pupils are directed to the content. | XXXX | XX | XX |
| The pupils ask for examples of their everyday life. | XXXX | XXX | XXXX |
| The pupils are motivated to participate in the activities. | XX | XXX | XXX |
| The pupils are engaged with all of their potentials. | X | XX | XXX |
| The pupils learn in their own ways. | XX | XXX | XXXX |
| The pupils are focused in their research activities. | X | XX | XXX |
| The pupils create constructive proposals. | X | XXX | XXX |
| The pupils set hypotheses. | X | XX | XXXX |
| The pupils learn together. | XX | XXX | XXXX |
| The pupils enjoy during learning. | XX | XX | XXXX |
| Collaboration among pupils is part of mutual growth. | X | XXX | XXX |
| The pupils participate in designing of the classroom. | X | XX | XXX |
| The pupils make decisions on their own learning. | X | X | XXXX |

4. DISCUSSION and CONCLUSION

The findings show that different models of action researches have positive impact as teaching strategies on the pupils' learning, which can be observed in the teachers' and pupils' perceptions presented in Table 1 and Table 2. The statements in the teachers' questionnaire in the initial stage of the AR have the lowest values of the pondered value of the arithmetic means, compared to the later phases of the research. After the implementation of the first and the second action, the pondered value of the arithmetic means is increasing for every given statement, which means that using different models of action research in the classroom has positive impact on the individualization of the pupils' learning according to the sampled teachers.

¹⁹⁴ Explanation of the signs: XXXX- always; XXX- often; XX- rarely; X- never.

In addition, pupils' perceptions are similar, i.e. the majority of the pupils don't find the initial stage of the classroom activities as means for creating educational context that enables individualization and the pupils' personal growth. According to the pupils (Table 2), during the implementation of the first and the second action in the action research the processes of individualization of learning are qualitatively improved. The pondered values of the arithmetic means for every given statement confirm the latter.

The teachers were also interviewed at the beginning and at the end of the action research. The results show that there are more complex, more participative, and more integrative pupils' activities at the end of the research, compared to those activities at the beginning of the research which can be described as normal, simple and obligatory.

To make the picture complete, we should take into account the perception of the pupils' activities in the classroom (See Table 3). The observation taken at the beginning and at the end of the research shows that the mentioned pupils' activities are more recognizable in frequency and in intensity at the beginning then at the end of the research. In addition, the participative, collaborative and individual pupils' activities take place at the end of the research.

By comparing and contrasting the two sets of findings, we have eventually come to conclusion that the general hypothesis of the research *By using different models of AR as teaching strategy, the individualization of pupils' learning can be improved*, is confirmed, i.e. using different AR models as teaching strategies has positive impact on the activities, the engagement, dedication and participation of the pupils in the processes of learning with accordance to their personal characteristics.

5. REFERENCES

- Iliev D. (2017). *Action research as strategy for learning of gifted and talented pupils*, Introductory Impulses at the Round table *Giftedness and creative approaches to learning*, 30 Jun 2017, Vrsac, Retrieved June 21, 2018 from: <http://www.nauka.uskolavrsac.in.rs/wp-content/uploads/2017/05/Dean-Iliev-en.pdf>
- Koenig R. (2010). *Learning for keeps: teaching the strategies essential for creating independent learners*, ASCD.
- Koshy V. (2005). *Action Research for Improving Practice- A Practical Guide*, Paul Chapman Publishing.
- Pelto P. R.. An Introduction to Action Research, In: Pelto P. R. n (Ed). (2010). *Action Research for Teacher Candidates- Using Classroom Data to Enhance Instruction*, ROWMAN & LITTLEFIELD EDUCATION.
- Pritchard A. (2009). *Ways of Learning theories and learning styles in the classroom* (second edition), Routledge.
- Rowell L. L., Bruce D. C., Shosh M. J., and Riel M. M., Introduction, In: Rowell L. L., Bruce D. C., Shosh M. J., and Riel M. M. (Eds.). (2017). *The Palgrave International Handbook of Action Research*. Palgrave Macmillan.
- Zuber-Skerritt O., Introduction: New Directions in Action Research, In: Zuber-Skerritt O. (Ed.), (1996). *New directions in action research*. The Falmer Press.