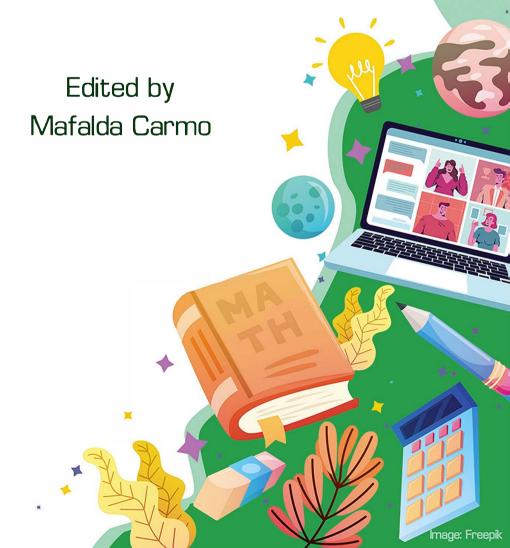
EDUCATION AND NEW DEVELOPMENTS 2024 Volume 1



Education and New Developments 2024

Volume 1

Edited by Mafalda Carmo Edited by Mafalda Carmo, World Institute for Advanced Research and Science (WIARS), Portugal

Published by inScience Press, Rua Tomas Ribeiro, 45, 1° D, 1050-225 Lisboa, Portugal

Copyright © 2024 inScience Press

All rights are reserved. Permission is granted for personal and educational use only.

Commercial copying, hiring and lending is prohibited. The whole or part of this publication material cannot be reproduced, reprinted, translated, stored or transmitted, in any form or means, without the written permission of the publisher. The publisher and authors have taken care that the information and recommendations contained herein are accurate and compatible with the generally accepted standards at the time of publication.

The individual essays remain the intellectual properties of the contributors.

ISSN (electronic version): 2184-1489

ISSN (printed version): 2184-044X

ISBN: 978-989-35106-9-8

Legal Deposit: 428062/17

Printed in Lisbon, Portugal by GIMA - Gestão de Imagem Empresarial, Lda.

BRIEF CONTENTS

Foreword	V
Organizing and Scientific Committee	vii
Sponsor	Xì
Keynote Lecture	xiii
Index of Contents	VV

FOREWORD

This book contains the full text of papers and posters presented at the International Conference on Education and New Developments (END 2024), organized by the World Institute for Advanced Research and Science (WIARS).

Education is a fundamental right that accompanies us from the very beginning of our lives. It encompasses every experience we encounter, influencing and shaping our thoughts, emotions, and actions. Whether we engage in formal education within classrooms or learn from the world around us, the process of acquiring knowledge plays a vital role in our personal growth and development. It equips us with the tools to navigate the complexities of life, broadens our perspectives, and empowers us to make informed decisions. This International Conference seeks to provide some answers and explore the processes, actions, challenges and outcomes of learning, teaching and human development. Our goal is to offer a worldwide connection between teachers, students, researchers and lecturers, from a wide range of academic fields, interested in exploring and giving their contribution in educational issues.

We have brought together a diverse group of individuals with various backgrounds to contribute their unique perspectives and knowledge on Education. By including people from different nationalities and cultures, we aim to create a rich plethora of experiences that can broaden our understanding of human nature and behavior. The exchange of ideas and experiences among our participants helps to cultivate personal and academic development, providing a platform for the exploration of new insights and discoveries.

END 2024 received 729 submissions, from more than 50 different countries, reviewed by a double-blind process. Submissions were prepared to take form of Oral Presentations, Posters, Virtual Presentations and Workshops. The conference accepted for presentation 284 submissions (39% acceptance rate).

The conference also includes one Keynote presentation by Dr. Ipek Kocoglu, Kean University, USA. We would like to express our gratitude to our invitee.

This conference addressed different categories inside the Education area and papers are expected to fit broadly into one of the named themes and sub-themes. To develop the conference program, we have chosen four main broad-ranging categories, which also covers different interest areas:

- In **TEACHERS AND STUDENTS**: Teachers and Staff training and education; Educational quality and standards; *Curriculum* and Pedagogy; Vocational education and Counselling; Ubiquitous and lifelong learning; Training programs and professional guidance; Teaching and learning relationship; Student affairs (learning, experiences and diversity; Extra-curricular activities; Assessment and measurements in Education.
- In **PROJECTS AND TRENDS**: Pedagogic innovations; Challenges and transformations in Education; Technology in teaching and learning; Distance Education and eLearning; Global and sustainable developments for Education; New learning and teaching models; Multicultural and (inter)cultural communications; Inclusive and Special Education; Rural and indigenous Education; Educational projects.
- In **TEACHING AND LEARNING**: Critical, Thinking; Educational foundations; Research and development methodologies; Early childhood and Primary Education; Secondary Education; Higher Education; Science and technology Education; Literacy, languages and Linguistics (TESL/TEFL); Health Education; Religious Education; Sports Education.
- In **ORGANIZATIONAL ISSUES**: Educational policy and leadership; Human Resources development; Educational environment; Business, Administration, and Management in Education; Economics in Education; Institutional accreditations and rankings; International Education and Exchange programs; Equity, social justice and social change; Ethics and values; Organizational learning and change, Corporate Education.

The contributions were published across two volumes, and this is the Volume 1 of the book titled *Education* and *New Developments 2024*, that showcases the outcomes of dedicated research and developments undertaken by authors who are driven by their passion to enhance research methods that directly relate to teaching, learning, and the practical applications of education in the present day. Within its pages, you will find a diverse array of contributors and presenters who expand our perspectives by delving into various educational matters.

This first volume focuses on the main areas of TEACHERS AND STUDENTS and TEACHING AND LEARNING, being the contributions of the other two areas published in Volume 2.

We would like to express thanks to all the authors and participants, the members of the academic scientific committee, and of course, to our organizing and administration team for making and putting this conference together.

Hoping to continue the collaboration in the future.

Respectfully,

Mafalda Carmo World Institute for Advanced Research and Science (WIARS), Portugal Conference and Program Chair

Porto, Portugal, 15 - 17 June, 2024

ORGANIZING AND SCIENTIFIC COMMITTEE

Organizer

World Institute for Advanced Research and Science (WIARS) www.wiars.org

Conference and Program Chair

Mafalda Carmo World Institute for Advanced Research and Science (WIARS), Portugal

International Scientific Committee

Aaron R. Deris, Minnesota State University, USA

Adanela Musaraj, Indiana Tech, USA

Adel Jebali, Concordia University, Canada

Adrián Ponz Miranda, Zaragoza University, Spain

Ahmet Ok, Middle East Technical University, Turkey

Alan Singer, Hofstra University, USA

Ali Ahmad Al-Barakat, University of Sharjah, United Arab Emirates

Ana Conboy, College of Saint Benedict and Saint John's University, USA

Ana-Maria Bercu, Alexandru Ioan Cuza University of Iasi, Romania

Anca Draghici, Politehnica University of Timisoara, Romania

Andis Klegeris, University of British Columbia Okanagan, Canada

Andrea Fiorucci, University of Salento, Italy

Andrea Hathazi, Babeş-Bolyai University, Romania

Andrei Nastas, Lower Danube University, Romania

Angela Piu, University of Valle d'Aosta, Italy

Anja María Mackeldey, Colegio Alemán Medellín / Universidad de Antioquia, Colombia

Anna Lazou, National & Kapodistrian University of Athens, Greece

Antoni Kolek, Kozminski University, Poland

Aphrodite Ktena, National and Kapodistrian University of Athens, Greece

Asta Vaitkeviciene, Vilnius University, Lithuania

Aurelija Dauksaite-Kolpakoviene, Vytautas Magnus University, Lithuania

Awelani Rambuda, Central University of Technology, South Africa

Ayse Esra Aslan, Istanbul University-Cerrahpasa, Turkey

Beatriz Carrasquer Álvarez, Zaragoza University, Spain

Begona Sampedro, University of Cordoba, Spain

Birgit Schmiedl, University College of Teacher Education Lower Austria, Austria

Borja Manzano Vázquez, University of Granada, Spain

Branka Zolak Poljašević, University of Banja Luka, Bosnia and Herzegovina

Cagla Atmaca, Pamukkale University, Turkey

Carla Massoud, Saint-Joseph University Beirut, France

Carolina Bodea Hategan, Babeş-Bolyai University, Romania

Caroline Akhras, Notre Dame University, Lebanon

Celina da Silva, York University, Canada

Cezar Scarlat, University "Politehnica" of Bucharest, Romania

Chantal Ouellet, Universite du Quebec a Montreal, Canada

Charalampos Karagiannidis, University of Thessaly, Greece

Chiara Uliana, University of Granada, Spain

Cory A. Bennett, Idaho State University, USA

Cristiana Pizarro Madureira, ESECS – Instituto Politécnico de Leiria, Portugal

Cristiano Luchetti, American University of Ras Al Khaimah, United Arab Emirates

Dale Kirby, Memorial University, Canada

Daniela Pasnicu, Spiru Haret University, Romania

David Aparisi, University of Alicante, Spain

David Nocar, Palacky University Olomouc, Czech Republic

Diana Maria Cismaru, National University of Political Studies and Public Administration (SNSPA Bucharest). Romania

Dijana Drandic, Juraj Dobrila University of Pula, Croatia

Dimitris Kilakos, National & Kapodistrian University of Athens (NKUA), Greece

Dina Vyortkina, Florida State University, USA

Donata Puntil, Kings College London, United Kingdom

Dorina Anca Talas, Babeş-Bolyai University, Romania

Dorota Gawryluk, Bialystok University of Technology, Poland

Douglas Baleshta, Thompson Rivers University, Canada

Dunja Andic, University of Rijeka, Croatia

Ekaterine Pipia, International Black Sea University, Georgia

Elena Baguzina, Moscow State Institute of International Relations, Russian Federation

Elena García Guerrero, University of Granada, Spain

Emel Dikbas Torun, Pamukkale University, Turkey

Eva Trnová, Masaryk University, Czech Republic

Evangelina Bonifácio, Polytechnic Institute of Bragança, Portugal

Fabiana Rodrigues Leta, Universidade Federal Fluminense, Brazil

Fernando Martin Villena, Universitat Pompeu Fabra, Spain

Gabriella Velics, Eotvos Lorand University, Hungary

Georgiana Ciobotaru, Dunărea de Jos University of Galati, Romania

Gheorghe Braniște, Dunărea de Jos University of Galati, Romania

Gina Aurora Necula, Dunărea de Jos University of Galati, Romania

Gráinne Ní Dhomhnaill, University College Dublin, Ireland

Gyöngyi Bujdosó, University of Debrecen, Hungary

Hana Vančová, Trnava University, Slovakia

Héctor Tronchoni, Florida Universitaria in Catarroja, Spain

Helin Puksand, Tallinn Univesity, Estonia

Henri Jacobs, Central University of Technology, Free State (CUT), South Africa

Ilijana Cutura, University of Kragujevac, Serbia

Ilona Tandzegolskienė, Vytautas Magnus University, Lithuania

Ina Blau, The Open University of Israel, Israel

Ioana Letiția Șerban, Babeș-Bolyai University, Romania

Ioannis Makris, State Special School / Directorate of Secondary Education West Athens, Greece

Irena Petrusic, University Adriatic, Montenegro

Irine Pkhakadze, A.T. Still University (ATSU) of Health Sciences, Georgia

Janaina Cardoso, Rio de Janeiro State University, Brazil

Javier Casanoves-Boix, International University of Valencia, Spain

Jeannette Jones, Texas Lutheran University, USA

Jenni Sanguiliano Lonski, Rollins College, USA

Jitka Hloušková, Independent Education Professional, Czech Republic

Joana Romanowski, Centro Universitario Interncacional UNINTER, Brazil

Joanna Paliszkiewicz, Warsaw University of Life Sciences, Poland

John Blake, University of Aizu, Japan

Jorge Viguri Cordero, University Jaume I, Spain

Juana M. Ortega Tudela, Universidad de Jaén, Spain

Jurgita Lenkauskaite, Vilnius University, Siauliai Academy, Lithuania

Kalliopi Trouli, University of Crete, Greece

Karel Němejc, Czech University of Life Sciences Prague, Czech Republic

Katerina Kabassi, Technological Educational Institute of the Ionian, Greece

Konstantinos Kalemis, National and Kapodistrian University of Athens / National Centre for Local Government and Public Administration, Hellenic Ministry of Education, Greece

Ladário da Silva, Universidade Federal Fluminense (UFF), Brazil

Laura Rio, University of Bologna, Italy

Leela Ramsook, Independent Researcher, Trinidad and Tobago

Lefkothea Kartasidou, University of Macedonia, Greece

Lefkothea-Vasiliki Andreou, University of Ioannina, Greece

Leila Kajee, University of Johannesburg, South Africa

Les Sztandera, Thomas Jefferson University, USA

Lindokuhle Ubisi, University of South Africa, South Africa

Luis Gonzaga Roger Castillo, Universidad de Granada (UGR) / Centro de Estudios Bizantinos, Neogriegos y Chipriotas, Spain

Magdolna Chrappán, University of Debrecen, Hungary

Maia Chkotua, International Black Sea University, Georgia

Maja Kerneza, University of Maribor, Slovenia

Maja Seric, University of Valencia, Spain

Malgorzata Cieciora, Polish-Japanese Academy of Information Technology, Poland

Manfred Meyer, Westfälische Hochschule, Germany

Manhong Lai, The Chinese University of Hong Kong, China

Manuel Fernández-Alcántara, University of Alicante, Spain

Marcin Fojcik, Western Norway University of Applied Sciences, Norway

Maria Lopes de Azevedo, ESECS, Polytechnic Institute of Portalegre, Portugal

Maria Orfila, Rey Juan Carlos University, Spain **Maria Carme Boqué Torremorell,** Ramon Llull University, Spain

María José Latorre, University of Granada, Spain

Marko Slavkovic, University of Kragujevac, Serbia

Marta Talavera, University of Valencia, Spain

Martina Kosturková, University of Presov, Slovakia

Marzena Wojcik-Augustyniak, University of Siedlce. Poland

Matthias Baume, Technical University of Munich, Germany

Maya Wizel, Middlebury College, USA / Kibbutzim College, Israel

Mayara de Carvalho Santos, Instituto Butantan, Brazil

Melissa Caspary, Georgia Gwinnett College, USA

Michail Kalogiannakis, University of Thessaly, Greece

Mike Green, University of Kent, United Kingdom

Milan Kubiatko, J. E. Purkyně University, Czech Republic

Mohammad Ahmad Abdeldayem, Zagazig University, Egypt

Monica Maier, Technical University of Cluj-Napoca, Romania

Monika Mladenovic, University of Split, Croatia

Mustafa Ozmusul, Harran University, Turkey

Napak-on Sritrakarn, ILSC & Greystone College, Australia

Natalia Casado, University King Juan Carlos, Spain

Natalie Lavoie, University of Quebec in Rimousk, Canada

Nicolás Ruiz-Robledillo, University of Alicante, Spain

Ognjen Pantelic, University of Belgrade, Serbia

Olga Dorul, Dunarea De Jos University of Galati, Romania

Omid Noroozi, Wageningen University & Research, Netherlands

Onur Ergünay, Izmir Democracy University, Turkey

Patrik Schulcz, Esade Business School (Ramon Llull University), Spain

Pavel Brebera, University of Pardubice, Czech Republic

Pavlina Rackova, University of Defence, Czech Republic

Pawel Topol, Adam Mickiewicz University in Poznan, Poland

Petros Kefalas, University of York Europe Campus, Greece

Raluca Trifu, UMF Iuliu Hatieganu from Cluj Napoca, Romania

Rasa Nedzinskaitė-Mačiūnienė, Vytautas Magnus University, Lithuania

Remigijus Bubnys, Kaunas University of Technology, Lithuania

Richard C. Kalunga, University of the District of Columbia, USA

Rosanna Tammaro, University of Salerno, Italy

Rút Lenková, University of Presov, Slovakia

Ryuichi Matsuba, Tokyo University of Technology, Japan

Sam Ramaila, University of Johannesburg, South Africa

Seppo Sirkemaa, University of Turku, Finland

Serhat Bahadir Kert, Yildiz Technical University, Turkey

Sharon Jaggernauth, The University of the West Indies, Trinidad & Tobago

Si Xiao, Columbia University, USA

Silvana Watson, Old Dominion University, USA

Silvânia Alves de Carvalho, Universidade Federal Fluminense, Brazil

Silvia Doncevova, Comenius University in Bratislava, Slovakia

Simon Richir, Arts et Metiers (ENSAM), France

Simone Brasili, Univeristy of Camerino, Italy

Stamatis Papadakis, University of Crete, Greece

Stephanie Linek, ZBW – Leibniz Information Centre for Economics, Germany

Susan Scott, Lakehead University, Canada

Syed Ziaur Rahman, Majan University College, Oman

Tatjana Portnova, Russian Center of the University of Granada, Spain

Temenujka Zafirova Malcheva, Sofia University "st. Kliment Ohridski", Bulgaria

Tena Velki, Josip Juraj Strossmayer University of Osijek, Croatia

Tricia Hudson Matthew, Metropolitan State University of Denver, USA

Valentina Vezzani, University of Madeira, Portugal

Vashti Singh, University of Guyana, Guyana

Vassilios Argyropoulos, University of Thessaly, Greece

Verónica Marín Díaz, University of Cordoba, Spain

Veronica Violant Holz, University of Barcelona, Spain

Verónica Yanez-Monje, Universidad of Concepcion, Chile

Vesna Dimitrova, Ss. Cyril and Methodius University in Skopje, Macedonia

Victor Fester, University of Waikato, New Zealand

Viorel Dorgan, Dunărea de Jos University of Galati, Romania

Wendy Setlalentoa, Central University of Technology, South Africa

Wiktor Bolkunow, Warsaw School of Economics, Poland

Xénia Liashuk, Trnava University, Slovakia

Zoltán Rónay, Eötvös Loránd University, Hungary

SPONSOR



http://www.wiars.org

KEYNOTE LECTURE

"REVOLUTIONIZING LEARNING: THE IMPACT OF ARTIFICIAL INTELLIGENCE ON EDUCATIONAL PARADIGMS"

Dr. Ipek Kocoglu *Kean University, USA*

Abstract

The integration of Artificial Intelligence (AI) in education is revolutionizing traditional teaching methods and curriculum development by facilitating personalized and adaptive learning experiences. This research paper explores the transformative role of AI in enhancing educational paradigms by optimizing learning outcomes tailored to individual needs. Drawing from a range of studies, the paper examines the effectiveness and challenges of AI applications within various educational settings. Our findings indicate that AI significantly boosts educational performance by adapting content delivery to match individual learning styles and needs, thus reshaping educational strategies and personalizing the learning experience. Furthermore, AI-driven adaptive learning systems not only customize educational content but also streamline administrative tasks for educators, enhancing overall efficiency. However, this technological advancement also introduces challenges, including ethical concerns and privacy issues that necessitate thorough scrutiny and careful implementation. The paper emphasizes the importance of comprehensive teacher training and ongoing ethical evaluation to ensure responsible use of AI in education. Through a nuanced understanding of AI's potential and limitations, this study provides actionable insights for educators and policymakers aiming to harness AI technologies to foster more dynamic and responsive educational environments.

Keywords: Artificial intelligence, adaptive learning, educational technology, curriculum development.

Biography

Dr. Ipek Kocoglu is an assistant professor of Strategy and Organization Theory in the Department of Management at Kean University. Following her doctoral studies in Management and Organization Theory, Dr. Kocoglu completed her post-doctoral research at Stevens Institute of Technology through a prestigious fellowship. She combined her background in industrial engineering and technology and innovation management to advance a framework that uses abductive research for new idea generation. Dr. Kocoglu's research focuses on gender diversity and sustainability. She has published in top-tier journals listed in the Financial Times 50 including the Academy of Management Review, The Leadership Quarterly, Management Decision, International Journal of Production Research, and Engineering Management Journal. Her research addresses critical issues like the effect of social context on women leaders' perceived competence, and the impact of extreme threats on organizational risk-taking. In her recent project Dr. Kocoglu develops a framework for digital sustainability solutions by leveraging Information Systems to mitigate the effects of climate change. Her contributions to academia have earned her numerous accolades, including the Excellence in Scholarship Award from Kean University and the Eschenbach Award for Best Paper from the American Society of Engineering Management. A recognized leader in open education, Dr. Kocoglu has been instrumental in pioneering the Open Education Resources (OER) conference at Kean University. She passionately advocates for using OER to close the educational equity gap for minorities and first-generation students. Dr. Kocoglu continues to inspire students in courses on entrepreneurship, organizational behavior, and strategic management. She is the author of a textbook on Organizational Theory and several influential book chapters on digital business models and strategies for developing digital government platforms. Beyond her academic achievements, Dr. Kocoglu serves as the Global Ambassador for inclusive research at the Diversity, Equity, and Inclusion Division of the Strategic Management Society. She is an active reviewer for esteemed journals, including Academy of Management Discoveries and Management Decision. Dr. Kocoglu's research has garnered over a thousand citations and has been featured in popular media such as Psychology Today, underscoring their impact on both academic and public spheres.

INDEX OF CONTENTS

ORAL PRESENTATIONS

<u>Teachers and Students</u>	
Development of didactics and pedagogy in the Danish pedagogy program through craft activities	3
Astrid Margrehe Hestbech, & Louise Hvitved Byskov	
Pre-service teachers' knowledge base for teaching mathematics: The development of syntactic and substantive knowledge Natalia Karlsson, & Wiggo Kilborn	6
Critical thinking in learning process of math in grades 5-6 in Latvia Rima Rieksta	11
One won't fit all: Designing a collaborative writing model to promote L2 writing for low-level learners Ngan Leng Mak	16
Nurturing future educators: Exploring new frontiers of collaborative teacher training model Noam Topelberg	21
Adopting ChatGPT technology approaches in professional music training – The TUT experience Hua Hui Tseng	26
Future teachers' knowledge, attitudes and practice regarding sustainable development goals Alena Letina, & Marina Diković	31
Imaging future sexuality educators: Attitudes and opinions of student teachers at Sapienza towards sexuality education Valeria Bruno, Roberto Baiocco, & Jessica Pistella	36
The training of the socio-pedagogical professional educator: An overview of the European context Maria Grazia Rionero	41
Training the media-educational habitus: 21st century skills in digital didactic settings in teacher education Gudrun Marci-Boehncke, & Matthias O. Rath	46
The association between perceived discrimination profiles and career aspirations and expectations of high school students Sabruna Dorceus	51
Drawing and writing about friendship as a way to support social inclusion in primary grades Tiiu Tammemäe, Egle Hollman, Mari-Liis Lind, & Helin Puksand	56
ни наптение, Еде понтин, мин-ыз ыни, х пенн г икзана	
Teaching science through humanising pedagogies: The South African perspective <i>Tholani Tshuma</i>	61

Qualitative framework: An approach to the evaluation of student's written outputs Imelda Braganza-Valera	66
Teaching fractions and the concept of inverse operations: Scientific concepts in pre-service teachers' learning of mathematics for teaching purposes Natalia Karlsson, & Wiggo Kilborn	71
Gender and students' mathematical literacy abilities Eleni Nolka, & Chryssa Sofianopoulou	76
Phonological-orthographic stimulation program for schoolchildren with learning difficulties Lívia Nascimento Bueno, & Simone Aparecida Capellini	80
Facilitating flexible learning experiences Ralucca Gera	85
Current and prevalent technologies in web curriculum Ronald J. Glotzbach	90
Unlocking creativity: Knots and Sona drawings in mathematics teacher professional development Andreia Hall, Ana Breda, Paula Carvalho, & Sónia Pais	94
Post-teaching observation feedback in the United Arab Emirates: College mentor and student-teacher perspectives Sarah Hyde	99
Importance of facilitating cross-cultural online discussion Tricia Hudson-Matthew, & Shawn Worthy	104
Peer mentoring in multidisciplinary final bachelor's thesis of engineering studies María González Alriols, Eneritz Onaindia, José David Nuñez, Isaac Barrio, Ainara Sánchez, & M. Mirari Antxustegi	109
On scoring competence Magne V. Aarset, & Stig Ytterstad	114
The impact of a first-year orientation team-building event John Smallwood, & Chris Allen	119
Guess who's coming to dinner! The impact of (virtual) guest speakers in a business class: A student perspective Ann Kirby, & Brian Turner	124
Perceptual-visual-motor skills and speed and legibility of handwriting in mixed subtype dyslexia Natália dos Santos, Monique Herrera Cardoso, Ilaria D'Angelo, Noemi Bianco, Catia Giaconi, & Simone Aparecida Capellini	129
The contribution of a collaborative approach in understanding resistance factors when implementing change Marie Brûlé, Chantal Viens, Julie Larochelle-Audet, Andréanne Gélinas-Proulx, & Laurie Carlson Berg	133
Increasing geometric literacy skills of future mathematics teachers through 3D printing activities in GeoGebra environment Lilla Korenova, & Angelika Schmid	138

Teaching and Learning

"Opening minds": The impact of a culturally and linguistically immersive teaching experience for pre-service teachers Cory A. Bennett, Wendy Ruchti, & Mona Nelson	142
Socio-economic status and students' mathematical literacy abilities Eleni Nolka, & Chryssa Sofianopoulou	147
Giving thanks is the key to transform things that happened into good things and positive emotions $Wei-Yu\ Liu$	151
An empirical research to re-contextualise the idea of care in preschool education <i>Ilaria Mussini</i>	156
Early marriage as a huge problem against education and career development Melano Beridze, & Nano Patchkoria	161
Generative Artificial Intelligence (AI) in education: A cross-national survey on university teachers' perceptions on the use of ChatGPT Kavita Karan, & Wellars Bakina	165
Which is more difficult, listening or reading? Helin Puksand, Tiiu Tammemäe, Kerli Haav, & Elika Klettenberg	170
A digital tool to help work-oriented project studies in higher education institutions Taina Lintilä, Tuija Marstio, & Suvi Sivén	175
Integrating the arts into kindergarten curriculum: A case study with children in Croatia Zlata Tomljenović, Aleksandra Smolić Batelić, & Svetlana Novaković	180
Zoonym phraseological units as hate speech in youth vocabulary Ana Vitanova Ringaceva, Darinka Marolova, Dragana Kuzmanovska, & Biljana Ivanova	185
Vernacular and dominant literate practices in Latin American scientific literature David Alberto Londoño-Vásquez, & Alvaro Ramírez-Botero	190
Discovering statistical misconceptions as students create notes for tests! Anne D'Arcy-Warmington	195
Effective Teams Workshop: A case study in higher education to teach teamwork competency Liliana Maritza Melo Ramos, Carola Hernández, & Marco Antonio Azuero Isaza	198
Games and calculus Maria Paula Oliveira	203
A web and simple clicks to understand chemical concepts Albert Poater	208
Interactive project-based teaching – Meeting the challenges of the coming generations of students John Lindgren, & Anna Isaksson	213
Co-constructing and evaluating an endocrine disruptor education program for teenagers in schools: The COPE-ADOS program Véronique Regnier Denois, Laetitia Marcucci, Camille Lassalle, Clarisse Russias, & Julien Masson	218

POSTERS

<u>Teachers and Students</u>	
Factorial structure validation of the Entrepreneurship Qualities Questionnaire 2.0 Eric Yergeau, Mathieu Busque-Carrier, Marcelle Gingras, & Frédérique Lépine	225
Development of an assessment method for individual grading of a group project work <i>Göran Fafner, & Valentina Haralanova</i>	228
Domain of cognitive-linguistic, reading and writing skills of Brazilian students in the initial literacy phase in the post-pandemic context Caroline Fernandes Brasil, Stephany Schunemann, Patrícia Mendes Comassio, & Simone Aparecida Capellini	231
Exploring interactive online script creation as a novel assessment method in higher education Tobias Baumeister, Sascha Hofmann, Thomas Kob, & Dietmar Fey	234
Perceptions of competencies among in-service socio-pedagogical professional educators: A nationwide exploratory survey Maria Grazia Rionero, Patrizia Sposetti, & Giordana Szpunar	237
Assessment of numerical cognition in preschoolers: Pilot study to verify the applicability of the developed instrument Silvia Cristina de Freitas Feldberg, Rita dos Santos de Carvalho Picinini, & Simone Aparecida Capellini	240
Project based learning in mechanical engineering education Valentina Haralanova, Samir Khoshaba, & Göran Fafner	243
FLU-EM – Assessment of handwriting fluency: Development through criteria and agreement among judges Monique Herrera Cardoso, Priscila Biaggi Alves de Alencar, & Simone Aparecida Capellini	246
The role of authentic experiences in foreign language learning: Road trips as a way to grasp the soul of a target language Alexandra-Monica Toma	249
Teaching and Learning	
Fostering critical thinking: Aligning assessment with educational expectations <i>Kathleen A. Siren</i>	252
'Get me involved and i will learn it'. Service-learning case of study at university Tamara Robledo Carranza, & Jorge Martín Dominguez	255
Adopting consensual behaviours: A lesson plan Eleni Varlami, Konstantinos Papakostas, Petros Karampet, Petros Christakopoulos, & Lefkothea-Vasiliki Andreou	258
Behavioral rating scale for internalizing and externalizing problems in academic skills in Brazilian schoolchildren Graziele Kerges-Alcantara, & Simone Aparecida Capellini	261

What do the learning diaries tell us about the language learning experience based on peer-teaching? Maarika Teral, & Raili Pool	264
How corpus linguistics can help promote health education: The case of schizophrenia $James\ Balfour$	267
Good practices in teaching cognitive neuroscience to biology students in higher education Eleftheria Katsarou, Angeliki Boulala, Petros Karampet, & Lefkothea-Vasiliki Andreou	269
Health and social care placements in today's changing work environments: A grounded theory study Anna Fiorentino	272
Screening for difficulties in mathematical learning: Elaboration and pilot study Rita dos Santos de Carvalho Picinini, Simone Aparecida Capellini, & Giseli Donadon Germano	275

VIRTUAL PRESENTATIONS

<u>Teachers and Students</u>	
Investigating the impact of Gamma-Tutor on the development of technological Pedagogical Content Knowledge in chemistry teaching for science teachers Muthandwa Chinamhora Sincuba, Sakyiwaa Boateng, & Limkani Sincuba	281
Emotional regulation – A training program for teachers Eva Vancu, & Zuzana Hlinková	286
Putting theory and practice together in preservice teacher training courses. Is it possible? Teresa Lewin, Dina Ben Yaish, Barbara Shapir, Sofia Ben-Yair, & Samar Aldinah	290
Meeting students' expectations: Cultural insights for enhanced educational program management Anastasios Athanasiadis	295
Evaluation of learning outcomes in masters degree. The perception of the coordinators Joaquín-Lorenzo Burguera, María-del-Henar Pérez-Herrero, Marta Virgós-Sánchez, José Miguel Arias-Blanco, & Natalia Rodriguez-Muñiz	300
Early detection of STEM skills during secondary education. A weak signals approach Florentina Alina Grigorescu (Pîrvu), & Cezar Scarlat	305
Comparison of visual and phonological skills in dyslexia subtypes Giseli Donadon Germano, & Simone Aparecida Capellini	310
Absence/presence in 'green' imaginings of Indian schoolscapes Tanaya Vyas	314
Navigating the teachers' and the subject's identity: A case of social sciences Nokuthula Diborah Nkosi, Sheri Hamilton, & Valencia Tshinompheni Mabalane	318
Custom-made course administration spreadsheets as an electronic gradebook alternative Brian G. Rubrecht	323
Dramatic arts' role in sustaining impactful education for community development amid 4IR challenges: A teacher's perspective Limkani Sincuba	328
Enhancing foreign language translation pedagogy through topology-imagery cognitive approaches Junwen Jia	333
Faculty development for emergency online teaching and learning: A case study Ashley Salter, & Shelly Wyatt	338
Expression of dialogue as an effective indicator of education quality in Lithuanian educational institutions Inesa Vietienė, & Zita Malcienė	343
The contribution of self-efficacy, emotion management, and mental resilience to fostering the educational climate among teachers in schools from Arab society in Israel Sehrab Masri, & Nayif Awad	347

Equity in the classroom for every child Delia Robinson Richards	350
Exploring pedagogical practices: Integrating ICT tools in grade 10 life sciences education Sam Ramaila	352
The role of the geography preservice teachers' service-learning in the development of map literacy Nokuthula Diborah Nkosi, & Memoona Mahomed	356
Exploring the existence of mathematics-sciences anxious-endemic equilibrium among pre-service physical sciences teachers: A pathway to building resilience among STEM students Sakyiwaa Boateng	361
Career management skills for vulnerable youth. A career guidance and vocational training point of view Natalia Rodriguez-Muñiz, Marta Virgós-Sánchez, María-del-Henar Pérez-Herrero, & Joaquín-Lorenzo Burguera	366
Pre-service teachers' understandings of how social values can be integrated in life sciences teaching and learning Eyitayo Julius Ajayi, & Lydia Mavuru	371
Parent's active role and specific involvement in child education: A South African teacher's perspective Limkani Sincuba, & Andrea Mqondiso Buka	376
Guiding first-year student teachers in the application of the skill of set induction in micro-teaching Ndoyisile Moses Majola, & Paseka Patric Mollo	380
Stabilising the link between secondary and higher education through lifelong learning programmes Vanya Dobreva, & Boriana Buzhashka	385
Facing the future: VET skills for today and tomorrow Denitsa Dimitrova, & Kamelia Nusheva	389
Impact of physical activity on the health status and quality of life of children and school adolescents Snezana Stavreva Veselinovska, Sonja Petrovska, & Despina Sivevska	394
The study of english listening problems of Thai EFL university students Waraporn Khampool	399
Learning through peer assessment: Student perceptions before and after participation Jonna Käpylä	404
Inclusive education and training during a pandemic and beyond - The new normal (identifying good practices) Kamelia Nusheva, & Boryana Yankova-Hadzhieva	409
Teachers' views on infusing IK into chemistry teaching at the junior secondary of Omusati region Tomas Asino, Kgomotsego Samuel, & Washington Dudu	414
Reminiscing training and special needs children Giulia Amorotti, Laura Guidotti, & Paola Corsano	419

Life sciences teachers' understandings of integration of indigenous knowledge when teaching biodiversity of plants Khetha Xolani Makhunga, & Lydia Mavuru	424
Teacher's views on challenges with the fostering of self-regulated learning skills and support from school management teams Keneilwe Agbenyegah, & Bernadette Geduld	429
Leveraging ICT tools for teaching and learning in the domain of physical sciences Sam Ramaila	434
Transforming the learning environment through interactive pedagogies Lydia Mavuru	438
Exploring the ontological boundary of metacognitive awareness of pre-service educators Matthews Makunye, Divan Jagals, & Julialet Rens	443
Specific competencies of student teachers: Identification of professional educational	448
needs Lucija Tomac, Renata Čepić, & Petra Pejić Papak	
Teaching and Learning	
Collaborative mathematical problem-solving with children: An illustration of shared and self-regulation in initial teacher training Isabel Piscalho, & Susana Colaço	453
The nature of learning tasks from perspective of children from marginalised Roma	458
communities Mária Hušlová Orságová, Katarína Vančíková, & Marián Trnka	
The method for interpersonal communication enhancement and fostering of resilience and emotional regulation $\textit{Eva Vancu}$	463
Exploring factors beyond phonological instruction in primary education Laura Hernández Sobrino, Eva Gutierrez-Sigut, & Virginia González Santamaría	466
Journey to global competence: Teaching through a sustainable development goals lens $Chaonan\ Xu$	471
Adapting the values engaged, educative evaluation framework to the evaluation of a community-based program Nuria Jaumot-Pascual	476
Considering automatic feedback in assessment for math learning Celina Aparecida Almeida Pereira Abar, José Manuel Dos Santos Dos Santos, & Marcio Vieira de Almeida	481
Working with pre-service teachers: Developing mathematics and science resilience while addressing maths and science anxiety levels in South African schools Sakyiwaa Boateng	486
Understanding the learning space, a reflection on blended learning in higher education: A bibliometric analysis Thoko Poppy Mahlangu	491

Reflecting on new public-school teachers' practices in the pandemic in Brazil Izumi Nozaki, & Eliseu Pichitelli	496
Level of physical activity among university students Rút Lenková, Gabriela Škrečková, & Eva Lukáčová	501
Teaching and learning practices in higher education institutions: Where has the theory gone? Gaby Probst, & Laura Zizka	505
Simulation modeling of a production system Chavdar Kostadinov, & Ivanka Peeva	510
The contribution of the picture book as an educational tool to prevent child abuse Mariline Rodrigues, Cátia Vidinhas, & Ana Catarina Silva	515
The current state of financial literacy among graduating students in connection with the effects of crises Anton Lisnik, Piotr Mazur, Miroslav Warhol, Milan Majerník, & Martina Kuperová	520
A problem-based learning approach to introduce the enzyme inhibitors blind screening to undergraduate biochemistry students Melissa García Caballero, Aurelio Moya García, José Antonio Torres Vargas, & Ana Rodríguez Quesada	524
Enhancing deep comprehension in high school students through the use of graphic organisers Maria Vittoria Battaglia, Ilaria Stragapede, & Alessandro Franceschini	529
Phonetics and audio-visual help to improve and strengthen the pronunciation of the English language Bertha Molina-Quintana, Marco Alberto Valenzo-Jiménez, Salvador Antelmo Casanova-Valencia, & Arcadio González-Samaniego	534
Skills development at the school subject of modern Greek language through debate Foteini Tsaliagkou, & Katerina Kasimatis	539
Primary school teachers' training needs to meet the challenges of 21st century science education Monica Tombolato	543
Effect of belief adherence and argumentation on belief flexibility during childhood, adolescence and young adulthood Marie Bousquet, Roger Fontaine, & Valerie Pennequin	548
An analysis of generative artificial intelligence tools usage to adapt and enrich software development courses Branko Mihaljević, Aleksander Radovan, & Martin Žagar	553
Analyzing drug compositions in a problem-based learning experiment to stimulate undergraduate students' autonomy Ana González Moreno, Luisa M. Cabalín Robles, Antonio Heredia Bayona, & Ana Rodríguez Quesada	558
Pedagogical power of story-telling in high education to develop critical thinking Lela Abdushelishvili	563

WORKSHOPS

Teaching and Learning	
Effects of critical thinking in literature education Gepco de Jong	569
AUTHOR INDEX	573



ZOONYM PHRASEOLOGICAL UNITS AS HATE SPEECH IN YOUTH VOCABULARY

Ana Vitanova Ringaceva, Darinka Marolova, Dragana Kuzmanovska, & Biljana Ivanova
Goce Delcev University, Stip (North Macedonia)

Abstract

Phrasemes with a zoonymic component represent a very significant segment in the phraseological fund of a language. The term zoonym is actually a general noun that is used to name an animal. However, zoonyms as lexical components have the ability to connect with another lexeme within the phraseme. When such linking takes place, the zoonym loses its basic lexical meaning. With that, the zoonym no longer denotes a specific animal, but acquires a new function. The zoonym becomes a metaphor, the breakdown of which leads to the discovery of certain character traits, mental characteristics, external characteristics, or emotional states that relate to man. Such properties of zoonyms speak of their high productivity in the formation of phraseological units. Zoonyms very easily become an integral part of young people's speech, especially in everyday colloquial communication. Following these, we detected several phraseological compositions in which a zoonym is used, with the aim of indicating some characteristic of the one to whom the phraseological unit is addressed. The use of zoonyms in phrasemes often initiates direct or indirect speech in which hate can be recognized. Being aware that hate speech is becoming a common occurrence in language communication (oral or written), we did research involving students. The research gave solid results that in the future can be an impetus for deeper research on this topic.

Keywords: Zoonyms, phraseological units, young people, hate speech.

1. Introduction

The human world and the animal world have always been in a direct and inextricable relationship. Animals are the first and closest neighbors of man since ancient times. Fearing them, man respected them and elevated them to the level of a cult. Ancient religions created lasting cults built on the images of animals, and remnants of them still exist today. In contemporary context, remnants of such cults remain and they function in their symbolic form. Man's closeness with animals left a mark in the language system, that is, in its lexical structure. Various historical, social, and cultural influences have contributed to the creation of lexical units in the language of a culture that are recognizable only for that culture, but also those that have a universal meaning. Due to different language images of the world and different literary sources, many zoonyms contain a certain element of meaning that is understandable only to the bearers of that particular language culture (Мирчевска-Бошева, 2021, p. 305) or that reason, the language structures that function within the framework of phraseological units carry cultural characteristics of the environment in which they were created and represent a kind of linguistic cultural heritage. As an example, we point to the phraseological unit *strong as a lion*, which essentially represents a universal phrase the meaning of which is the same in almost all languages, as opposed to the phraseological unit *boring as a louse/fly*, which is only known for certain language environments, such as Macedonian, for example.

Considering different definitions and interpretations of the term zoonym, we observe it exclusively as a general noun that names an animal regardless of which group it belongs to (reptiles, amphibians, invertebrates, fish, birds, mammals and insects). The research of phraseological units with a zoonymic component in Macedonian, English and German showed that it is a question of expressions with a comparative component. Although we are talking about languages that do not belong to the same language family, as well as the fact that they are languages with incomparable spatial representation and continuity, still, in terms of the symbolic meaning of the zoonyms, they show great similarities. The creation of phraseological units with a zoonymic component is conditioned by the creation of associative links of the human-animal relationship. Namely, drawing parallels means a comparative approach to the behavior of man and his approach, compared to the behavior of animals, their appearance, and their natural predispositions.

Table 1.

	English	German	Macedonian
1.	fat as a pig	fressen wie ein Schwein	Дебел како свиња/Свиња
2.	fight like a lion	kämpfen wie ein Löwe	Се бори како лав/Лав
3.	bad as a bitch	/	Лоша како кучка/Кучка
4.	work like a horse	wie ein Pferd arbeiten	Работи како коњ/ Коњ
5.	snake in the Grass	eine falsche Schlange	Лоша како змија/Змија
6.	repeat like a parrot	wie ein Papagei	Повторува како
		nachplappern	папагал/Папагал
7.	sly as a fox	so schlau wie ein Fuchs	Итар како
			лисица/Лисица
8.	stubborn as a donkey	stur wie ein Esel	Тврдоглав како
			магаре/Магаре
9.	/	/	Здодевен како вошка/
			Вошка

During the structural breakdown of phraseological units, it is noticed that the zoonym used within the framework of a given phraseme loses its primary meaning and becomes a symbol. The zoonymic component becomes a metaphor for that human characteristic that is associated with a certain animal: external appearance, way of moving, facial expression, sound expression, etc. Focusing on naming, we have actually come to the conclusion that in many phraseological units with a zoonymic component one can sense hate speech towards the person to whom the phrase is addressed. To insult the other, to humiliate or devalue means to choose a word that will actually be addressed to the other person. Considering animals as his rivals, man often uses them as symbols in speech communication with which he will cause negative feelings in the other person. Fat as a pig/cow; Bad as a bitch; Legs like a giraffe/stork; Stubborn as a donkey/goat are only some of the phrases with a zoonymic component used with a pejorative function. In fact, zoonyms within phraseology show great potential for forming a linguistic structure with a tendency to be used as hate speech, depending on the context. The negative connotation in which the phraseological units with a zoonymic component are used brings everyday referential speech to the border of hate speech. The external appearance is the most frequently affected.

Table 2.

The zoonym refers to:	Phraseological units with zoonyms*
External appearance of a person	strong like a lion, strong like a horse, fat like a pig,
	fat like a cow, fat like a bear, walks like a mare,
	big like an elephant, tall like a giraffe, legs like a
	stork, black like a raven, beautiful like a swan, a
	short rooster, beautiful like a gazelle, donkey ears
Mental characteristics	calm as a lamb, stubborn as a donkey, stubborn as
	a goat, slow as a snail, boring as a louse, bad as a
	dragon, bad as a snake, faithful as a dog, sly as a
	fox, sly as a monkey.
Behavior, habits, skills	repeat like a parrot, mute like a fish, creeps like a
	leech, boring like a fly, grabs like an eagle, works
	like a horse, creeps like a tick
Intellectual capacity	birdbrain, chicken brain, magpie brain, buffalo
	nerves, ox hide.

^{*}The translation of these phraseological units to English is literal.

The basic characteristics of phrasemes are solid structure, reproducibility, formal organization, idiomaticity, imagery, expressiveness, and connotative meaning. The meaning of the phrase is indicated by an image in the semantic sediment, which can be concrete and complete, part of a story, a parable, but it can also be a person, trait, symbol, toponym, etc. The semantic sediment reveals a motivational signal, that is, a visual message that helps to determine phraseological meaningful units. (Vidović, 2007, p. 405). It is precisely that visual message in phraseological units with a zoonymic component that makes them amenable to analysis in terms of whether or not they emit hate speech.

2. Research methodology

Motivated by the knowledge that zoonyms open opportunities for associative connection with man, his appearance, traits, and behavior, we did this research. The aim of the research was, firstly, to detect from the given language corpus the phraseological units with a zoonymic component and to perceive their frequency, and secondly, to isolate the phraseological units used as hate speech and their representation in the speech of young people. The team of researchers includes a group of professors at the Faculty of Philology from the Departments of Macedonian, English, and German as well as students in the first (first, second, third and fourth year) and second cycle of studies. The research was done on three groups of students studying: Macedonian, English and German. Namely, the students had a specific task to answer a questionnaire on the recognition and use of zoonyms in colloquial speech; in the second questionnaire, the most frequently used phrases according to the results of the first questionnaire were indicated and they were to be detected as hate speech or not. At the end of the research, in the last phase, a register of zoonyms was made that the students use most often both in their mother tongue and in the foreign language they study. Strong as a lion; works like a horse; fat as a pig; stubborn as a donkey; mute like a fish, repeat like a parrot, are just some of the phraseological compositions that we detected in students' speech. However, not all of them are used with the intention of directing hate speech towards another person. The conducted research showed that only part of the phrasemes containing zoonyms are used with the intention of directing hate speech towards the other person. The rest are used unconsciously, that is, with an undertone of metaphorical and metonymic meaning.

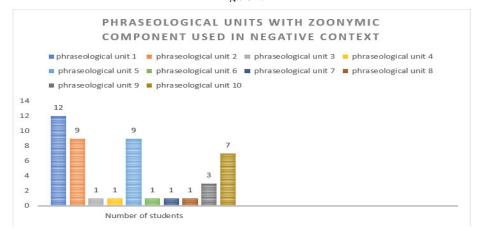
3. Results and interpretation

A total of 45 students from the first and second cycle of studies at the Departments of Macedonian language and literature, English language and literature and German language and literature were included in the research. From the corpus that was at our disposal, which contained texts where the referential function of the language is dominant, we singled out a total of 37 phraseological units with a zoonymic component (See Table no. 2). These are expressions that are most often used when giving a physical description of a person or an assessment of his/her psychological traits, habits, skills, or intellectual capacity. It should be noted that, in each of the mentioned languages (Macedonian, English and German), the phraseological units are with a different percentage of use, which of course depends on the cultural factors of the environment.

In the first phase of the research, the students had the task of answering a questionnaire about the recognition and use of zoonyms with a negative connotation that are represented in colloquial speech. From the results obtained, we prepared a register of phraseological units with a zoonymic component that are most often used in a negative context. The results showed that the largest number of students (12) recognized the phraseological unit *1. М. дебел како свиња, 1.Е. fat like a pig, 1. D. fressen wie ein Schwein* as the most frequent in the given language, used in a negative context. (Макаријоска, Л., & Павлеска -Георгиевска Б. 2020, p.190). This phraseological unit, whose zoonymic component indicates the external appearance of a person, is used in Macedonian, German and English with the same meaning, to describe an overweight person.

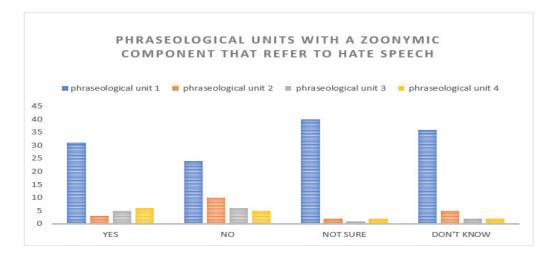
Phraseological units: 3. М. лош како кучка, (9 students, with the exception of German language students for whom this phraseological unit is unknown), 5. М. лоша како змија/Змија; 5. G. eine falsche Schlange; 5. E. Snake in the grass and 8. М. тердоглав како магаре (7 students); 8. E. stubborn as a mule; 8. G. stur wie ein Esel refer to the psychological traits of man and his bad behavior.

Figure 1.



In the second part of the research, the students had the task of pointing out, from the phraseological units with a zoonymic component, those that, according to their conviction and experience, indicate hate speech. The results showed that from the extracted linguistic material, the phraseological units: *fat as a pig, stubborn as a donkey, bad as a bitch, snake in the grass* are those that mostly refer to hate speech directed at the interlocutor (regardless of whether it is a conversation face-to-face or with an intermediary). To the question: "Do these phraseological units indicate hate speech", we got the following results:

Figure 2.



According to the results of the research, out of the total number of students who were included in the research (45), 31 students answered that the zoonymic component in the phraseological unit 1. fat as a pig refers to the use of hate speech, 3 answered NO, 5 answered NOT SURE and 6 DON'T KNOW. As for the phraseological unit 2. stubborn as a donkey, 24 students recognized it as hate speech, 10 answered NO, 6 with NOT SURE, and 5 with DON'T KNOW. The phraseological unit 3. snake in the grass, was recognized as hate speech by 40 students, 2 answered NO, 1 was NOT SURE and 2 said DON'T KNOW, while 4. bad as a bitch for 36 respondents was hate speech, 5 answered NO, 2 with NOT SURE, and 2 with DON'T KNOW.

From the above, we can see that the phraseological units with the zoonym snake mostly refer to hate speech, especially directed towards the female gender. This is directly related to the snake as an archetype with high frequency in almost all cultures. Snake as a metaphor for the curse, evil, cunning, greed as a biblical symbol has an uninterrupted continuity in the literary-linguistic tradition of almost all nations. As per the claim that cultural fact is very influential when it comes to language structures and their resistance, the positioning of this zoonym is understandable.

4. Conclusion

From ancient times until today, animals are the closest companions of man. They are part of his environment. Man lived with them, observed them, tried to understand them and learn to live near them. That alone led to the emergence of a large number of similarities in human behavior, in the way humas behave, gesture, articulate, etc. Such similarities are reflected in the language, especially in its lexical layer. Phraseological units with a zoonymic component are strongly expressive, emotional, and deeply metaphorical structures that are very common in referential speech. Man's need to use a word or a phrase that will hurt, humiliate, or delegitimize the interlocutor, prompted the use of zoonyms as the strongest weapon for this. Hence the conclusion that phraseological units with zoonyms in their composition have a strong associative power, but also the potential to motivate hate speech. A person in an affective state, rage or anger very often refers to the linguistic constructions that exist in his language, which contain a zoonym, with the intention of causing negative emotions in the object to which the speech is addressed. The speech of young people is burdened with the use of zoonyms with a pejorative function. Such usage associates hate speech which is becoming more and more prevalent in oral and written communication, especially today in the era of social networks and easy access to space for expression.

References

- Макаријоска, Л., & Павлеска-Георгиеска, Б. (2020). Фраземи со зооними во медиумска употреба [Phrases with zoonyms in media use]. In *Прилози за македонската фразеологија* [Contributions to Macedonian phraseology] (pp.180-204). Скопје.
- Мирчевска-Бошева, Б. (2021). Зоонимната фразеологија и надворешниот изглед на човекот (на материјал од македонскиот јазик [The zoonymic phraseology and the external appearance of man (on material from the Macedonian language] (pp. 305-314).
- Vidović, B. I. (2007). Metaforika zoonima u hrvatskoj frazeologiji [Metaphorical zoonyms in Croatian phraseology]. In S.Marjanić; A. Zaradija Kiš (Eds.), *Kulturni bestijarij* [Cultural bestiary] (pp.403-423). Zagreb.