Abstracting / Indexing

**ESCI** - Emerging Sources Citation Index
**ERIC** - Education Resources Information Center
**Scopus**

**EBSCO:**
The Belt and Road Initiative Reference Source
Education Research Complete
Education Source

Index Copernicus™
Cabell's Directory
DOAJ - Directory of Open Access Journals
Academic Journals Database
EdNA Online Database
ERA - Educational Research Abstracts Online
Electronic Journals Library
Genamics JournalSeek
Ulrich’s Periodicals Directory

**Note:** International Journal of Instruction has a wide range of abstracting/indexing services. However, the index services have the right of one-sided termination of the contracts and not to publish any of the articles. Therefore, we do not accept any responsibilities caused by indexing problems.
Advisory Board

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assoc. Prof. Fasasi Yunus Adebunmi</td>
<td>NIGERIA</td>
</tr>
<tr>
<td>Asst. Prof. Abdelrahman Mohamed</td>
<td>SAUDI ARABIA</td>
</tr>
<tr>
<td>Assoc. Prof. Orhan Akinoglu</td>
<td>TURKEY</td>
</tr>
<tr>
<td>Dr. Mohammad Akram</td>
<td>SAUDI ARABIA</td>
</tr>
<tr>
<td>Assoc. Prof. Nor A. Alias</td>
<td>MALAYSIA</td>
</tr>
<tr>
<td>Prof. Akmatali Alimbekov</td>
<td>KYRGYZSTAN</td>
</tr>
<tr>
<td>Assoc. Prof. Ali Al-Issa</td>
<td>OMAN</td>
</tr>
<tr>
<td>Prof. Khaled Al-Ajlouna</td>
<td>JORDAN</td>
</tr>
<tr>
<td>Asst. Prof. Hussain Alkharusi</td>
<td>OMAN</td>
</tr>
<tr>
<td>Prof. Isela Almaguer</td>
<td>USA</td>
</tr>
<tr>
<td>Assoc. Prof. Abdu Mohammed Al-Mekhlaf</td>
<td>OMAN</td>
</tr>
<tr>
<td>Prof. Waleed K. A. Ahmed Alzand</td>
<td>KUWAIT</td>
</tr>
<tr>
<td>Prof. Abdullah Ambusaidi</td>
<td>OMAN</td>
</tr>
<tr>
<td>Prof. Neil J. Anderson</td>
<td>USA</td>
</tr>
<tr>
<td>Assoc. Prof. Derek L. Anderson</td>
<td>USA</td>
</tr>
<tr>
<td>Prof. Joel B. Babalola</td>
<td>NIGERIA</td>
</tr>
<tr>
<td>Assoc. Prof. Evangelos Bebetsos</td>
<td>GREECE</td>
</tr>
<tr>
<td>Assoc. Prof. Santosh Kumar Behera</td>
<td>INDIA</td>
</tr>
<tr>
<td>Assoc. Prof. Thalia Bellali</td>
<td>GREECE</td>
</tr>
<tr>
<td>Assoc. Prof. Mary Jo Garcia Biggs</td>
<td>USA</td>
</tr>
<tr>
<td>Prof. Larry Boles</td>
<td>USA</td>
</tr>
<tr>
<td>Prof. Dele Braimoh</td>
<td>SOUTH AFRICA</td>
</tr>
<tr>
<td>Prof. Robert Burden</td>
<td>UNITED KINGDOM</td>
</tr>
<tr>
<td>Prof. Marilyn Campbell</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>Assoc. Prof. G. Nathan Carnes</td>
<td>USA</td>
</tr>
<tr>
<td>Dr. Carmencita L. Castolo</td>
<td>PHILIPPINES</td>
</tr>
<tr>
<td>Assoc. Prof. Yong-Fu Chang</td>
<td>TAIWAIN</td>
</tr>
<tr>
<td>Dr. Lockias Chitamara</td>
<td>ZIMBABWE</td>
</tr>
<tr>
<td>Prof. Che Kum Clement</td>
<td>BANGLADESH</td>
</tr>
<tr>
<td>Prof. Dale Cook</td>
<td>USA</td>
</tr>
<tr>
<td>Prof. Valentina Dagiene</td>
<td>LITHUANIA</td>
</tr>
<tr>
<td>Assoc. Prof. Patrick Alan Danaher</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>Asst. Prof. Jagannath K. Dange</td>
<td>INDIA</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assoc. Prof. Rula Khzouz</td>
<td>JORDAN</td>
</tr>
<tr>
<td>Prof. Remzi Y. Kuncal</td>
<td>TURKEY</td>
</tr>
<tr>
<td>Prof. Val Klenowski</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>Asst. Prof. Yee Lai Kelly KU</td>
<td>HONG KONG</td>
</tr>
<tr>
<td>Prof. Colin Lanksheer</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>Prof. Kar-Tin Lee</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>Assoc. Prof. Hsin-Chih Lin</td>
<td>TAIWAN</td>
</tr>
<tr>
<td>Dr. Hussain Ahmed Liton</td>
<td>SAUDI ARABIA</td>
</tr>
<tr>
<td>Assoc. Prof. Feng-Jung Liu</td>
<td>TAIWAN</td>
</tr>
<tr>
<td>Assoc. Prof. Manuel Lucero</td>
<td>SPAIN</td>
</tr>
<tr>
<td>Assoc. Prof. Zdena Lustigova</td>
<td>CZECH REPUBLIC</td>
</tr>
<tr>
<td>Prof. Ian Macdonald</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>Prof. Lazarus Ndiku Makewa</td>
<td>KENYA</td>
</tr>
<tr>
<td>Asst. Prof. MD. Saiful Malak</td>
<td>BANGLADESH</td>
</tr>
<tr>
<td>Prof. Robin D. Mason</td>
<td>UNITED KINGDOM</td>
</tr>
<tr>
<td>Assoc. Prof. Mark A. Minott</td>
<td>CAYMAN ISLANDS</td>
</tr>
<tr>
<td>Dr. Norma T. Nemeh</td>
<td>JORDAN</td>
</tr>
<tr>
<td>Prof. Nel Noddings</td>
<td>USA</td>
</tr>
<tr>
<td>Prof. Yngve Troye Nordkvelle</td>
<td>NORWAY</td>
</tr>
<tr>
<td>Ngboawaji Daniel Nte</td>
<td>NIGERIA</td>
</tr>
<tr>
<td>Eylem Oruç</td>
<td>TURKEY</td>
</tr>
<tr>
<td>Prof. M. Çağatay Özdemir</td>
<td>TURKEY</td>
</tr>
<tr>
<td>Dr. Deborah Osberg</td>
<td>UNITED KINGDOM</td>
</tr>
<tr>
<td>Serkan Padem</td>
<td>TURKEY</td>
</tr>
<tr>
<td>Prof. Santosh Panda</td>
<td>INDIA</td>
</tr>
<tr>
<td>Prof. Hitendra Pillay</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>Prof. Reza Pishghadam</td>
<td>IRAN</td>
</tr>
<tr>
<td>Prof. Ken Purnell</td>
<td>AUSTRALIA</td>
</tr>
<tr>
<td>Prof. Christoph Randler</td>
<td>GERMANY</td>
</tr>
<tr>
<td>Assoc. Prof. Norman Reid</td>
<td>UNITED KINGDOM</td>
</tr>
<tr>
<td>Dr. Heri Retnawati</td>
<td>INDONESIA</td>
</tr>
<tr>
<td>Prof. Sushanta Kumar Roul</td>
<td>INDIA</td>
</tr>
</tbody>
</table>
Asst. Prof. Şahin Danişman, TURKEY
Asst. Prof. Ayaj Das, USA
Prof. Estella De Los Santos, USA
Asst. Prof. Ibrahim Delen, TURKEY
Prof. Ugur Demiray, TURKEY
Assoc. Prof. Esra Dereli, TURKEY
Assoc. Prof. Yannis Dimitriadis, GREECE
Asst. Prof. Mohamed Elsaadani, EGYPT
Prof. Noriko Fujioka-Ito, ABD
Prof. M. Jayne Fleener, USA
Assoc. Prof. Kristin A. Gansle, USA
Assoc. Prof. Lynn Kelting-Gibson, USA
Prof. Margarita Victoria Gomez, BRAZIL
Prof. Lena Green, SOUTH AFRICA
Asst. Prof. Semra GÜNGÖR, TURKEY
Prof. Carol Hall, UNITED KINGDOM
Prof. Amani Hamdan, SAUDI ARABIA
Assoc. Prof. Jace Hargis, USA
Asst. Prof. Seyed Ahmad Hashemi, IRAN
Dr. Mark van't Hooft, USA
Dr. Ghazi Adib Mustafa Husnieh, JORDAN
Asst. Prof. Irshad Hussain, PAKISTAN
Jaya Nur Iman, INDONESIA
Prof. Majed Abu Jaber, JORDAN
Assoc. Prof. Jason D. Johnson, UAE
Asst. Prof. Troy Jones, USA
Prof. William E. Doll, Jr., USA
Norma A. Juarez Collazo, BELGIUM
Prof. Gregory J. Kelly, USA
Assoc. Prof. Shahadat Hossain Khan, BANGLADESH
Asst. Prof. Muhammad Imran Yousuf, PAKISTAN
Prof. Abdalla Mohamed Khataybeh, JORDAN

Profs. Peter A. Rubba, USA
Prof. Despina Sapountzi-Kreplia, CYPRUS
Prof. Barbara Seidemann, SWITZERLAND
Assoc. Prof. Yilashewa Seyoun, ETHIOPIA
Dr. Afshan Sharif, CANADA
Nazia Sharif, PAKISTAN
Prof. Ramesh Chander Sharma, INDIA
Asst. Prof. Laurie A. Sharp, USA
Prof. Ju-Ling Shih, TAIWAN
Asst. Prof. Mahesh B. Shinde, INDIA
Assoc. Prof. Hosin Shirvani, ABD
Assoc. Prof. Harison Mohd Sidek, MALAYSIA
Assoc. Prof. Parlindungan Sinaga, INDONESIA
Assoc. Prof. Richard B. Speaker, Jr., USA
Prof. N. Suzanne Standerford, USA
Prof. Howard Stevenson, UNITED KINGDOM
Dr. Simon Stobart, UNITED KINGDOM
Assoc. Prof. Pei-Chen Sun, TAIWAN
Prof. Karen Swan, USA
Prof. Jim Taylor, AUSTRALIA
Prof. Siew Ming Thang, MALAYSIA
Prof. Y. Gürcan Ülutanır, TURKEY
Dr. Muhammad A. Wahid Usmani, SAUDI ARABIA
Prof. Erwin Wagner, GERMANY
Assoc. Prof. Michael Whitacre, USA
Asst. Prof. Julia Wilkins, USA
Dr. Kung Teck Wong, MALAYSIA
Asst. Prof. Chia Jung Yeh, USA
Prof. Ali Yildirim, TURKEY
Prof. Allan E. Young, CAYMAN ISLANDS
Assoc. Prof. Muhammad Imran Yousuf, PAKISTAN
Dr. Yunisrina Qismullah Yusuf, INDONESIA
Prof. Galip Yuksel, TURKEY
Assoc. Prof. Eleni Zetou, GREECE
Contents

From the Editor: It is a privilege to study at University of Fribourg
Asim Ari, Yvonne Heiter.................................................................i-iv

Effect of Goal Setting for Motivation, Self-Efficacy, and Performance in Elementary Mathematics
Jacklyne D. Sides, Joshua A. Cuevas.................................................................1-16

National Public Control System in Higher Education: The Bologna Process
Elena Ryabova, Tatyana Cherkasova.................................................................17-34

The Effect of Problem-Based Learning Strategies and Cognitive Styles on Junior High School Students’ Problem-Solving Abilities
Miftahus Surur, I Nyoman Sudana Degeng, Punaji Setyosari, Dedi Kuswandia.................................................................35-48

The Effect of English Teacher’s Instructional Management Skills on Beginner Students’ Achievement and Perception
Burhanuddin Yasin, Faisal Mustafa........................................................................49-66

Students’ Self-Efficacy Beliefs and TOEIC Achievements in the Vietnamese Context
Nguyen Xuan Hong, Nga Thi Tuyet Phan..................................................................67-86

Academic Self-Handicapping Scale: Development and Validation in Indian Context
Savita Gupta, Ms. Geetika.........................................................................................87-102

The Effect of Problem-based Learning and Mathematical Problem Posing in Improving Student’s Critical Thinking Skills
Darhim, Sufyani Prabawanto, Bambang Eko Susilo..........................................................................103-116

Integrating Sharia Economics into the High School Economics Curriculum
Luqman Hakim, Moch. Khoirul Anwar, Riza Yonisa Kurniawan, Triesninda Pahlevi.................................................................117-132

Don’t Forget the Field Trip! The Professional Impact on K-12 Teacher Preparation and Retention
Shirley Ann Dawson, Patrick Allen Leytham.................................................................133-144

The Student Ability in Graph Understanding for Mastering Natural Science Concepts through the Process Skills Approach
Roslina, Nurlena Andalia, Burhanuddin AG, Muhammad Zulfajri.................................................................145-160

Problem-Based Service Learning’s Effect on Environmental Concern and Ability to Write Scientific Papers
Sumarmi, Syamsul Bachri, Arif Baidowi, Muhammad Aliman.................................................................161-176

Integrating Reading-to-write Strategies and Pairing Composition and Reading Courses for First-year, At-risk College Students
Tara Hembrough.........................................................................................177-196

Local Potential Integrated Science Video to Improve SPS and Concept Mastery
Insil Wilujeng, I Gusti Putu Suryadarma, Ertika, Wipsar Sunu Brams Dwandaru.................................................................197-214

How Do Italian Teacher Trainees Conceive Assessment?
Serafina Pastore.........................................................................................215-230

The Effect of Religiosity on Organizational Citizenship Behaviour with Gender, Age, and Working Period as Moderators Variable
Zummy Anselmus Dami, Fredi Purwanto, Gunaryo Sudarmanto, Rini Wulandari.................................................................231-246
The Development and Effectiveness of Motion Graphic Animation Videos to Improve Primary School Students’ Sciences Learning Outcomes
Muhammad Hanif ......................................................................................................................... 247-266

Instructional Practices in Science Education in German and Malaysian Secondary Schools: A Comparative Case Study
Salmiza Saleh, Tay Ai Jing ............................................................................................................ 267-282

High Order Thinking Skills Instrument on Microeconomics Course: A Development Research
Retno Mustika Dewi, Ni’matush Sholikhah, Dhiaa Fitrayati ................................................................. 283-294

Exploring the Interplay of Free Extensive Voluntary ESL Reading with Intensive Reading of Arabic Native Speakers
Negmeldin Alsheikh, Maha Omar Alhammad, Xu Liu, Safa Ahmed AlOthali, Najah Obaid AlMohammadi ................................................................................................................................. 295-314

The Effect of Guided Inquiry Learning in Improving Metacognitive Skill of Elementary School Students
Intan Dwi Hastuti, Surahmat, Sutarto, Dafik ..................................................................................... 315-330

Scaffolding Oral Fluency Mediating the Target Language in ELT to Tertiary-Level Students: A Follow-up Scheme
Mohammed Abdulgalil Abugohar, Dalal Aljudhil Ataheer Salheen, Baderadin Yassin, Hadeel A Saed, Kamariah Yunus .................................................................................................................... 331-346

The Influence of Teacher Certification on the Performance of Elementary School Teachers in Gorontalo Province, Indonesia
Siti Asiah Tjabolo, Herwin .................................................................................................................. 347-360

Number Talks Benefit Fifth Graders’ Numeracy
Pamela L. May ..................................................................................................................................... 361-374

The Effect of Using Simulation on Developing Students’ Character Education in Learning Economics
Fahimul Amri, Ery Tri Djatmika, Hari Wahyono, Sri Umi Mintarti Widjaja .............................................. 375-392

EFL Students’ Improvement through the Reflective YouTube Video Project
Angela Bayu Pertama Sari, Hanandyo Darjito, Dinar Martia Azizah .................................................................. 393-408

Evaluating User Experience of Using Cerdik BM Series 1 Interactive Pedagogical Tool
Nurulwahida Azid, Nuraini Yusoff, Rafizah Rawian, Nuryazida Sabarudin, Mohd Zaini Ishak .................................................................................................................................................. 409-426

Improving Students’ Problem-Solving Skills Using Inquiry Learning Model Combined with Advance Organizer
Gunawan Gunawan, Ahmad Harjono, Mir’atun Nisyah, Mahesti Kusdiastuti, Lovy Herayanti ......................................................................................................................................... 427-442

Teachers’ Professional Development Level across Cohort of Generations in Malaysia
Mohd Faiz Mohd Yaakob, Yahya Don, Ibrahim Sufi, Mat Rahimi Yusof .................................................. 443-456

A New Chemistry Multimedia: How Can It Help Junior High School Students Create a Good Impression?
Inas Sausan, Sulistyos Saputro, Nurma Yunita Indriyanti .......................................................................... 457-476
The Effectiveness of Inquiry Social Complexity to Improving Critical and Creative Thinking Skills of Senior High School Students
Ryzal Perdana, Ratu Betta Rudibyani, Budyono, Sajidan, Sukarmin
477-490

Effects of Multimedia Instructional Message on Motivation and Academic Performance of Elementary School Students in Croatia
Tomislava Lanc, Gordana Katerovac Jagodič, Jelena Bistrović
491-508

Power Point Game, Motivation, Achievement: The Impact and Students’ Perception
I Gede Budasi, Ni Made Ratminingsih, Ketut Agustini, Md. Yudyantara Risadi
509-522

The Interplay of Self-Efficacy Sources and Reading Self-Efficacy Beliefs in Metacognitive Reading Strategies
Muhammad Waleed Shehzad, Tahira Anwar Lashari, Sana Anwar Lashari, Md Kamrul Hasan
523-544

The Precision of Students’ Ability Estimation on Combinations of Item Response Theory Models
Ilham Falani, Maruf Akbar, Dali S Naga
545-558

Cultural Diversity and its Influence on English Teaching and Learning in an EFL Context
Umiati Jawas
559-574

A Systematic Review on the Flipped Classroom Model as a Promoter of Curriculum Innovation
José Alberto Lencastre, José Carlos Morgado, Thiago Freires, Marco Bento
575-592

Domains of Technological Pedagogical and Content Knowledge: Factor Analysis of Indonesian In-Service EFL Teachers
Lantip Diat Prasojo, Akhmad Habibi, Amirul Mukminin, Mohd Faiz Mohd Yaakob
593-608

Various Roles in the Development of EFL Learners’ English Skills
Phillip Haberman, Muhammad Afzaal, Abdul Ghaffar, Hind Alfaadda
609-622

Simas Eric Learning Model (SELM): Enhance Student’ Metacognitive Skill Based on the Academic Level
Ericka Darmawan, Siti Zabaidah, Richal Hendi Ristanto, Muhammad Rizal Akbar Zamzami, Bevo Wahono
623-642

Exploring Children’s Career Interests and Knowledge Based on Holland’s Theory
Yulia Ayriza, Agus Triyanto, Farida Agus Setiawati, Nanang Erma Gunawan
643-662

Effect of Social and Emotional Learning Approach on Students’ Social-Emotional Competence
Ibrahim Ahmed, Aswati Binti Hamzah, Melissa Ng Lee Yen Binti Abdullah
663-676

The Effectiveness of Visualization, Auditory, Kinesthetic (VAK) Model toward Writing Narrative: Linguistic Intelligence Perspective
Etika Kusumawarti, Slamet Subiyantoro, Rakayah
677-694

Development of Required Knowledge and Skills among Students through Applied Learning Modules
Tanapon Tamrongkunan, Tanes Tanitteerapan
695-714

Has Arabic Language Learning Been Successfully Implemented?
Zurqoni, Heri Retnawati, Syarifatur Rahmatullah, Hasan Djidu, Ezi Apino
715-730

Connections between Professional Well-Being and Mental Health of Early Childhood Educators
Judit Fináncz, Ágnes Nyitrai, Judit Podráczy, Melinda Csima
731-746
Development of Multi-representation Based Electronic Book on Inter Molecular Forces (IMFs) Concept for Prospective Chemistry Teachers
Rahmat Rasmawan.................................................................747-762

The New Generation Self-Directed Teaching Materials of Natural Science in Elementary Schools Validity Tests
A. A. Ketut Badiasttra, Iwan Wicaksono, I Gusti Made Sanjaya............................................763-780

Teacher Educators’ Perspectives and Experiences towards Differentiated Instruction
Tamirat Gibon Ginja, Xiaoduan Chen.............................................................781-798

The Influence of Whole Brain Teaching (WBT) to the Motoric and Linguistic Skills of Preschoolers
Ahmad Zaki Emyus, I Nyoman Sudana Degeng, Panji Setyosari, Saidah Uifa........................799-814

L1 Textual Glosses and Word Repetition: Facilitative Interventions for Incidental Vocabulary Acquisition
Mohammad Hassan AlRamadhan.............................................................815-832

The Instrument Development to Measure Higher-Order Thinking Skills for Pre-Service Biology Teacher
Candra Utama, Sajidan, Joko Nurkamto, Wiranto..................................................833-848

Rhetorical Structure Variations in Literature Review Chapters of Applied Linguistics Master’s Theses by Iraqi and International Students
Ahmed Rawdhani, Saman Ebadi, Nguyen Thi Thuy Loan..............................................849-866

The Effectiveness of the Application of Mathematical Software in Indonesia; A Meta-Analysis Study
Maximus Tamur, Dadang Juandi, Yaya Sukjaya Kasumah..................................................867-884

Improving Student Learning Outcomes through School Culture, Work Motivation and Teacher Performance
Onisimus Amt, Korlina Makalua, Jacoba Matital, Claudia Monique Pattiruhu, Rukhama Aralaha...............................885-902

The Effect of Valence and Arousal on Virtual Agent’s Designs in Quiz Based Multimedia Learning Environment
Vicneas Muniady, Ahmad Zamzuri Mohamad Ali..........................................................903-920

Developing Instruments to Measure Physics Problem Solving Ability and Nationalism of High School Student
Mardhiyyatin Naqiyah, Dadan Rosana, Sukardiyo, Ernasari.............................................921-936

Motivational Intensity as the Mediator of Orientation and Attitudinal with the Achievement of Chinese Language among the Preservice Teachers
Fonny Hutagalung, Fong Peng Chew, Tan Chor Ter.......................................................937-956

Development of Problem-Solving-Based Knowledge Assessment Instrument in Electrochemistry
Ratu Betta Rudiyani, Ryzal Perdana, Evi Elisanti..........................................................957-974

Positive Anxiety and its Role in Motivation and Achievements among University Students
Salwa Al Majali.................................................................975-986

The Effects of Augmented Reality to Motivation and Performance in EFL Vocabulary Learning
Cheng-Chang Tsai.................................................................987-1000