1. Record Nr. UNINA9910647205703321 Active learning: research and practice for STEAM and social sciences **Titolo** education / / edited by Delfin Ortega Sanchez Pubbl/distr/stampa London:,:IntechOpen,,[2022] ©2022 1 online resource (296 pages) : illustrations Descrizione fisica Collana Education and human development Disciplina 371.39 Soggetti Active learning Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto

1. Emergent Chemistry: Using Visualizations to Develop Abstract Thinking and a Sense of Scale within the Preschool Setting -- By Karina Adbo -- 2. Integrating Analogy into Scientific Modeling for Students' Active Learning in Chemistry Education -- By Song Xue and Danner Sun -- 3. About the Notion of Inverse Problem in STEM Education -- By Victor Martinez-Luaces, Jose Antonio Fernandez-Plaza and Luis Rico --4. Mathematical Creative Model: Theory Framework and Application in Mathematics Learning Activities -- By Subanji Subanji and Toto Nusantara -- 5. The Language That Grade R Students Use to Achieve the Envisaged Mathematics Outcomes, a South African Perspective --By Shakespear M. Chiphambo and Nosisi N. Feza -- 6. A Method to Improve Comprehension and Learning in Science Education - A Case Study in Systems Engineering and Automation -- By Sergio Velazguez-Medina and Pedro Cabrera-Santana -- 7. Perspective Chapter: Active Learning Strategies in the Veterinary Medicine Programme under the Think4Jobs Project -- By Rita Payan-Carreira, Hugo Rebelo and Luis Sebastiao -- 8. Perspective Chapter: The Role of Learning Styles in Active Learning -- By Armando Lozano-Rodriguez, Fernanda Inez Garcia-Vazquez and Jose Luis Garcia-Cue -- 9. Perspective Chapter: New Active Learning Models in Africa -- By Fred Awaah, Cosmas Lambini Kombat and Emmanuel Okvere Ekwam -- 10. Student Perceptions of Open Pedagogy and Community-Engaged Service Learning -- By Christian Williams -- 11. Perspective Chapter:

Ungrading, Grading Contracts, Gamification and Game-Based Learning -- By Gregory Garvey -- 12. Learning by Doing Active Social Learning -- By Anat Raviv -- 13. Agoraphobic Dispositions towards Action Research: Teacher Education Students' Perceptions and Experiences -- By Davison Zireva -- 14. Educational Paradigm with Ubuntu Mindset: Implications for Sustainable Development Goals in Education -- By George Frempong and Raavee Kadam -- 15. Early Childhood: Enriched Environments and Roles of Caring Adults -- By Analia Mignaton -- 16. Visual Discrimination: Spatial Reasoning Activity for Enhancing Children's Spatial Skills.

Sommario/riassunto

This book provides theoretical answers, applied methodological models, and didactic experiences that seek to reflect and analyze the potentialities and challenges of the active learning concept in STEAM disciplines and social sciences education. It also contributes to the understanding, intervention, and resolution of contemporary social problems and to the United Nations Sustainable Development Goals through the design, implementation, and evaluation of educational programs that incorporate integrated active learning as one of its explanatory axes.