# Effective Pedagogical Skills for a 21st Century Teacher

Reflections, Theonies and Pnactices

> Lawrence Meda Editon



# **Effective Pedagogical Skills for a 21st Century Teacher**

No part of this digital document may be reproduced, stored in a retrieval system or transmitted in any form or by any means. The publisher has taken reasonable care in the preparation of this digital document, but makes no expressed or implied warranty of any kind and assumes no responsibility for any errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of information contained herein. This digital document is sold with the clear understanding that the publisher is not engaged in rendering legal, medical or any other professional services.

Lawrence Meda

# Effective Pedagogical Skills for a 21st Century Teacher

Reflections, Theories and Practices



#### Copyright © 2023 by Nova Science Publishers, Inc.

**All rights reserved.** No part of this book may be reproduced, stored in a retrieval system or transmitted in any form or by any means: electronic, electrostatic, magnetic, tape, mechanical photocopying, recording or otherwise without the written permission of the Publisher.

We have partnered with Copyright Clearance Center to make it easy for you to obtain permissions to reuse content from this publication. You can visit copyright.com and search by Title, ISBN, or ISSN.

For further questions about using the service on copyright.com, please contact:

Copyright Clearance CenterPhone: +1-(978) 750-8400Fax: +1-(978) 750-4470E-mail: info@copyright.com

#### NOTICE TO THE READER

The Publisher has taken reasonable care in the preparation of this book, but makes no expressed or implied warranty of any kind and assumes no responsibility for any errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of information contained in this book. The Publisher shall not be liable for any special, consequential, or exemplary damages resulting, in whole or in part, from the readers' use of, or reliance upon, this material. Any parts of this book based on government reports are so indicated and copyright is claimed for those parts to the extent applicable to compilations of such works.

Independent verification should be sought for any data, advice or recommendations contained in this book. In addition, no responsibility is assumed by the Publisher for any injury and/or damage to persons or property arising from any methods, products, instructions, ideas or otherwise contained in this publication.

This publication is designed to provide accurate and authoritative information with regards to the subject matter covered herein. It is sold with the clear understanding that the Publisher is not engaged in rendering legal or any other professional services. If legal or any other expert assistance is required, the services of a competent person should be sought. FROM A DECLARATION OF PARTICIPANTS JOINTLY ADOPTED BY A COMMITTEE OF THE AMERICAN BAR ASSOCIATION AND A COMMITTEE OF PUBLISHERS.

#### Library of Congress Cataloging-in-Publication Data

ISBN: ; 9; /: /: ; 335/368/2\*gDqqm+

Published by Nova Science Publishers, Inc. † New York

# Contents

Acknowledgmer	vii vii
About the Edito	<b>r</b> ix
About the Autho	orsxi
The Review Pro	cessxv
Glimpse of Chaj	ptersxvii
Introduction Lawrence Meda	xxi
Chapter One	<b>Postgraduate Diploma in Education:</b> A Collaboration in Teacher Education Between Finland and the UAE1 Markus Talvio, Minna Saadé, and Lawrence Meda
Chapter Two	Going Wide Not Wild: Using Techno- Pedagogical Approaches to Promote Learner-Centered Teaching
Chapter Three	Using TPACK Framework to Explore Innovative Science Teaching in the UAE
Chapter Four	<b>Redefining Pedagogy in a Flipped Classroom</b> 57 Rawan Abdalla
Chapter Five	Improving Students' Literacy Skills Using an Adaptive Tech Tool

Chapter Six	Using the Community of Inquiry Model to Evaluate Flipped Learning Classes Conducted During Teaching Practice
Chapter Seven	Using the Social Constructivism Model to Attain Twenty-First Century Skills
Conclusion	
List of Reviewers	
Index	

# Acknowledgments

This book project would not have succeeded if it was not for people and an institution acknowledged in this section. First, I would like to thank the Almighty God for the research knowledge and skills he has given me to guide this project.

Second, heartfelt appreciation goes to Sharjah Education Academy (SEA) for providing funding to pay for a critical reviewer and a professional language editor. Special thanks go to the following institutional management team:

- Dr. Muhadditha Alhashimi (SEA President) for being instrumental in establishing SEA and creating a conducive environment for faculty members and students to conduct research.
- Dr. Jeanine Romano (SEA Executive Director) for supporting this book writing and publishing initiative from the first time it was introduced to her in 2022. Her leadership and support for research initiatives is heart-warming and inspiring. Without her support, this book project would not have come to fruition.
- Dr. Ted Purinton (SEA Founding Dean) for supporting the research project and meeting with the students (chapter contributors) shortly before they went to present their research at an international conference. Dr. Ted showed his solidarity with students' ingenuity, congratulated them and wished them the best with their research endeavors.
- Dr. Markus Talvio (SEA Program Chair) and Mrs. Minna Saadé for agreeing to write the first chapter that lays a critical foundation for this book. It would have been hard for someone to understand this book without reading the first chapter which provides a backdrop of information about the collaboration between SEA and the University of Helsinki HY+ to offer the PGDE program.

Third, I would like to express heartfelt appreciation to the six students from SEA (Adeeba, Anne, Busayo, Nailya, Rawan and Savita) who contributed chapters for this book. There would not have been a book if it was not for these students who demonstrated great enthusiasm, commitment and dedication to contributing to the scientific body of knowledge by publishing academic pieces of work in their names. All students endured the long and arduous time of collecting and collating their reflective experiences, reading and writing chapters and responding to all comments in accordance with reviewers' feedback. This has been a novel initiative, something I have not done throughout my career as a university professor. What made the whole project extraordinary is the fact that it was accomplished successfully by students who did not have a PhD qualification, which is often considered a key qualification in conducting research and publishing.

Fourth, heartfelt gratitude goes to Prof. Candice Livingston and Mrs. Lauren Walford for providing critical review and language editing services respectively. They both provided a high-class service to ensure that the work is of good quality.

Fifth, sincere gratitude goes to all 12 peer reviewers who reviewed chapters of this book. Reviews were rigorous and comments which were submitted were comprehensive and constructive. The comments helped students improve their academic writing skills in general and chapters in particular.

### **About the Editor**

Dr. Lawrence Meda holds a PhD in Curriculum Studies and is currently working as an Associate Professor and Director of Research at Sharjah Education Academy (SEA) in the United Arab Emirates (UAE). Prior to joining SEA, Dr. Lawrence was working at the College of Education at Zayed University in Dubai as an Assistant Professor and Program Chair. He is enthusiastic about teaching using different emerging technologies and is a certified online instructor. His research interests are in Teacher Education, Inclusive Education, Educational Technology and Curriculum Studies. His recent book publication entitled *Inclusive Pedagogical Practices Amidst a Global Pandemic: Issues and Perspectives Around the Globe* was published by Springer Nature. Dr. Lawrence has experience in supervising Master's and Doctoral students and publishing journal articles, book chapters and edited books.

## **About the Authors**

Adeeba Waseem has a Bachelor of Education, Bachelor's in English Honors, Master's in Clinical Psychology, Postgraduate Diploma in Computer Application and a PGDE. She is currently teaching at Delhi Private School, Sharjah, and works as a Headmistress of Phase 3 (Grades 6-8). She has been in the education field for more than 20 years. She has been a teacher champion for three years for student voices in sustainability, a UNESCO initiative. Her research interest is in literacy skills and its impact on students' attainment.

**Anne John** holds a Bachelor's Degree in Information Technology, a Diploma in Freelance Journalism and a PGDE. She is currently teaching at Delhi Private School, Sharjah, in the UAE. She has been a teacher for the past five years. Prior to working in the teaching field, she worked as a Software Engineer as well as a Content Writer. Her research interest is in technology and pedagogy.

**Busayo Ajongbolo** has a Bachelor of Science in Plant Science and Biotechnology and a PGDE. She is currently teaching at Manthena American School, Sharjah, in the UAE. She has been teaching for eight years. Her research interest is in Science Education and Educational Technology.

Lawrence Meda, see About the Editor.

**Markus Talvio** is an Associate Professor and Program Chair for the PGDE program at SEA. He is also an Adjunct Professor at the University of Helsinki, Finland, having over thirty years of experience in the field of education. He served as a senior lecturer at the University of Helsinki from 2018 to 2021 and was responsible for training on interaction skills, group development and educational psychology in Finnish and English, pedagogy and educational psychology for Finnish and foreign students in the Faculty of Educational Sciences. He has provided supervision to two doctoral students and about 40 master's and bachelor's students. He has been responsible for innovative

flipped learning and digitalization on Educational Psychology since 2018. Dr. Markus has produced thirty international scientific publications and has conducted altogether forty presentations at international scientific conferences and events since 2008.

Minna Saadé (M.A., M. Phil.) has over two decades of international experience at universities, non-governmental organizations and in the private sector in the fields of education, law and environment. Her true passion lies in the field of education, and she is a strong advocate for education as a fundamental source of happiness and prosperity for individuals and societies. Over the years, Mrs. Saadé has acquired advanced skills in project design and management. She has proven her ability to design, lead and deliver successful projects. She has been commended for her ability in skillfully bridging relationships between academic experts and end clients toward successful implementation of complex projects. In her current position as the Lead Expert for the University of Helsinki HY+, Mrs. Saadé has been advising, consulting, designing and leading customized educational projects worldwide, to develop local education systems in collaboration with academic experts from the University of Helsinki-the leading higher education institution in Finland. She has the privilege of working closely with educational professionals in Finland, the Middle East and Asia. As an ADB International Consultant, she is currently consulting on Educational Leadership in an ADB-funded SESIP program for Sri Lanka, which is led by the University of Helsinki HY+. She is also Project Director for multiple educational projects the University of Helsinki HY+ is conducting worldwide. Mrs. Saadé is a dual citizen of Finland and Lebanon, and has close ties to the latter, having also lived and worked there for a number of years. She is well acquainted with educational systems in the Levant and GCC region, culture and current developments.

**Nailya Shafikova** has a Bachelor of Language Arts and a PGDE. She is currently teaching English Language at Al Itqan American School in Sharjah, UAE. She is the Head of the English Department. She has been teaching for thirteen years. Prior to joining the education field, she was working in the trade industry as a sales manager. She is passionate about research and has initiated a research culture with high school students at her school. Her areas of research interest are in language learning and effective teaching and learning methods.

**Rawan Abdalla** has a Bachelor's Degree in Information Systems obtained from Ajman University in the UAE. She recently graduated with a PGDE from SEA. With two years of teaching experience, she initially specialized in teaching the Arabic Language. However, her journey led her to explore the dynamic field of STREAM (Science, Technology, Reading, Engineering, Arts and Mathematics) education, where she leveraged her expertise in educational technology to empower students.

**Savita Gaikwad** holds a Bachelor of Science in Chemistry from Shivaji University in India and a PGDE from SEA. She is currently teaching at Wesgreen International School in Sharjah, UAE. She has been teaching at the school for twenty-two years. Her area of research interest is in student learning.