

## LIST OF ABBREVIATIONS

ABBREVIATION	FULL MEANING
A'Level	Advance Level
ADI	Average Deviation Index
AI	Artificial Intelligence
AMMUSTED	Akenten Appiah Menkah University of Skills Training and Entrepreneurial Development
AMOS	Analysis of Moment Structures
AMTE	Association of Mathematics Teacher Educators
ANCOVA	Analyses of Covariance
ANOVA	Analyses of Variance
B.Ed	Bachelor of Education
BSc	Bachelor of Science
CAQDAS	Computer-Assisted Qualitative Data Analysis Software
CGPA	Cumulative Grade Point Average
CIPP	Context, Input, Process, Product
CK	Content Knowledge
CKT-UTAS	CK Tadem University for Technology and Applied Sciences
CMA	Comprehensive Meta-Analysis
CoE	College of Education
COTAP	Committee on Professional Development of Teachers and Principals
CPD	Continuous Professional Development
CT	Cooperating Teacher
DBE	Diploma in Basic Education
DFID	UK's Department for International Development
DLs	Distance Learners
DSS	Direct Subsidy Scheme
EDB	Education Bureau
EE	Effort Expectancy
EL	English Learners
ENTEP	European Network on Teacher Education Policies
EPT	Entrance Proficiency Test
ETEA	European Teacher Education Area
ETUCE	European Trade Union Committee for Education
EU	European Union
FA	Formative Assessment
FC	Facilitating Conditions
GCE	General Certificate of Education
GDP	Gross Domestic Product
GENSTAT	General Statistics Package Software
GES	Ghana Education Service
GPA	Grade Point Average
GTEC	Ghana Tertiary Education Commission
HLM	Hierarchical Linear Modelling
HOD	Head of Department
IAR	Illinois Assessment of Readiness
IBM SPSS	IBM Statistical Package for Social Sciences

ICC	Intraclass Correlation Coefficient
ICMI	International Commission on Mathematical Instruction
ICT	Information and Communication Technology
IEA	International Association for the Evaluation of Educational Achievement
IRT	Item Response Theory
ITA	International Trade Administration
ITEP	Integrated Teacher Education Programme
JHS	Junior High School
KAT	Knowledge of Algebra for Teaching
KNUST	Kwame Nkrumah University of Science and Technology
LA	Learning Analytics
LMT-TKAS	Learning Mathematics for Teaching-Teacher Knowledge Assessment System
MAP	Measures of Academic Progress
ME	Mathematics Education
MEES	Missouri Educator Evaluation System
MEP	Mathematics Education Programme
MKT	Mathematical Knowledge for Teaching
MoE	Ministry of Education
MONOVA	Multivariate Analysis of Variance
MPHIL	Master of Philosophy
MTE	Mathematics Teacher Education
MTEBI	Mathematics Teaching Efficacy Beliefs Instrument
MTs	Mother Tongues
NAB	National Accreditation Board
NCEE	National Centre on Education and the Economy
NCTE	National Council for Tertiary Education
NCTM	National Council of Teachers of Mathematics
NIE	National Institute of Education
NSC	National Senior Certificate
NTC	National Teaching Council
NYS	New York State public schools
O'Level	Ordinary Level
OCTP	On-Campus Teaching Practice
PAL	Peer-assisted Learning
PBL	Problem-Based Learning
PCK	Pedagogical Content Knowledge
PCK	Pedagogical Content Knowledge
PD	Professional Development
PE	Performance Expectancy
PETE	Physical Education Teachers' Education
PGDE	Post Graduate Diploma in Education
PhD	Doctor of Philosophy
PISA	Program for International Student Assessment
PK	Pedagogical Knowledge
PLT	Praxis II Principles of Learning and Teaching
PMTE	Personal Mathematics Teaching Efficacy

PPMCC	Pearson Product Moment Correlation Coefficient
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PSMTs	Pre-Service Mathematics Teachers'
PSTs	Pre-service Teachers
PTPDM	Pre-Tertiary Teacher Professional Development and Management
RME	Realistic Mathematics Education
SCK	Subject Content Knowledge
SDD-UBIDS	Simon Diedong Dombo University for Business and Integrated Development Studies
SDG	Sustainable Development Goals
SEC	Social And Emotional Competence
SEM	Structural Equation Modeling
SHS	Senior High School
SHTS	Senior High Technical School
SI	Social Influence
SIP	Student Internship Programme
SLD	Specific Learning Disabilities
SLDCK	Student Level Disciplinary Content Knowledge
SMK	Subject Matter Knowledge
SPED	Special Education
STATSDIRECT	Statistical Software for Medical Research in the 21st Century.
STEM	Science, Technology, Engineering and Mathematics
STS	Science and Technology Studies
TAG	Teacher Appraisal in Ghana
TE	Teacher Education
TEIs	Teacher Education Universities
TEP	Teacher Education Programme
TEPE	Teacher Education Policy in Europe
TET	Teacher Employment Test
TEU	Teacher Education University
TIMMS	Trends in International Mathematics and Science Study
TiT	Teacher in Training
TL	Target Language
TLM	Teaching Learning Material
TPA	Teacher Preparation in Africa
TPACK	Technological Pedagogical Content Knowledge
TPD	Teacher Professional Development
TRUST	Test of Regulation in and Understanding of Social Situations in Teaching
TSES	Teachers' Sense of Efficacy Scale
T-TEL	Transforming Teacher Education and Learning
TVET	Technical and Vocational Training Education
UCC	University of Cape Coast
UDS	University of Development Studies
UEW	University of Education, Winneba
UG	University of Ghana, Legon
UIS	UNESCO Institute of Statistics

UNESCO	United Nations Educational, Scientific and Cultural Organization
US	University Supervisor
UTAUT	United Theory of Acceptance and Use of Technology
VHGT	Van Hiele's Geometry Tests
VHGTL	Van Hiele's Geometric Thinking Levels
VL	Visible Learning
VLS	Visible Learning Scale
WA	Web Attitude
WASSCE	West African Senior School Certificate Examination
WCK	Web Content Knowledge
WPCK	Web Pedagogical Content Knowledge
WPCKS	Web Pedagogical Content Knowledge Survey