



DEDICATED TO

MY SENIOR GRANDFATHER –  
LATE JIBANANDA ACHARYA

&

MY JUNIOR GRANDFATHER  
LATE SHYAMANANDA  
ACHARYA

My role models whose never ending  
love, support, blessing, encouragement  
and wisdom have always motivated  
me to enjoy the beauty of true  
EDUCATION

## DECLARATION

I, Debolina Mukherjee, a bonafide student of PhD in Education in Tezpur University, Assam, would like to declare that the thesis entitled “Effectiveness of Constructivist approach-based Module on the Enhancement of Twenty First Century Learning Skills in English Subject among the Secondary School Students in West Bengal” is entirely original research work that has been conducted by me, under the supervision of Dr. Rajinder Singh, Assistant Professor, Department of Education, Tezpur University. No part of this thesis has been submitted anywhere else for any other degree. The thesis has been submitted by me for the partial fulfilment of the degree of Doctor of Philosophy in Education.

Place: Tezpur University

Date:

(Mrs. Debolina Mukherjee)

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## DECLARATION

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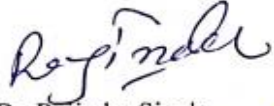
### Certificate from Supervisor

This is to certify that the thesis entitled "Effectiveness of Constructivist Approach Based Module on the Enhancement of Twenty First Century Learning Skills in English Subject among the Secondary School Students in West Bengal" submitted to the Department of Education, School of Humanities and Social sciences, Tezpur university, in partial fulfilment of the requirement for the degree of Doctor of Philosophy, has been carried out by Mrs. Debolina Mukherjee under my supervision and guidance.

All help received by her from various sources have been duly acknowledged. No part of this thesis is submitted anywhere else for the award of any other degree.

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## List of Abbreviations

<b>Abbreviation</b>	<b>Meaning</b>
APEC	Asia-Pacific Economic Cooperation
ANCOVA	Analysis of Covariance
ANOVA	Analysis of Variance
BSCS	Biological Science Curriculum Study
CBSE	Central Board of Secondary Education
CCP	Constructivism Collaboration Process
CLD	Constructivist Learning Design
CLE	Constructivist learning environment
CLIL	Content and Language Integrated Learning
CLTM	Constructive Learning Team Model
DDR	Design and Development Research
DIET	District Institute of Education & Training
EFA	Exploratory Factor Analysis
EFL	English as a Foreign Language
ELLs	English Language Learners
ELT	English Language Teaching
ESL	English as Second Language
ETE	Effective Teaching Evaluation
FLIPS	Flexibility, Leadership, Initiative, Productivity & Social Skills
ICSE	Indian Certificate of Secondary Education
ICT	Information and Communication Technology
IMT	Information, Media & Technology
ISD	Instructional Systems Design
KMO	Kaiser Meyer Olkin
LMICs	Low- and Middle-Income Countries

LSE	Life Skills Education
LSRW	Listening, Speaking, Reading, and Writing
MHRD	Ministry of Human Resource Development
MKOs	More Knowledgeable Others
NCERT	National Council for Educational Research and Training
NCF	National Curriculum Framework
NEA	National Education Association
NEP	National Education Policy
UNESCO	United Nations Educational, Scientific and Cultural Organization
OECD	Organization for Economic Co-operation and Development
P21	Partnership for 21st Century Skills
RIE	Regional Institute of Education
SPSS	Statistical Package for Social Sciences
WBBSE	West Bengal Board of Secondary Education
WHO	World Health Organization
ZAD	Zone of Achieved Development
ZPD	Zone of Proximal Development