

UNIVERSITI TEKNOLOGI MARA

**TRANSFORMATIVE DRIVEN
MECHANISM FRAMEWORK AS
KEY SUCCESS INDICATORS FOR
BLENDED LEARNING**

MALISSA MARIA MAHMUD

Thesis submitted in fulfillment
of the requirements for the degree of
Doctor of Philosophy

Academy of Language Studies

March 2017

ABSTRACT

Current literature shows that blended learning has inevitably permeated and transformed the landscape of educational practices. However, in the same vein, it also depicts less consideration given to the impending gaps in the blended learning experience, consequently indicating a paucity of evidence in the context of these technological interventions. This study aimed to examine and identify the Key Success Indicators (KSIs) for blended learning approaches. The research is delineated in seven research questions postulated to address the overall facets in blended learning: the powerful and the combined Effect Sizes (ESs), the definitions of blended learning, the types of technological intervention, the specific ratio or percentage of intervention, and the quality of indicators determined in the language related blended learning studies and other subjects related to blended learning studies. These research questions have guided this study to probe into the magnitude and power of ESs yielded from the 96 included samples by employing meta-analysis as an instrument of analysis. In addition to the ESs, this study also aimed to determine the key facets in blended learning approaches wherein the qualitative content analysis method was employed to analyse the samples. Besides that, two novel approaches were also employed as part of the data analysis to examine the categories of technological interventions and ratio of technology versus traditional approaches. The means of analyses enabled vital insights about the critical success indicators in a blended learning environment. Specifically, the findings from the seven research questions outline the KSIs as quantifiable measurements and guidelines in implementing the proposed Transformative Driven Mechanism (TDM) Framework that the researcher firmly believes possesses tremendous transformative potential in augmenting the quality of students' learning experience and ultimately reshaping the entire teaching and learning landscape.

ACKNOWLEDGEMENT

PhD is a lonely journey, so they say. What a complete understatement. It literally rocked me to the core! No words can describe the whole journey until you experience it for yourself. It was four and a half years and 559 pages of ineffably hard and excruciatingly intensive labor that consumed many late nights and restless weekends. Juggling a full time academic position whilst completing this thesis was definitely not a walk in the park! I gave up so many things, and sacrificed so much. It still feels so surreal but Alhamdulillah, praise to Allah SWT, that it is finally done. I would never trade this invaluable experience for anything else. It has truly and significantly changed me! Without a doubt, I could not have completed this chapter of life without the support, encouragement and motivation of innumerable people over the past years. I would like to extend my profound appreciation to the many people who have committed themselves to helping me achieve my academic goals. It is through their dedication and support that I was able to realize my potential. I am eternally grateful.

First and foremost, I would like to express my greatest appreciation to my dearest supervisor, Associate Professor Dr Hj Othman Ismail, who provided criticism so immensely constructive that it really improved the quality of this research. It took many extensive hours of scholarly discussion to complete this piece of work. He has been a dedicated mentor to me since my first year in the doctoral program. He has served as a voice of support when I needed encouragement, a voice of breadth and depth when I was thinking too linearly, and a voice of experience when I was limited by my own knowledge. I am forever indebted to him.

I would also like to thank my examiners, Professor Dr Cameron K Richards, Associate Professor Dr Saadiyah Darus and Associate Professor Dr Hj Ismie Roha Hj Mohamed Jais who have extended their vast knowledge, offered their timely and critical comment and support, and made my thesis better, allowing me to grow as a scholar.

My heartfelt gratitude goes out to my late-night companions and confidantes, Yeannie Tan and Mr. Mu who spent precious and countless hours, nights and weekends accompanying me in the office, spreading happiness and sharing shameless slices of Domino's pizza on those scientifically dark days.

A special thanks to my family. Words cannot express how grateful I am to them. Their constant prayer for me was what sustained me thus far. I would also like to thank all of my friends and colleagues who supported and incited me to strive towards my goal.

To my other half – Hasmadi Mohd Ali. Thank you for supporting me spiritually, emotionally and physically through this strenuous season. Without his loving support, this study would never have been completed. Finally, I dedicate this thesis to my mama, Puan Rohaini Abu Bakar, for her endless doá, support and unconditional love.

Above all, I owe it all to Almighty Allah SWT for granting me the wisdom, health and strength to undertake this research task, and enabling me to its completion.

TABLE OF CONTENTS

	Page
CONFIRMATION BY PANEL OF EXAMINERS	ii
AUTHOR’S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xvi
LIST OF ABBREVIATIONS	xvii
CHAPTER ONE: INTRODUCTION	1
1.1 Overview	1
1.2 Background of the Study	5
1.3 Problem Statement	10
1.4 Purpose of the Study	15
1.5 Research Questions	16
1.6 Significance of the Study	17
1.7 Scope and Limitation	19
1.8 Definitions of Terms Used in this Study	21
CHAPTER TWO: LITERATURE REVIEW	26
2.1 Overview	26
2.2 The Concept of Blended Learning	27
2.3 Conceptual Framework	29
2.4 Technology in Education	34
2.4.1 Emerging Trends in Technology in Education	38
2.5 Technology and Definitions of Blended Learning in Language Teaching and Learning	42
2.6 Definitions of Blended Learning	49
2.6.1 Sharpe et al.’s (2006) Dimensions of Definition	55
2.7 Ratio of Blended Learning Activities	58

CHAPTER ONE

INTRODUCTION

1.1 OVERVIEW

Innumerable initiatives and aspirations have been declared and avowed by the Malaysian Ministry of Education (MOE) for Higher Education Institutions (HEIs) to advocate the espousal of Information and Communication Technology (ICT). MOE is decreed to ensure that ICT is adopted as part of the instructional approaches employed by the HEIs, concomitantly warranting one the vital tenets sanctioned in the Vision 2020. In the same vein, MOE's trajectory and roadmap in regards to the augmentation of new technological and pedagogical instruments is aimed to enrich the existing curriculum, to cultivate and foster more effective organizational structures and to create empowered learners. Herein, the ministry has framed three main parameters for the integration of technology in the education sector (Chan & Foong-Mae, 2002; Mohd Zaki, Faizal, Erman, Nazrulazhar, Nor Azman, Asrul, & Nadi, 2009):

1. The employment of technology is utilised to diminish technological gaps and issues among schools.
2. The employment of technology is underscored as a means of pedagogical tool; either utilised to support the subject or as an independent subject on its own.
3. The employment of technology is accentuated to aid the upsurge of productivity and efficacy of the institution's learning management system.

The Malaysian Education Blueprint 2015 - 2025 for the HEIs aims to emit creative and resourceful learners who are able to integrate mastery learning to unravel setbacks; this is done by commissioning and linking available knowledge and information, as well as employing heuristic and technology to personalize and optimize learning experience (Ministry of Education Malaysia, 2015). In this context, students become autonomous learners who utilize technology in augmented learning experiences, and this undoubtedly fosters innovative culture (Ministry of Higher Education Malaysia, 2011). Furthermore, emerging technologies to scaffold teaching and learning have prompted a myriad of fascinating pedagogical approaches to aspire not only the students, but also the faculty to cultivate the development and integration of technology as part of the classroom environment. With the adoption of technology