

Preface

The needs of 21st-century skills and the industrial revolution 4.0 (IR 4.0) require educators to be more creative in providing the best approach especially in teaching English lessons. This book is written for all researchers interested in exploring the flipped learning approach. In writing this book, the authors assume that readers have prior knowledge of the flipped learning concept and the design and development research (DDR).

Flipped Learning in ESL Classrooms aims to share author's experience in conducting the flipped learning research. Readers will be walked through the process of designing and developing the new flipped learning framework step-by-step. This book also discusses the vital elements in every process of developing the flipped learning framework in great detail. Hence, readers will not miss any crucial factors of the new flipped learning framework.

This book also investigates the idea of lifelong learning as ubiquitous learning, which can be a part of this approach, is a tool known to promote this concept. This investigation will help infer students' autonomous learning to complement their learning in the universities. This is made possible by the nature of the approach that requires self-study or independent learning to be carried out by the students to build their knowledge and increase their understanding of a particular lesson. Therefore, developing a model on how to effectively implement the flipped learning approach in a local ESL classroom would provide impetus on the usage of such an approach in technology-mediated classrooms to ensure effective learning takes place.

This book can also be a great reference source and guidance for educators regardless of the fields or subjects. As this book offers a new framework, lecturers, researchers, and stakeholders can adapt or adopt the proposed framework and utilise it based on their purposes. Policymakers too can use the findings from this book in considering necessary elements in implementing flipped learning into primary, secondary, and tertiary institutions. It helps policymakers to

choose the right technological equipment as well as suitable learning instructions. Finally, we hope that this book could be a valuable reference for trainers and instructors in advancing technology-enhanced education. Readers are advised to adapt or adopt any ideas presented in this book in implementing flipped learning in their teaching and learning approach.

Education is one of the earliest benchmarks of a person's success in life; it is also one of the predictors of a country's future economic growth and development. The knowledge, skills, and competency levels of the citizen of a country greatly determine the success of its economy (MOE 2013). To this end, many countries have prioritize investing in the education sector, to catalyse the upward mobility of their citizen in the socio-economic scale (MOE 2015). The main catalyst for this research is the introduction of the National Educational Blueprint by the Malaysian government. The National Educational Blueprint (NEBP) is the government's effort to transform the Malaysian education environment to suit the needs, public demands, and challenges of the 21st century living (MOE 2013).

The main issue of the current Malaysian curriculum has been its ineptness in meeting the quality of international assessment standards: namely Program for International Students Assessments (PISA), which assesses 15 years old students' ability in applying knowledge of reading, mathematics, and science in real-world settings. Another assessment is, Trends in International Mathematics and Science Study (TIMSS) that assesses content knowledge and cognitive skills of students of 10 and 14 years old, in mathematics and science, (MOE 2013). The results for these two assessments have been poor to international standards. The last cycle report for the TIMSS assessments in 2007, at the time of this thesis writing is the latest, showed that Malaysia has fallen below the international average for mathematics and science, with 18% and 20% of Malaysian students failing to meet the minimum proficiency level for mathematics and science respectively.

ISA results reflect more of the same, as the last cycle of assessments in 2009, ranked Malaysia in the bottom third and below the international average for reading, mathematics, and science. This scenario is a cause for concern, as PISA assessments assess

students' higher-order thinking skills and problem-solving skills in real world settings, both important 21st century skills (MOE 2013). Students in the 21st century are not only expected to master the content knowledge, but they also need to be able to reason and apply that knowledge in unfamiliar settings creatively. They are also expected to have positive qualities such as leadership within them to be successful academically and in the working environments. The fact that there is a need to review and upgrade the Malaysian education system has also been reiterated by Malaysian scholars, such as Professor Mohamed Amin Embi in Mohamed Amin Embi and Ebrahim Panah (2014).

Another conundrum faced by Malaysian is the mismatch between employers' expectations of graduate characteristics and the actual characteristics possessed by the graduates. The crux of this issue is the graduate employability, which does not meet the expectations of the employers. In a study reported in the National Education Blueprint for Higher Education (MOE 2015), Malaysia is ranked 44 out of 50 countries in terms of educational outputs that factor in attributes such as graduate employability, among other things. This goes to show that there is a problem between what the industry expects of their future employees, and what the universities in Malaysia produce. Factors such as critical thinking skills, communication skills, and language proficiency, especially in English, are often found to be lacking in Malaysian graduates by the industry. These skills are viewed as essential by the industry for gaining success in the 21st century (MOE 2015), which has contributed to graduate underemployment and taking jobs that is below their qualification.

A study done by the Ministry of Education in 2013 showed that 45% of Malaysian graduates are taking jobs that pay RM 1,500 or less. This is below the targeted range of salary for a graduate in Malaysia (MOE 2015). Therefore, to address this issue, a review of the education system is wanting. A lack of the factors mentioned above, integrated in the education system points to a need to re-evaluate not only the content but also how we teach these contents to these students. The activities and approaches used in class are the determining factor in nurturing and developing skills and capabilities desired for the students to acquire

knowledge (O’Flaherty & Phillips 2015). As such, in light of the recent technological development that influences even the educational sphere, recent pedagogical developments and tools cannot be ignored in such a review.

Chapter 1: The Malaysia Education System briefly discusses the education shift in Malaysia mainly on digital technology, and how technology becomes crucial in the past years in Malaysia. This chapter also talks about the brief introduction of flipped learning and the scenario of flipped learning research in Malaysia.

Chapter 2: Exploration of the Theories (Part 1) discusses in-depth on the theoretical foundations underpinning the flipped learning framework designed in this book. This chapter explains the constructivism theory, the sociocultural theory, Kolb’s experiential theory and the social cognitive theory. This chapter also gives readers some insight into the elements of learning, such as active learning and mastery learning.

Chapter 3: Exploration of the Theories (Part 2) discusses on the most important theory which is the task-based learning is being discussed in a great detail. It starts with a bit history of the theory, several definitions of task, the criteria and components of task as well as approaches to the theory. The relation of task-based learning with English as a Second Language (ESL) and the consideration factors to implement the task-based learning are also being discussed in this chapter.

Chapter 4: The Flipped Learning Approach mainly discusses on the review relevant literature on the flipped learning approach. Each section reviews and elaborates how the literature is connected in this study. Relevant bodies of literature: journal articles, theses, books, and conference proceedings from local and abroad, will be drawn upon and discussed, in light of this study.

Chapter 5: Designing and Developing the Framework discusses on the three main phases of the study. Generally, there are three phases of the study. The first phase focuses on the design of construct for flipped learning framework utilizing review of literature concerning the flipped learning approach. The second phase is on the development of the flipped learning construct starting with the Fuzzy Delphi method. The third phase is the verification phase of the flipped learning construct in the form of a framework through the Rasch Model analysis.

Chapter 6: The Fuzzy Delphi Method Analysis presents the two sub-phases which are via Fuzzy Delphi Method (FDM). The preliminary test is also being presented and discussed in depth.

Chapter 7: The Rasch Model Analysis presents the preliminary study done on ESL undergraduates, studying in UiTM Shah Alam, Selangor. The analysis of the data was done using the Rasch model analysis method. The Rasch model analysis involved only analysis of items and construct acceptance and rejection only.

Chapter 8: The Verification Processes talks about the quantitative data that is being analysed through Rasch model analysis again, for an investigation and verification of the relationship between the respondents and items of the developed framework. The interview is also being discussed in this chapter to support the quantitative findings.

Chapter 9: The Future of Flipped Learning Approach in ESL Classrooms presents the overall review of the findings based on the research objectives, the implications of the study, followed by contributions and the proposed framework as well as the challenges in conducting the study. The chapter finally ends with recommendations for future research and an overall conclusion.

This is a book that explains thoroughly the designing and developing processes of the new flipped learning framework as well as the crucial elements in every process of developing the framework in great detail. Ubiquitous learning is also presented as it is the main tool to promote this flipped learning approach.

A token of appreciation goes to all the participants, experts, employers, and employees for the cooperation given in ensuring the success of this project. This book is funded and supported by Universiti Kebangsaan Malaysia under research grant no. GG-2022-031 and Dana Penerbitan Buku (DPB-2022-040).

Mohammad Musab Azmat Ali

Melor Md Yunus

Harwati Hashim

Siti Fatimah Abd Rahman