









# SELF-REGULATED LEARNING PREDICTORS OF ACADEMIC PERFORMANCE AND STRATEGIES IN RESOLVING BARRIERS TO LEARNING

### SAM FOONG











## THESIS SUBMITTED IN FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

## FACULTY OF EDUCATION & HUMAN DEVELOPMENT UNIVERSITI PENDIDIKAN SULTAN IDRIS 2015







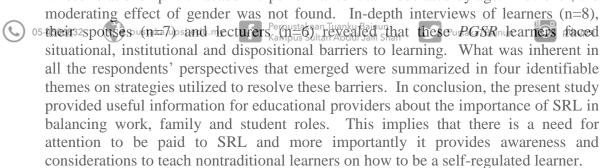






### **ABSTRACT**

The purpose of this study was to determine the underlying constructs of an instrument to measure self-regulated learning (SRL), examine the correlation between SRL and academic performance, determine the SRL predictors of academic performance and how gender and age moderated this relationship among nontraditional learners (n=519) in the Primary School Graduate Program (PGSR). Factor analyses, Pearson bivariate correlation, linear regression analysis and moderated multiple regression analyses were performed. Additionally, this study examined the barriers to learning and how SRL could be utilized to resolve these barriers. The items in the Self-Regulated Learning Questionnaire (Sf-ReLQ) was found to comprise a robust scale. Findings revealed that there was a moderately significant relationship between SRL and academic performance. An intriguing finding was the insignificant negative correlation of time study management and academic performance. Overall results of the multiple regression analyses indicated that the set of SRL variables predicted almost 33.4% of the cumulative grade point average and the best predictors of students' academic performance were Internet Self-efficacy and Rehearsal. results also suggested that value motivation was the only self-regulatory strategy whose relationship with academic performance was moderated by age. However, the moderating effect of gender was not found. In-depth interviews of learners (n=8),



















# PERAMAL PEMBELAJARAN ATURAN KENDIRI TERHADAP PENCAPAIAN AKADEMIK DAN STRATEGI UNTUK MENANGANI HALANGAN PEMBELAJARAN

### Abstrak

Kajian ini bertujuan menentukan konstruk yang terkandung dalam instrument pengukuran Pembelajaran Aturan Kendiri (PAK), mengkaji korelasi antara PAK dan pencapaian akademik, menentukan peramal PAK bagi pencapaian akademik serta mengkaji kesan moderator terhadap hubungan tersebut dalam kalangan pelajar dewasa (n=519) program Pensiswazahan Guru Sekolah Rendah (PGSR). Analisis faktor, korelasi Pearson, analisis regresi linear dan analisis regresi berganda menggunakan moderator dilakukan. Di samping itu, kajian ini mengenalpasti pelbagai halangan dalam pembelajaran yang dihadapi oleh pelajar dewasa dan bagaimana PAK digunakan untuk menangani halangan-halangan tersebut. Item-item dalam instrumen Self-regulated Learning Questionnaire (Sf-ReLQ) didapati mempunyai tahap kesahan dan kebolehpercayaan yang mantap. Dapatan kajian menunjukkan bahawa terdapat hubungan yang signifikan pada tahap sederhana antara PAK dan pencapaian akademik. Satu dapatan di luar jangkaan yang diperolehi bagi pembolehubah pengurusan masa menunjukkan hubungan negatif dan tidak signifikan

dengan pencapaian akademik. Secara keseluruhannya, analisis regresi pula 05 menunjukkan bahawa pembolehubah PAK menyumbangkan 33.40% kepada varians bagi Purata Mata Gred Terhimpun dan dua peramal utama adalah Efikasi Kendiri Internet dan Ulangan. Dapatan turut menunjukkan bahawa umur merupakan moderator yang signifikan dalam korelasi Motivasi Nilai dan pencapaian akademik. Walau bagaimanapun, jantina tidak mempunyai kesan moderator terhadap hubungan Temubual dengan pelajar (n=8), pasangan mereka (n=7) dan pensyarah (n=6) menunjukkan bahawa pelajar menghadapi halangan pembelajaran berbentuk situasi, institusi dan peribadi. Mengikut perspektif semua responden, pelbagai strategi digunakan dalam menangani halangan dalam pembelajaran dan dapat dikategorikan dalam empat tema utama. Kesimpulannya, kajian ini dapat menyumbang maklumat yang berguna kepada pihak penggubal dasar pendidikan di negara ini mengenai kepentingan PAK dalam mengimbangi kepelbagaian peranan seorang pelajar dewasa. Ini membawa implikasi bahawa lebih perhatian harus diberikan kepada PAK dan yang lebih penting lagi agar hasil dapatan kajian ini memberi kesedaran tentang perlunya mengajar pelajar dewasa mengenai pengamalan strategi PAK.















### TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
ABSTRACT	V
ABSTRAK	vi
CONTENTS	vii
LIST OF TABLES	xiv
LIST OF FIGURES	xix
LIST OF ABBREVIATIONS	XX
CHAPTER 1 INTRODUCTION	
05-4506832 pustaka upsi. Introductio Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah	ptbupsi 1
1.2 Background of the Study	5
1.3 Statement of the Problem	15
1.4 Purpose of the Study	24

1	1.3	Statement of the Problem
1	1.4	Purpose of the Study
1	1.5	Research Objectives
1	1.6	Research Questions

1.7 Significance of the Study

1.8	Limitations		33

1.9	Operational Definitions	•	36
	•		

1.10 Summary	37









27

28

#### **CHAPTER 2** LITERATURE REVIEW

2.1	Introduction	39
2.2	History and Overview of SRL	40
2.3	Theoretical Perspectives Underpinning SRL	45
	2.3.1 Bandura's Social Cognitive Theory	46
	2.3.2 Models of Self-regulated Learning	50
	2.3.2.1 Zimmerman's Cyclical Model	50
	2.3.2.2 Schunk's Conceptual Model	55
	2.3.2.3 Pintrich's Four Phase Model	56
	2.3.2.4 Analytical Comparison of Models	60
2.4	SRL and Academic Performance	65









71

- 2.4.2 Relationship between SRL and Academic Performance
- 2.4.3 Predictors of Academic Performance 78
  - 2.4.3.1 Motivational Strategies Predicting 79 Academic Performance
  - 97 2.4.3.2 Learning Strategies Predicting Academic Performance
  - 2.4.3.3 Moderator Effects of Gender and Age 117 on the Relationship between SRL and Academic Performance
- 2.4.4 Theoretical Framework of SRL and Academic 131 Performance
- 2.5 Measuring SRL













3.1 Introduction













PustakaTBainun



	3.2	Resea	arch Design	173
	3.3	Samp	ling Method	178
	3.4	The S	self-Regulated Learning Questionnaire (Sf-	183
	3.5	Pilot	Study	199
	3.6	Estab	lishing Reliability and Validity	201
		3.6.1	Exploratory Factor Analysis (EFA)	203
			3.6.1.1 Determining the Suitability of the Data	204
			3.6.1.2 Factor Extraction	207
			3.6.1.3 Deciding the Number of Factors	208
			3.6.1.4 Criteria for Extracting Factors	208
05-4506832	pustaka.upsi	.edu.my	3.6.1.5 Rotation Method  f Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah 3.6.1.5 Interpretation  PustakaTBainun p	210 tbupsi 211
			3.6.1.6 Results of the EFA	213
		3.6.2	Reliability	231
	3.7	Main	Study	236
		3.7.1	Procedures and Data Collection	236
		3.7.2	Statistical Analysis of Quantitative Data	238
			3.7.2.1 Descriptive Statistics	241

3.9 Summary



3.7.2.2 Inferential Statistics

3.8 Qualitative Data Collection Method





241

256

#### **CHAPTER 4 FINDINGS**

4.1	Introd	luction	290
4.2		ninary Data Screening Techniques and riptive Analyses of Data	291
4.3	Quan	titative Analyses of Data	304
	4.3.1	Factor Structure of the Sf-ReLQ	304
	4.3.2	Reliability Analyses for Sf-ReLQ	322
	4.3.3	Relationship Between SRL and Academic Performance	323
	4.3.4	SRL Predictors of Academic Performance	330
	4.3.5	Gender and Age as Moderating Variables in the Relationship between SRL and Academic Performance	341
taka. upsi	Quali	tative PAnalyse's of Data Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbu	<sub>p</sub> 356
	4.4.1	Barriers to learning	358





4.4.1	Barriers	to	learning

4.4.1.2	Institutional	Barriers

4.4.1.1 Situational Barriers

365

359

# 4.4.1.3 Dispositional Barriers

370

# 4.4.2 Strategies Utilized to Resolve Barriers to Learning

376

# 4.4.2.1 Developing Positive Learner Characteristics

376

# 4.4.2.2 Striving to Balance Multiple Roles

384

# 4.4.2.3 Building Supportive Relationships

391

# 4.4.2.4 Maintaining Social Connectedness

399

# 4.5 Summary

















#### DISCUSSION, IMPLICATIONS AND CONCLUSION **CHAPTER 5**

	5.1	Summary of Study	408
	5.2	Discussion of Findings	411
		5.2.1 Quantitative Findings	412
		5.2.1.1 Construct Validity and Reliability of the Sf-ReLQ	413
		5.2.1.2 The SRL-CGPA Correlation	415
		5.2.1.3 Predictability of SRL Variables	429
		5.2.1.4. Moderating Effects of Gender and Age	433
05-4506832	pustaka.upsi	5.2.2 Qualitative Findings  Ferpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah 5.2.2.1 Types of Barriers to Learning	438 oupsi 439
		5.2.2.2 Utilization of SRL Strategies to Resolve Barriers	445
	5.3	Implications of the Study	466
		5.3.1 Theoretical Implications	467
		5.3.2 Methodological Implications	472
		5.3.3 Practical Implications	473
	5.4	Limitations of the Study	478
	5.5	Recommendations for Future Research	483
	5.6	Conclusion	488









493

# **REFERENCES**

### **APPENDICES**

A	LETTER OF CONSENT - UNIVERSITY OF MICHIGAN	520
В	REQUIREMENTS FOR SELECTION OF CANDIDATES	521
С	THE SELF-REGULATED LEARNING QUESTIONAIRE (Sf-ReLQ)	522
D	Sf-ReLQ (BAHASA MELAYU)	527
Е	APPROVAL LETTERS FROM EPRD, IPGM AND ITE	532
F	CONSENT FORM TO PARTICIPATE	536
G	INTERVIEW PROTOCOL	538
Н	RESULTS OF NORMALITY, LINEARITY, AND HOMOSCEDASTICITY FOR MULTIPLE REGRESSION	546





















# LIST OF TABLES

Table Num	ber	Page
2.1	Schunk's Conceptual Framework for Studying Self-Regulation	55
2.2	Pintrich's General Framework of SRL	58
2.3	Comparison of Zimmerman's (2000) and Pintrich's (2004) SRL Models	62
2.4	Grading Scheme Based on Marks, Grade and Grade Point Average for the PGSR Program	69
2.5	Academic Awards and Qualifications for the PGSR Program	70
2.6	Summary of Some Non-Experimental, Correlational Studies of SRL and Academic Performance	77
2.7	LASSI: Strategic Learning Components, Subscales and  Pustak Description Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah  PustakaTBainun  pt	136 bupsi
2.8	Barriers to Learning	169
3.1	Demographic Profile of Sample	182
3.2	Scales, Subscales and Item Numbers Comprising the Sf-ReLQ	195
3.3	Summary of Data Analyses Methods for Pilot Study	201
3.4	Kaiser-Meyer-Olkin and Bartlett's Test	214
3.5	Factor Loadings based on a Maximum Likelihood Analysis with Promax Rotation for Nine Subscales of the Motivation Strategies of the Sf-ReLQ	216
3.6	Factor Loadings based on a Maximum Likelihood Analysis with Promax Rotation for Six Subscales of the Motivation Strategies of the Sf-ReLQ	219
3.7	Structure for the Motivation Strategies Construct	221









05-4506832 pustal	ka.upsi.edu.my f Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah	psi
3.8	Factor Loadings based on a Maximum Likelihood analysis with Promax Rotation for Seven Subscales of the Learning Strategies of the Sf-ReLQ	223
3.9	Factor Loadings based on a Maximum Likelihood Analysis with Promax Rotation for Six Subscales of the Learning Strategies of the Sf-ReLQ	226
3.10	Structure for the Learning Strategies Construct	229
3.11	Items within the 6 Sf-ReLQ Dimensions and the Subscales' Corresponding Item Numbers	230
3.12	Cronbach's Alpha for Motivation and Learning Strategies	234
3.13	Description of Study Variables	240
3.14	Summary of Data Analyses Methods for Main Study	242
3.15	Interpretation of Strength of Correlation	243
3.16	Profile of Each Respondent	272
05-4506832 4.1 pustal	Ka.upsi.edu.my f Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun ptbu	295
4.2	Descriptive Statistics for Independent and Dependent Variables	299
4.3	Mean and Standard Deviation of Cumulative Grade Point Average by Gender and Age Group	300
4.4	Mean Scores and Standard Deviations for Sf-ReLQ	301
4.5	Results of KMO, BTS and Communalities	306
4.6	Factor Loadings based on a Principal Axis Factoring Analysis with Promax Rotation for Six Subscales of the Motivation Strategies of the Sf-ReLQ	308
4.7	Structure for the Motivation Strategies Construct	311
4.8	Factor Loadings based on the first PAF Analysis with Promax Rotation for Six Subscales of the Learning Strategies of the Sf-ReLQ	314











05-4506832	pustaka.upsi.edu.my f Perpustakaan Tuanku Bainun Kampus Sultan Abdul Jalil Shah PustakaTBainun pt	bupsi
4.9	Factor Loadings based on the second PAF Analysis with Promax Rotation for Five Subscales of the Learning Strategies of the Sf-ReLQ	316
4.10	Structure for the Learning Strategies Construct	318
4.11	Items within the Sf-ReLQ Scales and the Subscales' Corresponding Item Coding	321
4.12	Cronbach's Alpha for Motivation and Learning Strategies	323
4.13	Pearson's Product Moment Correlations for Sf-ReLQ Scales and Cumulative Grade Point Average	325
4.14	Pearson's Product Moment Correlations between Sf-ReLQ Subscales and Cumulative Grade Point Average	327
4.15	Mean, Standard Deviation and Normality Tests for the Sf- ReLQ Scales and Academic Performance	331
4.16	Collinearity Statistics for the Sf-ReLQ	334
05-450684217	pustak Multiple, Regression Model Strimmary for SfstReLQn ptl	<sub>bup</sub> 336
4.18	Summary of ANOVA for Sf-ReLQ Subscales Predicting Academic Performance	336
4.19	Summary of Coefficients for Motivation and Learning Strategies Predicting Academic Performance	337
4.20	Multiple Regression Model Summary for Final Model	339
4.21	Summary of ANOVA for Final Model	339
4.22	Summary of Coefficients Final Model	340
4.23	Moderated Multiple Regression Model Summary for Sf-ReLQ	344
4.24	Summary of Coefficients for Motivation and Learning Strategies Predicting Academic Performance Moderated by Gender	345
4.25	Moderated Multiple Regression Model Summary for Value Motivation	346





































# LIST OF FIGURES

Figure Nu	mber	Page
2.1	Triadic reciprocality model of causalty	48
2.2	Phases and sub-processes of self-regulation	51
2.3	Relationship between VAL, EXP, AFF and academic performance	80
2.4	Relationship between COG, MES, RMS and academic performance	98
2.5	Moderator model	122
2.6	Theoretical framework of the relationship between SRL, academic performance	132
3.1	Sample size based on stratified random sampling procedure.	180
05-4506832.2	pustak Screedplot of motivation strategies Kampus Sultan Abdul Jalil Shah	ptbup217
3.3	Scree plot of learning strategies	224
4.1	Scree plot of motivation strategies in first principal axis factoring	310
4.2	Scree plot of learning strategies in first principal axis factoring	315
4.3	Scree plot of learning strategies in second principal axis factoring	317
4.4	Moderation of the VAL on academic performance by age	354
5.1	Barriers to learning and strategies to resolve them	441
5.2	Relationship between SRL and academic performance moderated by age	468



















### LIST OF ABBREVIATIONS

AFF Affective motivation

ATT Attitude

CGPA Cumulative grade point average

COG Cognitive strategies

DE Distance education

EFA Exploratory factor analyses

EGO Extrinsic goal orientation

ELA Elaboration

EXP Expectancy motivation







IGO Intrinsic goal orientation

ITE Institute of Teacher Education

ISE Internet self-efficacy

LEA Learner anxiety

LASSI Learning and Study Strategies Inventory

MES Metacognitive strategies

MOE Ministry of Education

MSLQ Motivated Strategies for Learning Questionnaire

MSR Metacognitive self-regulation

PGSR Pensiswazahan Guru Sekolah Rendah (Primary School

Graduate Teachers Program)











05-4506832









**PER** Peer learning

**REH** Rehearsal

**RMS** Resource and management strategies

**SCT** Social cognitive theory

Sf-ReLQ Self-regulated Learning Questionnaire

**SLP** Self-efficacy for learning and performance

**SPSS** Statistical Package for the Social Sciences (now known as

Statistical Product and Service Solutions)

SRL Self-regulated learning

**TSM** Time and study management

VAL Value motivation



























### **CHAPTER 1**

### **INTRODUCTION**











### 1.1 Introduction

Education in Malaysia is changing very rapidly, responding to the emerging focus on lifelong learning which has become a necessity in order to remain competitive in today's global knowledge economy. This is reflected in the active promotion and provision of lifelong learning through the implementation of government policies and strategies undertaken towards providing infrastructural and financial support to open up more opportunities for nontraditional learning. Whilst efforts to introduce new programs for non graduate teachers to attain degrees through distance education are being intensified, our understanding of the unique factors that predict their success have not increased. Needless to say, the educational journey for nontraditional learners had the potential to be drastically different from traditional learners which











requires them to take more responsibility for their learning as compared to fulltime on-campus traditional learners. Undoubtedly the academic and non-academic roles of nontraditional learners had a strong influence on how these learners integrated in the academic setting, managed their time, maintained employment, utilized resources and social support, and built relationships with other learners. Ultimately, nontraditional learners were subject to the effects of these variables, which shaped their academic performance. Bowl (2001) pointed out that entering into higher education, for nontraditional learners can result in a feeling of powerlessness, as well as a struggle for personal, academic, financial and emotional survival. Additionally, one might reasonably expect that the nontraditional learners would be, at a minimum, inconvenienced, and, at times, disadvantaged relative to their traditional counterparts (Newbold, Mehta & Forbus, 2010). This would result in various stress coping behaviors degative attitudes about the college experience and lower grade point averages on the part of the nontraditional learners.

Knapper and Cropley (2000) viewed adult learners as facing challenges from the cognitive (thinking, learning, memory), attitude, motive and self-image domains. For example, they must be self-starters who are capable of initiating and seeing through a learning activity without supervision and be able to work without direct feedback and without external rewards (such as an encouraging word from the teacher). Most of all, they are unable to feel the campus ambience like other oncampus students and they must be able to ignore a multitude of distractions revolving around them as they spend a great deal of their student time away from the classroom. Most nontraditional learners are typically employed full-time, have personal commitments playing the role of spouse and parent and face many barriers to











05-4506832

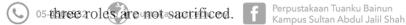








learning. The barriers to learning have been categorized in a number of ways. Perhaps the best known is that used by Cross (1981), when she summarized them as situational, dispositional and institutional. Situational barriers arise from an individual's life situation; the fact that work or home responsibilities may leave little time for study, that courses may cost too much money, that child care arrangements may not be available, or that transport may be a constraint. Dispositional barriers relate to the learner's own attitudes and self-perceptions. Institutional barriers include the rules and regulations which define the time, place and entry requirements of courses, or simply the non-availability of a course of study required by the individuals. Certainly, challenged by the myriad of barriers, nontraditional learners require a great amount of self-regulation in striking a balance between the demands of employment, studying and family, in order that the success of one or more of these









In light of this, self-regulated learning (SRL) has been shown to play a vital role in education as a lifelong learning skill that could enhance academic performance by utilization of motivation and learning strategies. The term SRL has been well known since the 1980s because it emphasizes the emerging autonomy and responsibility of students to regulate and control their own learning strategies (Bandura, 1986). Ng (2010) described SRL behaviour as one of the most interesting and attractive areas in educational psychology and numerous researches have been conducted to study self-regulation. The concept of SRL has been explained by researchers in different ways; however, the central idea underlying it is similar, which is about motivation and learning strategies that students utilize to achieve their learning goals. Most theorists agree that SRL refers to the process where students











activate and sustain cognitions and behaviors systematically towards the attainment of academic learning goals (Zimmerman, 2001). Based on the body of literature, it can be concluded that in the process of SRL, learners need to set their learning goals, make their learning plans, choose their learning strategies, monitor their learning processes, evaluate their learning outcomes and suppress interference.

Earlier research had shown that SRL has a positive influence on academic

success (Pintrich & DeGroot, 1990; Schunk, 1994). Subsequent research also reported that individuals who used SRL strategies in their learning performed better than those who did not apply self-regulation to their learning among traditional learners (Hofer & Yu, 2003; Nota, Soresi, & Zimmerman, 2004; Pintrich & De Groot, 1990; Pintrich & Zusho, 2007; Schunk & Zimmerman, 2006; Zimmerman, 2008). As 05-stroh32 the present study sought to explore SRL and academic performance in the nontraditional learner's context. In addition, the study proposed to explore the effect of gender and age as the moderating variables on the relationship between SRL and academic performance. Although studies on SRL have examined individual differences such as gender and age among learners, the literature on whether gender and age are related to SRL is inconsistent and inconclusive (Pintrich & Zusho, 2007). To date, there is limited evidence of moderator or interaction effects of gender and age, and very few researchers have explicitly tested for these effects. Yet, identifying possible moderator effects on the relationship between SRL and academic performance can help us to better understand the nature of the relationship between these variables and, in turn, can suggest whether SRL interventions (if the need arises) should be tailored according to gender and age differences.









This study was about an investigation into the underlying constructs of a new instrument to measure the correlation between SRL and academic performance and determining the best SRL predictors in this relationship among nontraditional learners in a distance education primary school teachers' graduate program. In addition, the moderating effects of gender and age on the relationship between SRL and academic performance was examined, followed by an inquiry of the types of barriers faced by these nontraditional learners and how SRL was utilized to resolve these barriers. Although there are many studies about SRL done in other countries, however, there is a void in the literature on the role of SRL and academic performance especially in distance education among nontraditional learners who play multiple roles and lead complex adult lives. They also encounter challenges and barriers different from those faced by traditional learners. The study examined academic performance because 05 teacher academic performance during their attainment of a degree has been known to affect teacher quality and improve their students' performance in the classrooms (Wenglinsky, 2000). According to the Organization for Economic Cooperation and Development (OECD) 2007, both historically and internationally, academic performance has long been one of the most important issues in complex civilizations, ranging from its ancient role in selecting civil servants in the Middle East, India and China to its current significance as a driver of advanced economies.

### 1.2 Background to the Study

In response to the physical constraints of time, space and place in providing higher educational opportunities for nontraditional learners, many achievements and











innovations of new delivery systems in distance education have been made in teacher education in the country to provide a second chance for serving teachers, who had missed out on a tertiary education. Teacher quality or teacher effectiveness is viewed as one of the most important inputs in an education system. It is worth noting that in line with this, the Malaysian Education Blueprint (2013–2025) pointed out that "the quality of teachers is the most significant school-based determinant of student outcomes" (p.137). Hence, there is a broad consensus that academic performance of students can be raised if the quality of teachers improved. For example, Wenglinsky (2000) asserted that teacher effectiveness is the single biggest contributor to student success outweighing all other factors, such as class size, socioeconomic status, and gender. Wenglinsky also found that evidence suggested that student performance was higher when teachers had a university degree in the field they taught. To illustrate

was put forward by Angel Gurría, Secretary-General of the OECD, at the presentation of the Program for International Student Assessment (PISA) 2009 results. The OECD, a Paris-based group that includes the world's major industrial powers provides the PISA covering reading, mathematics and science domains that are given to 15-year-old students. The PISA 2009 identified several top fliers such as China (Shanghai), Korea, Hong Kong, Singapore, Finland, Canada, Japan and New Zealand. One of the lessons drawn from the top performing education systems is that teachers' quality pays, strong education systems pay careful attention to the profile of their teachers and much like corporations, they make sure that their teaching force is the best (Gurría, 2010). Needless to say, these provide the justifications for efforts being made to upgrade the qualifications of teachers in this country in order to raise the standard of education in schools.









