UNIVERSITI PUTRA MALAYSIA

COMPARISON BETWEEN COMPETENT AND BASIC ENGLISH LANGUAGE LEARNERS USING COGNITIVE AND AFFECTIVE LEARNING STRATEGIES

AMALI BINTI AHMAD KHAIR

FPP 2008 27
COMPARISON BETWEEN COMPETENT AND BASIC ENGLISH LANGUAGE LEARNERS USING COGNITIVE AND AFFECTIVE LEARNING STRATEGIES

By

AMALI BINTI AHMAD KHAIR

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Partial Fulfillment of the Requirement for the Degree of Master of Science

March 2007
DEDICATION

To my late father,
Hj. Ahmad Khair bin Taib,

For his love, understanding and unrelenting support till the end;

To my mother,
Arfah @ Jamaliah bt. Hj. Ahmad,

For her love, everlasting ‘wake up call’ and 100% encouragement;

To my auntie,
Atikah bt. Hj. Ahmad,

For her understanding, support in her own right and constructive criticisms;

To my siblings,
Dik Nie, Shal, Wahdi, Yang and Deena,

For their love, unfailing ‘push’ and support in their own individual way;

To my beloved soulmate and my tower of strength, my husband,
Juwahir bin Kayan,

For his undying love, endless understanding and eternal support;

And

To my three beautiful daughters,
Afif Bazlaa, Afif Nuhaa and Afif Ulfaa,

For their beautiful selves and smiles, joys and laughter, and forever ‘chaos’ and ‘noises’ in my life.

All of you mean so much to me and you are all truly and absolutely beautiful in my eyes and in my heart.

Nothing is wasted,
Nothing is forgotten...
This study was carried out mainly to examine the disparity of achievement between the excellent and below the average students in relation to their cognitive and affective application in their learning styles. The study focused on whether or not the application of CCTS (Critical and Creative Thinking Skills) or TS (Thinking skills) in their learning strategies is significant.

Therefore, a two-fold (quantitative and qualitative method) quasi-experimental one group pretest posttest type of study was conducted to investigate the phenomenon. This study consists of three methods of data collection; responses from the
questionnaire, taped recording responses from the interviews and the analysis of the transcribed lessons conducted. A comparative study between two types of respondents are involved in this study; namely the excellent and below the average students using English as a second language thus 129 students of B(Ed.) TESL in UPM were being partially experimented on. The subjects were required to respond to the five section questionnaire of forty nine (49) items which included section A – Student’s profile and Habitual Tasks, section B – Parents’ or Guardian’s Background, section C – What a Good Learner Can Teach Us (a perception of excellent students on how to excel), section D (i) and (ii) – COGAFF and section E – Multiple Intelligence Inventory; for the quantitative part of the study. Analyses of the quantitative data were carried out using SPSS Version 13.0. The qualitative aspect of the study was basically based on the interview on how they learnt English, their experience in the process of learning the language and their strategies on how to excel in learning the target language. The transcriptions of the two lessons were provided in this study to show that the application of CCTS can either be in an ‘overt’ or direct kind of intervention or in a ‘covert’ or subtle manner of teaching as well. This was shown in the consolidation section when the researcher added another six (6) excellent students from the Al Bukhary Complex as she found that the initial part of the study proved to be insufficient in providing data of the excellent students. Therefore, the total number of respondents involved in this study was 135 students.
From the descriptive analyses of the data it was discovered that the two groups of students exhibit differences in their habitual tasks and these differences can be narrowed through intervention. From the analyses of paired samples t tests and independent samples t tests of SPSS Version 13.0 it was discovered that the two groups of students also exhibit significant differences in their perception of what good learners can teach them in terms of strategies and learning styles; in their strategies and learning styles based on their cognitive and affective domains; and also in their thinking skills, all of which can be narrowed using intervention.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi sebahagian keperluan untuk ijazah Master Sains

PERBANDINGAN DI ANTARA PELAJAR-PELAJAR KOMPETEN DAN PELAJAR-PELAJAR ASAS BAHA萨 INGGERIS DENGAN MENGGUNAKAN STRATEGI PEMBELAJARAN KOGNITIF DAN AFEKTIF

Oleh

AMALI BINTI AHMAD KHAIR

March 2007

Pengerusi: Ghazali Mustapha, PhD

Fakulti: Pengajian Pendidikan

Kajian ini bertujuan untuk mengkaji perbezaan pencapaian di antara pelajar-pelajar cemerlang dan pelajar-pelajar yang lemah berdasarkan kepada aplikasi kognitif dan afektif di dalam stail pembelajaran mereka. Kajian ini menjurus kepada menjawab persoalan samaada aplikasi kemahiran berfikir secara kreatif dan kritikal (CCTS) ataupun kemahiran berfikir (TS) di dalam strategi pembelajaran mereka signifikan. Untuk mencapai tujuan ini satu kajian separuh ekspiremen yang menggunakan kaedah perbandingan pra dan pasca kajian telah dijalankan.
Kajian ini mengandungi tiga kaedah pengumpulan maklumat iaitu; penggunaan borang kaji selidik; jawapan dari temuduga yang dirakamkan; dan dari analisa transkripsi pengajaran yang telah dijalankan. Kajian ini juga melibatkan satu perbandingan di antara pelajar-pelajar cemerlang dan yang lemah dalam aspek penguasaan Bahasa Inggeris sebagai bahasa kedua. Sejumlah 129 pelajar B. (Ed ) TESL di Universiti Putra Malaysia telah disoal selidik untuk kajian ini. Responden telah dikehendaki menjawab sebanyak 49 soalan di dalam 5 bahagian melalui borang soal selidik iaitu; Bahagian A – Profail Pelajar dan Tugas Rutin (Habitual Tasks); Bahagian B – Latar Belakang Ibubapa atau Penjaga; Bahagian C – Persepsi Apa Yang Boleh Diajar Oleh Seorang Pelajar Cemerlang (satu persepsi bagaimana pelajar cemerlang beroleh kejayaan); Bahagian D (i) dan (ii) – COGAFF; dan Bahagian E – Inventori Kecerdasan Pelbagai (Multiple Intelligence). Analisa data kuantitatif telah dibuat menggunakan SPSS Versi 13.0 manakala analisa kualitatif melalui temuduga yang menjurus kepada bagaimana responden belajar Bahasa Inggeris, pengalaman mereka di dalam mempelajari bahasa tersebut dan strategi-strategi bagaimana untuk mencapai kecemerlangan di dalam penguasaan bahasa tersebut. Transkripsi pengajaran-pengajaran telah dibuat di dalam kajian ini untuk menunjukkan aplikasi kemahiran berfikir secara kreatif dan kritikal (CCTS) boleh dilaksanakan melalui kaedah pencelahan yang nyata (overt intervention) ataupun tidak nyata (covert intervention). Bagi menguahkan lagi keputusan kajian, pengkaji telah menambah sejumlah enam orang lagi responden yang cemerlang dari Kompleks Pendidikan Al Bukhary, Alor Star di dalam kajian beliau untuk dianalisa
secara kualitatif dan kuantitatif menjadikan jumlah responden seramai 135 orang kesemuanya.

Dari analisa deskriptif yang dijalankan, kajian ini mendapati bahawa kedua-dua kumpulan pelajar terbabit menunjukkan perbezaan dari segi tugas rutin (habitual tasks) yang mana jurang itu dapat dirapatkan melalui pencelahan (intervention). Melalui analisa yang menggunakan paired samples t test dan independent samples t test SPSS Versi 13.0, kajian ini telah mendapati bahawa kedua-dua kumpulan pelajar menunjukkan perbezaan yang signifikan di dalam persepsi mereka terhadap apa pelajar cemerlang dapat mengajar mereka dari segi strategi dan stall pembelajaran; di dalam strategi dan stall pembelajaran berlandaskan aspek kognitif dan afektif mereka; dan juga di dalam kemahiran berfikir, yang mana kesemua perbezaan ini dapat dikuangkan melalui kaedah pencelahan (intervention/treatment).
ACKNOWLEDGEMENTS

In the name of Allah the most gracious and merciful who has given me the will and strength to complete this thesis. Alhamdulillah, finally.

My endless gratitude and admiration to my supervisor, Ghazali Mustapha, PhD, for his inexhaustive guidance and supervision that I cannot begin to imagine a mere mortal is capable of having. As shown by this great individual, this is not only a completion of an academic achievement but it also involves a spiritual journey that could ever be tested on a person. His incredible patience in pushing me from behind will not go unnoticed and certainly exemplary to many when a dedicated or devoted supervisor is needed to be taken as an example. I also wish to express my gratitude to my co-supervisors, Prof. Dr Turiman Suandi and Samsilah Roslan, Ph.D, for their patience and cooperation in reading my work and constructive comments.

I also wish to express my appreciation to the students who volunteered to be the subjects for this study; mainly the UPM students and the students from the Al Bukhary Complex. There were also students who had provided me with consistent moral support namely Bilal, Omar, Boussoury, Mukhtar, Ibraheem and others who had been very concerned with the completion of this thesis; from the bottom of my heart, I thank you.

Last but not least, my undying love and thanks to my parents for being my inspiration in carrying out this study. My appreciation goes also to my beloved siblings for being there whenever I need support and encouragement. A special utmost heartfelt thanks to my loving husband, for his constant love and support, emotionally, spiritually and physically. To my three forever beautiful daughters, Bazlaa, Nuhaa and Ulfaa, your tireless support when we spent countless late nights together and beautiful quiet strength in pushing ‘mama’ to complete this thesis had been my tower of strength and the radiant smiles and continuous humor is the remedy for all my stress. THANK YOU ALL!
Approval Sheet


Ahli Jawatankuasa Pemeriksa adalah seperti berikut:

Roselan Baki, PhD
Pensyarah
Fakulti Pengajian Pendidikan
Universiti Putra Malaysia
(Pengerusi)

Jayakaran Mukundan, PhD
Pensyarah
Fakulti Pengajian Pendidikan
Universiti Putra Malaysia
(Pemeriksa Dalam)

Noreen Noordin, PhD
Pensyarah
Fakulti Pengajian Pendidikan
Universiti Putra Malaysia
(Pemeriksa Dalam)

______________________________
HASANAH MOJHD. GHAZALI, PhD
Profesor dan Timbalan Dekan
Sekolah Pengajian Siswazah
Universiti Putra Malaysia

Tarikh:
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>DEDICATION</th>
<th>ii</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>vi</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ix</td>
</tr>
<tr>
<td>APPROVAL SHEET</td>
<td>x</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>xi</td>
</tr>
<tr>
<td>LIST OF TABLES AND FIGURES</td>
<td>xviii</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xxi</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td>xxii</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>xxiii</td>
</tr>
</tbody>
</table>

## CHAPTER

1 INTRODUCTION

Why do we need to review the origin of thinking skills?  1

Problem Statement  7

Objectives - General objective  12

Specific objectives  12

Research questions  13

Significance of the study  14

Scopes and limitations of the study  18

Theoretical framework  19

Thinking skills: Ghazali Mustapha’s COGAFF  20

Taxonomy  

Thinking skills: Gardner’s Multiple Intelligence  20

Theories of Learning Related to Thinking Skills of Different School of Thoughts  21

Behaviorism style  22

Cognitivism style  23
LITERATURE REVIEW

What is the significance of the literature review to the study? 29
Why are the headings in question forms? 30
Which school of thoughts? (Major theories of learning) 30
Behaviorist perspectives 31
Cognitivist perspectives 35
Constructivist perspectives 36
Collaborative learning 38
Humanistic perspectives 39
TESL Methodology 42
Academic style/ Grammar Translation Method 43
The Audiolingual style 44
The communicative style – Social type 46
The communicative style – Information type 46
Thinking skills : From the viewpoint of the historical background 47
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects and sampling procedures</td>
<td>102</td>
</tr>
<tr>
<td>Curriculum layout</td>
<td>105</td>
</tr>
<tr>
<td>Assessment instruments</td>
<td>106</td>
</tr>
<tr>
<td>Instrument 1 – Ghazali Mustapha’s COGAFF Taxonomy</td>
<td>107</td>
</tr>
<tr>
<td>Instrument 2 – Multiple Intelligences and MIDAS</td>
<td>111</td>
</tr>
<tr>
<td>The research instrument – the Questionnaire</td>
<td>115</td>
</tr>
<tr>
<td>TSI (Thinking Skill Inventory)</td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>121</td>
</tr>
</tbody>
</table>

4 RESULTS AND ANALYSIS OF DATA

Why do we provide our research with results? 123
Need we analyze the data? Why?
Research questions 123
Research hypotheses 124
The framework of the study 127
The quantitative section – The analysis 130
Analysis of hypothesis 1 - frequencies 133
Analysis of hypothesis 1 – Wilcoxon Signed Ranks Test 137
Analysis of hypothesis 2 142
Analysis of hypothesis 3 143
Analysis of hypothesis 4 144
Analysis of hypothesis 5 145
Analysis of hypothesis 6 148
Analysis of hypothesis 7 149
The qualitative section – The analysis
Why do we interview the students?
The analysis of the interview – the consolidation section
Student 1
Student 2
Student 3
Student 4
Student 5
Student 6
Why do we use contextual based transcription to transcribe the interview?
Why is the combination of both cognitive and affective domains important?
Why do we need to integrate Motivation and Self Concept?
What is the definition of motivation?
Why is motivation important?
How are motivation and emotion related?
What are the sources of motivation? (i)
Intrinsic process motivation
Instrumental motivation
External self concept based motivation
Internal self concept based motivation
Goal internalization
Why do we need to incorporate a self concept-based of learning motivation?
Why do we need to structure and develop our self
Why is the Perceived Self crucial in promoting behavior change?

Self-Esteem/Self concept

What are the sources of motivation? (ii)

Why should we consider the impact of self concept on motivational processes?

Expectancy

Attribution

Reinforcement

Behavior/Attitude change

Attitude Change Continuum:

Possible learning/acquisition Strategies

Analysis of the Consolidation section – Transcriptions

Why do we need the transcriptions?

Transcription 1

Transcription 1: A Lesson on Fear

Transcription 2

Transcription 2: A Mystery

The analysis – Transcription 1

Interpretation of the result Transcription 1

The analysis – Transcription 2

Interpretation of the result Transcription 2

Abbreviation

Conclusion
## DISCUSSION AND CONCLUSION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>234</td>
</tr>
<tr>
<td>Discussion of the findings</td>
<td>234</td>
</tr>
<tr>
<td>Conclusion of the findings</td>
<td>239</td>
</tr>
<tr>
<td>Discussion and conclusion on the statistical data –</td>
<td>239</td>
</tr>
<tr>
<td>quantitative data</td>
<td></td>
</tr>
<tr>
<td>Discussion and conclusion on the interview – qualitative</td>
<td>243</td>
</tr>
<tr>
<td>data</td>
<td></td>
</tr>
<tr>
<td>Discussion and conclusion on the transcribed lessons</td>
<td>245</td>
</tr>
<tr>
<td>Suggestions for further study</td>
<td>254</td>
</tr>
<tr>
<td>Research Limitations</td>
<td>256</td>
</tr>
<tr>
<td>Bibliography</td>
<td>258</td>
</tr>
<tr>
<td>Appendices</td>
<td>280</td>
</tr>
</tbody>
</table>
LIST OF TABLES AND FIGURES

TABLES

3.1 : Quantitative Style vs Qualitative Style
3.2 : The Quasi-experimental One-Group Pretest/Posttest Design
3.3 : Thinking Skills Inventory Achievement (TSIA)
3.4 : Reliability Analysis of the Dependent Variables
3.5 : Multiple Intelligences Table
3.6 : Style of Learning
3.7 : TESL Methodology (adopted)
3.8 : COGAFF Taxonomy – the levels adopted
3.9 : Final Total of the Group
3.10 : COGAFF TAXONOMY
4.1(i) : Thinking Skill Inventory of Achievement (TSIA)
4.1(ii) : Thinking Skill Inventory of Achievement (TSIA) based on CGPA only
4.2 : v6 - Students taking vitamins or supplements
4.3 : v7 - Students engaged in sports
4.4 : v8 - Students liked to stay indoors
4.5 : v9 - Students helped out with local charity
4.6 : v10 - Students who took up other subjects
4.7 : Mean difference of pretest and posttest of what good learners can teach them in terms of strategies and language learning styles using paired sample T test
4.8 : Mean difference of pretest and posttest of what good learners can teach them in terms of strategies and language learning styles between excellent and below average students using independent samples T test
4.9: Mean difference of pretest and posttest of students' strategies and language learning styles based on the Cognitive and Affective Domains (TARO and JIGGS) before and after intervention using paired sample t-test

4.10: Mean difference of pretest and posttest of students' strategies and language learning styles based on the Cognitive and Affective Domains (TARO and JIGGS) between excellent and below average students using independent samples T test

4.11: Mean difference of pretest and posttest of Multiple Intelligence before and after intervention using paired sample T test

4.12: Mean difference of pretest and posttest of Multiple Intelligences between excellent and below average students using independent samples T test

4.13: Multiple Intelligences Table

4.14: Style of Learning

4.15: TESL Methodology (adopted)

4.16: COGAFF Taxonomy – the levels adopted

4.17: Transcription 1 - Style of Learning

4.18: Transcription 1 - TESL Methodology adopted

4.19: Transcription 1 - COGAFF Taxonomy – the levels adopted

4.20: Comparison Between Low Order Questions and High Order Questions Posted during the lesson

4.21: Transcription 1 - Multiple Intelligences

4.22: Transcription 2 - Style of Learning

4.23: Transcription 2 - TESL Methodology adopted

4.24: Transcription 2 - COGAFF Taxonomy – the levels adopted

4.25: Transcription 2 - Comparison Between Low Order Questions and High Order Questions Posted during the lesson

4.26: Transcription 2 - Multiple Intelligences

4.27: Abbreviation
List of Diagrams/Transcriptions/Charts

Diagram 3.1 : Framework of the Research
Diagram 3.2 : Conceptual Framework of the Research Proposed
Diagram 3.3 : Proposed Administration of the Research
Diagram 3.4 : The Actual Administration of the Research
Diagram 4.1: The framework of the study
Transcription 1 : A lesson on Fear
Transcription 2 : A Mystery

LIST OF ABBREVIATIONS/NOTATIONS/GLOSSARY OF TERMS

AS - Average students
BAS - Below the average students
CCTS - Critical and creative thinking skills
COGAFF - Cognitive and Affective Taxonomy
EPT - English Placement Test
EQ - Emotional quotient
ESL - English as a Second Language
HOTs - Higher Order Thinking skills
KBKK - Kemahiran Berfikir secara Kritis dan Kreatif
LOTs - Lower Order Thinking skills
MI - Multiple Intelligences
MoE - Ministry of Education
MUET - Malaysian University English Test
PMR - Penilaian Menengah Rendah
SPM - Sijil Pelajaran Malaysia
STPM - Sijil Tinggi Pelajaran Malaysia
TESL - Teaching English as a Second Language
TS - Thinking skills
TSIA - Thinking Skills Inventory of Achievement
TSI - Thinking Skills Inventory
UPM - Universiti Putra Malaysia
UPSR - Ujian Penilaian Sekolah Rendah

LIST OF APPENDICES

Appendix 1 : Research questionnaire
Appendix 2 : Questions for the interviewee
Appendix 3 : Critical and Creative Thinking Skills(CCTS)
Appendix 4 : Critical and Creative Thinking Skills(CCTS)
Appendix 5 : The National Philosophy of Education
Appendix 6 : Bloom’s Taxonomy
Appendix 7 : COGAFF Taxonomy of Levels of Thought Processes (LOTP)
Appendix 8 : CCTS/KBKK
Appendix 9 : Partial Integration of CCTS/KBKK
Appendix 10 : Socratic Questioning
Appendix 11 : Transcription tables
Appendix 12 : Implications for Teaching
Appendix 13 : Sources of Motivation and Motivational Inducement Systems
Appendix 14 : Sekaran (2003) Table of Sample Size for a Given Population Size

Appendix 15 : Statistical Analysis
  Frequencies
  Wilcoxon Signed Ranks Test
  t-test
  Normality Test – Explore

Appendix 16 : The EDU 3043 Module
This thesis is submitted to the Senate of Universiti Putra Malaysia and has been accepted as partial fulfillment of the requirement for the degree of Master of Science. The members of the Supervisory Committee are as follows:

**Ghazali Mustapha, PhD**  
Lecturer  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Chairman)

**Turiman Suandi, PhD**  
Professor  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Member)

**Samsilah Roslan, PhD**  
Lecturer  
Faculty of Educational Studies  
Universiti Putra Malaysia  
(Member)

_______________________________  
**AINI IDERIS, PhD**  
Professor/Deputy Dean  
School of Graduate Studies  
Universiti Putra Malaysia

Date:
DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations, which have been dully acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

________________________
AMALI BINTI AHMAD KHAIR

Date: