

Advances in Language and Literary Studies

ISSN: 2203-4714 www.alls.aiac.org.au



EFL Learners' Language Learning Strategies: A Case Study at Qassim University

Mohammed Mahib ur Rahman*

Department of English Language and Translation, College of Arabic Language and Social Studies, Qassim University, Saudi Arabia Corresponding Author: Mohammed Mahib ur Rahman, E-mail: drmahib.qu@gmail.com, m.rahman@qu.edu.sa

ARTICLE INFO

Article history
Received: July 10, 2020
Accepted: September 18, 2020
Published: October 31, 2020
Volume: 11 Issue: 5
Advance access: October 2020

Conflicts of interest: None Funding: None

Key words:

Language Learning Strategies (LLS), English as a Foreign Language, EFL Students, Qassim University

ABSTRACT

Language learning strategies (LLS) play a significant part in learning a second or foreign language. These strategies support and simplify the process of language learning for students. Hence, this study endeavors to investigate LLS applied by students at the Department of English Language and Translation, Qassim University in learning English language as a foreign language. The present study applied "Strategy Inventory for Language Learning" (SILL), which was established by Oxford (1990) to collect data. 30 students from level four took part voluntarily, and later data was analyzed to provide means, distribution of frequencies, standard deviation, percentages, and total scores of data set. The study discloses that EFL students were accustomed to the whole six LLS groups. Moreover, the study also reveals that some students used more LLS than other students, although the difference was significant across all students. These LLS groups are; "compensation, social strategies, affective, cognitive, metacognitive, and memory with a medium level of frequency use for over-all strategies (M = 3.49)". The most repeatedly applied strategies by students of level four from these six strategies are as follows from the top "metacognitive, compensation, social, memory, cognitive, and affective strategies". The findings would help teachers and students to be aware of LLS while in teaching and learning English as a foreign language.

INTRODUCTION

Language learning strategies (LLS) have played an essential key role in second and foreign language learning. LLS have contributed much to promote and assist language learning to both EFL and ESL students. Therefore, many kinds of research on LLS have been published and flourished in the 1970s with the theory of cognitive revolution, and a number researches have shown an adjacent association between LLS, language learning, and achievements. Oxford explains LLS as "specific action taken by the learner to make learning easier, faster, more enjoyable, more self-directed, and more effective and more transferable to new situations" (1990: 8). She also continues saying that learning strategies take a substantial part for language students and learners to improve their foreign or second language abilities. Besides, for the process of learning a foreign language, students or learners have to be very aware of using adequate learning strategies (Meshyan & Hernandez, 2002; Sueraya, Ismail, Arifin & Ismaiel, 2010; Al-Wazzan, 2020; Salma, 2020). Consequently, not having appropriate language learning strategies turns out to be a problem for students and learners to develop their foreign or second language.

A few studies also propose that learning strategies are capable of helping students to improve their achievement in language skills (Bremner, 1998; O'Malley, 1985; Politzer, 1983). A study by Anida (2003) has effectively confirmed that EFL students are capable of developing their performances, interests, self-confidence, and attitude towards the learning English by following significant language learning strategies. The study further shows a connection between LLS and language skills. This has been connected to the amount and choices of strategies applied in learning and how suitable strategies are utilized in language learning.

On the other hand, a significant number of English learners regarded learning the English language as difficult and time-consuming to acquire fully, as noticed in several studies (i.e., Burk, 2005; Duereh, 1999; Doka, 2000; Wan Nordin, 2006; Etae, S. 2009; Qais, Zainab & Hamidah, 2007; Hobrom, 2004; Sultana, 2020; El-Haj, 2019).

For that reason, this study efforts to investigate "Language Learning Strategies (LLS)" applied by EFL students in learning the English language at the department of English. The study also aims to categorize the most common strategies used by these students.

The context and its scope of using LLS in this study are based on the "Oxford Taxonomy." She distributes "LLS" into two essential taxonomies: "direct and indirect strategies" that are further segmented to a total of six sub-classes. "The direct strategies consisted of memory, cognitive, and compensation strategies. On the other hand, the indirect

strategies contained metacognitive, affective, and social strategies" (Oxford, 1990).

Research Questions

Despite the progress that has been made in the conceptualization of teaching and investigating strategies, and their assistances in the process of teaching and learning English, still more empirical studies are needed. From the above review of studies that shed light on LLS in learning English, the current study will answer the following research questions:

- What are "Language Learning Strategies (LLS)" applied in learning English as a foreign language at the English Department at Qassim University?
- What are most common strategies applied by EFL students in the department at Qassim University?

OBJECTIVES OF THE STUDY

The present empirical study emphasizes in identifying the following primary objectives:

- To investigate "Language Learning Strategies (LLS)" applied in learning English as a foreign language by level four students at the Department of English Language and Translation.
- 2. To categorize the most common strategies applied by EFL students in the department.

RESEARCH METHODOLOGY

The researcher in this study used the survey method, which is usually applied in educational studies. Survey research strategies are techniques in quantitative research in which the researchers detect and investigate students' surveys to define the characteristics of the sample to infer opinions, solutions, and recommendations (Creswell, 2008).

Sample

Thirty students studying English as a foreign language in the English department at Qassim University were considered for this study. They are level four students and have already studied English for two years in the department. The questionnaires were handed to all of them.

Scale

In this study, the researcher used a questionnaire to collect data to respond to the objectives of the study. The questionnaire was separated into two parts. The first part was the demographic background of the participants (3 items). The second was about "Strategy Inventory for Language Learning" (SILL), which was established by Oxford (1990). It was used to investigate the type and regularity of strategies accomplished by students in 48 items. These 48 items were based on six different strategy groups used in the study, namely; "memory strategies (9 items), cognitive strategies (11 items), compensation strategies (6 items), metacognitive strategies (9 items), affective strategies (6 items), and

social strategies (7 items)". Also, the scoring scale for all 48 items in SILL questionnaire was classified by using a 5-likert scale such 1 indicated "Never or almost never true of me" (Never), 2 indicated "Generally not true of me" (Not true), 3 indicated "Somewhat true of me" (Somewhat), 4 indicated "Generally true of me" (True), and 5 indicated "Always or almost always true of me" (Always).

Data Analysis

All answers on the returned questionnaire were tabularized in numerical code for the following analyses. Data from the questionnaire were coded and entered into a computer database using a software package, the "Statistical Package for Social Sciences (SPSS)" to analyze and achieve quantitative data for this study.

A descriptive analysis of all variables was carried out to offer implications to the data. The descriptive analysis provides simple summaries and general information about the study's data set where the researcher could obtain descriptive procedures. Therefore, the researcher would understand the level of distribution and its spread (Robson, 1997).

RESEARCH FINDINGS AND DISCUSSION

Table 1 above indicated that fourth-year students' utilization of memory strategies in learning English fell within the mean score of 2.63-3.93. The strategy "thinking of relationships between what is already known and new things are currently learnt in English" (item 5) was the most repeatedly used by them, holding the mean of 3.93. While, the least frequently used was the strategy "using flashcards to remember new English words" (item 3), where its mean score carried only 2.63.

Concerning the results of using cognitive strategies, Table 2 exhibited that the mean score of strategy "reading for pleasure in English" (item 10) was observed to be the highest with 3.66 whereas, the lowest mean (2.56) appertained to the strategy "watching English language TV shows spoken in English or going to movies spoken in English" (item 19).

Based on the statistical data for compensation strategies revealed in Table 3 above, it showed that the highest mean score (3.96) was shared by the strategy "using gestures when unable to think of a word during a conversation in English" (item 24) and the strategy "using a word or phrase that means the same thing if unable to think of an English word" (item 25). The strategy "reading English without looking up every new word" (item 21), on the other hand, carried the smallest mean of 2.76.

It was found in Table 4 above that the mean of descriptive statistics for metacognitive strategies was ranged between 3.23 and 4.16. To illustrate, the mean of 3.23 belonged to the strategy "planning the schedule in order to have enough time to study English" (item 34), and the mean of 4.16 pertained to the strategy "paying attention when someone is speaking English" (item 27).

Table 5 above revealed that among 6 items regarding affective strategies, the participants desired to apply the strategy "encouraging themselves to speak English even

8 ALLS 11(5):6-11

Table 1. Memory strategies

Item no	Statement	Never % (N)	Not true % (N)	Somewhat % (N)	True % (N)	Always % (N)	Mean
1	Memory strategies "I review English lessons often".	3.3 (1)	-	73.3 (22)	23.3 (7)	-	3.16
2	"I use rhymes to remember English words".	3.3 (1)	10.0(3)	63.3 (19)	23.3 (7)	-	3.06
3	"I use flashcards to remember new English words".	13.3 (4)	26.0 (8)	43.3 (13)	16.7 (5)	-	2.63
4	"I physically act out new English words".	-	16.0 (7)	43.3 (13)	36.7 (11)	3.3 (1)	3.26
5	"I think of relationships between what I already know and new things I learn in English".	-	3.3 (1)	13.3 (4)	70.0 (21)	13.3 (4)	3.93
6	"I use new English words in a sentence so I can remember them".	-	6.7 (2)	23.3 (7)	60.0 (18)	10.0 (3)	3.73
7	"I remember a new English word by making a mental picture of a situation in which the word might be used".	3.3 (1)	10.0 (3)	26.7 (8)	50.0 (15)	10.0 (3)	3.53
8	"I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign".	-	13.3 (4)	16.7 (5)	56.7 (17)	13.3 (4)	3.70
9	"I connect the sound of a new English word and image or picture of the word to help me remember the word".	-	13.3 (4)	33.3 (10)	36.7 (11)	16.7 (5)	3.56

Table 2. Cognitive strategies

Item no	Statement	Never % (N)	Not true % (N)	Somewhat % (N)	True % (N)	Always % (N)	Mean
10	Cognitive Strategies: "I read for pleasure in English".	-	10.0 (3)	23.3 (7)	56.7 (17)	10.0 (3)	3.66
11	"I practice the sounds in English".	-	10.0(3)	30.0 (9)	53.3 (16)	6.7 (2)	3.56
12	"I start conversations in English".	3.3 (1)	20.0 (6)	33.3 (10)	40.0 (12)	3.3 (1)	3.20
13	"I try to talk like native English speakers".	-	20.0 (6)	30.0 (9)	36.7 (11)	13.3 (4)	3.43
14	"I write notes, messages, letters or reports in English".	3.3 (1)	20.0 (6)	46.7 (14)	30.0 (9)	-	3.03
15	"I use the English words I know in different ways".	-	6.7 (2)	33.3 (10)	60.0 (18)	-	3.53
16	"I try not to translate word for word".	-	13.3 (4)	33.3 (10)	43.3 (13)	10.0(3)	3.50
17	"I say or write new English words several times".	-	6.7 (2)	36.7 (11)	53.3 (16)	13.3 (4)	3.53
18	"I first skim in English passage then go back and read carefully".	3.3 (1)	3.3 (1)	36.7 (11)	40.0 (12)	16.7 (5)	3.63
19	"I watch English language TV shows spoken in English or go to movies spoken in English".	16.7 (5)	33.3 (10)	26.7 (8)	23.3 (7)	-	2.56
20	"I make summaries of information that I hear or read in English".	3.3 (1)	13.3 (4)	40.0 (12)	43.3 (13)	-	3.23

they feel afraid of making a mistake" (item 40) with the highest frequency, with a mean of 3.86. On the other side, they used the strategy "writing the feelings in a language learning diary" (item 38); the mean was 2.20.

Finally, Table 6 above displayed that the frequency of using social strategies was range within the mean of 3.33-3.83. Certainly, the strategy "asking questions in English to other students or native English speakers" (item 42) was the least frequently used by the students, carrying the mean of 3.33. The most frequently used by them on the contrary (mean 3.83) were the strategy "discussing English lesson with friends"

(item 44) and "asking the other person to slow down or repeat something in English if they do not understand" (item 48).

As indicated in Table 7 above, the metacognitive strategy was the highest rank used by the students. The mean score was 3.74, followed by a compensation strategy, with a mean of 3.61. This mean score (3.61) was slightly higher than the mean score of social strategy (3.58). Furthermore, memory strategy was ranked in the fourth highest mean (3.40), and cognitive strategy was in the fifth (3.35) relatively. Surprisingly, the affective strategy was the least frequently used by the students, possessing a mean of 3.29. The Metacognitive strategy

 Table 3. Compensation strategies

Item No	Statement	Never % (N)	Not true % (N)	Somewhat % (N)	True % (N)	Always % (N)	Mean
21	Compensation strategies: "I read English without looking up every new words".	13.3 (4)	30.0 (9)	23.3 (7)	33.3 (10)	-	2.76
22	"I try to guess what other person will say next in English"	3.3 (1)	10.0 (3)	30.0 (9)	50.0 (15)	6.7 (2)	3.46
23	"To understand unfamiliar English words, I make guesses".	-	-	23.3 (7)	63.3 (19)	13.3 (4)	3.90
24	"When I can't think of a word during a conversation in English, I use gestures".	-	3.3 (1)	16.7 (5)	60.0 (18)	20.0 (6)	3.96
25	"If I can't think of an English word, I use a word or phrase that means the same thing".	-	10.0 (3)	16.7 (5)	40.0 (12)	33.3 (10)	3.96
26	"I make up new words if I do not know the right ones in English".	-	10.0 (3)	36.7 (11)	36.7 (11)	16.7 (5)	3.60

 Table 4. Metacognitive strategies

Item no	Statement	Never % (N)	Not true % (N)	Somewhat % (N)	True % (N)	Always % (N)	Mean
27	Metacognitive strategies: "I pay attention when someone is speaking English".	-	-	10.0 (3)	63.3 (19)	26.7 (8)	4.16
28	"I try to find as many ways as I can to use my English".	-	13.3 (4)	33.3 (10)	30.0 (9)	23.3 (7)	3.63
29	"I think about my progress in learning English".	-	6.7 (2)	16.7 (5)	46.7 (14)	30.0 (9)	4.00
30	"I look for people I can talk to in English".	3.3 (1)	13.3 (4)	36.7 (11)	30.0 (9)	16.7 (5)	3.43
31	"I try to find out how to be a better learner of English".	-	6.7 (2)	16.7 (5)	53.3 (16)	23.3 (7)	3.93
32	"I have clear goals for improving my English skills".	3.3 (1)	-	30.0 (9)	46.7 (14)	20.0 (6)	3.80
33	"I look for opportunities to read as much as possible in English".	3.3 (1)	10.0 (3)	26.7 (8)	50.0 (15)	10.0 (3)	3.53
34	"I plan my schedule so I will have enough time to study English".	6.7 (2)	10.0 (3)	43.3 (13)	33.3 (10)	6.7 (2)	3.23
35	"I notice my English mistakes and use that information to help me do better".	-	-	16.7 (5)	70.0 (21)	13.3 (4)	3.96

 Table 5. Affective strategies

Item No	Statement	Never % (N)	Not true % (N)	Somewhat % (N)	True % (N)	Always % (N)	Mean
36	Affective Strategies: "I try to relax whenever I feel afraid of using English".	3.3 (1)	-	23.3 (7)	60.0 (18)	13.3 (4)	3.80
37	"I give myself a reward or treat when I do well in English".	6.7 (2)	26.7 (8)	30.0 (9)	33.3 (10)	3.3 (1)	3.00
38	I write down my feelings in a language learning diary.	30.0 (9)	40.0 (12)	13.3 (4)	13.3 (4)	3.3 (1)	2.20
39	"I notice if I am tense or nervous when I am studying or using English".	3.3 (1)	26.7 (8)	26.7 (8)	30.0 (9)	13.3 (4)	3.23
40	"I encourage myself to speak English even when I am afraid of making a mistake".	-	3.3 (1)	23.3 (7)	56.7 (17)	6.7 (5)	3.86
41	"I talk to someone else about how I feel when I am learning English".	-	6.7 (2)	33.3 (10)	46.7 (14)	13.3 (4)	3.66

10 ALLS 11(5):6-11

Table 6. Social strategies

Item no	Statement	Never % (N)	Not true % (N)	Somewhat % (N)	True % (N)	Always % (N)	Mean
42	Social Strategies: "I ask questions in English to other students or native English speakers".	3.3 (1)	6.7 (2)	46.7 (14)	40.0 (12)	3.3 (1)	3.33
43	"I practice English with other students".	6.7 (2)	3.3 (1)	43.3 (13)	40.0 (12)	6.7(2)	3.36
44	"I discuss English lesson with my friends".	3.3 (1)	3.3 (1)	20.0 (6)	53.3 (16)	20.0 (6)	3.83
45	"I ask for help from English speakers".	6.7 (2)	3.3 (1)	16.7 (5)	60.0 (18)	13.3 (4)	3.70
46	"I ask English speakers to correct me when I talk".	3.3 (1)	3.3 (1)	33.3 (10)	46.7 (14)	13.3 (4)	3.63
47	"I try to learn about the culture of English speakers".	3.3 (1)	16.7 (5)	26.7 (8)	46.7 (14)	6.7 (2)	3.36
48	"If I do not understand something in English, I ask the other person to slow down or say it again".	3.3 (1)	6.7 (2)	16.7 (5)	50.0 (15)	23.3 (7)	3.83

Table 7. Most strategies practiced

Strategies categories	N	M	SD	Level of use	No. in rank
Memory	30	3.40	.397	Medium	4
Cognitive	30	3.35	.482	Medium	5
Compensation	30	3.61	.576	Medium	2
Metacognitive	30	3.74	.605	Medium	1
Affective	30	3.29	.500	Medium	6
Social	30	3.58	.590	Medium	3
Overall		3.49	.397	Medium	

was found the most repeatedly used strategy, while the affective strategy was the least repeatedly used. These findings are consistent with those of the studies by Al-Buainain (2010) and Riazi (2007). The studies, as mentioned earlier, focused on using language learning strategies (LLS) in learning English as L2 and EFL by a variety of students. These results imply a mutual status of L2 or EFL of these two languages (English) in some countries and similar strategies used by the students of this language. On the contrary, few findings in this study seem to be contradictory with the results of the earlier study by Oxford (1990), who argues that Asian students, in general, prefer to apply rote memorization rather than other forms in the language learning process. The findings of this study agree with many previous studies that are carried out by Meshyan & Hernandez (2002) and Sueraya, Ismail, Arifin & Ismaiel (2010). Furthermore, Riazi (2007) asserts that nowadays, learning approaches requiring memorization of factual knowledge have been minimized in non-Western countries, and more effective learning approaches such as analysis, synthesis, and assessment of the instructional tools are incorporated in the learning and teaching of a target language.

CONCLUSION

The study was an attempt to identify the language learning strategies applied by undergraduate students at the Department of English Language and Translation, Qassim University. The results have identified that some students used more LLS than other students, although the difference was significant across all students. It was also observed that the most repeatedly applied strategies by students of level four are "metacognitive, compensation, social, memory, cognitive, and affective strategies".

Indeed, LLS play a considerable role in second and foreign language learning as it assists students in letting the process of learning faster, more comfortable, more amusing, more transferable to new conditions, more productive, and more self-directed (Bremner, 1998; O'Malley, 1985; Politzer, 1983). Hence, one way to effectively learn the target language is that students have to be conscious of using positive language learning strategies. The more strategies students use, the more successful and confident they will be. Therefore, for those who apt to be successful in foreign or second language learning in general and in the English language precisely, they should be acquainted with all six groups of LLS and apply them more knowingly.

Finally, it is also hoped that this study's findings may help instructors become more aware of LLS while teaching English Saudi EFL students and help students be aware of their ILLS order to improve their English skills.

REFERENCES

Abu Radwan, A. (2011). Effects of L2 proficiency and gender on choice of language learning strategies by university

- students majoring in English. *Asian EFL Journal*, 13(1), 115-147.
- Abu Shmais, W. (2003). Language learning strategy use in Palestine. *TESL-EJ*, 7(2), 1-17.
- Al-Buainain, H. (2010). Language learning strategies employed by English Majors at Qatar University: Questions and Queries. ASIATIC, 4(2), 92-120
- Al-Otaibi, G. (2004). Language learning strategy use among Saudi EFL students and its relationship to language proficiency level, gender and motivation. Unpublished PhD Dissertation, Indiana University of Pennsylvania.
- Al-Wazzan, Khetam Mohammad. (2020). The Efficiency of Using KWL Strategy in Teaching Arabic for Speakers of Other Languages. International Journal of English and Education. Volume 9, Issue 3.
- Anugkakul, G. (2011). A comparative study in language learning strategies of Chinese and Thai students: A case study of Suan Sunandha Rajabhat University. *European Journal of Social Sciences*, 19(2), (pp. 163-174).
- Bedell, D. & Oxford, R. (1996). Cross-cultural comparison of language learning strategies in the People's Republic of China and other countries. In R. Oxford (Ed.). *Language learning strategies around the world: Cross-cultural perspectives* (pp. 47-60). Honolulu: Second Language Teaching and Curriculum Center, University of Hawaii.
- Bremner, S. (1998). Language learning strategies and language proficiency: Investigating the relationship in Hong Kong. Asian Pacific Journal of Language Education, 1, 490-514.
- Brown, D. (1994). Principles of language learning and teaching (3rd ed.). Englewood Cliffs, NJ: Prentice Hall Regents.
- Brown, D. (2000). *Principles of language learning and teaching*. NY: Longman.
- Bruen, J. (2001). Strategies for successes: Profiling the effective learner of German. *Foreign Language Annals*, 34(3), 216-225.
- Burke, J. C. (2005). Arabic language study in the United States after 9/11. Muslim Education *Quarterly*, 22
- Cajkler, W. & Thornton, B. (1999). Language learner perceptions of strategy use in secondary school. *Language Learning Journal*, 20, 45-50.
- Chamot, A. (1999). Children's learning strategies in language immersion classrooms. *The Modern Language Journal*, 83(3), 319-339.
- ChapakiaCheuseng. (1996). Teaching Arabic as second language in Pattani, South of Thailand: Problems and Possibilities. Unpublished master's thesis, International Islamic University Malaysia.
- Creswell, John.W (2008). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (Fifth edition). New Jersey: Pearson Merrill Prentice.
- Doka, H, M (2000). Attitude of Malay student toward learning Arabic as a foreign language. Unpublished dissertation, University of Malaya, Malaysia

- El-Haj, Samia A. Abu. (2019). Students' Response towards Learning English through Using Blended Learning at Tertiary Level in the Middle East. International Journal of English and Education. Volume 8, Issue 2.
- Etea, S. (2009). The utilization of internet websites in teaching and learning Arabic in Southern Thailand Universities. Unpublished master's thesis, International Islamic University Malaysia.
- Hobrom, A. I. (2004). Online resources and learner autonomy: A study of college-level students of Arabic. Unpublished doctoral dissertation, The University of Texas at Austin.Available online.Retrieved March 21, 2012.http://lib.utexas.edu/etd/d/2004/hobromd4198/hobromd4198.pdf
- Meshyan, G., & Hernandez, A. (2002). Is native language decoding skill related to second language learning. Journal of Educational Psychology, 94(1), 14-22.
- O'Malley, J. M., Chamot, A. U., Manzanares, G. S., Kupper, L., & Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. Language Learning, 35, 21-46.
- Oxford, R. & Ehrman, M. (1989). Adult language learning and psychological type: A pilot study. *Journal of Psychological Type*, 16, 22-32.
- Oxford, R. (2003). Learning Styles & Strategies. GALA
- Oxford, R. (2011b). *Teaching and researching language learning strategies*. Harlow, Essex, UK: Pearson Longman.
- Oxford, R.L. (1990). Language learning strategies. What every teacher should know?. Boston: Heinle and Heinle.
- Politzer, R. (1983). An exploratory study of self-reported language learning behaviors and their relation to achievement. Studies in Second Language Acquisition, 6, 54-65.
- Qais Faryadi, Zainab Abu Bakar, & Hamidah Maidinsah. (2007). Determining an effective interactive multimedia Arabic language courseware for Malaysian primary school children: An alternative paradigm for learning in the classroom. Online Submission, Paper presented at National Conference on software engineering & computer systems (Kuantan, Malaysia, 2007). (ERIC Document Reproduction Service No.ED499175).
- Riazi, A. (2007). Language learning strategies use: perceptions of female Arab English majors. Foreign language Annual; Fall 2007; 40, 3; proquest education journals, p. 433.
- Robson, Colin (1997). Real World Research, a Resource for Social Scientists and Practitioner-Researchers. Oxford: Blackwell Publishers Ltd.
- Salma, Umme. (2020). Teaching English Pronunciation to the Students at the Secondary Level: Practises and Challenges. International Journal of English and Education. Volume 9, Issue 2.
- Sultana, Irin. (2020). Language Learning Style Preferences: KSA ESL Learners. International Journal of English and Education. Volume 9, Issue 3.