INVESTIGATING THE 'PROBLEM' OF MEMORISATION AMONG MALAYSIAN ENGLISH AS SECOND LANGUAGE (ESL) LEARNERS

Thang Siew Ming[1]
School of Language Studies and Linguistics
Faculty of Social Sciences and Humanities
University Kebangsaan Malaysia
thang@pkrisc.cc.ukm.my

Abstract

Research on approaches to studying has revealed a prevalent reliance on memorisation in the case of students from Asian cultures. If we were to associate memorisation with rote learning then this situation would represent a disturbing feature. But research has shown that memorisation in the Asian context is frequently accompanied with attempts to reach understanding (see for e.g. Kember and Gow, 1990; Biggs, 1996; Marton et al., 1996; Watkins, 1996; Hess and Azuma, 1991). In my PhD thesis, designed to investigate student learning processes and effectiveness of courses through the analysis of learning styles, approaches to studying, and perceptions of course, I found memorisation more dominant among Malaysian distance learners than on-campus learners. However, memorisation in these learners seems to be used in conjunction with understanding unlike in the on-campus learners where it is used in conjunction with surface approaches to studying.

INTRODUCTION

Research into the approaches to studying of students in Asian cultures revealed a prevalent reliance on memorisation, which is generally not evident in students in the West. If we were to associate memorisation with rote learning then this situation would represent a disturbing picture. But research has shown that this memorisation is frequently accompanied with attempts to reach understanding. Kember and Gow (1990) found a 'narrow approach' in which students from Hong Kong worked systematically through material section-by-section attempting to understand each new concept and then committing it to memory before proceeding to the next. Others have subsequently reported observations of memorisation occurring in conjunction with understanding (see for e.g. Kember and Gow, 1990; Biggs, 1996; Marton et al., 1996; Watkins, 1996; Hess and Azuma, 1991).

This article will first review some relevant research in this area and then proceed to discuss the case of memorisation in Universiti Kebangsaan Malaysia (UKM). The focus will be on the learning of English in an ESL context. The implications of this phenomenon to the teaching and learning of English in Malaysia will also be considered.

REVIEW OF LITERATURE

Kember (1996) suggested that the various forms of combining memorisation and understanding meant that approaches to studying might be better characterised as a continuum rather than dichotomous Deep and Surface Approaches (See Appendix A for the meanings of these terms). He described the intermediate position closer to the deep end of the spectrum as arising from students who have a preference for seeking understanding but recognise that their examinations normally require them to produce material. They, therefore try to understand the concepts and then make sure the material is learnt so that they can get a good grade in the examination. As for the intermediate position towards the surface end of the spectrum, he described it as arising because students, who initially has the intention to memorise, but discover that they have to be selective, as the memory load increases as they progress through school.

Watkins (1996) reporting interviews with Hong Kong secondary school students interpreted the continuum in terms of four stages beginning with reproduction by rote learning, and ultimately moving to understanding materials before committing it to memory. In the light of these research studies, memorising in the Asian context should not necessary be viewed negatively, as there is great likelihood that it can lead to understanding of underlying concepts, and ultimately to the achievement of higher grades in examinations.

Kember (2000) also offered his view with regard to genuine cases of rote learning. He suggested that this could arise from the use of didactic spoon-feeding, which does not encourage students to adopt a Deep Approach or think critically. Thus, the way the curriculum is designed and the way the course is taught can affect the learning approach, which students adopt. This means that the attitudes and beliefs of the instructors are relevant, as these have marked impact upon the nature of the courses they

teach (Gow and Kember, 1993; Kember and Gow, 1994; Kember 1997). This can be described as " teachers' expectations leading to a self-fulfilling prophecy". In other words, teachers' beliefs that students have a predilection for rote learning lead them to structure their courses to cater for this type of learning, which leads to students adopting a Surface Approach (Kember, 2000). However, it has to be pointed out that this explanation for the occurrence of rote learning is not limited to an Asian context. It has universal applicability. However, the likelihood of it being the cause of rote learning in an Asian context is higher because of the general misconception that Asian learners rely on rote learning (Kember, 2000).

Marton et al. (1996) reported that memorisation could be used to reach understanding in addition to understanding preceding memorisation. Kember (1996) and Watkins (1996) further found that the pattern of memorisation being used in conjunction with understanding was more prevalent in the distance learners than the on-campus learners. This finding suggests that it is incorrect to assume that distance learners are more prone towards rote learning. In fact the reverse may be true.

Although these studies were carried out mainly on Chinese in Hong Kong, I believe they may be applicable to Asians from other contexts too, such as the sample of this study, which comprised Malaysian of different ethnic Asian origins. The discussion that follows will discuss the applicability of these findings to the UKM context.

MEMORISATION IN THE UKM CONTEXT

The research study

This article discusses the results, relevant to the theme of Memorisation, arising from my PhD thesis (Thang, 2001) undertaken to investigate student learning processes and perceptions of courses. Before attempting to do that, I think it is necessary for me to give a brief outline of the research design and methodology of my thesis that have relevance to the discussion in this paper. The research instruments are:

- A revised version of Entwistle and Ramsden's Approaches to Studying Inventory(1983), named New Approaches to Studying Inventory (NASI) (See

Appendix A for the scales/subscales and their meanings and Appendix B for a copy of the Inventory)

- Semi-structured interviews

The questionnaire was administered to 347 distance learners and 367 on-campus students. 92.25 of the distance learners were between 24 to 40 years of age. In other words, most of them were adult learners. As for the on-campus learners, 96.2% were 23 and below. In other words, most of them were recent school leavers. The interviews were carried out on 13 distance learners. The results that have relevance to the theme of memorisation were found in the item analysis and factor analysis of the NASI. The interviews data provided further information on this theme.

PRESENTATION OF RELEVANT RESULTS

Item Analysis of items in NASI

A comparison of mean scores per item of the distance learners and on-campus learners revealed significant results for the following two items on the theme of Memorisation.

Scale	Subscale/items	Mean score		SD		F (df)
		DLs	OCLs	DLs	OCLs	
Surface Approach	**Relying on memorising** **No. 4** The best way for me to understand the meanings of technical terms is to remember the textbook definitions. **No. 19** I spend quite a lot of time repeating or copying out things to help me remember them.	2.86	2.66	0.70	0.73	13.46**(1/721)
		3.03	2.88	0.70	0.77	7.50*(1/724)

Fig. 1 Significant results of items on the theme of Memorisation

SD = Standard Deviation
DLs = distance learners
OCLs = On-campus learners

* p< 0.05
** p< 0.001
Underlined mean score = higher mean score

The findings suggested that distance learners relied more on memorising than on-campus learners.

Factor Analysis of the scales/subscales of NASI

Principal component factor analysis was performed (with SPSS 9.0 programme) upon the scores which the distance learners and the on-campus learners obtained on the scales/subscales of NASI, using varimax ® (orthogonal) rotation with Kaiser normalisation. This exercise yielded a three-factor solution for the distance learners which accounted for 55.88% of the variance and a four-factor solution for the on-campus learners which accounted for 57.08% of the variance. Fig. 2 presents the factor solutions relevant to the theme of Memorisation.

		Factors of distance learners			Factors of on-campus learners			
		I	II	III	I	II	III	IV
Percentage of variance accounted for by each factor		32.56	16.18	7.21	28.60	15.44	7.17	6.5
Scales	**Subscales**							
I Deep Approach	1. Looking for Meaning 2. Active Interest/ Critical Stance 3. Relating and Organising Ideas 4. Use Evidence and Logic	0.676 0.598 0.745 0.736	0.391 0.314		0.726 0.471 0.611 0.738		 0.327	0.600

II Surface Approach	**1.**	**Relying on Memorising**	0.445	0.475			(0.212)	0.583		
	2.	Difficulty in Making Senses			0.713			0.691		
	3.	Unrelatedness		0.591	0.382			0.804		
	4.	Concern about Coping		0.741			0.350	0.550	-0.313	

* Loadings below 0.3 were omitted except for the one in parentheses
   Eigenvalues above 1

Fig. 2 Factor solutions for themes that have relevance to Memorisation

Fig. 2 showed that Relying on Memorising had high loadings on Factor I and Factor II in the case of the distance learners. As for the on-campus learners it had only high loading on Factor II. It also revealed that all the subscales related to Deep Approach had high loadings on Factor I for both distance learners and on-campus learners. As for the subscales of Surface Approach, all except Difficulty in Making Sense, had high loadings on Factor II for distance learners, and all had high loadings on Factor II for on-campus learners.

Analysis of interview data

The interview data revealed that the interviewees studied last minute. This applied to students from all three faculties – Social Science, Applied Science and Business Administration – irrespective of the differences in proficiency levels. Thus it was reasonable to assume that, to a large extent, all these learners were dependent on memorisation. A typical response from them with regard to memorisation is as follows:

> Akhir, I think, pada saya, saya mudah ingat last minute. Kalau buat revision awal-awal lupa. Dulu saya buat nota-nota tetapi semester dulu saya target dua minggu sebelum exam, saya study hard, very hard sampai dua pagi. Saya boleh recall balik. Inggeris belajar sambil belajar lain. Bila saya boring apabila saya belajar psikologi saya buat Inggeris.

> **Translation**

> At the end, I think I can remember better at the last minute. If I carry out my revision earlier, I cannot remember. I used to make notes but last semester I gave myself a target. Two weeks before the examination, I studied very hard, until two o'clock in the morning and I could recall. I study English while studying other

subjects. When I am bored of studying psychology, I study English.

<div align="center">(Student B: Female, Low Proficiency, Social Sciences)</div>

Discussion of relevant results

The results from the item analysis suggested that there was a greater reliance on memorisation among distance learners than on-campus learners. The interview data reaffirmed the tendency towards memorisation in the case of distance learners. Factor analysis revealed further interesting findings. It revealed that the Relying on Memorising subscale loaded ambiguously across Factor I and Factor II in the case of distance learners but loaded mainly on Factor II in on-campus learners. Factor I resembles Entwistle and Ramsden's Meaning Orientation (1983) since all the subscales of Deep Approach for both distance learners and on-campus learners loaded onto it. As for factor II, it resembles Entwistle and Ramsden's Reproducing Orientation since almost all of the subscales of distance learners and on-campus learners loaded onto it.

Thus, it appeared that memorisation could be viewed as having positive and negative connotations in the case of distance learners, since it could be linked with understanding and rote learning whereas in the case of on-campus learners, it could be linked mainly with rote learning. These findings clearly suggested that the pattern of memorisation being used in conjunction with understanding is more prevalent among the distance learners.

The findings support recent literature that suggests that memorising should not be considered solely as rote learning as it entails very much more than that especially in Eastern cultures. (Kember and Gow, 1990; Biggs, 1996; Gow et al, 1996; Marton et al., 1996; Watkins, 1996 and Kember, 2000). However, the discovery of a higher incident of rote learning among the on-campus learners is a disturbing feature.

**IMPLICATIONS TO THE TEACHING AND LEARNING OF
ESL IN THE MALAYSIAN CONTEXT**

The results suggest the possibility of a higher incident of memorisation without understanding in the case of on-campus learners in comparison to distance learners. Studies by Kember (1996) suggested that the way the curriculum is designed and the way the course is taught can affect the learning approach, which students adopt. Thus, if a teacher uses a didactic, spoon-feeding approach, which does not encourage students to adopt a Deep Approach or to think critically, his/her students may be orientated to use Surface Approach to learning.

In the Malaysian context, the higher proportion of rote learning among the on-campus learners may also be due to the exam-oriented approach and the teacher-centred approach used in schools, which do not give much room for creative and critical thinking. This problem is less evident in the distance learners (who are mostly adults) most probably because they have working experiences and have been exposed to other methods of learning and teaching. Thus, it is necessary to ensure that courses offered, especially to on-campus learners, are innovative and encourage critical thinking. Research by Kember and Gow, (1992), Kember and Mckay (1996) and Kember et al. (1997) has also shown that Asian students are receptive to such programmes. These programmes will make learning more enjoyable and instances of rote learning will also be reduced as students learn more 'effective' ways of learning. In addition learner training schemes that 'teach' students more effective learning strategies and 'train' them to be more critical, creative and autonomous should be implemented (see for examples Cotterall, 1995, Victori and Lockhart (1995), Ellis and Sinclair, 1989a, 1989b, 1989c).

References

Biggs, J. (1996). Western misconceptions of the Confucian-heritage learning culture. *The Chinese learner: Cultural, psychological and contextual influences.* D. Watkins and J. B. Biggs. Melbourne and Hong Kong, Australian Council for Educational Research and the Comparative Educational Research Centre, University of Hong Kong.

Cotterall, S. (1995). Developing a course strategy for learner autonomy. *ELT Journal, 49*(3), 219-227.

Ellis, G. and Sinclair, B. (1989a). *Learning to learn English - A course in learner training - Learners' book*. Cambridge: Cambridge University Press.

Ellis, G.and Sinclair, B. (1989b). *Learning to learn English - A course in learner training - teachers' book*. Cambridge: Cambridge University Press.

Ellis, G.and Sinclair, B. (1989c). *Learning to learn English: A course in learner training*. Cambridge: Cambridge University Press.

Entwistle, N. J. and Ramsden, P. (1983). *Understanding student learning*. London, Croom Helm Ltd.

Gow, L. and Kember, D. (1993). Conceptions of teaching and their relationship to student learning. *British Journal of Educational Psychology* 63: 20-33.

Gow, L., Balla, J., Kember, D. and Hau, K. T. (1996). Learning approaches of Chinese people: A function of socialisation processes and the context of learning? In M. H. Bond (Ed.), *The handbook of Chinese psychology*. Hong Kong: Oxford University Press.

Hess, R. D. and Azuma, M. (1991). Cultural support for schooling: contrasts between Japan and United States. *Educational Research* 20(9): 2-8.

Kember, D. (1996). The intention to both memorise and understand: Another approach to learning? *Higher Education* 31: 341-351.

Kember, D. (1997). A reconceptualisation of the research into university academics' conceptions of teaching. *Learning and Instruction* 7(3): 255-275.

Kember, D. (2000). Misconceptions about the learning approaches, motivation and study practices of Asian students. *Higher Education* 40: 99-121.

Kember, D. and Gow, L. (1990). Cultural specificity of approaches to study. *British Journal of Educational Psychology* 60: 356-363.

Kember, D.and Gow, L. (1992). Action research as a form of staff development in higher education. *Higher Education, 23*(3), 297-310.

Kember, D. and Gow, L. (1994). Orientations to teaching and their effect on the quality of student learning. *Journal of Higher Education* 65(1): 58-74.

Kember, D. and McKay, J. (1996). Action research into the quality of student learning: A paradigm for faculty development. *Journal of Higher Education, 65*(5), 528-554.

Kember, D., Lam, B. H., Yum, J. C. K.and Liu, S. B. (1997). *Case studies of improving teaching and learning from the action learning project*. Hong Kong: Action Learning project.

Marton, F., Dall'Alba, G. and Kun, T. L. (1996). Memorising and understanding: the keys to the paradox? In D. Watkins and J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* . Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Watkins, D. (1996). Hong Kong secondary school learners: A developmental perspective. *The Chinese learner: Cultural, psychological and contextual influences*. D. Watkins and J. B. Biggs. Melbourne and Hong Kong, Australian Council for Educational Research and the Comparative Educational Research Centre, University of Hong Kong.

Thang, S. M. (2001). Learners' conceptions of their learning processes and their perceptions of their English as a Second Language courses in a tertiary distance learning context. *Unpublished PhD thesis*, University of Nottingham.

Victori, M.and Lockhart, W. (1995). Enhancing metacognition in self-directed language learning. In N. F. Davies (Ed.), *System* (pp. 223-234). Oxford: Pergamon.

Appendix A

Scales/subscales of the NASI and their meanings

Scale/subscale	Meaning
1. Deep Approach	
Looking for meaning	Learners look for meaning in studying.
Active interest/critical stance	Learners have an active interest in subjects studied. They interact actively with what is being learnt and link what is being studied with real life.
Relating and organising ideas	Learners relate new information to previous information actively and organise ideas mentally.
Use evidence and logic	Learners use evidence and logic in trying to understand materials and to arrive at conclusions.
2. Surface Approach	
Relying on memorising	Learners rely on rote learning.
Difficulty in making sense	Learners find difficulty in understanding and making sense of what is being read and things that have to be remembered.
Unrelatedness	Learners find difficulty in perceiving what is important and also in seeing an overall picture or how ideas fit together.
Concern about coping	Learners are unduly concerned over ability to cope with work.
3. Strategic Approach	
Determination to excel	Learners are competitive and self-confident and determined to achieve success.
Effort in studying	Learners put in extra effort to make sure that work is being done well. They work hard and are able to concentrate well on work.
Organised studying	Learners have organised study methods. They make an effort to ensure that appropriate conditions and materials for study are available.

Time Management	Learners are able to organise time effectively and able to abide by good study plans.
4. Lack of direction	Learners are cynical and disenchanted about higher education. They feel driven to enter university to please others.
5. Academic-self confidence	Learners feel confident about ability to cope with work. They have no difficulty in understanding new information and ideas.
6. Extrinsic Motivation	Learners are primarily motivated by the qualifications and the prospects of a good job on graduation.
7. Syllabus-boundedness	Learners have the intention to restrict learning to the defined syllabus and tasks requirements.

Appendix B

New Approaches to Studying Inventory (NASI)

We would like you to show whether you agree or disagree with each or the statemntss listed below. We are concerned here with your approach to studying in general

Please circle the number beside each statement that best conforms with your view.

4   for "strongly agree"
3   for "agree"
2   for "disagree"
1   for "strongly disagree"

1. I rather drifted into higher education without deciding for myself what I really wanted to do.	4	3	2	1
2. My main reason for being in university is to learn more about subjects that really interest me.	4	3	2	1
3. Ideas in the course books or articles often set me off on long chains of thought about what I'm reading.	4	3	2	1
4.The best way for me to understand the meanings of technical terms is to remember the text-book definitions.	4	3	2	1
5.My main reason for being here is that it will help me to get a better job.	4	3	2	1
6. When I'm reading an article or book, I try to work out for myself exactly what it is about.	4	3	2	1
7. I'm not sure what's important, so I try to get down just as much as I can in lectures.	4	3	2	1
8. I like to be told precisely what to do in essays or other assignments.	4	3	2	1
9. One way or another I manage to get hold of books or whatever I need for studying.	4	3	2	1
10. When I look back, I sometimes wonder why I ever decided to come here.	4	3	2	1
11. I put a lot of efforts into making sure I have the most important details at my finger tips.	4	3	2	1

12. I look at the evidence carefully and then try to reach my own conclusions about things I'm studying.	4	3	2	1
13. Sometimes I worry about whether I'll ever be able to cope with the work properly.	4	3	2	1
14. I know what I want to get out of this course and I'm determined to achieved it.	4	3	2	1
15. Generally, I find the set work to easy to do.	4	3	2	1
16. Often I find myself reading things without really trying to understand them.	4	3	2	1
17. I generally put a lot of effort into trying to understand things, which initially seem difficult.	4	3	2	1
18. I work steadily throughout the course, rather than leave everything until the last minute.	4	3	2	1
19. I'm not prepared just to accept things I'm told; I have to think them out myself.	4	3	2	1
20. I spend quite a lot of time repeating or copying out things to help me remember them.	4	3	2	1
21. I generally try to make use of my time during the day.	4	3	2	1
22. I think I'm quite systematic and organised in the way I go about studying.	4	3	2	1
23. When learning a new topic, I find it difficult to see how the ideas fit together.	4	3	2	1
24. I seem to be able to grasp things for myself pretty well on the whole.	4	3	2	1
25.Sometimes I find myself thinking about ideas from the course when I am doing other things.	4	3	2	1
26. I chose my present courses mainly to give me a chance of a really good job afterwards.	4	3	2	1
27. I prefer courses to be clearly structured and highly organised.	4	3	2	1
28. When I'm reading, I examined the details carefully to see how they fit in with what's being said.	4	3	2	1
29. I often seem to panic if I get behind with my work.	4	3	2	1

30. I enjoy competition; I find it stimulating.	4	3	2	1
31. I generally choose courses more from the way they fit in with my career plans that from my own interests.	4	3	2	1
32. Although I can remember facts and details, I often can't see any overall pictures.	4	3	2	1
33. So far, I seem to have a good grasp of the subjects I'm studying.	4	3	2	1
34. I work hard when I'm studying and generally manage to keep my mind on what I'm doing.	4	3	2	1
35. I often have trouble making sense of the things I have to remember.	4	3	2	1
36. I think I'm on this course more to please other people than because I really wanted it myself.	4	3	2	1
37. Often I feel I'm drowning in the sheer amount of materials we're having to cope with on this course.	4	3	2	1
38. I try to relate ideas I come across to other topics or other courses whenever possible.	4	3	2	1
39. I constantly check the course schedule to make sure I am reading what is required of me.	4	3	2	1
40. I suppose I am more interested in the qualifications I'll get than in the courses I'm taking.	4	3	2	1
41. I don't usually have much difficulty in making sense of new information or ideas.	4	3	2	1
42. I tend to read very little beyond what's required for completing assignments.	4	3	2	1
43. I organise my study time carefully to make the best use of it.	4	3	2	1
44. When I'm working on a new topic, I try to see in my own mind how all the ideas fit together.	4	3	2	1
45. It's important to me to feel I'm doing as well as I really can in the courses here.	4	3	2	1
46. I usually set out to understand for myself the meaning of what we have to learn.	4	3	2	1

47 I find I have to concentrate on memorising a good deal of what I have to learn.	4	3	2	1
48. Coming here wasn't really my choice; more other people's expectations and no obvious alternative.	4	3	2	1
49. Often I lie awake worrying about work I think I won't be able to do.	4	3	2	1
50. I make sure I find conditions for studying which let me get on with my work easily.	4	3	2	1
51. When I'm doing a piece of work, I try to bear in mind exactly what that particular teacher wants.	4	3	2	1
52. I usually don't think about the implications of what I have to read.	4	3	2	1
53. It's important for me to be able to follow the argument or see the reasoning behind something.	4	3	2	1

---

[1] Thang Siew Ming is a lecturer at the School of Language Studies and Linguistics, Universiti Kebangsaan Malaysia. She holds a PhD from the University of Nottingham, UK. Her areas of professional interest are Autonomous Learning, Distance Education, CALL and Processes of Learning (inc. learning styles and approaches to learning).

Editor's Note: This article was first published in Jurnal e-Sumber, the electronic journal of the Faculty of Social Sciences and Humanities, UKM Bangi in 2003, Vol. 1. There were six articles published in this first volume of Jurnal e-Sumber. Due to unforeseen circumstances, Jurnal e-Sumber is no longer in existence and its website inaccessible. The editorial board of Jurnal e-Bangi, the current electronic journal of Faculty of Social Sciences and Humanities, UKM Bangi has decided to include the six articles in its Archive section.