

Learners' memory and Learners' success in Learning English.

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It is undoubtedly true that learners bring many individual characteristics to the learning process which will affect both the way in which they learn and the outcomes of that process. (Oxford & Ehrman 1993, Grandom & Hanania 1991, Carroll 1965, 1991, Atkinson & Schiffrin 1968, Skehan 1986, 1988, Gardner 1985, Gardner & MacIntyre 1992, Witkin 1962, Riding & Charman 1991, Willing 1987, Welche 1981, Skehan 1986, Hanson 1991, Rubbin 1981, 1987, O'Malley & Chamot 1990). However, just what those characteristics are and exactly how they affect the learning process is rather unclear. Intuitively, such apparently obvious factors come to mind as age, gender, personality, aptitude, intelligence and motivation as characteristics influencing their success in learning a foreign language. Among these factors, aptitude is a key factor to affect learners' success in learning foreign language.

There are several sub factors in the aptitude area. Memory is one of the sub factors of aptitude and plays a great role in learning. Unlike to the other individual factors, memory factor affects the learning process constantly, from beginning to the end. (Atkinson & Schiffrin 1968, Skehan 1986b, 1989, Gardener & Lambert 1972, Skehan 1982, Wesche et al 1982, Sasaki 1991, Schmidt 1990, Pawley & Syder 1983, Yorio 1989)

This study is designed to investigate the relationship between learners' memory and the success in learning English of 180 Korean elementary learners. It is a follow up study to reconfirm the result of previous longitudinal study; Memory is the key factor to distinguish fast learners from slow learners.

In this study the memory test was given to 180 Korean elementary learners and analyzed. Each student's level is observed and tested at school by his or her English teacher. And these test results were used in this study to find out the relationship between learners' memory and learners' success in learning English.

I Introduction

A great deal has been written in language teaching books and journals about the importance of considering individual differences in learning a foreign language.

It is undoubtedly true that learners bring many individual characteristics to the learning process which will affect both the way in which they learn and the outcomes of that process (Oxford & Ehrman 1993, Grandom & Hanania 1991, Carroll 1965, 1991, Atkinson & Schiffrin 1968, Skehan 1986, 1988, Gardner 1985, Gardner & MacIntyre 1992, Witkin 1962, Riding & Charman 1991, Willing 1987, Welche 1981, Skehan 1986, Hanson 1991, Rubbin 1981, 1987, O'Malley & Chamot 1990). However, just what those characteristics are and exactly how they affect the learning process is rather unclear. Intuitively, such apparently obvious factors come to mind as age, gender, personality, aptitude, intelligence and motivation as characteristics influencing their success in learning a foreign language. Among these factors, aptitude is a key factor to affect learners' success in learning foreign language.

There are several sub factors in the aptitude area. Memory is one of the sub factors of aptitude and plays a great role in learning. Unlike to the other individual factors, memory factor affects the learning process constantly, from beginning to the end (Atkinson & Schiffrin 1968, Skehan 1986b, 1989, Gardener & Lambert 1972, Skehan 1982, Wesche et al 1982, Sasaki 1991, Schmidt 1990, Pawley & Syder 1983, Yorio 1989).

This study is designed to investigate the relationship between learners' memory and the success in learning English of 148 Korea elementary learners. It is a follow up study to reconfirm the result of previous longitudinal study; Memory is the key factor to distinguish fast learners from slow learners.

II Purpose

This paper verifies the relationship between learners' memory and the success in learning English in Korean elementary students. In other words it confirms the result of previous longitudinal study; Memory is the key factor to affect the learning.

III Memory

Though this memory factor is a part of aptitude it is a very important factor in this study. This factor turned out to be a major individual factor affecting individual learning and outcomes of that process.

Atkinson and Schiffrin (1968) suggested that there are two major stages of memory; short-term memory and long-term memory. The one is considered to be limited incapacity, and to require conscious effort and control. It is also likely to be serial in operation. The other, in contrast, is very large in capacity, can operate in parallel fashion, and may not be always susceptible to conscious control. This

original portrayed short-term memory as the gateway to long-term memory, with the transfer of material from the former to the latter effected by processes of rehearsal. Short- term memory has been replaced by the concept of working memory, a system which still contains rehearsal 'loops' and also a central executive component which is concerned with the allocation of a limited amount of attention. In addition, working memory contains those 'records' from long-term memory that are 'currently in a state of high activation' (Anderson 1995) and which may therefore interact with new material, which has just been encountered. The interaction of working and long-term memory is also important for the production of speech. Here the material from long-term memory, concerned both with the propositions to be expressed as well as the linguistic means, has to be accessed and assembled. Working memory can function as a sort of storage area while the different elements of a message are being orchestrated. (Gathercole & Baddeley 1994)

Individual differences in processing ability concern the learner's capacity to deal with the range of forms in input. This seems to be an individual difference variable, in that some people will be more effective input processors than others and be more able to notice, for given input, new forms which may be integrated into their language development . This might be because some people have greater working memory attentional capacity, or because the analytic processes within working memory are carried out at greater speed. (Schmidt 1990)

IV Method

1. Subject

School	Grade	Male	Female	Total
A	5	20	17	113
B	5	45	41	
A	6	17	18	35

Subjects are 148 Korean elementary students in two different schools.

2. Material

Memory Test and Mid Term Evaluation

Memory test is made of 20 questions and the score is the number of the questions that each student answers correct. Mid Term Evaluation is held in 4 areas; listening,

speaking, reading and writing. Students are evaluated by three different grades; A (very good), B (good), C (need to study more)

3. Procedure

In this study the memory test was given to 148 Korean elementary learners and analyzed. Each student's level is observed and tested at school by his or her English teacher. And these test results were used in this study to find out the relationship between learners' memory and learners' success in learning English.

V Result

The result of 5th graders' memory test and Mid- term evaluation

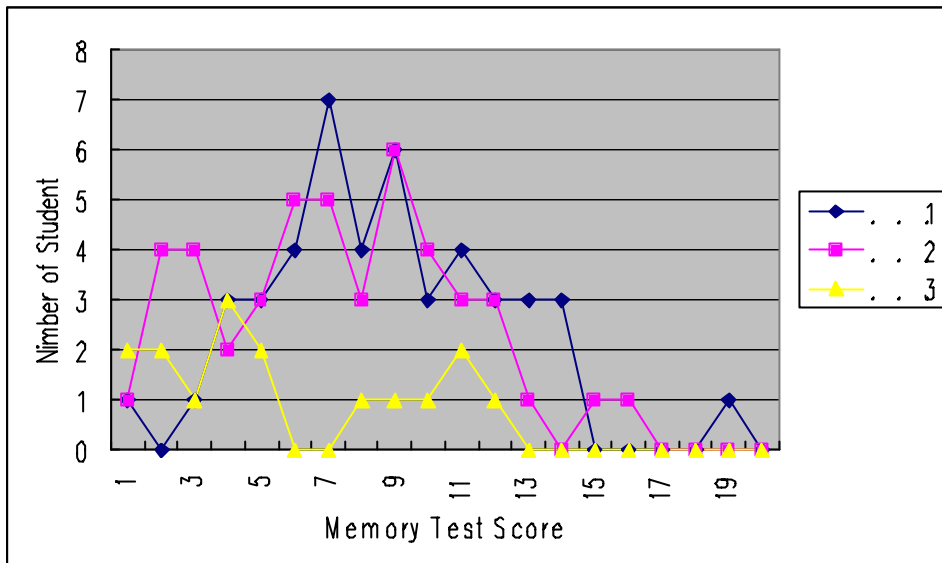
M.T.S = memory test score

High Level : students who have Grade A on more than three areas

Low Level : students who have Grade C on at least one area and no A

Middle Level : Rest of students who belong to neither High nor Low level

M. T. S	High Level			Middle Level			Low Level		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
-1	1		1			0		1	1
0		1	1			0	2		2
1		1	1	1		1	2		2
2			0		4	4	2		2
3	1		1	2	2	4		1	1
4	1	2	3	2		2	2	1	3
5	1	2	3	2	1	3	1	1	2
6	2	2	4	1	4	5			0
7	4	3	7	4	1	5			0
8	2	2	4	2	1	3		1	1
9	2	4	6	4	2	6		1	1
10	1	2	3	2	2	4	1		1
11	2	2	4	2	1	3	1	1	2
12	1	2	3	2	1	3	1		1
13	1	2	3		1	1			0
14	1	2	3			0			0
15			0		1	1			0
16			0	1		1			0
19		1	1			0			0



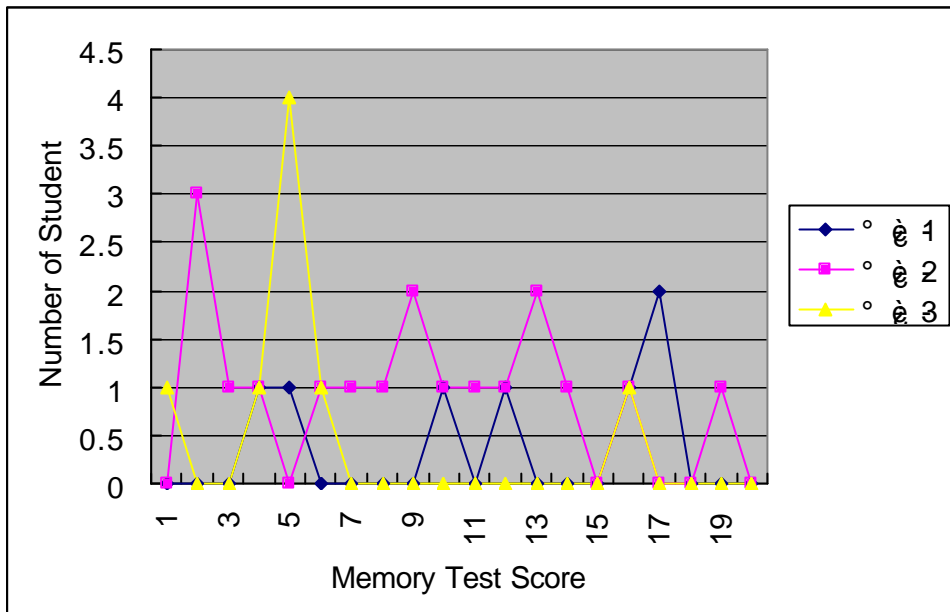
The highest memory score of high- level students is 19. And high- level students belong to range of 7 to 15. The highest memory score of low- level students is 12. And low- level students belong to range of 0 to 11. The above graph shows that the highest peak of low- level students is around score 4 and that of high level is around 7. These facts indicate that high- level students have relatively higher memory than low- level students. We can tell high-level students from low- level students distinctively by the memory factor.

The highest memory score of middle level students is 16 and middle level students belong to range of 2 to 12. The highest peak of middle level students is around score 7. Above graph shows that middle level students have fairly higher memory than low- level students. Therefore middle level students can be distinguished from low- level students by the memory factor too.

The range of memory score of high- level students and that of middle level students are somewhat similar. And peak points are also same. But the highest score and the range of high peak points are different. The highest score of high level students is higher than that of middle level students and the range of peak points (7-14) of high level students are little higher than that (6-11) of middle level students. Therefore high- level students are not clearly distinguished from middle level students by the memory factors. In this case other factor is needed to separate them clearly.

The result of 6th graders' memory test and Mid- term evaluation

M. T. S	High Level			Middle Level			Low Level		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
-1			0			0	1		1
0			0			0	1		1
1			0			0	1		1
2			0	1	2	3			0
3			0	1		1			0
4	1		1	1		1		1	1
5		1	1			0	2	2	4
6			0	1		0	1		1
7			0	1		0			0
8			0		1	1			0
9			0	1	1	2			0
10		1	1		1	1			0
11			0		1	1			0
12		1	1	1		1			0
13			0		2	2			0
14			0	1		1			0
15			0			0	1		1
16	1		1		1	1			0
17	1	1	2			0			0
19			0		1	1			0



The highest memory score of high- level students is 17. And high- level students belong to range of 4 to 5, 10 to 11 and 16 to 17. The highest memory score of low- level students is 15. And low- level students belong to range of 0 to 1 and 4 to 6. The above graph shows that the highest peak of low- level students is around score 5 and that of high level is around 17. These facts indicate that high- level students have relatively higher memory than low- level students. We can tell high- level students from low- level students distinctively by the memory factor.

The highest memory score of middle level students is 19 and middle level students belong to range of 2 to 4 and 6 to 12. The highest peak of middle level students is around score 2. Though middle level students' highest peak point is lower than low level students' highest peak point, most of middle level students are located in the range of higher score than most of low level students. Therefore middle level students can be distinguished from low- level students by the memory factor too.

The range of memory score of high- level students and that of middle level students are somewhat similar. But the highest score of middle level students is higher than that of high- level students. Most of 6th grade students belong to middle level students. We cannot clearly distinguished high- level students from middle level students by the memory factor of 6th grade students. In this case other factor is needed to separate them clearly or more data on 6th grade students are needed.

VI Conclusion

This study shows that high level students and low- level students are clearly distinguished by memory factor. And middle level students and low level students are also distinguishable by memory factor. But memory factor is not good enough to distinguish high- level students from middle level students. In this case other than memory factor is needed. Analyzed factor, which was mentioned in the previous longitudinal study, might be the second factor to distinguish these two groups.

This result is about the same as the result of previous longitudinal study; Memory is the key factor to distinguish fast learners from slow learners. Therefore we can conclude that memory factor is the key factor, which affects the success of Korean elementary students in learning English.

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