Effectiveness of Arabic Conjugation Technique In Make-up of Morphemic Retention For The First Class Student of MAN Bangil Who Cames From SMP

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Abstract

One of efforts to solve the problem of the student of MAN Bangil (the low standard of Arabic lesson) is mastery of conjugation. This research wants to measure the influence of applying Arabic conjugation technique in in-creasing of students' morpheme retention. The result of analyses show that the students accept applying of conjugation taechniques at first bill of semester have higher ability of morpheme-retention compared to who do not accept it or accept it at the second bill of semester. The findings prove that "appliying of conjugation technique has effectiveness in improving morphemic retention".

Key Word: *conjugation technique, procedural memory, retention*

A. Introduction

Study of Arabic ini Madrasah Aliyah is instructed to develop ability of having the languagy in fushah form (correct and good) with priority in reading ability (Diknas, 2003) as ng fromo sources a base to comprehend Islamic teaching from sources which are presented in Arabic and to master religion subject matter. In Indonesia and English grammar students can depeen by themselves, but in Arabic thy can not do so, especially for some students who come from SMP. For some students, difficulty of adaptation in facing Arabic (which requires reading Arabic text without *harakat*, combinig some letters, and reading them correctly) causes some students less fluent in folloeing lesson which uses Arabic letters and obstacle of adtivities which uses the language.

One of the effort to overcome that difficulty is ability of morphemic conjugation (principle of derivation and type of Arabic word), an elementary aspect in Arabic (one of flexy language), which its system has permanent pattern (Krida-laksana, 2007). Therefore, appliying the technique of morphemic conjugation beside the developing of curriculum (Handbill of number DJ. III/PP.00/ED/681/2006 about Practice of Content Standart) – is needed much as a supporter of mastery in Arabic. The

mastery of that conjugation pattern is more effective by exploiting retention function, procedural knowledge, automatic process, and spur of retrieval (Koriat, 2004). In few of the students of Madrasah Aliyah are in formal operational phase (Eggen, 2004) with ability of cognitive equilibrium through accommodation and assilimition, appliying of technique memorize of conjugation pattern requires emphasizing logical aspect, and not mechanical (rote learning).

In human brain cortex, there is function – declarative and procedural memory (Rybash, 1999) – to realize object which is observed, to store, and to retrieve the impression (Wolf, 2001). Tulving (1994) introducing the retrieval theory, which classifies memory in semantics and episodeic. The first gets in touch with experience of chronological of audiovisual and emotional (Hodges & Kim, 2001) which based on semantic, but not on the contrary. Because of its constructive character, information of episodic can form and encode retrieval. Facing to Arabic conjugation possibility of reliability distortion which is represents one of the episodic memory characteristic does not influence memorization, because (1) Arabic letters, which are visible more as alphabet pictures, facilitate of iconic impression, (2) Arabic conjugation represents 'event' more than concept, that relates to attention, emotion, and knowledge as well (Leun & Richard, 2002) (3) conjugation patterns as a super – ordinate other words which refer to episodic cues, assits so much voicing of melody (rhyme), that facilitate memorization.

Semantic memory constitutes information input into episodic memory as concept network (Mayes, 2001), altough it is easy to be forgetten in comparison with episodic system. The memory organizes declarative knowledge as a mental acquisition before it is reexpressed through assiciation (Skehan, 2003), memory performance, which as computer system, entangling repetition (Luce, 2003) in declarative knowledge to form prepared knowledge and to automate. Students who do ezercise a lot in applying lesson items, his memory about it will be more ready to (Greidanus, 2001). Often episodic memory is converted with semantic memory because of their aspect rens simultaneously in forming declarative memory as other side of procedural memory (Cabeza, 2003).

Memory function (Fencsik, 2000) can be classified in: (1) sensory regsiter, that fading in (0,5-2,0 second, except it is repeated), (2) term short memory, that stores about seven bits of information in 1-4 second before it is integrated into term memory as cognitive product or attitude lerning, (3) term long memory, that stores permanent information before

it is retreved through working memory or short term memory as 'a copy' of information with guidance of context clue. The effectiveness of memory is based on repetition of information preparation through recall and recognition. On behalf of that, intelligence and linguistic of metame-mory-an experience of cognitive activity substantial which pursuant to metacong-nition-is needed (Bjorklund, 2004) to organize information impression into sche-me (Golbeck, 2005), that guides information identifying so that the burden of working memory is not too heavy (Abram, 2007). More knowledge and experience someone has, more wide scheme will be, even it forms schemata if informaton is presented systematically and logically (Bransford, 2000), for example concept mapping as a scaffolding.

Recall and of recognition can be assites by mnemonic methods (Twinning, 2002). This strategy is differentiated in: (1) inner knowledge, the way of integrating information into cognitive structure through meanigful learning which its effect is bigger than textual repetition (Scwartz, 2005), (2) generaative learning, the way of reaching automate retrieval through training and verbal repetition (Golbeck, 2002). Memory stategy which is based on this view can be in the form of mnemonic device, the intensification of meaning context or poem (Nairne, 2003), over learning, the intensification of items (Schunk, 2000). It is different from rote learning (mechanical memorization with literally character, which suited for the chjild of elementary school), mnemonic methods is more according to adolescent age students (in for-mal operational phase).

In appliying of conjugation technique, the deftness of change of words (as 'measuring' subordinate morpheme) can assist students in speech ability and of grammatical (Deweale, 2005) considering that the study of the language pays attention and interest of performance so that students can make fact connection, and develop trouble-shooting as well (Gardner, 1999). Therefore, its study pays attention on explication (language order) and induction (language experience) by passing training to increase lexical skill (Fukkink, 2005). In connection with ex-ploiting of memory, conjugation items can be set in according to ininformation process phases (Sternberg, 1998): (1) introduce, to check perception (Kramsch, 2002), (2) understanding, for the achievement of declarative knowledge depository of information of learning acquisition (Chaplin, 2000).

Appliying of conjugation technique pays attention to: (1) study component (information enconding, inference giving, concept mapping, principal application, alternative comparing, and response expression), (2)

elements of study design (students' entry behavior, student activities, instructional methods, and evaluation), (3) factors of influencing study (situation, cognition, and memory energy, intermezzo, evocation of motivation, lerning attitude, reinforcement, and transfer of knowledge), (4) meaningfulness of subject matter (advance of organizer, items struture) and information process.

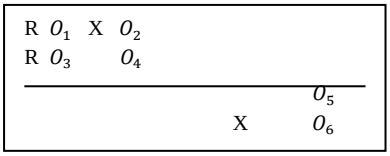
Evaluation and assesment as measurement of study result and ability appli-cation (Vernon & Marius, 2002) are conducted to know effectiveness of appliying of conjugation technique in making-up of students' morphemic retention, and push them up to learning flow (Egbert, 2003). In the form of multiple choice is assessed effective, because it can improves prediction about association of inter-words (Koriat & Robert, 2005), considering that morphemes often emerge in usage of language, multiple choice-test gives broadness of items representation and also tired amenity of items validity and reliability (Najiang, 2004).

Based on memory theories (especially mnemonic methods), this research is conducted in two phases and two targets. First phase aims to measure the level of difference of deftness of students' morphemic retention given by appliying of conjugation technique which is compared to whom the appliying si not given in the case of both groups have of Arabic instruction as usual.the second phase aims to measure difference of students 'morphemic retention after appliying of that conjugation technique is passed to both groups with difference start (A group is at the first middle of odd semester, B group is at the second middle while they are in studiying of language).

This research shows some fundamental implication: (1) cultivation of awa-reness for the students (especially who come from SMP) about the important of morpheme conjugation as supporter of Arabic, (2) the correlation of conjugation technique with Arabic instruction so that it can extend transformation of morphemic retention, and at the same time apprearance the role of conjugation in application as language and speech, (3) usage some strategies of appliying conjugation technique to speed up the process and to heighten its effectiveness, (4) the importance of assessment process of appliying conjugation technique besides the assessment of result, (5) correlation the assessment retention of morphemic with score of Arabic, to know the level of relation and influence of appliying conjugation technique towards students' Arabic achievement (so that adding confidence of related-teachers about the relation between morphemic retention and Arabic.

B. Method

The method of this research is conducted by giving the different treatmnet by rotation design on group of experiment and grouop of control, by functioning class as a laborious background. The rotation appears in two phase as shown in picture 1:



Picture 1: Design Research (Modified from L Vockel 1983: 174)

R : randomization
X : treatment
O_1; O_3 : pretest
O_2; O_4; O_5; O_6 : post-test

Based on rotation model at experiment group and control group (Picture 1), intervention the form of partial counter balanced (Gall, 2003), with treatment (conjugation technique) is applied only once at each group (see tables 1).

Tables 1 Treaatment Model of Counter Balanced

First phase			Second phase
Group	Tuning scale	Treatment	Test
Treatment	Test		
Experiment (Arabic) + Muhadatsah technique	random, pretest Post-test II	(Arabic) + conjugation	Post-test I
Control (Arabic) + conjugation technique	random, pretest Post-test II	(Arabic) + Muhadatsah	Post-test I

In this research, subjects of experiment are students of MAN Bangil of class X who come from SMP (in seven calssroom) with treatment permormed within class-setting as presence (where subjects and non-subjects stay). To unionize with the same character, the filling list and pretest are propagated to all subjects. At the first middle of odd semester, to the group of ekperiment is given conjugation technique, beside Arabic, while the control group has muhadatsah practice (conversation) beide Arabic, as counterpart of allocation of hour learning. At the second middle of that semester, the appliying of conjugation technique is also passed to

the group which at first is functioned as controller. To know the level of effectiveness of and treatment difference effect in its presentation start, post-test is conducted to the both groups, either at the first or the second phase.

The forming of group of experiment group and of control group is done through some phases (see tables 2).

Tables 2 Process of Sorting Subject Research

Sorting aspect total	Classification	Kinds
School descent 140 students	-	MTs
	-	SMP
	143 students	
Classical random 4 class groups	Number 2, 3, 4, 5, 6	Xb, Xc, Xe, Xf
3 class groups	Number 1, 4, 7	Xa, Xd, Xg
Character candidate	Appropriate 49 students	Experiment group
		Control group
candidate	47 students	
candidate	Inappropriate 30 students	Experiment group
		Control group
candidate	17 students	
Total balance 40 students	Experiment group	-
Random 40 students	Control group	-

It is known from tables 2 that students of X class of MAN Bangil who come from SMP consists of 143 persons (in seven class groupings). Classical random is conducted toward the persons totally to determine class candidate of subject groups of experiment and control groups. Then (based on the Filling List), according to the tune of character of substantive sorting process is conducted (to avoid result bias of treatment) which in the form of: school descent (SMP), education of parents (non-pesantren/boarding school), nationally (non-Arabian), outer learning (do not attend the non-formal-madrasah or Arabic courses), place (outside of pesantren).

Besides the equality of character, it is also conducted the equallllity of students' prerequisite ability, which is relied on pretest scores. According to these scores five interval level is made in stretch of (5,11 –

5,80; 4,41 – 5,10; 3,71 – 4,40; 3,01 – 3,70; 2,31 – 3,00) with the detail of each level consits of 7, 10, 11, 6, and 6 persons (each group consists of 40 persons). There by there are variance equality on intergroups in characteristic and their prerequisite ability. If one or more members of the level grouop fall during a period of reserch (so that there is no data of it), one or more members of the other same level group is left out.

The instrument which used (compiled under guide two Education Psychology experts and one of Arabic expert) in the form of: (1) Fillling list, which is distributed together with pretest to entirey students of X class in order not to be discriminative impression among them who come from SMP and from MTS (but the analyses is put only put on data of students come from SMP), (2) paper and pencil test in multiple choice form of five options which uses assesment of stan-eleven scale (for the pretest, unit test, and post-test). At post-test (its items is by analogy with unit tests based on difficulty level at formula of difficulty index), it is used criterion referenced and test validity (with point biserial formula) to the 20 % answer sheets test on unit 1, 2, 3 from subjects and of non subjects students taken randomly.

Treatment items (compiled under guide of two experts of educational Psychology, pne expert of Arabic, and three teachers of Arabic) which prepared in the Teacher Giudance (as a holding book in appliying of conjugation technique and assessment of students' morphemic deftness) and the Students Book is a holding for students in mastering of conjugation items and doing exercises). The appliying of morpheme conjugation technique (including aspects of: psychological, knowledge description, function of retention, and items) is conducted in the instruction form with time allocation 2 x 45 minute/week in meaningful instructional model, including two continuums: (1) process (motivation, word choice, audiovisual, reception meaningful, zone of proximal development, concept mapping, example giving, concept, verification, and retention), (2) subject matter mastering (elaboration, structuring, organizing, analogy, recall, recognition, and reproduction). There are five approaches used in appliying of conjugation technique: meaningfulness, functionally, emotional, individual, and grouping.

The result of post-test I, as data about ability of morphemic retention reached by group of experiment and group of control is analyzed with t-test. The t-test is also used to analyzed the result of post-test II, which in the data form about the ability of morphemic retention of experiment and control group after both accepting the appliying of conjugation technique (in different start). Hereinafter, the result of

crossed treatment at both of the groups (counter balance) which is obtained by post-test I and of post-test I and of post-test II (from both of the groups), is analyzed by ANOVA to know a total description about the result of the treatment difference.

Result

Hyopthesis test is conducted after test hjomogeneity of variance of experiment and control group to be sure that assessment score at both of the groups are caused by the influence of treatment, not caused of other factors.

Hypothesis 1: the difference or morphemic retention ability of experiment and control group occur at the existence of treatment.

Hypothesis 2: the difference of morphemic retention ability of experiment and control occur at the difference of start giving of treatment.

The compared thing this research is the mean score of experiment group and control group (with difference of intervention as strectched at table 1), with the result of analysis which is shown in tabels 3.

Table 3 The results of Post-test Analysis

Phase	Group	N		Sig.
Mean	DS	t count	t table	
I	Experiment	39*		7.21
0.72				
			0.000	
8.53	1.99			
	Control	39		6.37
0.40				
	Experiment	39		7.57
0.51				
II				0.000
2.32	1.99			
	Control	39		6.93
0.64				

From the result of post-test phase I which shows mean score of experiment group (7.21) and control group (6.37) with deviation standard of 0.72 and 0.40 each, can beconcluded that mean-assessment both of the group is not identical (it is different by significant), because the value of probability (Sig.) equal to One person of student drops (because of mutation). 0.000 < 0.005 and t count (6.53) > t table (1.99). in another words, the mean-assess-ment of post-test I of experiment group is higher than the mean-assessment of control group.

From the result of post-test phase II which shows assessment mean of expe-riment group (7.57) and control group (6.93) with deviation standard of 0.51 and 0.64 each, can be concluded that mean-assessment

both of the group is not iden-tical (it is different by significant), because the value of probability (Sig.) equal to 0.000 < 0.005 and t count (2.32) > t table (1.99). in another words, the mean-assessment of post-test II of experiment group is higher than mean-assessment of control group.

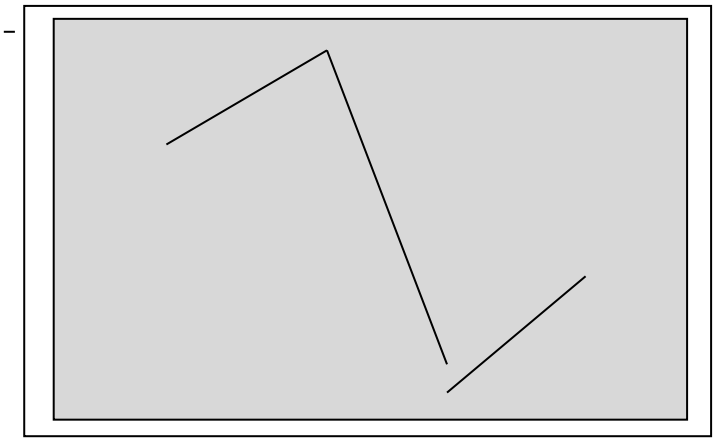
It is clearer that the difference of mean-assessment of post-test I and post-test II to both groups shown by comparing which is based on the analysis of ANOVA (see table se 4).

Table 4 ANOVA Analysis of Assesement of Experiment Group and Control Group

Group	N	Posttest	Assess	Mean	DS	Sum of squares		F		Sig.
						Between group	within group	Count	Table	
Exper	39	I	7.21	7.39	0.72	29.95	52.11	29.12	2.66	0
		Ii	7.57		0.51					
Contr	39	I	6.37	6.65	0.4					
		II	6.93		0.64					
Total	78	-	-	-	-	82.06		-	-	-

Table 4 shows that there is difference between mean-assessment of post-test I and post-test II at of experiment group (7.21) and 7.57; with deviation standard 0.40 and 0.64). the amount of square of between groups equal to 29.95, with the mean of inter-group is 5.47; while the amount of square of within group is 52.11 with the mean of inter-group is 7.21.

The amount of F count (29.12) > F table (2.66) with the level of significance is 0.000 (> 0.05). it means, that there is difference of mean-assessment between the morphemic retention ability of experiment group and control group at post-test I and of psot-test II. In annother words, the mean-assessment of four groups in both of the post-test differ significantly. The difference appears more clearly in the form of mean plot (picture 2).



Picture 4 indicates that at post-test I, experiment group gets mean-assessment of 7.21 and at post-test II gets it on 7.57. on the other side, control group gets in post-test I mean assessment of 6.37 and at post-test II gets it of 6.37. it means that the experiment group, which gets applying of conjugation technique in first, owns the retention morphemic ability is higher than the group control gets, either in post-test I or post-test II.

C. Discussion

In general this research is directed to measure the level of influence of applying Arabic conjugation to ability of experiment students' morphemic retention with (1) the same students who are not given by applying of that conjugation technique, (2) the same students who are given by applying of that conjugation technique but with different start. In post-test I, that is conducted at the middle of odd semester, the mean-assessment which is reached by experiment group is higher than the mean assessment which control group can get. This fact proves the influence of applying of morphemic conjugation technique which is given to ex-periment group (as a scaffolding of Arabic instruction) although the control group accepts muhadtasah practice as the same function aspect, that difference is because of some factor: (1) episodic experience about morphemic conjugation which is expressed in performance (Sprenger, 1999) in the from of pattern mastery in morophemic practice, (2) deftness of semantic information (fact, concept, and principle about the system of Arabic morphemic conjugation) as a memorial 'note' which enable the episodic memory operates freely (Mayes, 2001).

At prottest II, which is conducted in the end of odd semester (when expe-riment group also get muhadatsah praktice and of control group accept the applying of conjugation technique), the score mean that is

reached by experiment group is getting imrovement. It can be convinced that such a thing is caused by their conteztual experience or other (Fachler, 1999) in transforming conjugation patterns they have accepted at first middle of odd emester so that can form the sceme (about conjugation system which organized in cognitive structure as 'a conjugation rule') which can become base classification of furthermore information to be more meaningful (Golbeck, 2005). On the other side, from result of that control groups reaches, even there is fluctuation which higher relatively compared to what experiment group reeaches. Such a change is a fair symptom, because: (1) at the second middle of odd semester the control group also accepts applying of conjugation technique, so that they are cognitively having a same matter as what experiment groups gets at the first mmiddle of that semester, (2) it is different from experiment group, the applying of post-test II to control group represents the event which is have 'short distance whit applying of conjugation technique, (3) it is possible that there is interference (memory about conjugation technique with muhadatsah practice) at control groaup smaller than what experiment grooup reaches.

Substantially, the score mean of that experiment group in post-test I, and II higher than what the control group does. This reality proves that there is influence of difference of applying start of conjugation technique which is given to the two groups (the experiment group gets applying of conjugation technique at the first middle of odd semeseter, while the control group at the middle of the second middle of it). Thus, there is a time duration difference at both grouops in the case of: (1) patterns transformation of conjugation which they have learned, as learning activity through exploiting of physiological function, affective, and emotional in facing of examples, writings, pronunciations, and associations (Campbell, 1996; Dirlam, 2006), (2) forming of and assimilation accomodation of morphemic information (Eggen, 2004) including pre-lexical aspect (oral/writing input), lexical, (semanctic, phoneme, spelling) and post lexical (analysis, words integration) (Swanborn & Glopper, 1999), (3) broadness of language deftness, which is in the form of iconic mention (language representation), noetic mention (idea express-ion), and pathic mention (language taste) which will give intensive congeniality in language mastery implicity (procedural, automation, and emotional) and explicit (and semantic of episodic) (Deweale, 2005).

D. Conclusion and Recommendation

In Arabic, conjugation has a big role in changing of morphology and words type, considering that Arabic is one of flexi language, with variation of verbs tansmutation (derivation and inflection) which is very wide with permanent pattern. The applying of conjugation technique can facilitate mastery transmutation. Upon thinking about that the patterns of conjugation represents analogy base to 'measuring' words receptively and productively, the mastery of it will be quicker if the patterns memorized. The applying of conjugation technique in Madrasah Aliyah of Bangil (with students who come from SMP as research subject), proven that the result effectively.

Based on the fact it can believe that applying of conjugation technique (which its focus is the mastery of type alteration pattern of words and and its kinds automatically) owns big potency to assist students in Arabic instruction and of muhadatsah compared on the contrary, because both of those last are applied science, while conjugation technique is pure science as an assist equipment of learning or scaffolding, that more efective if it is passed to the students since early of Arabic instruction. As for students, the patterns of conjugation which memorize represent a frame to recognize the type of word and form without more difficulties to determine meaning variation which is based on affix notion and function of subject-object which are stringed up with verbs.

E. Suggestion

Madrasah Aliyah of Bangil should put into applying of conjugation technique, which presented at least during one semester for new students, and as a Mains Working team of Madrasah, it should invite other madrasahs to conduct so. Thereby, there is a parallelism of action in overcoming of students' Arabic difficulty in mastering the subject matter. It is expected from Arabic teachers to present conjugation items by methods and strategies which can motivate students and applying their competence as well. To assist acceleration of conjugation mastery, it is expected from parents to equip learning facilities for their childern and motivate them to follow Arabic courses. The effort will minimize competency difference and childern's low achievement in deftness of Arabic of compared with Indonesian and English.

There are other side that have not yet touched peculiarly in this research, either in subject matter of substance, emphasis and approach of other cognitive domain, or time allocation. Also, there are sides in the case

of method variation or instructional model. Therefore, it is needed the other research about conjugation of Arabic morphemic, which can extend and deepen the study about aspects of that languange.

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