

TEST-TAKING STRATEGICNESS IN OPEN BOOK TESTS

Suprihadi
Thomas Baharuddin Assyarofi
(pakpriumk@gmail.com)

Universitas Muria Kudus
Jalan Gondang Manis, Kudus 59352, Indonesia

Abstract: Perception about testing and preparation to take a test is usually actualized in what the students do before, during, and after testing. This research involves 50 students and 17 lecturers as respondents, and uses structured questionnaire as its instrument. The results of the analysis show that: 1) the test-taking strategy used by the students of Education Department, the University of Muria Kudus (EED UMK) in open book tests is fair; 2) in α .01 and df 15, there is a significant dependency relationship between students' grade and test-taking strategy use in open book tests, although there is no exact relationship nature between these two variables.

Key words: test-taking strategy, open book test, test formats, test stages

Going to a test venue might be different experience for different students. Some students may consider it similar to going to usual classes, while others may relate it to a war battle. The first group of students often enters test rooms with great enthusiasm, while the second enters the test rooms with great anxiety. However, enthusiasm and anxiety cannot yet be judged as indications of preparation: the first group is not necessarily always more prepared than the second group.

The implication of perception about testing and preparation to take a test is usually actualized in what the students do before, during, and after testing. "Smart test-takers begin thinking about a test long before they enter the test room" (Kesselman-Turkel & Peterson, 2004:v). My personal experience for years as a test supervisor at the English Education Department, the University of Muria Kudus (hereby EED UMK) indicated that there were almost always

some students who arrived late. During testing, there were also some students who behaved unsympathetically. One of the unsympathetic students' behaviours during the test was also reported by FKIP PKMM 2008 Team (Sulistiyanto, Azkiyah, & Julianto, 2008). Using 100 students in Kudus as respondents, they discovered that about 93.10% of them were cheaters with various reasons. Another experience also indicated that after testing there were some students discussing the test with their classmates and there were also some who left the test rooms doing nothing.

Whatever the reason is, cheating should not be the solution for bad preparation or un-readiness for testing. Bad preparation for testing cannot be overcome by means of cramming. "Cramming won't do very much for you (except make you so tired that when you take the exam you won't be able to think clearly enough to answer the questions you DO know)" (Kesselman-Turkel & Peterson, 2004:1). Instead of cheating or cramming, students should use good strategy in taking a test. Cohen clarifies that:

The kinds of strategies that respondents were drawing on as they completed language tasks are the consciously selected processes that the respondents used for dealing with both language issues and the item-response demands in the test-taking tasks at hand (Cohen, 2006:308)

In language learning, how much a student has achieved a certain level of a language skill or a certain amount of a language component is usually measured through testing, i.e. a method of measuring a person's ability, knowledge, or performance in a given domain (Brown, 2004:3). Therefore, to do well on a test is to have both good knowledge of the information that is being tested. Additionally, students should also have the abilities to use the language knowledge allowing them to show what they know. Independent of these two important aspects, language performance also depends on test-wiseness, i.e. the familiarity of test takers with the tests. Hence, test-taking strategies consist of both language use strategies and test-wiseness strategies (Cohen, 1998:219).

Language use strategies are steps or actions that learners select to accomplish language tasks, and include retrieval strategies, rehearsal strategies, cover strategies, and communication strategies (Cohen, 1998:219). Cohen argues further that all four types of strategies are used in test taking, because students need to retrieve material for use in the test, may need to rehearse it before using it, are likely to use some cover strategies to look good, and need to use communication strategies well if the tests call for it. These various language use

strategies constitute test-taking strategies when they are used to help produce responses to testing tasks (Cohen, 1998:219).

Test-wiseness strategies are not necessarily determined by proficiency in the language being assessed, but rather may be dependent on the test taker's knowledge of how to take tests (Cohen, 1998:219). An example of test-wiseness strategy is when the test taker opting out of the language task at hand (for example, through a surface matching of identical information in the assigned passage and with information in one of the response choices). At other times, the strategies may constitute short cuts to arriving at answers (for example, not reading the text as instructed but simply looking immediately for the answers to the given reading comprehension questions), which is in Fransson's words, "respondents may not proceed via the text but rather around it" (Fransson, 1984).

In the context of EED UMK, the question that arises is "Do the students of EED UMK use good test-taking strategies?" If yes, "How strategic are they in taking tests?" The author wonders about it because the study made by Ngadiman of Widya Mandala University reveals that in general the students under his research are not always well prepared for classroom tests (Ngadiman, 2006). It is therefore important to conduct a research at EED UMK concerning test-taking strategies used by the students.

Another important issue to investigate is the relationship between the grade of the students, represented by the semester in which they are enrolled and test-taking strategy use or the strategicness in taking tests. This is because the students of EED UMK, like students of other universities, are segmented into semesters depending on the year of their entrance. Therefore, students of certain semester usually have different characters with students of other semesters, especially in terms of their academic experience and maturity. As a matter of fact, experience and maturity clearly affect the behavior of the students. Therefore, we can infer that experience and maturity enhance logical thinking. Analogous to this, the higher the grade or semester of the students, the more strategic they will be in taking tests.

Testing practices at EED UMK vary according to the characteristics of the subjects, the approaches of the teaching and learning processes, the teachers, and the number of the students taking the subject. Reading comprehension, vocabulary and grammar mastery are often tested using objective types of items,

but writing and translation are usually tested through essay types of test, and so linguistics and teaching theories.

One test currently popular among lecturers of EED UMK is open-book test, especially for the last two categories. This is because the number of the students is relatively great and not proportional with the number of the lecturers so that controlling the students during testing becomes a big problem.

Open book test as a part of alternative tests (Stoner & Smith, 2007) may sound easy, but in reality, the test may be quite difficult. My personal experience indicated that in open-book examinations students spent most of their time wandering around their books to arrive at the answers, indicating that they were not familiar with the contents of the books. However, when the lecturer announced an open book test to his or her students, most of them breathed a sigh of relief, because they thought that answering that type of test would be easier. As a matter of fact, open book exams test the student's ability to find and use information for problem solving, and to deliver well-structured and well-presented arguments and solutions (Kesselman-Turkel & Peterson, 2004: 98). It means that open book test questions usually require them to apply knowledge rather than just remember facts. They may be essay-style questions or involve problem solving or delivering solutions.

In line with the description above, the main objectives of this research are:

1. to give a brief account of the test-taking strategy used by the students of EED UMK in open book tests before, during, and after testing.
2. to give a brief account of the dependency relationship between student's grade and test-taking strategy use in open book tests before, during, and after testing.

This research is also a response to Cohen's challenge to collect strategy data from actual high stakes testing situation. In fact, the strategies actually used in responding to tests in high stakes testing situations may differ from those identified under research condition (Cohen, 2006:313).

METHOD

Based on Johnson and Onwuegbuzie's description of research method, this research is a mixed methods research (usually referred to also as mixed research), because the researcher mixes or combines qualitative and quantitative research techniques (Johnson & Onwuegbuzie, 2004:17). The problem ex-

plored in this research is mainly concerned with test-taking strategies used by the students of EED UMK in open book tests in three stages of tests: before testing, during testing, and after testing and their relationship with the student's grade.

Data

There are two types of data used in this research: primary and supporting data. The primary data represent the qualities of the test-taking strategies used by the students of EED UMK in open book tests in term of ranked-occurrence, which are labeled and scaled ranging from 1 to 6: scale 1 means never and scale 6 means always. The supporting data are lecturers' information and perception concerning the students' test-taking strategy use. The supporting data are used only to confirm and to explain probable prominent phenomena revealed in the primary data, especially those which potentially depend on the lectures' activities.

Respondents

The respondents of this research are the students of EED UMK who were taking real tests and the lecturers of EED UMK. In this way, the test situation was an achievement testing situation so that both physically and psychologically, it was natural.

There were 50 student respondents, who were selected randomly. They comprise active students from different semesters in the academic year 2009/2010 taking open book tests: 15 students from semester I/II; 15 students from semester III/IV; 10 students from semester V/VI; 10 students from semester VII/VIII. Meanwhile, the research also includes 17 out of 25 lecturer respondents, which comprises full-timers and part-timers. They were also selected randomly.

Instrument

Verbal report protocol, in the type of self-report, i.e. learners' descriptions of what they do about their test-taking strategies (Green, 1998:3; Cohen, 2006: 308), is used as the instrument to collect the data. The self-report data are elicited through structured questionnaire using six-Likert scale written in Bahasa

Indonesia. The statements in the questionnaires are all positive so that greater value choices mean better test-taking strategy use. An example item of the questionnaire is as follows:

Saya siap menghadapi tes sejak hari pertama kuliah dengan cara membaca dengan cermat Rencana Perkuliahan yang diberikan dosen.

Tidak Pernah Selalu
 1 2 3 4 5 6

1 = Never 2 = Very Rarely 3 = Rarely
 4 = Occasionally 5 = Very Frequently 6 = Always

Data Analysis and Interpretation

To reveal the quality of the test-taking strategy use of the students, an index number is used. Because there are six scale choices used in this research, the formula to get the index number is as follows:

$$\text{INDEX NUMBER} = ((f_1 \times 1) + (f_2 \times 2) + (f_3 \times 3) + (f_4 \times 4) + (f_5 \times 5) + (f_6 \times 6))/6$$

(Ferdinand, 2006: 291-293).

For detail interpretation, the results will be assigned into six categories, while for general conclusion the interpretation is done by using three-box method, i.e. categorizing the results into three categories (c = 3) (Ferdinand, 2006: 292). The guidelines for the interpretation are presented in Table 1 and Table 2.

Table 1. Guideline for Interpretation of the Index of Test-taking Strategy Used by the Students of EED UMK in 6 Categories

Index Number	Category of Test-taking Strategy Use
8.33 – 15.33	Never use good strategies
15.34 – 22.34	Very Rarely use good strategies
22.35 – 29.35	Rarely use good strategies
29.36 – 36.36	Occasionally use good strategies
36.37 – 43.37	Very frequently use good strategies
>43.37	Always use good strategies

Table 2. Guideline for General Interpretation of the Index of Test-taking Strategy Used by the Students of EED UMK in 3 Categories

Index Number	Quality of Test-taking Strategy Use	Category of Test-taking Strategichness
8.33 – 22.34	Bad	Un-strategic
22.35 – 36.36	Fair	Fairly Strategic
>36.36	Good	Strategic

To test the significance of the relationship between student's grade variable and test-taking strategy use variable, Chi Square Test of Independence is used.

FINDINGS AND DISCUSSION

The main concern of this research is on the quality of the test-taking strategies used by the students of EED UMK in open book tests before, during and after taking the tests. Another issue which is also explored is the dependency relationship between students' grade and test-taking strategy use. However, to get more meaningful interpretation concerning the test-taking strategies used by the students of EED UMK, the supporting data will also be referred to. Table 3 presents the summary of the supporting data.

Table 3. Test-taking Strategy Use of the Students' of EED UMK Based on Lecturers' Perception

Test Stage	Index	Quality of Test-taking Strategy Use	Category of Test-taking Strategichness
Before Testing	12.13	Good	Strategic
During Testing	10.50	Fair	Fairly Strategic
After Testing	11.79	Fair	Fairly Strategic
Average	11.48	Fair	Fairly Strategic

Test-Taking Strategy Use of the Students of EED UMK in Open Book Tests Before Testing, During Testing, and After Testing

The number of the questions in the questionnaire for tapping strategies before testing is 14, nine for strategies during testing, and two for strategies after testing. Table 4 presents the summary of the indexes of the test-taking strategies used by the students of EED UMK in open book tests.

Table 4. Test-taking Strategy Use of the Students of EED UMK in Open Book Tests

Test Stage	Index	Quality of Test-taking Strategy Use	Category of Test-taking Strategicness
Before Testing	29.45	Fair	Fairly Strategic
During Testing	37.63	Good	Strategic
After Testing	33.58	Fair	Fairly Strategic
Average	33.55	Fair	Fairly Strategic

If we refer to Table 1, we can see that in taking open book tests the students of EED UMK “occasionally use good strategies” (Average index = 33.55). As a whole, Table 4 indicates that their strategy use falls within Fair category, which means that they are fairly strategic in taking open book tests.

Referring to test stages, we can see that the most strategic one is when the students of EED UMK are taking a test (during testing). Due to the fact that the index is 37.63, the quality of their test-taking strategy in open book tests during testing is good, which means that the students of EED UMK are strategic during open book test-takers. The worst among the three test stages appears in before testing stage, in which the index is only 29.45.

In relation with this result, some possibilities and facts may happen and make them fairly strategic in open book tests. The first possibility influencing the result is the relatively low score for the students’ test-taking strategy use before testing as compared with the other two stages. More precisely, the data reveal that up to scale 4 (occasionally use good strategies), the percentage of the respondents is 72.42%, or only 27.58% of the respondents who say ‘very frequently’ to ‘always’ do good strategies. This fact may lead to the interpretation that, in general, the students of EED UMK are not always well prepared for taking open book tests. This is in line with the result of the research done by

Ngadiman (2006), i.e. that in general the students of the English Department in Surabaya under his research are not always well prepared for classroom tests. In fact, the students' being fairly strategic is supported by the fact that to the lecturers' perception the qualities of the students' test-taking strategy in all stages of test are only fair (Table 3).

The un-readiness of the students of EED UMK in taking open book tests can be seen more clearly if we examine the results of the questionnaire item per item. For item 1, which asks the students about their readiness for the coming tests from the first day of class by means of reading the lecture plans, the data indicate that the students are only 'occasionally' prepared (with the index of 30.33) or the students who are up to 'occasionally' prepared for the coming tests from the first day of class is 78% and only 6% who are 'always' prepared. Another fact which reveals from the data is that most of the students, or 60%, only up to occasionally try to know from the beginning of the lecture when and how many times the tests will be given for the subjects they are enrolling in (item 2): the rest 28% reply very frequently and the rest 12% reply always. In fact, when the lecturers are asked if the students know the plan concerning when and how many times the tests will be given, what types of item they will get through the lecture plans (by means of item 1 of the questionnaire for the lecturers), the index of the lecturers' support is 14.50. This fact implicitly means that the lecturers have socialized or communicated the lecture plans to the students. Another gap between lecturers' information and students' response is concerned with the weights of the assessment components: most of the lecturers reply implicitly that they inform them to the students while the students reply that they only 'occasionally' know the weights of the assessment components. Fortunately, there is a good indication that, to some degree, the students do not apply test-wiseness strategies, because only 30% of them reply that they 'very frequently' to 'always' apply this strategy when they are asked whether they learn the used test or not to anticipate the coming test; while the lecturers reply that the students 'rarely' apply this strategy.

The last phenomena that can be interpreted as indication of un-readiness are the results of question 14 before testing and question 1 during testing, which try to reveal the use of cover strategy. Question 14 asks the students if they enter the test room self-confidently either ready or unready, while question 1 asks them if they show self-confidence during testing despite their un-readiness in order that they seem to be ready. Although in some way or another

applying cover strategy is good, the high average index for these items (42.33 for item 14 and 40.00 for item 1) indicate that they 'very frequently' pretend to be ready and therefore they are actually 'very frequently' not ready.

The second fact that may influence the students of EED UMK's being only fairly strategic in taking open book tests is that after testing, 54% of the respondents respond that they 'never' or 'occasionally' discuss the tests they have enrolled in with their classmates; the other 24% reply they 'very frequently' have discussion and the rest 22% reply they 'always' have discussion. As a matter of fact, different phenomena happen when the lecturers initiate to conduct discussions. To the lecturers, 41.18% of the students 'always' attend the discussions, 11.76% 'very frequently', and there are no student who 'never' and 'very rarely' do it.

To get more detail information of the strategy use of the students of EED UMK in taking open book tests, we can see the frequency distribution of the scores of each item which is used to reveal the students' test-taking strategies. In before testing stage the highest index (42.33) is found in item14, with which it tries to uncover the use of cover strategy. This shows that the use of cover strategy is quite prominent among the students of EED UMK under research in taking open book tests.

The phenomenon of using cover strategy also happens during testing stage. Twenty percent of the respondents say that they very frequently use cover strategy while 46% say they always practice this strategy by pretending to show self-confidence during testing, in spite of the fact they are actually not ready.

The use of cover strategy, especially those revealed through the questionnaire, can be judged from two sides as a bad and a good practice. It is bad because the students pretend to be ready or show artificial attitude. It can also be judged as a good practice because in this way there is a possibility for the students to cover their weakness so that their performance in the tests can be maximized.

The combination of low indexes of test-taking strategy uses in open book tests in almost all test stages and high indexes in using cover strategies indicate that in taking open book tests the students are not so serious. This indication was sensed by the researcher, and also by other lecturers, when once he announced that the format of the coming test was open book. Most of the students usually expected so; therefore, they usually showed happiness and comfort.

However, in fact, on the day of the test nearly none of the students brought books to the test.

Another unsatisfactory fact also happens in after testing stage. Although this research does not examine much about the students' behavior after testing, the fact that they only occasionally use good strategy has made it reasonable to conclude that after testing the students pay no enough attention to what they have done in the test. As a matter of fact, after testing stage is a crucial time to reflect and review what they did in the test.

Relationship between Test-Taking Strategicness and Successfulness

Although the quality of the test-taking strategy of the students under research is only fair, meaning that they only fairly strategic test takers, the average GPA of the students is 3.54. This is a relatively high GPA, because the highest possible one is 4.00. This fact supports Cohen's findings that the relationship between test-taking strategicness and successfulness is not linear, in the sense that a proven test-taking strategy for a certain language task will be appropriate for other tasks. It depends on how given test takers employ the strategy at a given moment on a given task (Cohen, 1998:220). Sometimes, certain test takers use limited number of strategies successfully for most situations, but others may have a relatively extensive number of strategies though only a few which is effective. Therefore, strategy use and effectiveness will depend on the particular learners, the learning tasks, and the environment (Cohen, 2006:311). It is therefore possible that some learners got satisfactory marks in foreign language tests not because of their actual ability in the language but rather because of their cleverness at using the above or other test-wiseness strategies, or because they were lucky. The frequency of strategy use is not necessarily an indicator of success, nor is success at using a given strategy in a given context a guarantee that the next use of that strategy will also be successful (Cohen, 1998:220). The number of strategies used to obtain a response to a test item may not indicate of how strategic a student is.

Dependency Relationship Between Student's Grade and Test-Taking Strategy Use

It is very possible that students of different semesters are also different in their strategicness in taking tests, including in open book tests. Therefore, the

hypothesis which is put forward is: “There is a significant dependency relationship between student’s grade and test-taking strategy use in open book tests before, during, and after testing”. Table 5 presents the observed frequency (*fo*) and expected frequency (*fe*) of the students of each semester who say never to always use good strategies.

Table 5. Observed Frequency (*fo*) and Expected Frequency (*fe*) of Students’ Test-taking Strategy Use in Open Book Tests

Category of Test-taking Strategy Use	<i>f</i>	Student's Grade				Total
		I/II	III/IV	V/VI	VII/VIII	
Never	<i>fo</i>	30	41	47	13	131
	<i>fe</i>	39.30	39.30	26.20	26.20	
Very rarely	<i>fo</i>	41	43	26	20	130
	<i>fe</i>	39.00	39.00	26.00	26.00	
Rarely	<i>fo</i>	85	68	52	43	248
	<i>fe</i>	74.40	74.40	49.60	49.60	
Occasionally	<i>fo</i>	63	81	33	53	230
	<i>fe</i>	69.00	69.00	46.00	46.00	
Very Frequently	<i>fo</i>	60	62	23	56	201
	<i>fe</i>	60.30	60.30	40.20	40.20	
Always	<i>fo</i>	96	80	69	65	310
	<i>fe</i>	93.00	93.00	62.00	62.00	
Total		375	375	250	250	1250

Based on Table 5 as the data of the students’ test-taking strategy use, we can calculate the value of the chi square (X^2) and then test the hypothesis by using Chi Square Test of Independence.

Hypothesis Testing

H_0 : There is no relationship between student's grade and test-taking strategy use in open book tests before, during, and after testing.

(H_1 : There is a relationship between student's grade and test-taking strategy use in open book tests before, during, and after testing)

$$df = (r - 1)(c - 1) = (6 - 1)(4 - 1) = 15$$

$$\alpha = .01$$

$$X^2 (\text{critical}) = 30.578$$

$$X^2 (\text{obtained}) = \sum \left[\frac{(fo - fe)^2}{fe} \right]$$

After having been calculated by using the formula above, the value of X^2 (obtained) is 54.27. This test statistic falls into the critical region and, therefore, the null hypothesis (H_0) is rejected and the research hypothesis (H_1) is accepted. In other words, there is a significant dependency relationship between student's grade and test-taking strategy use in open book tests. The pattern of cell frequencies observed is unlikely to have occurred by chance alone. The student's grade and test-taking strategy use are dependent. Specifically, based on these sample data, the probability of using certain test-taking strategies in open book tests is dependent on the semester in which the students enroll: the grade of the students makes difference in whether a student never, very rarely, rarely, occasionally, very frequently, or always use good test-taking strategy in open book tests.

In spite of the fact that the students' test-taking strategy is dependent on their grades, it should be noted that chi square test does not tell us the exact nature of the relationship. In this case, it does not tell us which level of students – those from semester I/II, semester III/IV, semester V/VI, or semester VII/VIII – is more likely to be in a certain category of test-taking strategy use. In other words, chi square does not tell us, for example, whether or not students of semester I tend to always use good strategy than students of the other semesters. To make this determination, we must perform some additional calculation. We can figure out how student's grade is affecting the test-taking strategy use by calculating percentages within each column of the bivariate table (Healey,

2009: 268). To do this, Table 5 needs simplifying with reference to Table 2, because reducing the number of the categories of the test-taking strategy will make it easier to be justified. Table 6 presents the result of the percentage calculation that has been simplified into three categories of test-taking strategy use. For instance, 71 is the accumulation of those who never and very rarely do good test-taking strategy, and so forth.

When we compare the strategicness between one semester and another, there seem to be some unnatural relationships as they should have been. In strategic level, the percentage of Semester I/II is higher than those of Semester III/IV and Semester V/VI. The percentage of Semester III/IV is also higher than that of Semester V/VI. The natural relationship is between Semester VII/VIII and Semester V/VI, III/IV, and I/II, because the percentage of the students of Semester VII/VIII who is strategic is higher than the lower three semesters.

Table 6. Test-taking Strategicness in Open Book Tests of the Students of EED UMK

Category of Test-taking Strategicness	Student's Grade								Total	
	Smt I/II		Smt III/IV		Smt V/VI		Smt VII/VIII			
	<i>f</i>	%	<i>F</i>	%	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%
Unstrategic	71	18.93	84	22.40	73	29.20	33	13.20	186	14.88
Fairly Strategic	148	39.47	149	39.73	85	34.00	96	38.40	416	33.28
Strategic	156	41.60	142	37.87	92	36.80	121	48.40	548	43.84
Total	375	100	375	100	250	100	250	100	1250	100

In unstrategic level, the natural relationship should be, as opposed to strategic level, the lower the semester, the higher the percentage of the unstrategic test-takers, because strategicness is influenced by maturity. However, in this level, the higher the semester is, the higher the percentage is; except for Semester VII/VIII which is the lowest.

From Table 6 we can conclude tentatively that there is no exact nature of relationship between the student's grade and category of test-taking strategicness in open book tests. The lack of exact nature of relationship between the student's grade and category of test-taking strategicness can be explained from

the point of view of the number of categories used in the chi square test. Despite the simplification that has been done, the two variables still generate a complex 3 x 4 table with 12 cells.

CONCLUSIONS AND SUGGESTIONS

In general, the test-taking strategy use of the students of EED UMK in open book tests before, during, and after testing is fair. In other words, the students of EED UMK are fairly strategic open book test-takers, in spite of the fact that their average GPA is relatively high (3.54). This is due to the fact that the relationship between test-taking strategichness and successfulness is not linear. In addition, there is a distinction between strategies for language use, resulting GPA, and strategies for responding to a test, which result in test-taking strategichness: the former generally focus on making sense out of the language material, while the latter may simply focus on getting the right answer.

There seems to be a tendency that the students of EED UMK under research focus more on during testing stage, because in this stage the quality of their test-taking strategy use is good, while in before testing and after testing stages the quality is only fair. It may mean that most of the students entered the test rooms without maximum preparation. This is the same as what Ngadiman has revealed that in general the students under his research are not always well prepared for classroom tests (Ngadiman, 2006).

The use of cover strategy is revealed in good quality. A gap between what the students say and what the lectures say about the test-taking strategy used by the students of EED UMK is recorded, especially in before testing stage: to the students, the quality is fair, while to the lecturers the quality is good. If this is traced back from the questionnaire, it seems this happens due to information gap so that their voice is different.

The second conclusion is that in the level of significance .01 and degree of freedom 15, the relationship or dependency between student's grade and test-taking strategy use in open book tests before, during, and after testing is proved to be significant. This conclusion supports the theory of cognitive developmental model of human development that the "how" of development seems to be reflected in the strategies that children use at qualitatively different developmental levels to solve certain types of problems (Salkind, 1985:19).

Although there is a significant relationship between student's grade and test-taking strategy use, there is no exact nature of relationship between these

two variables. When we compare the strategicness between one and another semester, there are some unnatural relationships as they should have been. In strategic level, the percentage of Semester I/II is higher than those of Semester III/IV and Semester V/VI. The percentage of Semester III/IV is also higher than that of Semester V/VI. The natural relationship is between Semester VII/VIII and Semester V/VI, III/IV, and I/II, because the percentage of the students of Semester VII/VIII who is strategic is higher than the lower three semesters.

To maximize the performance in testing, the students are suggested to be well prepared for the coming tests by reading the lecture plans and ask the lecturers to inform their lecture plans if they do not. They are also suggested to focus on all test stages, not only in during testing stage. Suggestion by Katalin is also important to note, i.e. to give some training in test-taking skills because it would help testees to do well on exams.

For further research, it is hoped that this research can inspire the readers to conduct a research related with test-taking strategies in other areas such in a certain language skill and component, test-taking strategy among different levels of students, such as when they are preparing their National Examination.

REFERENCES

- Brown, H.D. 2004. *Language Assessment: Principles and Classroom Practice*. New York: Pearson Education, Inc.
- Cohen, A.D. 1992. Test-Taking Strategy on ESL Language Tests. *TESOL Journal*, 10:10-115.
- Cohen, A.D. 1998. *Strategies in Learning and Using a Second Language*. London & New York: Longman.
- Cohen, A.D. 2006. The Coming Age of Research on Test-Taking Strategies. *Language Assessment Quarterly*, 3(4):307-331.
- Cohen, A.D. 2009. (adcohen@umn.edu). June 23, 2009. Re: Test-taking Strategy Research. E-mail to Supriyadi (pakpriumk@gmail.com)
- Cohen, A.D. & Upton, T.A. 2006. *Strategies in Responding to the New TOEFL Reading Tasks*. Monograph Series MS – 33. ETS

- Ferdinand, A. 2006. Metode Penelitian Manajemen: Pedoman Penelitian untuk Penulisan Skripsi, Tesis dan Desertasi. Semarang: Badan Penerbit Universitas Diponegoro.
- Flippo, R.F. & Caverly, D.C. 2009. Handbook of College Reading and Study Strategy Research. New York: Routledge.
- Fransson, A, 1984. Cramming or Understanding? Effects of intrinsic and extrinsic motivation on approach to learning and test performance. In Alderson, J.C. & Urquhard, A.H. (Eds), Reading in a Foreign Language (pp. 86 – 121). London: Longman.(Online), (<http://www.carla.umn.edu/assessment/VAC/references.html> \l "fransson_1984" \t "carla")
- Green, A.J.F. 1998. Using Verbal Protocols in Language Testing Research: A Handbook. Cambridge, UK: Cambridge University Press.
- Healey, J.F. 2009. Statistics: A Tool for Social Research (Eight Edition). Belmont, CA, USA: Wadsworth Cengage Learning.
- Hedge, T. 2000. Teaching and Learning in the Language Classroom. Oxford: Oxford University Press.
- Johnson, R.B & Onwuegbuzie, N.J. 2004. Mixed Methods Research: A Research Paradigm Whose Time Has Come. Educational Researcher, 33(7): 14-26.
- Katalin, B. Reflections on the Test-Taking Strategies of 7th and 11th Grade Hungarian Students of English. *ELT Journal*. 7(3).
- Kesselman-Turkel, J. & Franklynn, P. 2004. Test-Taking Strategies. London: University of Wisconsin Press.
- Kurikulum 2007. 2007. Program Studi Pendidikan Bahasa Inggris, FKIP UMK
- Likert Scale. 2008. (Online), (<http://www.gifted.uconn.edu/siegle/research/Instrument%20Reliability%20and%20Validity/Likert.html>), Retrieved 5 February 2008.
- Ngadiman, A. 2006. Students' Strategies for Taking Classroom Tests (Abstract). k@ta. 8(2). (Online), (<http://puslit.petra.ac.id/~puslit/journals/articles.php?PublishedID=ING06080204>), Retrieved 4 May 2009.

- Nunan, D. 1992. *Research Methods in Language Learning*. New York: Cambridge University Press.
- Salkind, N.J. 1985. *Theories of Human Development (Second Edition)*. New York: John Wiley & Sons, Inc.
- Stoner, M. & Smith, P. 2007. *Assessing Student Learning: How do We Know that They Know?* (Online), (<http://www.ctl.csus.edu/documents/TypesofTests.doc>), Retrieved 16 September 2009.
- Sulistiyanto, A., Azkiyah, N. & Julianto, E. 2008. *Upaya Preventif Edukatif Membentuk Generasi Anti Korupsi*. Paper presented on Diskusi Pelajar dan Mahasiswa Se-Kudus, Tim Program Kreativitas Mahasiswa Bidang Pengabdian pada Masyarakat 2008, Universitas Muria Kudus.
- Test-Taking Tips. 2003-2008. (Online), (<http://www.testtakingtips.com/test/openbook.htm>), Retrieved 5 February 2008.
- Test-Taking Strategies. (Online), (<http://www.carla.umn.edu/assessment/VAC/research/test-taking.htm>), University of Minnesota.
- Yoshida, K. 2006. Theoretical Frameworks of Testing in SLA: Processing perspectives and strategies in testing situations. *JALT Testing & Evaluation SIG Newsletter*. 10(1):2-7, (Online), (<http://jalt.org/test/pub.htm>)