

The Effectiveness Of Strategy In Completing ToeFl Reading Comprehension By Using Computer - Based Test (Cbt) And Paper - Based Test (Pbt) In Senior High School Masrupi

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ABSTACT: The aim of this research is to know the effectiveness of strategy in completing TOEFL reading comprehension by using Computer Based Test or Paper Based Test. To achieve this research aim, so that students are skilled at reading various strategies are needed to measure their abilities. Computer Based Test (CBT) is a method of assessing students managed by computers that are either stand-alone or special network or by other technology devices connected to the internet. Paper Based Test (PBT) is a method with manual examinations that use paper media and stationery. This research focuses on comparative quantitative studies, namely statistical analysis of the comparison of student who used Test-Taking Strategy in completing TOEFL reading comprehension test by using CBT and PBT methods. Results of tests TOEFL Reading Comprehension students who use the Test-Taking Strategy in Class PBT (B₂). Based on the data of research were collected from the field, to score Tests TOEFL Reading Comprehension students who use the Test-Taking Strategy in grade PBT (B₂) and a range of 0-100 shows the score Lowest 65 and score top 81 with the range of scores 14. From the results of the analysis of data gained an average of 75.15 deviation standard 4.532, the median of 77 and 77 mode. The results of test TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in the CBT class is higher than those who learn by using Test-Taking Strategy in the PBT class From the ANAVA calculation above it can be seen that the $F_{count} = 0.85$ which turns out to be smaller than the $F_{table} = 4.03$ ($0.85 < 4.03$). It's mean H_o is accepted. Based on these results, it can be concluded that there are significant differences in the result of test TOEFL Reading Comprehension those who learn by using Test-Taking Strategy in the CBT class are higher than those who learn by using Test-Taking Strategy in the PBT class.

Keywords: *Test-Taking Strategy, TOEFL Assessment, Computer Based Test, Paper Based Test, Reading Comprehension Skill.*

I. INTRODUCTION

To day technology is a concept that relates to the type of use and knowledge of tools and expertise, and how that technology can influence human ability to control and change things around it. So, basically technology is a kind of result of the work of human hands to be able to utilize nature and something around it more optimally. Thus, technology simply aims to facilitate the fulfillment of human needs.

Information communication technology has significantly transformed the method of assessment. In many academic domains, educational measurement has been moving from Paper Based Test (PBT) to the use of computer-based testing (CBT), defined as tests or assessments that are administered by computer in either stand-alone or dedicated network or by other technology devices linked to the internet. in a high school that has organized the UNBK program. In fact, this year was one of the schools designated by the Banten provincial education office as a model school that carried out computer-based School Exams (USBN BK). In addition to using the CBT program at Public Senior High Schools in UNBK and USBN BK, school teachers also began using CBT in the daily Test Process (UNBK). With UNBK, teachers can more easily give students grades, teachers do not bother photocopying questions for student exams, teachers only need to listen to questions. Besides that, the teacher is easier, because it doesn't have to fix, and immediately gets out of value, but it's also

easier to analyze the problem, because it's already on the server, the teacher only checks on the server, values, data, and analysis are easier. English entered into the Academic Potential Ability Test. Unfortunately, not all English language skills were tested, focused more on reading skills in the CBT and PBT test methods. The objectives of this study are: To find out which is more significant to assessing students reading skill between Paper Tests (PBT) or Computer Based Tests (CBT) and to know the influence of Computer Based Test or Paper Based Test in assessing students reading skill in Higher Education. CBT and PBT also use to test TOEFL reading comprehension in Higher Education.

TOEFL (Test of English as a Foreign Language) is a standardized test to measure the English language ability of non-native speakers wishing to enroll in English-speaking universities. The test is accepted by many English-speaking academic and professional institutions. TOEFL is one of the two major English-language test in the world, the other being the IELTS. TOEFL is trade mark of Educational Testing service (ETS), a private non-profit organization, which design and administer the test (ETS, 2007).

In English there are four skills should be mastered by students. One of the skill is reading. Reading is the main gateway for obtaining information, science, knowledge and expressing idea. It also regarded as a way for communication and especially for educational development. Someone is seemly impossible for having a wide insight without reading. But, reading it self is not enough, According to Barneet (1998 : 343-349) the concept of comprehension that may be even more important. Students need to be able to analyze and reorganize ideas and information. To keep understanding what is the readers read. They have to comprehension a text. The reader in the real world is involved in meaning-based activity that is purpose and comprehension driven, reading is motivated by the reader's particular purpose and is propelled by increasing comprehension of the texts (Hudson, 2007 : 9). Reading comprehension can be defined as the ability to understand a text, to analyze the information, and to interpret correctly what the writer is stating. " No one process defines reading comprehension by itself, but together they provide a fairly accurate account of the processes required for fluent reading". (Grabe & Stoller, 2002 : 17).

In TOEFL test, reading comprehension is a part of the third section which aimed to test student ability to interpret and analyze a text or literature about various kinds of topics. In this time, TOEFL is used in many sectors, for example to get scholarship, for applying job, as a standardized test to measure students proficiency in English level and it is also as a requirement for graduating at an University. Some universities such as Mulawarman University require their students to pass the TOEFL test by the passing grade of four hundred and fifty before they get final examination of their theses, (Shaleh, 2017), FBS UNM Makassar University, the TOEFL test is highly recommended for students who want to continue their education to higher level for example from undergraduate level to graduate level (Mahmud, 2014), and Syiah Kuala University in Aceh Province ask their students to obtain a TOEFL score ranges from 450 to 477 depending on varying department regulation (Putra et al., 2017).

As Kusuma (2016 : 3) stated that TOEFL test is proficiency test, which is used to measure the ability of a person without being directly ignored by the process of teaching and learning. There are three kinds of TOEFL test that is issued by ETS (English Testing Service) and it is often used in examination in the college or universities. They are paper - based test (PBT), Computer -based test (CBT), and Internet – based test (IBT). There are three sections of test in paper – based test : Listening, structure, reading comprehension. In computer – based test : Listening, structure, reading and writing. And internet based – test : Listening, speaking, writing and reading.

In this research, the researcher used TOEFL ITP test. TOEFL ITP stands for " Institutional Testing Program ". Test are paper based with similar to TOEFL PBT and use academic content to evaluate the English language proficiency of non-native English speaker. This exam is also suitable to those who want to measure their English level for personal reasons or within an academic context to boost a job application or event to assess the effectiveness of an English language course. ITP questions and content are very similar to what students find in college exam. Assessments are made in oral and reading comprehension, structure and writing expression. It score is depending on the exam level, the score may vary : 200-500 is the range for the beginner/intermediate level scale and 310-677 correspond to an intermediate/advanced level scale.

Among three language skills tested in TOEFL, reading comprehension is the most important section (Anjomshoa & Zamanian, 2014) cited in Putra et al., (2017). At the same time, that section is also the most difficult according to the preliminary data from Syiah Kuala University (Putra et al., 2017 : 773). Previous researchers also found that EFL students in other Indonesian universities had the same problem (Gani et al., 2016; Prammu et al., 2014 in Putra et al., 2017). Similar results were discovered in other countries such as China (Chern, 1985; Ling, 2011), and Iran (Kheizardeh & Tavakoli, 2012).To achieve a better score and acceptable results in completing TOEFL reading comprehension test is not easy, a student must have a wide knowledge and an appropriate strategy because It will help them to answer the question easily.

According an early definition provided by Brown (2007 : 119) defines strategies as the "specific methods of approaching a problem or task, modes of operation for achieving a particular end, planned designs for controlling and manipulating certain information." Furthermore, Strategy is defined as a plan or method that is designed to reach a goal. It can include deliberate and conscious behaviors, as well as unconscious behaviors. Then, a reading strategy is further defined as "a physical or mental process used consciously or unconsciously with the intention of facilitating text comprehension and/or learning (Davies, 1995). Pani defines reading strategies as "the mental operations involved when readers approach a text effectively to make sense of what they read. Good readers apply more strategies more frequently and more effectively than poor readers." (Pani, 2004 : 355-3362).

As the mental process Reading strategies are essential not only for successful comprehension, but also to overcome reading problem and become a better reader and comprehender ((McNamara: 2009). Most individuals have personal strategies that they develop as ways to understand what they read. Reading strategies often taught by teachers and utilized by students as ways to improve reading comprehension (Mckee, 2012 : 48). King as cited in Karami (2008) believe that four factors are involved in reading comprehension : the reader, the text, the strategies, and the goal. He, then goes on to emphasize that what actually makes the difference is the reading strategies. For king, the single most important factor in reading is the startegies learner utilize.

The study by Green and Oxford (1995a : 261-297) discovered that the higher-level students reported using strategies of all kinds significantly more frequently than the lower level students. Then, Dreyer and Oxford (1996b) found a significantly positive correlation between frequency of strategy use and successful TOEFL scores, while Park (1997 : 211-221) also discovered more frequent use of strategies among more proficient learners. And other demand have been advanced by the other researcher, Oxford (2001c) in Pawlak (2014 : 46) arguing that strategy use may account for up to 61 percent of the variability in English proficiency scores and Chamot (2004 : 18) stating that ".Differences between more and less proficient languages learners have been found in the number and range of strategies used, in how the strategies are applied to the task, and in the appropriateness of the strategies for the task". A number of studies have demonstrated a significant positive correlation between strategy use and proficiency.

It can be concluded that strategy and proficiency have a significant correlation. Because proficient learners are able to use an appropriate strategy in completing a task or problem faced. Hence, It gives them a bigger chance to get a higher score.

The test-taking strategies have been referred to as techniques, tactics, potentially conscious plans, consciously employed operations, learning skills, basic skills, functional skills, cognitive ability, language processing strategies, and problem solving procedure (Wenden, 1987:7). According to Jimenez et al. (1996 : 90-112) test-taking strategies as operations or steps used by test-takers to facilitate the retrieval of information and classified them into four group – reader initiated strategies, text initiated strategies, bilingual strategies and interactive strategies. Futhermore, Test-taking strategies according to Cohen & upton (2006 : 4) are "test-taking processes that the respondents have selected and of which they are conscious, at least to some degree".

In other words, the notion of strategy implies an element of selection. At other times. Otherwise, the processes would not be considered as strategies. At other times, the strategies may constitute shortcuts to arriving at answers (e.g., not reading the text as instructed but simply looking immediately for the answer to the given reading comprehension questions). In addition, McDonough examined a number of strategies which let the reader come to the right answer without actually knowing it from internal linguistic evidence. He found that the students would be allowed to get the right answer for the wrong reasons. As a matter of fact, "the surface matching of test item stem and reading passage, or clues even in the stem itself which matched with one of the options" (McDonough, 1995: 109).

In conclusion, test – taking strategy is a preparation in doing a test conciously, which are including of some students skills and strategies that will enable students to handle all types of test in achieving a good score.

The Understanding Modern Test with Computer Based Test (CBT)

Modern Test or Computer Based Test is a test using a computer through internet access with scaling done automatically by a computer. Use of CBT as a summative assessment tool carries concrete practical and economic benefits because it provides facility to test an immense number of student cohort with the facility of automated marking of responses (Charman, 1999; Zakrzewski & Bull, 1998). CBT is a mode of testing that acts as a catalyst for change, provides a base for change in mode of learning, instruction and curricula in educational institutions (Scheuermann & Pereira, 2008). Recently in most of the educational institutions there is a recent trend in shifting the mode of assessment from PBT to CBT. Administering the CBT mode of assessments is becoming predominantly widespread in educational assessment domain because this major variation in assessment methodology leads to practical changes in pedagogy and curricula methodology (Chen, 2012; Genc,

2012; Hsiao, Tu, & Chung, 2012; OECD, 2010). Pedagogical advantages on CBT include: providing a fast and error free feedback; repeatability of tests consisting of randomly-generated test items; unquestionable reliability and fairness; flexibility in allocation of test timing and venue; and, direct responsibility for one's own learning and test taking (Charman, 1999).

The Understanding Traditional Test with Paper Based Test (PBT)

Based Test (UN-PBT) is a test to measure aspects of knowledge implemented in written form. According to the Ministry of Education and Culture, Paper Based Test (PBT) is an exam system used with use the text of the question and answer sheet paper based. Therefore, it can be concluded that the Paper Based Test (PBT) is an evaluation system improving the quality of education held in writing using paper and pencil. Based on media paper and pencil used, the term Paper Based Test (PBT) is often referred to as a conventional test. The procedure for working on PBT is that students are required to blacken one of the answers that is considered right on paper Answer Sheet (LJK). All questions are presented at on paper and answer using a pencil. Exam questions multiple choice, with five answer choices. These questions are grouped into several package questions.

Computer Based Tests versus Paper and Pencil Tests

Although CBT offers many advantages over traditional PPT (Poggio, Glasnapp, Yang and & Poggio, 2005; Zhang & Lau, 2006), equivalency of scores between the two test administration modes have been the real concerns for the researchers and experts in the area of assessment, practitioners, and educators (Lottridge, Nicewander, Schulz, & Mitzel, 2008). To deal with this concern, many researchers conducted studies in synthesizing the administration mode effects of CBTs and PPTs (Pommerich, 2004; Poggio et al., 2005; Salimi, Rashidy, Salimi, & Amini Farsani, 2011). Noyes and Garland (2008) believe that the benefits of standardized computer-based tests, such as quick and objective results and the ease of comparing results with others make this method very popular. Moreover, moves toward computerized testing are rooted in the advantages it provides in comparison with traditional paper-and-pencil format (Choi & Tinkler, 2002; Kim & Huynh, 2007; Kingston, 2009). Such advantages, according to the findings of mentioned studies, include cost-effective administration, ease of administration, more accuracy, immediacy of scoring and reporting, and flexible test scheduling and location. These studies, also, indicated that students who are familiar with computers feel more comfortable using it (O'Malley, Kirkpatrick, Sherwood, Burdick, Hsieh, & Sanford, 2005; Poggio, et al., 2005).

While computers have been important in language testing, only a relatively small group of professional language testers use computers in producing and administering language tests (Kathleen, 2006). However, score derived from CBT as compared to PPT might reflect not only the examinee's proficiency in the construct being measured, but also the level of language proficiency of examinees (Clariana & Wallace, 2002). Clariana and Wallace (2002) in their study found that: "It is critical to realize that computer-based and paper-based tests, even with identical items, will not necessarily produce equivalent measures of student learning. Instructors and institutions should spend the time, cost, and effort to mitigate test mode effects."

Test Theory Description

Tests or examinations (informally, examinations or evaluations) are assessments intended to measure exam participants' knowledge, skills, talents, physical fitness, or classification on many other topics. Tests can be done verbally, on paper, on a computer, or in a restricted area that requires test takers to physically perform a series of skills. Tests vary in style, accuracy and requirements. For example, in a closed book test, test takers are often asked to rely on memory to respond to certain items while in an open book test, test participants can use one or more additional tools such as a reference book or calculator when responding to an item. Tests can be done formally or informally. Examples of informal tests are reading tests given by parents to children. An example of a formal test is the final examination given by a teacher in class or I.Q. The test is given by a psychologist in a clinic. Formal testing often produces test scores or scores. Test scores can be interpreted with respect to norms or criteria, or sometimes both. Norms can be set independently, or by statistical analysis of a large number of participants. The exam is intended to test the child's knowledge or willingness to give time to manipulate the subject.

Definition of Reading

Reading is one of the English skills as part of four essential skills such as speaking, listening and writing. It is the way to understand written messages. According to Nuttal (2000:2), reading means a result of interaction between the writer's mind and the reader's mind. It is the way how the reader tries to get the message or the intended meaning from the writer. In this process, the reader tries to create the meanings intended by the writer, the reader can get the point. Reading can be defined as the instantaneous recognition of various written symbol with existing knowledge and it also can be defined as comprehension of the information and the idea communicated. There are some strategies in answering TOEFL reading comprehension test, such as skimming, scanning, reading to learn and test-taking strategy.

Test-taking strategies

The test-taking strategies have been referred to as techniques, tactics, potentially conscious plans, consciously employed operations, learning skills, basic skills, functional skills, cognitive ability, language processing strategies, and problem solving procedure (Wenden, 1987:7). According to Jimenez et al. (1996 : 90-112) test-taking strategies as operations or steps used by test-takers to facilitate the retrieval of information and classified them into four group – reader initiated strategies, text initiated strategies, bilingual strategies and interactive strategies. Furthermore, Test-taking strategies according to Cohen & Upton (2006 : 4) are "test-taking processes that the respondents have selected and of which they are conscious, at least to some degree".

In other words, the notion of strategy implies an element of selection. At other times. Otherwise, the processes would not be considered as strategies. At other times, the strategies may constitute shortcuts to arriving at answers (e.g., not reading the text as instructed but simply looking immediately for the answer to the given reading comprehension questions). In addition, McDonough examined a number of strategies which let the reader come to the right answer without actually knowing it from internal linguistic evidence. He found that the students would be allowed to get the right answer for the wrong reasons. As a matter of fact, "the surface matching of test item stem and reading passage, or clues even in the stem itself which matched with one of the options" (McDonough, 1995: 109).

In conclusion, test – taking strategy is a preparation in doing a test consciously, which are including of some students skills and strategies that will enable students to handle all types of test in achieving a good score.

Reading in EFL Context

in language learning one of the most prominent considerations is reading (Noor, 2011 in Kavlu). Reading perceived as a main pillar in academic and higher education context for EFL and ESL learners

(Karbalaeei, 2010). They received new information through reading which assists them to gain comprehending, reading between lines, synthesizing, interpreting in order to go a head in their study field (Grabe et al., 1991). Reading in EFL notion has been widened the concept to encapsulate mental and visual skills required to get information from digital displays, computers, and and-held (mobile) devices or from other various technological learning settings. Nowadays the concept of reading is expounded to incorporate the process of learning complex and different set of abilities and knowledge which empower EFL readers to comprehend print-based and visual information and be able to keep up pace with vibrant and rapidly developing information-based environment (Reutzel & Cooter,2012).

In foreign language situations, where second language input sources are limited, reading becomes a viable means of developing second language ability (Gorsuch & Taguchi, 2010) which, in turn, can facilitate or hinder academic success for many foreign language learners across educational contexts (Taylor et al., 2006). Thus, in many foreign language settings reading is given special attention, due to the fact that reading is one of the most important language learning goals for many foreign language students (Grabe, 1991: 406).

Research Methodology

The Experimental research method in this study uses comparative research. This research method uses experiments, namely research conducted by conducting manipulation of research and the existence of control (Nazir, 1988: 74). When viewed from the type of implementation, this research is an Associative type of research with a causal relationship, that is a causal relationship. So, here there are independent variables (variables that affect) and dependent (influenced) (Sugiono, 2010: 7). In this study there are two groups of variables involved, namely two independent variables and one dependent variable. The two independent variables are Test-Taking

Strategy in CBT and PBT class, while the dependent variable is TOEFL reading comprehension. The research design used is factorial design 2×2 , which is an experiment in which all or almost all levels of a certain factor are combined with all or almost all levels. The experimental class and control class. The strategy in completing TOEFL reading comprehension test by using CBT as Experimental class but using PBT is a control class. This test depending on the type of data (nominal, ordinal, interval / ratio) and sample group tested. Comparison between two independent samples, namely the samples are separated from each other explicitly where one sample member does not become a member other sample. Research instrument for collecting data used in the test is in the form of test questions. To measure the increase in cognitive abilities of students in understanding reading comprehension test or the material is in the form of multiple choice questions as many as 40 items with five alternative answers namely a, b, c, d and e. The question consists reading skill only with material in the second semester, which is about business and personal later, passive voice, and analytic exposition in accordance with English material that has been studied in the previous class. Making questions about the questions chosen by the researchers looked at examples and collections of questions from quipper school.

In this research, to analyze about the Effectiveness of Test-Taking Strategy in completing TOEFL reading comprehension in Computer Based Test class or Paper Based Test class, in Assessing students' TOEFL reading comprehension skill in Higher Education use a statistical approach which involves a comparative analysis of data on students TOEFL reading comprehension score from CBT and PBT class were performed using Pearson Coefficient Correlation.

Pearson moment Correlation (r) signifies the degree of relationship that exists between dependent variable is the Paper Based Test (PBT) denoted as X. While the independent variable is the Computer Based Test (CBT) denoted as Y. Equation 1 represents the Pearson correlation coefficient formula, the valid test result for r lies between -1 and +1. If r lies between 0 and 1, it shows that there is a positive correlation that is X increases as Y increases. If $r = 1$, it shows that the result is perfect positive. If r is between 0 and 0,49, it exhibits a low positive correlation. When $r = -1$, it shows a perfect negative correlation that is the rate at which the dependent variable increases is exactly equal to the rate between -0,49 and -1, it exhibits a strong negative correlation.

Research result and Discussion

Research result, data has been collected through research in tabulated in accordance with the purposes of the analysis of data contained in a draft study that aims to show the picture of general regarding dissemination or distribution of data. It has been explained that the research this is a research experiment that uses a draft analysis of *factorial 2 x 2*. So that by design are the descriptions of the data that will be presented as follows are: (1) The result of TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT class (A_1). (2) The result of TOEFL Reading Comprehension students who learn by using the Test-Taking Strategy in PBT class (A_2). (3) The result of TOEFL Reading Comprehension of students (B_1). (4) The result of TOEFL Reading Comprehension of students (B_2). (5) The result of TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT and PBT class ($A_1 B$). (6) The result of TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in PBT class ($A_1 B_2$). (7) The result of TOEFL Test Reading Comprehension of students who study with Test-Taking strategy in the CBT class ($A_2 B_1$) and (8) The result of TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in the PBT class ($A_2 B_2$). Each group of group distribution are presented by way of presenting the average as a measure concentration, standard deviation as the size of the deployment in the description of data, tables frequency.

- b. Results of tests TOEFL Reading Comprehension students who use the Test-Taking Strategy in Class PBT (B_2). Based on the data of research were collected from the field, to score Tests TOEFL Reading Comprehension students who use the Test-Taking Strategy in grade PBT (B_2) and a range of 0-100 shows the score Lowest 65 and score top 81 with the range of scores 14. From the results of the analysis of data gained an average of 75.15 deviation standard 4.532, the median of 77 and 77 mode.

The number of class intervals of 6 and length of class 3 created a table of distribution frequency Results Tests TOEFL Reading Comprehension of students who use Test-Taking Strategy as seen in Table 9.

Table 9. Distribution Frequency Score TOEFL reading comprehension of Students who used Test-Taking Strategy in Class CBT.

Interval Class	Frequency	Frequency	Frequency
	Absolute (f)	Cumulative	Relative (%)
65-67	1	1	3.84
68-70	5	6	19.23
71 - 73	2	8	7.69
74 - 76	4	12	15.38
77 - 79	9	21	34.61
80-82	5	26	19.23
amount	26	-	100

For a clearer presentation, the result of TOEFL Reading Comprehension Test of students who used Test-Taking Strategy in the CBT class (B₂).

3. The result of TOEFL Reading Comprehension for students who use the Test-Taking Strategy in CBT and PBT Classes.
 - a. The result of TOEFL Reading Comprehension Test of students who use the Test-Taking Strategy in CBT and PBT Classes (A₁ B₁).

Based on the data of research were collected from the field, to score Tests TOEFL Reading Comprehension students who use the Test-Taking Strategy in CBT and PBT class (A₁ B₁) shows the score Lowest 80 and score top 92 with the range of scores 12. From the results of the analysis of the data obtained 86.38 average deviation standard 3.885, the median of 87 and 82 mode.

The number of class intervals of 5 and length of class 3 created tables distribution of the frequency of tests TOEFL Reading Comprehension of students who learn with Test-Taking Strategy on CBT Class and Class PBT as shown in Table 10.

Table 10. Distribution of Frequency Score TOEFL Reading Comprehension of Students who learn by using Test-Taking Strategy in CBT and PBT class.

Interval Class	Frequency	Frequency	Frequency
	Absolute (f)	Cumulative	Relative (%)
80-82	3	3	23.07
83-85	3	6	23.07
86 - 88	2	8	15.38
89-91	4	12	30.76
92-94	1	13	7.69
amount	13	-	100

For a clearer presentation the result of test TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT and PBT class (A₁ B₁).

- b. Results of test TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy In CBT and PBT class (A₁ B₂).

Based on the data of research were collected from the field, for the Reading Comprehension TOEFL score of students who learn by using Test-Taking Strategy in CBT and PBT Class (A₁ B₂) shows the lowest score of 74 and the highest score of 81 with a range of scores 7. From

the results of data analysis obtained an average score of 77.92 deviations standard 2,290, the median of 78 and 78 mode.

The number of class intervals of 5 and length of class 2 made a table of distribution frequency of tests TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT and PBT class as shown in Table 11.

Table 11. Distribution of Frequency Score TOEFL reading comprehension of Students who learn by using Test-Taking Strategy in CBT and PBT class.

Interval Class	Frequency	Frequency	Frequency
	Absolute (f)	Cumulative	Relative (%)
73-74	1	1	7.69
75 - 76	2	3	15.38
77 - 78	5	8	38.46
79-80	3	11	23.07
81 - 82	2	13	15.38
amount	13	-	100

For a clearer presentation, the result test TOEFL Reading Comprehension students who learn by using Test-Taking Strategy in CBT and PBT class (A₁B₂) are presented in the form of a histogram as the image 6.

4. The test result of Reading Comprehension TOEFL of students who learn by using the Test-Taking Strategy in CBT and PBT Class.

a. The test result of TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT and PBT Class (A₂B₁).

Based on the data of research were collected from the field, for the Reading Comprehension TOEFL scores of students who learn by using the Test-Taking Strategy in CBT and PBT Class (A₂B₁) shows the lowest score of 66 and the highest score of 81 with a range of scores 15. From the results of data analysis obtained an average of 73.62 deviation standard 44.64, a median of 74, 73 mode.

The number of class intervals of 5 and length of class 3 created tables distribution of the frequency of tests TOEFL Reading Comprehension students who learn by using Test-Taking Strategy in Class CBT and PBT as shown in Table 12.

Table 12. Distribution of Frequency Score TOEFL Reading Comprehension of Students who learn by using Test-Taking Strategy in CBT and PBT class.

Interval Class	Frequency	Frequency	Frequency
	Absolute (f)	Cumulative	Relative (%)
66 - 68	2	2	15.38
69 - 71	2	4	15.38
72 - 74	4	8	9.46
75 - 77	2	10	15.38
78-80	2	12	15.38
81-83	1	13	7.69
amount	13		100

For a clearer presentation, the test result of TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT and PBT Class (A₂B₁). The result of test TOEFL

Reading Comprehension of students who learn by using Test-Taking Strategy in CBT and PBT Class (A₂B₂).

Based on the data of research were collected from the field, for TOEFL Reading Comprehension Test scores of students who learn by using the Test-Taking Strategy in CBT and PBT Class (A₂B₂). shows the lowest score of 65 and the highest score of 80 with a range of scores of 15. From the results of data analysis obtained an average of 72.38 standard deviations of 4.574, a median of 71, mode 70.

The number of class intervals of 5 and length of class 3 created tables distribution of the frequency of tests TOEFL Reading Comprehension students who learn by using Test-Taking Strategy in Class CBT and PBT as shown in Table 13.

Table 13. Distribution of Frequency Score TOEFL Reading Comprehension of Students who learn by using Test-Taking Strategy in CBT and PBT class

Interval Class	Frequency	Frequency	Frequency
	Absolute (f)	Cumulative	Relative (%)
65-67	1	1	7.69
68-70	5	6	38.46
71 - 73	2	8	15.38
74 - 76	1	9	7.69
77 - 79	3	12	23.07
80-82	1	13	7.69
amount	13		100

For a clearer presentation, the test result of TOEFL Reading Comprehension Test for students who learn by using Test-Taking Strategy in CBT and PBT Class (A₂B₂).

B. Testing Requirements Analysis

Requirements analysis that using ANOVA two directions should do the testing requirements of the analysis of the form of test normality test and homogeneity. The aim is to make group; (1) The result of test TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT class (A₁). (2) The results of test TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in PBT class (A₂). (3) The result of test TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in the CBT Class (B₁). (4) The results of tests TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in PBT class (B₂). (5) The result of test TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in the PBT Class and who learn by using Test-Taking Strategy in CBT and PBT class (A₁B₁). (6) The results of tests TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT and PBT class (A₁B₂). (7) The result of test TOEFL Reading Comprehension students who learn by using Test-Taking Strategy in CBT and PBT Classes (A₂B₁) and (8) The result of test TOEFL Reading Comprehension of students who learn by using Test-Taking Strategy in CBT and PBT class (A₂B₂).

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