CHAPTER II

REVIEW OF RELATED LITERATURE

In this chapter, the researcher explains the related literature of the research consists of the definition of validity, the kinds of validity, the definition of students’ achievement, factors influencing success learning, aspects influencing scores in a test and previous studies.

A. Validity

The term validity is frequently used in case of measurement and testing. The definition of validity according to Fulcher is the extent to which inferences made from assessment result are appropriate, meaningful, and useful in terms of the purpose of the assessment. From the definition above, it can be concluded that to measure whether the test is valid or not depends on the purpose of the test made. The instrument can be categorized to have high validity if the test runs its function well or gives the test result in accordance with the aim of the test made. So, the test which possesses low validity will produce irrelevant data with the purpose of the test made.

Validity as a term to determine proper test in gaining the goal made is an important thing to do by the tester. Tester should be careful in making a test. For example, if tester wants to measure students’ ability in making question tag, so the test result will show students’ ability in

1 Glenn Fulcher, Practical Language Testing, (Great Britian: Hodder Education, 2010) 19
making question tag. The things that will be achieved in valid test are preciseness and accuracy.\(^2\) In another word, the test can differentiate a small aspect of the test given. For example, if we want to measure gold weight, we exactly must use gold measurement to gain accuracy and preciseness result. If we use body measurement instrument in measuring gold weight, the result will not valid because those two instruments are different in use. The valid measurement or test has lowest error degree so it can show the real thing of the measured or tested object.

From the explanation above, it shows that validity has two primary characters, accuracy and preciseness. So, a test cannot be categorized as the most valid test without seeing the test object. One test instrument possesses high quality level to test one object. But it cannot be high quality level in other objects. But, the valid test is not always showing the goal we want to get, because sometimes there is other aspect that can influence the quality of the test such as in scoring or from the people who join the test. So, to measure the validity of the test, the way is comparing to the lattice work made by the tester.

According to Brown, validity consists of five kinds: content-related evidence, criterion-related evidence, construct-related evidence,
consequential validity and face validity. The term of validity is sometimes known as evidence. The following will discuss about each of them.

1. **Content-Related Evidence**

   This approach measures how far the test items represents domain or tested materials. To establish the content validity in the measurement instrument, the tester must identify the whole content that will be examined. Then the items will be chosen randomly from the whole content which represents the information from the all areas. By using this method, the tester should collect carefully amount of a group which represents the whole content.

   In term of content validity, the tester tries to take the conclusion from the test score into larger domain from the whole content. So that, the content validity is related to the sample of a population representativeness. Knowledge and skills covering in the test items must represent the larger domain from knowledge and skills. However, to make representative test of the whole materials is difficult. For example, in the grammar class, the grammar materials in 1 semester are consisting of tenses, passive voice, if clause, question tag, and adjective clause. It is difficult and near to the nonsense to make representative test of this materials.

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4. Ibid 23
grammar course materials. Content validity is usually made by content experts. Taking a grammar course as an example again, a test of grammar course should be written by English experts because they know more what are important in their own discipline.

2. **Criterion-Related Evidence**

When the focus of the test is on criterion validity, the tester tries to take the conclusion from the test scores to performance. A high score of a valid test shows that the test taker has the performance criteria. An independent variable could be used as a predictor variable and a dependent variable as the criterion variable. The correlation coefficient between them is called validity coefficients.⁵ Here is the researcher concern, criterion validity. College entrance is as predictor of pre-college students’ ability in their future achievement in college.

For example, students sometimes join toffle preparation class before join the real toffle test. In the end of the class, the test is made to predict the students’ capability in joining the real toffle test. The toffle preparation test scores is becoming the predictor variable while the scores of the toffle test is becoming the criterion variable. It is concluded that if the tester passes the toffle

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preparation test, he/she should be ready to join the real toffle test. In other words, if the toffle preparation test scores could predict the real toffle test scores, the toffle preparation test is claimed to have a high degree of criterion validity.

The concept of validity helps us to know what the test measures, what it intends to measure and can the results be used to predict the future behavior of the participants. In other words, it addresses at how well a specific assessment tool predicts the future behavior. College entrance test or college admission test is a test that is expected to be able to predict the success of pre-college students in gaining good academic achievement in the future. Pre-college students filtered based on college entrance test results are expected to reflect the high-low ability in gaining academic achievement. If the score of the college entrance test is high, necessarily it will guarantee success in the future. Instead, pre-college students who do not pass the college entrance test it is because the test shows that they have low test scores and they will not be able to success in the future.

As a tool of comparison of predictive validity is the scores obtained after the pre-college students join the teaching learning process at the college. If it proves that who has the higher score in the college entrance test failed in the first semester exams and if the rejected pre college students gives chance to have same
teaching learning process and they pass in the first semester exams, so the college entrance test of the college cannot be categorized as good predictor or has low predictive validity.

3. **Construct-Related Evidence**

To understand the construct validity, first, it is important to know about what construct is. A construct is known as attribute, proficiency, ability, or skill that processed in human brain toward the existing theory.\(^6\) Construct validity deals with how well an assessment, or topics within an assessment, connected with the educational constructs that the assessment was designed to measure.\(^7\) For example, if the construct to be measured is the ability of the students in speaking English by oral interview, the way how to analize the score is using several factors, fluency, pronunciation, grammatical accuracy, vocabulary in use and socio linguistic appropriateness. Those categorization in analyzing the ability in speaking English are theoretical construct which is made by the language experts as major components of oral profiency. So if there is a teacher conducts test for speaking ability and just evaluates only pronunciation and grammar, the


result of the test is not valid because the construct validity of the test made and conducted is low.

4. **Consequential Validity**

Language testing experts use consequential validity to refer to the social consequences caused by particular test for a particular purpose. A test considered to have consequential validity if the test has benefits for the social life, even if some experts assume that consequential validity is not urgent. Since, it is excluded to the concept of validity in which focus to the essence of the assessment itself.

The explanation above means that, the impact of the test takers, teachers, schools, government and the community should be considered. According to Brown, the impact test is known as *washback* (reverse impact). For example, the impact of the test on learning, especially in preparation for the particular test. The appearing of institutes tutoring, private tutoring, and books of UAN preparation, a test preparation of CPNS test, and others are some of phenomena of test impact. Other example, If after the teacher certification is found institution that sells seminars

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certificates, training certificates and even sell diploma, it was also a washback of teacher certification. The thing to remember does not mean the impact behind it is always bad, it must be able to produce a positive washback. If we do a formative test and find weaknesses in the students learning or teachers teaching weaknesses and we are trying to fix it, so the test that we are arranged has produced positive feedback effect. In other hand, if after following the test the students did not even change the learning style and learning targets, and when they are tested again the results still does not pass, the test that we developed did not leave any impact.

5. **Face Validity**

In many ways, face validity offers is contradicive to content validity, which attempts to measure how accurately an assessment represents what it is trying to measure. The difference is that content validity is comprehensive and specific evaluation, whereas face validity is a more general measure. Furthermore, the measurement is from the student who doing the test. As an example, after a group of students did a test, the teacher asked for feedback to decide about what good and need to be improved in the test. This can be used as an evaluation for the next assessment project.
According to Brown face validity is classified as ‘weak evidence’ supporting construct validity, but that does not mean that it is incorrect\textsuperscript{11}. For example, after doing a test, some students would assume that the test is good because it assess the lesson that had been explained by the teacher. However, another student would assume that the test was too difficult. Thus, this validity doesn’t guarantee how the quality of assessment is, but it is as a support for the other validity concept.

In fact, in the social and educational sciences, it is difficult to measure the face validity of a test because there are so many factors that may lay behind the one assumption such as; background knowledge, the lesson mastery, or even the student emotion. It is practically impossible to account for them all. So that, face validity cannot be a single validity concept of a test because the result can be based on the participant perspective. To make a view about how good the test is we can send the test to a group of colleague experts in the field, to evaluate what they think it needs improvement. This face validity helps a teacher to find the weakness before wasting a lot of time and money for a test.

B. The Definition of Students’ Achievement

\textsuperscript{11} D, J, Brown, Testing In Language Programs. (USA: Upper Saadle River, Prentice Hall Regents, 1996) 46
Before the discussion about students’ achievement will be explored more, the researcher explains that the term students’ achievement is sometimes called academic achievement and learning achievement. Those terms are same in meaning, so the researcher sometimes uses term learning achievement and academic achievement in explaining “students’ achievement”. Achievement is always associated with the implementation of activities dealing with the objective of the class. Learning achievement is inseparable from learning, because learning is a process, while learning achievement is the output of the learning process. In the other word, learning achievement is measurement to know how good the process is.

At the same time, there are some definitions of learning achievement, for example, Winkel states that learning achievement is a statement to the success of learning or ability students in learning activities in accordance with the achieved weight. On the other hand, Kuh et al assumes that learning achievement is the realization of potential abilities or capacity of a person. In school, learning achievement can be seen from the mastery of the learning materials and objective of the class. To this purpose, the achievement has private role in evaluating how far students understand the material. Tools to measure achievement or learning

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outcomes are called achievement test developed by teachers or lecturers who teach the subjects.

Furthermore, Tarenzini defines learning achievement involve the mastering of cognitive, affective and psychomotor. Those aspects are connected to each other which can make a standard of how student can gain the “good” predicate.

Students’ learning achievements are often presented in the form of a symbol, in the form of numbers, letters or words that tell the results already achieved by each student in a given period. The results of the measurement of the students include cognitive (knowledge), affective (attitude) and psychomotor (skills) can be determined after evaluation called achievement test. In the university level, the learning achievement is denoted by numbers or letters. Based on some definitions above, it can be concluded that learning achievement is the level of capability that students have to understand with the information obtained in the learning process including cognitive, affective and psychomotor.

On the contrary, Pascarella argued that the success of learning achievement tests will not always guarantee a student’s success in

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14 Pascarella, Tarenzini, "How College Affects Student: A Third Decade Research", (USA: PB Printing, 2005) 69
learning.\textsuperscript{16} It is because there are some factors that exactly involve in the learning process. However in achievement almost only cognitive aspect that is evaluated. To this reason, the student achievement through test may not fully reveal complete student ability in the lesson that has been taught. As a result, learning achievement tests may show invalid result toward student competency. Meanwhile, according to Kuh et al, there are two kinds of outcome learning achievement, those are: academic achievement shown by the value (IPK) in school and (b) the economic benefits and quality of life after graduation lecture\textsuperscript{17}.

Although there are limitations in its use, Pascarella and Terenzini and Kuh et al concluded that the academic achievement is still the best indicator for the persistence of students, graduation rates and school enrollment at the next level. An academic achievement in the first year is crucial to further academic success and graduation rates, due to good academic achievement can reduce the possibility of students dropped out from college and increase the possibility of faster or at least on time graduation. In addition, the benefit of an academic achievement also has a positive effect on the probability of obtaining employment that is suitable with the field after he graduated from college.

\textsuperscript{16} Pascarella, Tarenzini,“How College Affects Student: A Third Decade Research”, (USA: PB Printing, 2005)
\textsuperscript{17} George D. Kuh et al, What Matters to Student Success: A Review of The Literature, Commissioned Report For The National Symposium On Postsecondary Student Success: Spearheading A Dialog On Student Success, USA, Indiana University Bloomington, July 2006
As a fact, William and Swail found that college graduation proved to have a better life-career than colleagues who did not earn a degree which will influence to their financial economically.\textsuperscript{18} Furthermore, the college graduation will have the better skill and experience than the one who do not continue their education. As a result, the college graduation will have better work ethos and qualification dealing with job demanded. To prove the graduation, academic achievement is needed to make sure that he or she is approved by the university. Moreover, through the academic achievement the job seeker will know the qualification of the employer. In short, academic achievement is the most valid way in measuring the quality of the student.

C. Factors Influencing Success Learning

Kuh et al in the commission report delivered at the \textit{National Symposium on Post secondary Student Success} with the title \textit{What Matters to Student Success: A Review of the Literature} proposed a framework for student learning success is based on literature surveys that have been done. Within this framework, the success of student learning (student success) is defined as academic achievement, the students’ involvement in activities

\textsuperscript{18} Ibid
which is aimed at education, satisfaction, acquisition of knowledge, skills, achievement of educational goals, and performance after graduation.\textsuperscript{19}

There are two factors that influence the success of learning those are: Pre Class Experience and Background Characteristics of Students (Pre-college Student Experience and Background Characteristic) and phase Experience Class (College Experience), which includes the Student Behavior, Institution Condition and Student Engagement.

1. Pre-Class Experience and Background Characteristics of Students

In the teaching learning process, teacher sometimes finds a student who has good intensity in material given by the teacher. Moreover, the student sometimes makes a difficult question which the teacher never predicts before. The student pretends to master the material given well then the others. This fact concludes that there is a correlation between pre-class experience and background characteristics of students. Kuh at al divides some factors in the period of pre-college experience and student background characteristics that influence academic achievement into four

categories: work experience, age, educational background and socio-economic condition and family situations.\textsuperscript{20}

\textbf{a. Work Experience}

When college students choose faculty of their education in college that is accordance with their work, it can be indicated that they will get better score than others in their academic achievement because they directly apply what they gain in the class and they can explore it in their work place. It is proved by Research De Rue entitled "\textit{Quantity or Quality? Work Experience as a Predictor of MBA Student Success}", showed that the Master of Business Administration (MBA) program must recruit students with the qualification of high quality work experience, the work experience that requires high responsibility and work place diversity.\textsuperscript{21}

This is in contrast to research Dreher and Ryan, which examines the relationship between work experience for Master of Business Administration (MBA) students and the academic achievement. The results showed that the work experience only had small impact on academic success or

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\textsuperscript{21} D. Scott DeRue, \textit{Quantity or Quality? Work Experience as a Predictor of MBA Student Success, GMAC Research reports, september 2, 2009}
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academic achievement in the first semester, and does not affect the academic success of the following semester.\textsuperscript{22}

b. Age

Age of a personal is assumed to have an influence on his thinking ability. Students who are older often said to be possess more ability in terms of basic skills which is necessary for effective study at higher education level. Therefore, a student who is older tended to have higher academic achievement than students who are younger. But test results of Richardson in his study entitled "Mature Student in Higher Education: Academic Performance and Intellectual Ability" gives different conclusion about age impact on academic achievement. He concluded that in terms of academic performance for higher education (post graduate) there is no sufficient evidence to guarantee the young student will have a better academic performance than students with older age. Differences in gender and age of the students do not have an impact on student performance. The ages 25-29 ages is seen as the most excellent in the performance of students, but other than that age only provide a slight difference in affecting student achievement.\textsuperscript{23}

\textsuperscript{22} George F. Dreher, Katherine C. Ryan, Prior Work Experience And Academic Achievement Among First-Year Mba Students. Research in higher education, august 2000, volume 41, issue 4
\textsuperscript{23} Jhon T.E. Richardson, Mature Students In Higher Education Performance And Intellectual Ability, (netherland: kluwer academic publisher, 1994)
c. **Educational Background**

The educational background and participation courses have a significant effect on academic achievement in the exam. The experience or academic background in language at the previous education gives significant positive effect on student achievement of language department. It is very logic, someone who has gotten education before going to the college, and he or she chooses college program same with the education before, surely his or her educational background influences the academic achievement at college.

but Trail, et al in his research entitled "Impact of Field of Study, College and Year on Calculation of Cumulative Grade Point Average" shows that the differences in educational background give little effect on the academic performance of students. The differences in educational background affect only 1.5% of the academic achievement.²⁴

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²⁴ Carla trail at al, Impact of Field of Study, College And Year on Calculation of Cumulative Grade Point Average, advances in health sciences education august 2008, volume 13, issue 3

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d. **Socio-Economic Condition and Family Situations**

This case actually has biggest effect to the college students’ achievement in the college. There had been many facts dealing with the college students’ failure in their college.
caused by this case. Bary in his research entitled “The Effect of Socio-Economic Status on the Academic Achievement” investigated the effect of family situation (family-level factors) including the number of siblings, socio-economic status (consisting of education, employment status and income of parents), incomes possessed by the family and parent involvement in their children school. The sample was 7,976 students from 752 schools. The Selection of schools conducted by the way probability sampling of the Educational Longitudinal Study data of 2002, which is collected by the National Center for Education Statistics (NCES).  

The results showed that socio-economic status gives positive effect on the test scores, students who have a lower socio-economic status tend to get lower test scores as well. whereas, other results shows that the number of sibling gives negative effect on the test scores, incomes of the family give positive effect on the test scores, and the greater parents involvement in their children school give a positive effect on the test scores. In case increasing students’ concentration, something to support student success is a guarantee of financial aid that is suitable until the student graduating from

the college, especially for the scholarship program. With this guarantee, the students will be able to fully concentrate to the learning activities and does not need to work after being in college to pay college and suffice their needs and their family needs.

e. Gender

Most researches which observe the effect of gender on learning achievement shows that female tend to have better academic achievement than male. In addition, female tend to be more diligent in learning and diligently involved in extra college activities that support the learning process, while male prefer to join college activities that are refreshing and sports.

Female also has nature in case a tendency to involve and join in social relations, so in the learning, they feel possess the obligation and responsibility to improve her performance to reach the family expectations, teachers and friends around her, while male tend to get his motivation to improve performance only for his own purposes.26

2. Stage College Experience

When college students begin the course in the college, another important factor in achieving success is the involvement of the college students toward effective educational activities. Chikering and Gamson in a Kuh et al explained that there are seven categories of effective educational activities that can affect college student learning and the quality of their educational experience. The seven categories, namely: the relationship between students and faculty, collaboration between students, active learning process, fast in giving feedback and accurate, time which is used to do the homework, high expectations and appreciate the variety of talents and ways of learning\textsuperscript{27}. In general, the college students that are more involved in those activities, the more that they learn and possess and the more that they are more to survive and graduate from college.

The college must help the college students in providing interesting classroom experiences that encourage students to spend more time and effort to the learning process and help students to develop good study habits. It is important for institutions to invest in supporting the academic facilities designed for students and academic staff to work together to increase the learning atmosphere inside and outside the classroom in order to have a great influence on student success. Institutional

\textsuperscript{27} Ibid
conditions are related to student success include: the mission of the institution is clear and focused, high standards and expectations for student achievement, assessment and timely feedback, a culture of student-centered learning, peer support, the pressure on the first year of college, respecting the diversity of knowledge, the integration of learning and previous experience, academic support programs tailored to meet the needs of students, the application for subjects studied, active learning, collaboration between students and academic staff and among students, stressing support environment for academic work, relationships with faculty outside the classroom.\textsuperscript{28}

In addition, Campbell in his study titled Motivational Systems Theory and The Academic Performance of College Students examined the relationship between learning motivations, responsive learning to environmental factors and college Grade Point Average (GPA) of the academic achievement of 259 students in business program at Institute of Higher Education in the Southeast United States of America. The results showed that learning motivation, responsive learning to environmental factors

\textsuperscript{28}Ibid
and college Grade Point Average (GPA) has positive correlation.\textsuperscript{29}

D. Aspects Influencing Score in A Test

Score in a test becomes an important thing for someone who taking a test because score determines the test takers’ hope in joining a test. There are few aspects that can influence increasing and decreasing score in test. Prof. Dr. Saifuddin Azwar, MA explained in his speech aspects influencing score in test.\textsuperscript{30} He divided it into 4 kinds as below:

1. In the many tests Rosser found that the true answer test questions relating to the differences of gender are always profitable to the men even though woman have high academic achievement. Rosser also found that women are generally better at answering questions about relationships, aesthetics, and the humanities, while men are more successful in answering questions about sports, science, and business. This conclusion is supported by the findings of previous studies conducted by researchers of \textit{Educational Testing Service} (ETS). Dwyer reviewed gender gap from a historical perspective. Dwyer found that among the writer’s tests generally know that gender differences can be manipulated by selecting different test items. For example fact showed that, in a few years early

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\textsuperscript{29} Michael M. Campbell, \textit{Motivation Systems Theory and The Academic Performance of College Students}, Journal Of College Teaching And Learning, Volume 4, Number 7, July 2007
\textsuperscript{30} Prof. Dr. Saifuddin Azwar, MA explanation in his speech aspects influencing score in test
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implementation of the SAT, men got higher scores than women on the mathematics but women always gained higher than men on the Verbal section. The head of *Educational Testing Service* (ETS) took a policy in balancing verbal tests in order to help men by multiplying 18 questions related to politics, business and sport on the Verbal section. After that, men gained higher score than women whether on the Math and the Verbal section.

2. The multiple choice format from the research conducted by ETS and the College Board have concluded that form of multiple choices potentially influences against women. In a study of various forms of tests at Advanced Placement (AP) test created by ETS for the College Board, also found that the gap scores between genders is reduced or lost all in other forms such as answers-short and essays except in the form of multiple-choices. Similar results were concluded from the findings of the California Bar Exam tests and the SAT's English Composition with Essay Test.

3. Guessing opportunities on multiple-choices test with five choices that imposing guessing penalty, which is to reduce the score by quarter for each wrong answer and give a score of zero for a question that is not answered, intended to test takers who do not feel sure the answer did not make any guesses, because speculation in the answer contains a risk of loss score. Research shows that men tend to be braver to take risks and will guess if they do not know the answer, while women
tend to answer only if they convince that their answers are correct and tend not to guess. Unwillingness to do guessing on the test proved negative impact on test scores.

4. Another factor influencing the gender gap is the elements that must work quickly in response to the test. Evidence shows that women and men have a different approach to solving the problem. In general, women tend to view the problem as a whole, considering the possibility of more than one correct answer and check their answers. This approach is good for the school and in everyday life but will be harm when facing exam because it would be very wasting time. Various studies have found that when a test is given without any pressure of time, the scores of women will rise sharply, while a score of men has not changed much compared with an exam that must be completed within a limited time.

In this research, the researcher does not measure the factors influencing success learning and factors influencing scores in a test (point C and D). But, the researcher has strong assumption that students who achieve high scores in college entrance language test, have been influenced by factors explained in point D. The students accepted through SPMB qualification test and achieved high scores in Intensive Course (IC), have been passed through processing few factors in point C.

E. Previous Study
In this research, generally, discusses about validity test. Actually there have been some of graduated students of UIN Sunan Ampel Surabaya that in their thesis discussed about validity, but the difference is in case angle or point of view and the variable and place of research focus on. Year 2013, student of Arabic Teacher Education Department (PBA), Salma, conducted research about validity and reliability of the college entrance test items of UIN Sunan Ampel Surabaya exactly pre-college students selection test (SPMB) in the second SPMB qualification test, but she focused on the items of the test, measuring whether the items of the test can be categorized as valid and reliable or no.

From the outside college, the research about Analysis in The Level of Predictive Validity of The College Entrance Test D-3 Program of UIN Yogyakarta Toward Students’ Achievement of Technic Faculty Academic Year 2012-2013. The result of this research showed that the level of predictive validity between those two variables is in 0.68. It means that the level of the college entrance test of UIN Yogyakarta toward students’ achievement of technic faculty has high predictive to the students’ achievement.

Next, the research conducted by Sahlan Rosyid, he conducted a research untitled “Dampak Nilai Ujian Masuk Universitas Muhammadiyah Surakarta Terhadap Indeks Prestasi Mahasiswa Fakultas Psikologi Dan Fakultas Agama Islam Prodi Tarbiyah Angkatan 2009”. In his research result showed that between the college entrance test of Universitas
Mumahammadiyah surakarta towards achievement index (IP) students of psychology faculty and PAI academic year 2008-2009 is low, therefore, the scores of the college entrance does not determine or predict the achievement index (IP) students of psychology faculty and PAI academic year 2008-2009.

The previous studies above are few samples of research focusing in assessing the level of predictive validity of a test at college. Actually there are many research conducted to analyze the level of predictive validity of the other test excluding college entrance test such as national examination, school admission test and others. It proves that evaluation in case predictive validity has significant rule in determining the quality of the students. Therefore, knowing the level of college entrance language test scores in UIN Sunan Ampel Surabaya towards students’ achievement of Teacher English Education Department (PBI) in the first year academic year 2014-2015 is conducted by the researcher.