Students Learning Difficulties and Saturation in Achieving Competency

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Abstract—This study has the main purpose of describing the difficulty and saturation of student learning in achieving competency. The type of research used is quantitative, using a descriptive analysis. The results showed: 1) student learning problems are grouped into three, which are: learning difficulties, forgetfulness in learning and learning saturation; 2) student learning problems are closely related to personal data, which are: school origin, college choice, student residence, the distance of residence to campus and transportation; 3) learning difficulties are grouped into two, which are, internal and external. Internal learning difficulties are caused by: interest in subjects, learning readiness, learning facilities, learning media, health, fatigue, attention to subjects, disability, lack of ability to master foreign languages, etc. External learning difficulties are caused by: the curriculum, the classroom environment, family problems, conditions of the study room, longing for family and hometown, active in organizations, and social environment, etc.; and 4) student activities in overcoming learning difficulties include: repeating and exploring the material, asking questions, reading a lot and adding references, making study groups and discussions, getting learning facilities, independent learning, concentration and focus, etc. The most activities carried out to read a lot and add references sources (71).

Keywords—learning difficulties; learning saturation; competence; students

I. INTRODUCTION

Students in learning activities have different habits or motivations. Student learning activities sometimes take place smoothly, full of concentration and high enthusiasm, but sometimes they learn not smoothly, difficult to concentrate and not excited [1]. Some learning difficulties experienced by students are due to lack of motivation, low learning interest and wrong learning habits [2]. In addition to these problems, learning difficulties are caused by negative attitudes towards teachers, lessons and unfavorable learning situations [3-5].

Student learning difficulties in detail are grouped into five, which are: (1) learning disorder is where student's learning is disturbed because of conflicting responses, so that the learning outcomes achieved are lower than their potential; (2) learning disfunction is the learning process of students not functioning properly, even though the students actually do not show any mental subnormalities, impaired sensory devices, or other psychological disorders; (3) under achiever causes student achievement to be mediocre or very low even though the student has a level of intellectual potential that is classified as above normal; (4) slow learner is a student who is slow in the learning process, so that it takes longer than a group of other students who have the same level of intellectual potential; and (5) learning disabilities, the symptoms shown are students unable to learn or avoid learning, so that learning outcomes are below their intellectual potential [4].

Student learning difficulties can also be seen from: low student achievement, the results achieved are not in accordance with the effort that has been done, slow in carrying out the tasks of learning activities, showing a less normal attitude and showing different behaviors, and showing less emotional symptoms [6]. The low student learning outcomes are caused by: low intellectual ability, emotional disturbances, lack of learning motivation, social background, unfavorable learning habits, low ability to memorize, student senses are disturbed, the teaching and learning process is not appropriate, and there is no support from the learning environment [7].

Learning difficulties are also caused by saturation in learning. Learning saturation can mean that the learner is no longer able to contain anything in memory of the learning outcomes. Syah describes student learning saturation caused by sensory saturation, physical saturation and mental saturation. The mental condition of students when experiencing boredom of learning will experience boredom and fatigue that is so very high that it results in the emergence of reluctance, listlessness, lack of enthusiasm, or lack of enthusiasm for learning activities. The causes of saturation in student learning are: 1) learning methods that are less varied, where students learn only to face exams; 2) learn only in certain places, the condition of the room and the location of furniture that has not changed for a long time; 3) learning atmosphere that does not change for a long time; 4) lack of recreational or entertainment activities can cause fatigue so students need refreshment; and 5) there is a strong and protracted mental tension during learning [4].

A. Learning Problems

Learning is an important key in the education process, because without learning the educational process never occurs. The education process provides learning experiences for all students. Learning experience is sought by students by building meaning, ideas and understanding during learning, while...
lecturers act as facilitators or motivators of students during learning. Based on learning theories, Rooijakkers explains the learning process and the relationship between learning stages can be seen in the following figure [8].

Fig. 1. Learning process [8].

1) **Learning difficulties**: Learning difficulties of students are not only caused by a low level of intelligence but also influenced by other factors outside intelligence (IQ). High IQ does not guarantee the success in learning. The phenomenon of learning difficulties is evident from the decline in academic performance or learning achievement of students. The causes of learning difficulties are grouped into two: internal learning difficulties, which is learning difficulties that arise from within students and external learning difficulties which is learning difficulties that come from outside the students [1,8].

Internal learning difficulties are grouped into two factors, which are: psycho-physical; and mental/spiritual. Psycho-physical factors can be: 1) cognitive, caused by the low intellectual capacity/intelligence of students; 2) affective, is partly due to the unstable emotions and attitudes of students; and 3) psychomotor, partly due to disruption of the means of sight, hearing, etc. [8]. Factors of physical learning difficulties explained by Dalyanto are caused by: 1) illness, sick students will experience physical weakness, so the sensory nerves and motor are weak. This condition causes stimuli received through the senses that cannot be passed on to the brain; 2) unhealthy, unhealthy students will experience learning difficulties, because they are easily tired, sleepy, dizzy, lost concentration, lack of enthusiasm, disturbed thoughts, etc. These conditions cause the response to receive lessons to be reduced, because the brain's nerves are unable to work optimally to process, manage, interpret and organize the subject matter through the senses of students; 3) disability, students with disabilities will experience learning difficulties. These difficulties depend heavily on the types of disabilities experienced by students, i.e. mild or permanent disability (serious) those who can still take lessons in public schools are lack of hearing, lack of vision can be overcome using devices such as hearing aids, eyeglasses, etc. Factors of spiritual learning difficulties are caused by intelligence, talent, interest, motivation, mental health factors, types of students [1].

External learning difficulties are learning difficulties caused by factors in the environment and conditions that do not support student learning activities. These factors are: family environment, school environment and community environment. In addition to the general factors above, highlights the special factors that cause extreme learning difficulties in the form of learning disability, which is a symptom that appears as an indicator of psychic abnormalities that cause learning difficulties [9].

External learning difficulties are grouped into several factors, which are: 1) family environment, which are: a) parents' factors, such as how to educate children, the relationship of parents with children, examples of guidance from parents; b) the atmosphere of the home / family, such as a very crowded and rowdy family atmosphere, a family atmosphere that is always tense, lots of quarrels between family members, not harmonious; c) family economic conditions. The family's economic situation is grouped into: poor economy, excessive (rich) economy. 2) School factors, the causes are: a) teachers, such as: teachers who are not qualified, relationships with students are not good, do not have the skills to diagnose learning difficulties of students; and teaching methods are not appropriate; b) tool factors, incomplete learning tools make presentation of lessons not good, especially for practical learning; c) the condition of the building does not meet the health requirements and smoothness of the learning process; d) the curriculum used is not in accordance with the needs of students and the distribution of unbalanced subject matter causes learning difficulties; and e) study time at school and lack of discipline. 3) The social environmental factors, which influences students' learning, is: associating friends, the surrounding environment, and activities in the community. 4) Mass media factors, including cinema, TV, newspapers, magazines, books, etc. The thing that hampers learning is if students use the time for the mass media too long which causes them to forget their learning assignments.

2) **Forgetfulness in learning**: Forgetting is the loss of the ability to call or reproduce everything that has been learned. Gulo and Reber in Syah [7] explain forgetting as an inability to recognize or recall something that has been learned or experienced. The forgetting experienced by students is not the same as other students and cannot be measured directly because what is said is to be forgotten by students is precisely what he said. The causes of forgetting are grouped into three, which are: 1) Forgetfulness can occur due to conflict disruption between items of information or material in the memory system of students. Conflict disorder is caused by proactive interference and retroactive interference; 2) Forgetfulness can occur due to pressure on items that already exist, whether intentional or not.; 3) forgetfulness can occur to students due to changes in the environmental situation between learning time and recall time; 4) forgetfulness can occur due to changes in the attitudes and interests of students towards certain learning processes and situations; 5) forgetfulness can occur if the subject matter that has been mastered has never been used; and 6) forgetfulness can occur because of the brain nerve changes of students caused by an illness, alcoholism, narcotics, accidents that cause brain disorders, etc. [8].

Forgetting in learning can be overcome by increasing memory. The methods are: 1) Overlearning, is a learning effort that exceeds the basic mastery or certain subject matter; 2) Extra study time, is an effort to increase learning time or
frequency of learning activities; 3) Mnemonic devices, are special tips that can be used as mental hooks to incorporate information items into the student sense system; 4) Clustering, is a method of grouping small material items that are considered the same or almost the same; 5) divided training, in which students do exercises with a short time allocation and are separated by breaks, so that they can study or practice with more efficient time. Learning Barlow, Reber and Anderson as described by Shah [7].

3) Learning saturation: Learning plateau is a certain learning time span that is used but does not produce results. Study saturation can occur if a student loses motivation or consolidates one particular skill level before reaching the next skill level. Learning saturation can also occur due to boring or fatigue.

B. Students Problem in Learning

Students are said to have problems in learning if they show symptoms of deviations from behavior commonly practiced by a student who studies. Behavioral deviations described Dalyono are grouped into two, which are [1]: (1) simple behavioral aberrations, such as drowsiness in class, aloofness, embarrassed to ask questions, shyness, timid, taidness, late on doing assignments, etc.; and (2) aberrations of extreme behavior, for example, skipping college, refusing to do assignments, not taking exams, being aggressive in class, blackmailing friends, being rude to friends and lecturers, etc. The following picture describes the student learning process and the expectations and realities faced by students during learning.

II. METHOD

This study uses quantitative descriptive. Data collection using research instruments. The study was conducted in Building Engineering Education Program using a sample of students in the third semester until eighth with a total of 101 students. Instrument validity is done using Delphy technique and instrument reliability using split technique with product moment correlation formula, then using Spearman Brown formula [10]. The data analysis technique of this study uses quantitative descriptive analysis using an average of Sudjana [11], the formula used is to find the average:

\[ x = \frac{\sum x_i}{n} \]

III. THE RESULT OF THE RESEARCH

A. Student Data

This study discusses student data that causes learning difficulties faced by students of the PTK FKIP Undana Program Studi Pendidikan Teknik Bangunan. The data of the students studied were: 1) the previous school, based on the results of the most data study, students came from Civil Vocational High Schools (76 students), including non-Civil Vocational Schools (3 students); 2) choice of majors, based on the results of the study the students chose themselves building engineering education program has the highest rating (83) and the smallest choice because of joining their friends (2). The data is very supportive of the initial ability of college students in the PTB study program because the choice of lectures is their own desires means that students' interest is high enough to study at PTB; 3) residential address, based on the results of research by most PTB study students living in the city of Kupang (83) and few living outside the city of Kupang (18), meaning that the student's college environment is still accessible to students; 4) place of residence during college, based on the results of residence research is one of the factors of student learning difficulties. As immigrants in Kupang, in general PTB study students stay in boarding or live in family homes. Students who grow up from Kupang live with their parents; 5) the distance of residence to campus, based on the data collected the distance of most student residences is 2-5 km, for 34 students. The distance is not too far away if students use private vehicles, but if they have to use public transportation the distance must be calculated so as not to be late to campus; 6) transportation goes to and returns to campus. Based on the data collected, most of the students who ride private vehicles are 44 people followed by public transportation, 33 people. The smallest number is walking (27 people), usually students who live around the campus.

Fig. 2. Student personal data.

1) Intrinsic learning difficulties: Intrinsic learning difficulties are learning difficulties that come from students themselves. Intrinsic learning difficulties are grouped into eleven, indicators, which are: (1) student interest in subjects; consisted of eight questions, namely student interest in subjects, student attention, the concentration of learning, awareness, inability to do assignments. The results showed the number of students who answered did not agree with the question of interest ranked highest (46) and the students who agreed (34). This means that student learning difficulties are not always affected by student interest in subjects but it really depends on the students' efforts in learning; 2) learning readiness consist of six questions, namely discussing how students manage time, lecture references, lecture notes, learning facilities such as stationery, study rooms, and other study needs. Based on research data, the number of students who answered agreed to the question of learning readiness was ranked the highest 42 students and students who disagreed (40 people). This means that students must have high learning readiness in order to be able to receive all learning material.
provided by the lecturer, in addition to the reference support and other learning facilities are needed to study; 3) learning facilities consist of five questions, namely discussing about lecture references, ability to download lecture references, completeness of learning facilities, finance. Based on the research data, the number of students who answered agreed to the question of learning readiness ranked the highest number of 45 students and students disagreed (33 people). This means that students must have learning facilities that support the learning process. Complete learning facilities can reduce student learning difficulties both for theory and practice; 4) learning media consist of four questions, namely discussing whether students have learning media such as study rooms, study desks, computers, printers, etc. which help the student learning process. Based on the research data, the number of students who answered did not agree to the question of learning media was ranked the highest, 42 students and students agreed (32 people). This means that students have adequate learning media such as study rooms, study desks, computers, etc. Complete learning media can reduce student learning difficulties; 5) health consist of six questions, namely discussing about student health conditions, emotional disturbances, calmness, aggression, and disturbances in the thinking process. Based on research data, the number of students who answered agreed to occupy the highest ranking of 39 students and students did not agree (37 people). This means that students have good health while attending college. Good health can reduce student learning difficulties both for theory and practice; 6) fatigue consist of six questions, namely discussing the time spent outside of teaching hours, such as helping parents work, making money, spending too much time on assignments, lack of rest, distance from residence to campus. Based on the research data, the number of students who answered did not agree to fatigue questions ranked highest, which are 46 students and students agreed (32 people). This means that students have no fatigue which is very meaningful during attending lectures on campus. Students who have fatigue can reduce student learning difficulties; 7) attention to the subject consists of five questions, namely the lack of attention to the courses that are programmed, the ability to store information, the learning time that is abused, and less able to contribute. Based on the research data, the number of students who answered did not agree to fatigue questions ranked the highest, 42 students and students agreed (43 people). This means that students have attention to the subject is very balanced between disagreeing and agreeing. Students who have attention to the subject can reduce learning difficulties; 8) difficulty in following the lesson consists of twelve question questions, namely students' difficulties in receiving information, learning burdens, frequent mistakes, laziness to ask questions and reading, no friends, incomplete lecture notes, underprivileged digest the contents of reading, etc. Based on the research data, the number of students who answered did not agree to fatigue questions ranked highest, 45 students and students agreed (43 people). This means that students do not experience significant difficulties in taking lessons.; 9) disability, The question for disability consists of four questions, namely limited vision and hearing, psychomotor disorders and motor impairment. Based on research data, the number of students who answered did not agree to the question are 45 people and students who agree (43 people). This means that students do not experience bodily disabilities that cause disruption while attending college; 10) study habits consist of six questions, namely learning irregularly, learning less seriously, not being able to concentrate, learning to use other media such as music, etc. Based on the research data, the number of students who answered agreed to the question ranked highest, 42 people and students who did not agree (33 people). This means that students do not experience bad study habits that can interfere with their learning achievements. Good study habits can reduce students' learning difficulties; and 11) unable to master the language consists of three questions, namely the ability to understand the content of reading, reading references and looking for references. Based on the research data, the number of students who answered agreed to the question ranked highest, 44 students and students who did not agree (33 people). This means that students do not experience difficulties in mastering the language to reference learning. The ability to master language can reduce students' learning difficulties in reading foreign language reference. Intrinsic learning difficulties can be seen in the following figure 3.

![Intrinsic Learning Difficulties](image)

**Fig. 3. Intrinsic learning difficulties.**

2) *Extrinsic learning difficulties:* Extrinsic learning difficulties are grouped into ten indicators. The results showed: 1) curriculum consists of seven questions, namely curriculum that supports competency, learning load, engineering and educational lecture material, learning system. Based on research data, the number of students who answered agreed to occupy the highest rank, 55 people and did not agree (15 people). This means that the curriculum strongly supports the student learning process at PTB; 2) the way the lecturer gives the subject consists of nine questions, namely understanding the lecture material, the lecture material is very solid, the lecturer gives too many assignments, is less able to explain, less uses variation teaching, less opportunity to ask questions, learning media limited. Based on research data, the
number of students who answered did not agree with the highest rating of 47 people and agreed (40 people). This means that the way the lecturer gives the lecture material is good, which can be seen from the material, mastery of the material, the assignment given, the use of good media. The way the lecturer gives the lecture material well can reduce the difficulties of students; 3) classroom environment consists of five questions, namely study room, wifi, electricity, class facilities and classroom environment. Based on the research data, the number of students who answered did not agree has the highest rank at 47 people and agreed (30 people), meaning that the classroom learning environment was conducive to the learning process. The conducive learning environment can reduce student learning difficulties during theory and practice learning; 4) family problems consist of six questions, namely that there is no cohesiveness in the family, lack of parental supervision, lack of communication, substandard delivery of tuition fees, lack of parental attention. Based on research data, the number of students who answered did not agree to occupy the highest ranking of 47 people and agreed (30 people). This means that family problems do not interfere with the learning process; 5) study room consists of four questions, namely the condition of the house that is too noisy and does not support the atmosphere of learning, there is no study table, limited electricity, lack of air circulation, the condition of the house is dirty, damp and messy. Based on the research data, the number of students who answered did not agree to occupy the highest ranking of 52 people and agreed (28 people). This means that the study room at home/boarding supports the learning process of students. These conditions can reduce student learning difficulties while attending theory and practice learning; 6) miss the village and family consists of four questions, namely feeling homesick, family or sick family members in the village who always disturb the concentration of learning, not independent because they are usually served by the family. Based on the research data, the number of students who answered did not agree to occupy has the highest ranking of 46 people and agreed (30 people). This means that homesickness and family homes can be overcome and students can concentrate on learning; 7) associates and other sexes consist of four questions, which are often receiving guests and visiting, not having the rules of time in receiving guests or visiting, spending a lot of time on guests and lots of activities with friends makes it difficult to divide study time. Based on research data, the number of students who answered did not agree has the highest ranking of 44 people and agreed (39 people). This means that the activity of receiving guests and visiting does not disturb the learning process. The ability to manage time in visiting and receiving guests can reduce student learning difficulties during the theoretical and practical learning; 8) receiving guests and visiting consists of five questions, namely off-campus activities take up a lot of study time, having lots of friends of the opposite sex takes up a lot of study time, attention to the opposite sex holds concentration on learning. Based on the research data, the number of students who answered did not agree has the highest rank of 48 people and agreed (32 people). This means that associates and opposite sex do not interfere with the learning process. The ability to organize friendships during dating can reduce student learning difficulties; 9) active in the organization consists of three questions, namely organizational activities that take up a lot of study time, more full concentration on organizational activities, many leave the class due to organizational activities. Based on the research data, the number of students who answered did not agree to occupy has the highest rank, 51 students and students agreed (31 people). This means that the activities of the type organization do not interfere with the learning process. The ability to organize organizational time can reduce student learning difficulties while attending theory and practice learning; 10) social environment consists of three questions, namely the social environment, activities in the community, successful communities capable of encouraging learning. Based on the research data, the number of students who answered did not agree to occupy has the highest ranking of 42 people and agreed (39 people). This means that the social environment and student activities do not interfere with the learning process. The ability to regulate activities in a social environment can reduce student learning difficulties while attending theoretical and practical learning. In detail, the extrinsic learning difficulties can be seen in the following figure.

![Extrinsic Learning Difficulties](image)

Fig. 4. Extrinsic learning difficulties.

3) Activities carried out by students in overcoming learning difficulties: The activities carried out by students in overcoming their learning difficulties are very diverse. The researcher tried to group into 13 activities. The most activities carried out are reading a lot and adding reference sources (71), followed by making study groups and discussions (42) and ask questions (29). The lowest activity is to complete learning facilities (5) and independent learning, practice making and solving problems (5). Based on the results of the study, students have done some positive activities in overcoming their learning difficulties, but there are students who have not fully overcome the problem of learning difficulties such as completing learning and independent learning facilities. This condition is caused by the condition of family finances and
group learning is considered more beneficial than independent learning. In detail the distribution of activities carried out by students in overcoming learning difficulties can be seen in the following figure:

Fig. 5. Student activities overcome learning difficulties.

IV. CONCLUSION

Conclusions that can be drawn from this study are: 1) Student learning problems are grouped into three, which are: learning difficulties, forgetfulness in learning and learning saturation; 2) based on personal data, students choose a place to live, study programs, means of transportation and a distance that is not too far from the campus, these choices can reduce the difficulties and saturation of student learning; 2) students generally do not have internal learning difficulties, meaning that interest in learning, learning readiness, learning facilities, etc. supports their learning process so as to reduce student learning difficulties and saturation; 3) students do not have external learning difficulties, which are difficulties that come from outside the student. Intrinsic and extrinsic learning difficulties faced by students depend on the personal conditions of students; 4) the activities carried out by students in overcoming their learning difficulties include reading a lot and looking for supportive references (71), making study groups and discussions (42), and the lowest activity is to complete learning facilities, and independent learning, making exercises and solve each problem (5).

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