# Potential Learning Loss during the Covid-19 Pandemic; Preliminary Case in Student of English Education Study Program, University Riau

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Abstract-This study is focused to find out the level of student learning loss during the Covid-19 pandemic. The samples are students in the English Education Study Program, Faculty of Teacher Training and Education, Riau University. The samples were taken directly by purposive sampling method. The data was collected in form of a summative response scale, using a Likert scale with five answer choices and collected through a google form. The data were analyzed quantitatively, and described descriptively and inferentially. The results showed that learning loss (aspect of cognitive, affective, and psychomotor) was not found in students of the English Education Study Program. Lectures that have been directed to cognitive improvement found a value of 80.97%, while students who did not master the material obtained a score of 51.25%. Meanwhile, students who have not been able to apply lectures through mini research found a value of 53.73%. However, students have not been able to answer the lecturer's questions from different aspects at a value of 53.73%. In general, lectures conducted by English language education students at the Teacher Training and Education Faculty, Riau University, during the Covid-19 pandemic have not been categorized as learning loss.

Keywords—affective, cognitive, psychomotor, learning loss, English education students.

## I. INTRODUCTION

Learning activities are a form of a series of activities conducted with awareness by someone. This activity is intended to be able to produce a change in behaviour in each person. This change can apply to aspects of attitudes, knowledge, and skills [1]. In learning activities, an interaction is formed between students and learning resources, learning media, and teacher as a facilitator in guiding the learning process. Lecturers as educators have a very large role in success of learning in schools. This is because the lecturer plays a role in helping the development of students and realizing their life goals optimally [2]. The world is currently facing the COVID-19 pandemic. Where learning activities must be carried out online [3], [4]. Although online teaching and learning activities are Riki Apriyandi Putra Biology Study Program Faculty of Teacher Training and Education Riau University Pekanbaru, Riau riki.apriyandi@lecturer.unri.ac.id

conducted ineffectively compared to conventional learning. However, teachers must find the right learning strategies, so that the quality of learning goes well [5].

The Covid-19 pandemic also has an impact on a person's psychology and behavior in the future. Teachers and students are faced with habit of interaction in form of distance learning [6]. The development of students' abilities during the COVID-19 pandemic is largely determined by the pattern of communication in the teaching and learning process between teachers, students and parents [7]. On the other hand, if there is no good communication between these elements, serious problems will be faced and learning loss will occur. Distance learning activities conveyed during the COVID-19 pandemic are indicated to reduce students' learning abilities. One of them is lowering the ability to read (literacy), count (number) and problem solving. Students in teaching and learning activities also have difficulty in processing understanding the material due to their limited abilities.

Meanwhile, educational institutions must be able to carry out assessments of children's abilities, adapt new learning concepts, and make improvements to the ongoing learning process. The effects caused by Learning Loss were found to cover educational, economic and social aspects [8]. The results of research found that every student who did not go to school within 10 days was equal to 1% of the student's standard deviation. If they did not attend school for 60 days, they would lose 6% of the student's standard deviation [9]. The results of the Ministry of Education and Culture's survey on November 13 to December 17, 2020 involving 68% of 11,306 teachers found that > 50% of students did not meet the expected competency standards while studying from home [10].

Focusing on the educational aspect, learning loss was found to have an impact on decline in three educational domains, namely cognitive, affective, and psychomotor. The occurrence of learning loss in the cognitive domain indicates that students' competence in mastering subject content was decreased. Learning loss in the affective domain was directed at students' self-efficacy in solving a problem. It was found that the students' self-confidence decreased in completing their learning [11]. While in the psychomotor domain, learning loss is directly linked to the decline in 21st century skills of students, such as critical thinking skills, problem solving, creativity, innovation, collaboration, communication and digital competence [12].

Several researchers have extensively explored learning loss in students. Clark et al [13] and Angrist et al [14] have investigated student learning loss during online learning. This study explores the potential for student learning loss in online learning during the Covid-19 pandemic and focuses on investigating pedagogical models to assess student learning loss and analysis of student learning loss. The method used was a survey. Techniques used to minimize learning loss can be done using low-tech such as short messages, direct calls and educational transition analysis to see potential learning loss during the Covid-19 pandemic. Kaffenberger, [15] has investigated the use of the pedagogical production function model to estimate the potential long-term learning loss of students affected by the COVID-19 pandemic. This study has examined the potential for student learning loss as a result of school closures and analysed the potential for preventing student learning loss. Turner et al [16] reported the potential for student learning loss caused by the Covid-19 pandemic by using survey methods and interviews with teachers and students.

Based on the problems described in the background of this study, it is very urgent to conduct research on the learning loss of students of the English Education Study Program, Faculty of Teacher Training and Education.

#### II. METHODOLOGY

This research was a survey research using a questionnaire (e-questionnaire) as the main research instrument. This research method was in the form of non-experimental, which was used to review the effectiveness of issues and problems from various perspectives which include knowledge, motivation, skills, views, beliefs, behavior and so on.

The questionnaire method was chosen because the questionnaire was more practical and efficient to obtain information in teaching and learning practices. The questionnaire was intended to seek complete information about a problem and respondents. The respondents were not feel worried about the answers given, if they were not in accordance with reality in filling out the questions [17].

Samples were taken through purposive sampling method. The sample was students of the English Education Study Program, Faculty of Teacher Training and Education (FKIP) Riau University (UNRI). The number of samples was 176 respondents. The data was collected in the form of a summative response scale, using a modified Likert scale with five answer choices. and taken through e-questionnaire (google form). The samples were analyzed quantitatively. The samples were also described descriptively and inferentially.

### III. RESULT AND DISCUSSION

The results showed that learning loss on cognitive, affective, and psychomotor aspects were not found to occur in students of the English Education Study Program. The findings found that lectures have shown an increase in student cognitive with a value of 80.87%. Meanwhile, lectures have described an increase in student effectivennes with a value of 79.79%. Lectures have demonstrated an increase in student psychomotor with a value of 77.91%. The condition of student learning loss is shown in Figure 1.

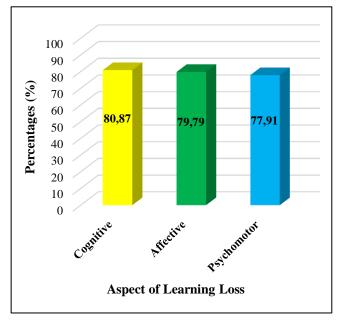


Fig. 1. Learning conditions conducted in the English Language Study Program, Riau University

The high value of cognitive aspect contributed by learning leads to the achievement of indicators, leads to new knowledge, contextually according to the needs of the world of work, and based on online assessment. In addition, the cognitive aspect has also been directed to learning that refers to research results. However, the cognitive aspect was still found in two indicators with low values. Where the indicators of students have not mastered the material during lectures with a value of 51.25% and students have not been able to apply lectures through mini research with a value of 53.73%.

The low mastery of material in students were due to their ability to find and absorb learning independently. This was closely related to their ability to conduct mini research. In general, the willingness of students was high to carry out mini research, but the habitual process was found to be an obstacle. Students were expected to be able to inquire in finding sources of knowledge. The inquiry process could lead students to get knowledge that was fast and long stored in memory.

The high value of students' affective aspects was caused by a strong desire, independence, confidence, strategies, and variations of ideas in online learning, but all of them have not become a habit. It was highly expected that all courses apply mini research, with the aim that students were accustomed to inquiry and eventually become a culture. A person's success is not only measured by cognitive results, but the basis is work ethic. A strong work ethic requires an awareness of the person concerned about the connection of a job with a more comprehensive view of his life. This view of life will give him realization, meaning and purpose in life [18].

Meanwhile, the high value of the psychomotor aspect was contributed by the expertise of lecturers in using various

applications, strategies, learning methods, intensive communication, and learning design. This was supported by the opinion of students, where students were able to learn together, learning becomes interesting, and students were also able to take risks related to a decision. However, students were still not able to answer the lecturer's questions from a different point of view and obtained value of 53.73%. This means that students' analytical and synthesis skills was still needed to be developed. The development of students' thinking skills can be conducted through learning that emphasizes inquiry, mini research, and Science, technology, environment and mathematics (STEAM). The use of the STEAM learning method has a positive impact on learning. Students were found to experience significant improvements in learning achievement before and after learning using the STEAM method [19].

# **IV. CONCLUSIONS**

The lectures conducted by English language education students at the University of Riau, during the Covid-19 pandemic, were found not to be categorized as learning loss. The conducted lectures could improve the cognitive, affective and psychomotor domains of students. The values of cognitive, affective and psychomotor domains were 80.87, 79.79 and 77.91%, respectively.

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