

# The Evaluation of E-Learning in Logistics Distribution Practicum Courses Based on Students' Future Orientation and Case Studies

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## ABSTRACT

Logistics Distribution Practicum (LDP) is a course that plays an essential role in the industrial era 4.0. This course provides skills regarding the movement of goods and services relevant to today's online buying and selling transactions. Thus, course learning can not be separated from the motivation to learn from students. This paper aims to evaluate the LDP teaching and learning process for half a semester of lectures from interest, job perception, and case studies given. The study took data from 2 classes with the survey method. Of the 51 data collected, 30 were further processed. The results found that students had a high interest in studying LDP. However, many of them are still hesitant to work in the logistics distribution sector. Cases given in learning are considered to help students understand the learning material. On the other hand, the material still needs to be updated. This research helps develop logistics distribution skills in a case-based curriculum.

**Keywords:** E-Learning, Future Orientation, Case Studies

## 1. BACKGROUND

The industrial revolution 4.0 has opened up new opportunities and challenges for human life, including in education. Changes in industry and market behavior need adjustments from the education sector. To answer these challenges, a learning process innovation needs to be developed by universities to adapt to the needs of the world of work and business. It is hoped that with this innovation, higher education can produce graduates who are adaptive and competitive.

One approach used to accommodate 21st-century education is the Case-Based Method (CBM). CBM is an approach that emphasizes the sustainability of the learning process in an innovative, interactive, and effective manner based on cases in the Business and Industrial World (DUDI). CBM affects the entire educational process: curriculum design, learning objectives, achievements; education strategy; learning method design; assessment procedures; and the education environment/ecosystem.

Logistics Distribution Practicum (LDP) is a vocational marketing course that discusses the basic concepts of distributing goods. It involves supply chain practices, material handling, transportation, and warehousing. This course also discusses the latest developments in data analysis, such as the green supply

chain. Moreover, it equips the student with the skill of Microsoft Excel data management applications in business practices. Students will be encouraged to master the concept of distribution logistics within the business scope and to solve daily business cases using database and excel applications.

This course is a compulsory subject for Diploma III students majoring in marketing to prepare graduates to be competitive in the era of the industrial revolution 4.0. After studying the logistics distribution practicum, students are expected to plan and procure logistics, manage logistics at the lowest cost, and plan transportation activities with optimum time and cost meticulously and measurably according to the concept of integrated logistics management.

Aspects that affect learning outcomes for students are fundamental. The assessed elements are interest, job orientation, and the case study are given in this study. Interests include students' awareness of the importance of this course and their perceptions of the benefits they will receive in the future. Job orientation includes whether they will work in distribution logistics or not after graduation. Case studies are the implementation of case-based methods in the Merdeka Learning curriculum.

This paper is divided into five parts. Our first section introduces this course in the industry context and its

position in the Universitas Andalas curriculum. In the second part, we describe related theoretical concepts. The third section describes the methods we use in obtaining and processing data. The following section will describe the results obtained—finally, conclusions to sum up our findings.

**2. LITERATURE REVIEW**

E-learning is a technology that allows learning to be carried out more varied [1]. This method supports communication with various types and content that can be done anywhere and anytime. Although the e-learning method has been introduced for a long time, it has been used since Indonesia's COVID-19 pandemic in 2020. The existence of the pandemic forced the adoption of technology very quickly.

Research on learning culture has shown that cultural aspects affect how students learn and perceive learning [2]. Tapanes et al. [3], Simmons et al. [4], Yang et al. [5], and Tarhini et al. [6] found that the effects of cultural characteristics such as individualism/collectivity, level of ambiguity, power distance, masculinity, uncertainty avoidance, and cultural orientation affect the way people interact with learning materials and study partners. Considering previous research, we found that student orientation (long term or short term) is relevant to studying the distribution logistics practicum course. Long-term and short-term orientations are reflected in how a person gains knowledge and deals with life [7]. From previous studies, we found that when students teach long-term goals, they are more persistent in achieving achievement and impact success [8].

The case method is also known as case learning [9] and case study approach [10]. It is a technique that uses real-life scenarios to convey learning related to a particular subject. These cases capture real scenarios to provide authentic experiences related to situations in the real world, which are more relevant and binding. The case method also promotes collaborative learning because students learn to prepare cases with discussion groups [11]. Cases enable students to relate their experiences to the learning process and enhance learning through problem-solving activities. This method also encourages students to be more active in participating in class. When lecturers use cases, students are involved in analyzing, discussing, and reading, making the classroom atmosphere more lively. However, with the Covid-19 pandemic, it is a challenge for lecturers to apply the case method.

**3. METHODOLOGY**

The purpose of the survey is to assess the future orientation of students and the application of case studies conducted on the e-learning system. In addition, it also evaluates learning resources that are often used by students when learning online. Data was collected through an online questionnaire method which was distributed to students of 2 class LDP. Questions are

arranged on a 5 Likert scale (1 = Strongly disagree, 5 = Strongly agree). The survey was conducted in October 2021.

Cases were given in 5 meetings before the mid-exam which was published on the Universitas Andalas learning management system. Students are expected to discuss the case and upload the results of working solutions on the system. The statement given is:

Future orientation

1. I have an interest in retail business
2. I think the LDP course will help my future work
3. Distribution Logistics is important to study today
4. I think the Logistics Distribution job is promising
5. I want to work in the field of Logistics Distribution

Case study material

1. There are enough case questions to study this course
2. Learning from existing case questions helps me understand the material
3. The case questions are up-to-date/latest

Learning resources

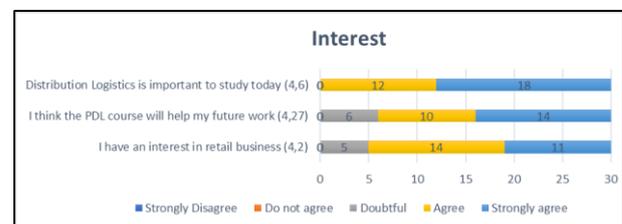
1. My main learning source is a text book
2. My main learning source is the lecturer's explanation
3. My main learning resources are other sources on the internet

Learning result expectation

1. I can learn LDP material well
2. I'm not sure I can pass this course

**4. RESULT AND DISCUSSION**

The following are the results of quantitative data analysis. The following chart represents quantitative data as descriptive statistics. Of the 51 students who filled out the survey, 30 data were further processed. The rest were not processed because they failed to answer basic questions to test their seriousness in filling out the questionnaire.



**Figure 1** Interest in logistics distribution.

The first picture is the future orientation of students regarding their interest in the logistics distribution field. Students answer three questions with an average of four liker times. The majority of students agree that distribution logistics is an important field to study today. Furthermore, students also agree that logistics

distribution will help their work in the future. In addition, the interest in the retail business has a relatively high level of approval.

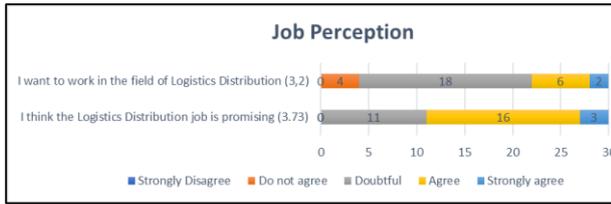


Figure 2 Job perception

When asked about their desire to work in the logistics distribution sector, students had quite obvious doubts. It shows by point 3.2 when they are asked about their desire to work in the logistics distribution sector. Students also think that logistics distribution work is less promising, right.

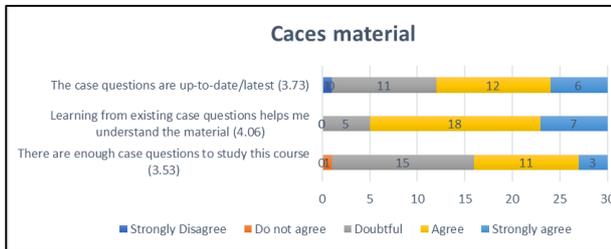


Figure 3 Study cases

Figure 3 shows the distribution of student assessments regarding the case material given in class. The evaluation of the case's recency is at 3.7 or in doubt. Furthermore, the case questions given are proven to encourage students to understand more about the learning material. However, the case questions given are still considered insufficient.

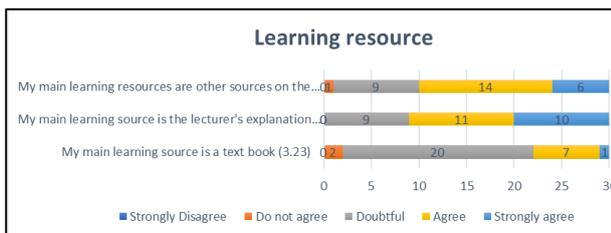


Figure 4 Learning resources

In online learning, of course, learning media must also be studied. There are three sources of student learning, namely, the internet, lecturer explanations, and books. Of the three learning sources, the lecturer's explanation is still the primary source of student learning. Learning resources are then followed by the internet and finally books. It shows that the learning culture of teacher center learning is still strong in this course, although the internet has become an alternative for students.

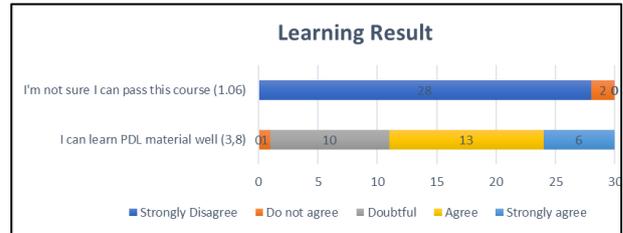


Figure 5 Learning result expectation

The last picture shows the expectations of student learning outcomes. Almost all students feel confident that they will pass this course. However, this fact is not followed by student confidence in the understanding of LDP material.

## 5. CONCLUSION

Based on our research, several conclusions can be drawn. First, students have a high interest in LDP courses. However, many of them do not want to work in distribution logistics. Doubts against promising job opportunities evidence this. In the case study perspective, while the case study helps students understand the learning material, we found that the cases should be more adapted to the current industry conditions. In addition, the number of cases must also be increased. Moreover, the students still regard lecturers as a source of knowledge that is not yet fully relevant to student center learning.

## AUTHORS' CONTRIBUTIONS

The author has contributed equally to this research.

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