

Analysis of Pedagogical Content Knowledge of the Management Lecturers in Arranging Semester Learning Plan

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Abstract— Pedagogical Content Knowledge (PCK) is crucial in educational research because not all lecturers have the same level of Pedagogical Content Knowledge skills. This study aims to explore the Pedagogical Content Knowledge of management lecturers at Universitas Kristen Indonesia Paulus in creating Semester Learning Plans. By using a case study approach with data collection methods including think aloud, interviews, and documentation. The results of this study showed that the Pedagogical Content Knowledge of management lecturers is characterized by an understanding of teaching orientation which influences the approach to achieving management learning competencies based on basic competencies. Additionally, their knowledge of the curriculum is informed by applicable curriculum objectives, and their understanding of students' needs and difficulties is rooted in their knowledge of student understanding. Furthermore, their assessment strategies involve planning assessment aspects and methods to facilitate evaluation. The lecturers' knowledge of learning strategies is linked to learning models. The study concludes that the Pedagogical Content Knowledge of management lecturers at Universitas Kristen Indonesia Paulus is effective.

Keywords— Pedagogical Content Knowledge; Semester Learning Plan.

I. INTRODUCTION

The learning process involves the lecturer's actions and activities, which are driven by cognitive processes. As the central figure in education, lecturers play a crucial role in the learning process, directly interacting with students across three stages: planning, implementation, and evaluation. Lecturers also hold control in learning, so they must be able to work well so that the students have the competencies that match expectations.

Lecturer is a highly skilled professional responsible for advancing knowledge, innovation, and expertise through education, research, and community engagement. Each lecturer's educational background and experience might be various, which can influence their teaching approaches and creativity. To achieve optimal learning outcomes, it is crucial to have lecturers who possess expertise in higher education's Tridharma (teaching, research, and community service) and can effectively manage all aspects of the learning process. Lecturer competence is the ability to perform their duty based on their skills and knowledge, which impacting the quality of student learning outcomes [2,3].

Professional lecturers must have four main competencies which are outlined in the Law of the Republic of Indonesia Number 14 Year 2005, Article 8 about Teacher and Lecturer. These competencies include: (1) pedagogical competencies, which involve understanding students, designing and implementing learning, evaluating learning outcomes, and fostering students' potential; (2) professional competence, which requires a broad and in-depth understanding of the subject matter; (3) personality competence, characterized by a stable, mature, wise, and authoritative personality that serves as a role model for students and embodies noble character; and (4) social competence, which involves effective

communication and socialization with students, colleagues, educational staff, parents, and the community

Becoming a professional lecturer is a challenging endeavor that requires a lecturer to have knowledge related to their competencies. The competencies a lecturer must possess are influenced by their educational background, teaching experience, and the period of time they have been teaching. As the result, professional competence is thought to significantly impact the educational process and the quality of educational output. Moreover, increasing professionalism requires a high level of commitment, as exemplified by lecturers at the Universitas Kristen Indonesia Paulus.

A crucial aspect of a lecturer's knowledge is pedagogy, particularly pedagogical content knowledge (PCK). Pedagogical Content Knowledge is important in research because not all lecturers have the same Pedagogical Content Knowledge skills in teaching. Instead, each lecturer has unique and different abilities formed by factors such as the teaching environment, subject matter, and personal experience.

Pedagogical Content Knowledge (PCK) was initially conceptualized by Shulman in 1986. Since that, Pedagogical Content Knowledge has been extensively researched globally. Pedagogical Content Knowledge is the fusion of two key competencies: pedagogical knowledge (pedagogical competence) and content knowledge (professional competence), as proposed by Shulman (1986) [4]. According to Magnussso and Krajcik (1999), Pedagogical Content Knowledge consists of five components: orientation towards teaching economics, knowledge about the curriculum, knowledge about students' understanding of the material, knowledge about assessment, and knowledge about learning strategies [5].

A lecturer's Pedagogical Content Knowledge (PCK) can be observed through the Semester Learning Plans they have prepared. The low ability of a lecturer's Pedagogical Content Knowledge can be inferred from the quality of the Semester Learning Plan. This is in line with research conducted by Rahmadhani, Rahmat, and Purwianingsih (2016), which found that the Pedagogical Content Knowledge skills of biology lecturers in Cimahi were still low, as evident in the mismatch between the Semester Learning Plan and the lecturers' teaching methods [6]. Each lecturer's Pedagogical Content Knowledge skills are different from one another.

The Semester Learning Plan used by lecturers at Universitas Kristen Indonesia Paulus was adapted from Semester Learning Plan prepared by other higher education lecturers, which was then modified to suit the specific conditions at the university. This encouraged the researchers to select Universitas Kristen Indonesia Paulus as the research location. In addition, researchers are interested in exploring Pedagogical Content Knowledge of management lecturers in preparing Semester Learning Plan at the university. Therefore, the pedagogical content knowledge of management lecturers in preparing Semester learning plan might be varied due to differences in the experience and background of each lecturer.

Analysis of pedagogical content knowledge of management lecturers in making semester learning plans is a crucial aspect in educational research. Pedagogical Content Knowledge refers to the knowledge that lecturers use to guide their teaching decisions and how they organize their teaching practices. In the context of management lecturers, PCK is very important because it influences the design and implementation of semester learning plans that meet the needs of students in entrepreneurship courses with spatial-cultural integration. The preparation of semester learning plans involves various factors, including the lecturer's understanding of the subject matter, learning objectives, and assessment methods.

The Effectiveness of Pedagogical Content Knowledge in lecturer management can lead to the creation of well-structured, engaging, and relevant semester learning plans for students. This is supported by research that highlights the importance of Pedagogical Content Knowledge in shaping the quality of teaching and learning outcomes. In recent years, there has been an increasing emphasis on the use of technology to improve the management of semester learning plans. In the context of management lecturers, pedagogical content knowledge analysis in making semester learning plans can provide valuable insights into the factors that influence the quality of the plan. This includes the role of pedagogical content knowledge in shaping learning objectives, choice of teaching methods, and assessment strategies used.

By understanding how management lecturers use their pedagogical content knowledge to develop semester learning plans, educators can better support the professional development of these lecturers and improve the overall quality of teaching and learning in entrepreneurship courses with spatial-cultural integration. Overall, the analysis of management lecturers' PCK in developing semester lesson plans is a critical area of research that can inform the

development of more effective and engaging learning experiences for students.

II. RESEARCH METHOD

In this study, researchers used qualitative research methodology, specifically using case study design. This approach conducts in-depth research into the phenomenon under investigation to provide detailed information on the subject matter. Case studies, as described by Creswell (2012), can take two main forms: single cases or cases where time and place are restricted [7].

The subjects of the study were lecturer of the Management Study Program of Universitas Kristen Indonesia Paulus because the lecturers of the management study program had attended the Curriculum Training Workshop. Researchers in this study play their own role in data collection as data collectors to collect information through think aloud, interviews, and documentation to collect data. Miles and Huberman stated that the data analysis technique used in this study was based on the approach proposed by Sugiyono (2015), Miles and Huberman emphasize that qualitative data analysis activities are carried out interactively and continuously until the data reaches saturation point, where there are not new insights are obtained from further analysis, that analysis activities for narrative data involve reducing data to identify key elements, followed by drawing conclusions [8].

III. RESEARCH RESULT

The research findings of the two subjects indicate that the Pedagogical Content Knowledge of management lecturers in preparing Semester Learning Plan for the Entrepreneurship course at UKI Paulus consists of five interconnected components: orientation towards teaching entrepreneurship, knowledge about the curriculum, knowledge about students' understanding of the material, knowledge about assessment, and knowledge about learning.

The responses of the management lecturer with the status of Foundation Permanent Lecturer show that there are five Pedagogical Content Knowledge components in preparing the Semester Learning Plan. The first component is the orientation towards teaching entrepreneurship courses which was responded to positively by both courses. This orientation is linked to the achievement of management learning competencies, specifically related to course learning outcomes, such as Sub Learning Outcomes for Course 1 and Sub Learning Outcomes for Course 2. Additionally, the teaching orientation is identical to the learning approach, which the two subjects effectively explained as a useful tool in designing learning that would later be utilized.

The second aspect, curriculum knowledge, shows that both subjects share similar understanding regarding the objectives of the curriculum. This is evident in their understanding of the curriculum's role in regulating learning, necessitating its periodic updates to align with contemporary developments and demands in education. Additionally, both subjects demonstrate similar approaches to learning, reflecting their shared understanding of the curriculum's purpose.

The similarity in their responses reveals that both subjects

view learning objectives as a standard for measuring the effectiveness of the learning process. These objectives are formulated based on indicators derived from predetermined knowledge domains. In terms of the curriculum program, both subjects aim to develop students' competencies through the materials taught and learning resources such as textbooks, relevant books, or internet-accessible information. These materials are detailed in the semester learning plan prepared by both subjects.

The third aspect, the lecturer's knowledge about students' understanding of the material, reveals that both subjects recognize the importance of students' knowledge and skills. This is evident in their responses, where they emphasize that students need to read or study the material before it is taught. This approach acknowledges that students' needs cannot solely be met by lecturers' information, and instead encourages students to be more active and engaged by asking questions. This collaborative approach allows both lecturers and students to play an active role in the learning process.

Both subjects agree that students' abilities to understand material and the different learning styles, leading to misunderstandings about the material. To overcome this problem, they have considered it in preparing the semester learning plan, so that they can take steps to overcome these difficulties. Misunderstandings often arise during the learning process, such as during discussions or written tests, and can be used as a consideration in anticipating and overcoming these problems.

The fourth aspect, lecturers' knowledge of assessment, shows that both subjects have the same perspective on assessment, as reflected in their interviews and Semester Learning Plan. Both emphasized the importance of considering three aspects of assessment: knowledge, attitude, and skills. These aspects are planned in accordance with the latest curriculum used at Universitas Kristen Indonesia Paulus. The assessment methods used in each aspect include attitude observation, oral tests, written tests, and knowledge assignments, as well as performance and skill observations. In addition, both subjects realized that each assessment method has its own advantages and disadvantages, so not all methods are used.

The fifth aspect, lecturers' knowledge of entrepreneurship learning strategies, shows that both subjects have similar knowledge of learning strategies. This understanding is applied in determining learning models that are adjusted to the topics discussed in entrepreneurship learning. For example, the learning model used for the main material of basic entrepreneurship concepts that lasts for three meetings is problem-solving learning. The implementation of this problem-solving learning strategy is detailed in the Semester Learning Plan prepared by both subjects.

IV. CONCLUSION

Based on the result of this study, it can be concluded that the Pedagogical Content Knowledge of Lecturers of the Management Study Program at Universitas Kristen Indonesia Paulus in preparing Semester Learning Plans consists of five components. The first component is the orientation of lecturers

of the management study program at Universitas Kristen Indonesia Paulus towards teaching entrepreneurship courses which are considered effective because they involve consideration of the learning approach used to achieve student competencies in accordance with the latest curriculum.

Secondly, the management lecturers at Universitas Kristen Indonesia Paulus are knowledgeable about the curriculum and can use this knowledge to set learning objectives aligned with the curriculum. They can also plan learning materials and resources to develop student competencies.

Third, the lecturer's understanding of the entrepreneurship material and the student's understanding of the material play an important role in the preparation of the Semester Learning Plan. In addition to considering the student's material needs, the lecturer also identifies common difficulties faced by students when studying entrepreneurship.

Fourth, from Pedagogical Content Knowledge (PCK), lecturers of the management study program at Universitas Kristen Indonesia Paulus involve their understanding of assessment in entrepreneurial learning. This knowledge enables them to formulate assessment plans that are aligned with learning objectives and cover various aspects and methods to effectively evaluate student competencies.

Fifth, the knowledge of management lecturers regarding learning strategies in preparing Semester Learning Plan is determined by the suitability of the material, student conditions, and methods of presenting the material. Therefore, these considerations also affect the selection of learning models.

V. SUGGESTION

For higher education leaders, it is recommended that they consistently provide resources and training to enhance lecturers' scientific knowledge, so they can be able to develop their Pedagogical Content Knowledge (PCK). Lecturers themselves are eager to continue learning and participate in training related to science and curriculum developments in Indonesia to improve their Pedagogical Content Knowledge. For future researchers, this study's findings are limited to the qualitative analysis of lecturers' pedagogical content knowledge in preparing Semester Learning Plan, focusing on only five components.

Therefore, future research should expand on this study by investigating lecturers' Pedagogical Content Knowledge (PCK) in their teaching practices, including components that were not covered in this research.

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