

Developing 21st century learning design via rubik collaboration in STIE Pancasetia Banjarmasin

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Abstract

The community service activity aimed to enhance lecturers' understanding and implementation of the 21st Century Learning Design (21CLD) framework, with a specific focus on the Collaboration Rubric. In the era of Society 5.0, where technological advancements driven by artificial intelligence, the Internet of Things, and automation continue to shape education, lecturers must adapt their teaching methods to prepare students for modern challenges. The activity sought to strengthen pedagogical competence by introducing lecturers to the concept of collaborative learning, emphasizing key components such as shared responsibility, substantive decision-making, and interdependence. The program targeted lecturers at Sekolah Tinggi Ilmu Ekonomi (STIE) Pancasetia Banjarmasin and was conducted through a socialization method consisting of presentations, sharing sessions, and discussions. The materials were presented using slides to support better understanding and active engagement. The results showed that participants were highly enthusiastic, actively involved in discussions, and demonstrated a deeper understanding of the principles of collaboration within the 21CLD framework. They gained the ability to design learning activities that foster teamwork, communication, and accountability among students. Furthermore, lecturers recognized the importance of integrating collaborative rubrics into classroom practices to promote a learner-centered approach aligned with 21st-century education goals. Overall, this program effectively contributed to improving lecturers' teaching quality and encouraged the continued adoption of innovative, collaborative learning strategies in higher education.

Keywords: 21st century learning design, collaboration rubric, pedagogical competence, higher education, STIE Pancasetia

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1. Introduction

The development of education in Indonesia continues to evolve dynamically in line with rapid technological progress and societal transformation. The transition from the Industrial Revolution 4.0 to Society 5.0 marks a new phase in which innovations driven by the Internet of Things (IoT), Artificial Intelligence (AI), and robotics have brought significant changes to both the economy and education. The concept of 21st-century learning is designed to prepare students to adapt to the evolving demands of modern society by mastering essential competencies known as the 4Cs—creativity and innovation, critical thinking and problem solving, communication, and collaboration. These competencies are vital for ensuring that

students can thrive in a world where technology and knowledge evolve rapidly.

The 21st Century Learning Design (21CLD) for educators is a structured framework consisting of eight modules that provide a clear and practical pathway for developing 21st-century skills through digital technology with learners. This model is built upon a research-based methodology that promotes a collaborative and practice-oriented process to help educators redesign their teaching activities to enrich student learning experiences. The series of 21CLD courses includes videos, readings, rubrics for each dimension, and anchor lessons, allowing educators to engage actively in evaluating and redesigning their lessons in alignment with the 21CLD rubrics. These dimensions include collaboration, knowledge construction, self-regulation, real-world problem solving and innovation, ICT for learning, and skilled communication—all of which are essential for preparing learners to meet the challenges of the digital era.

A crucial component in implementing the 21CLD model is the rubric, a tool that defines specific, result-based assessment criteria (Evans & Eller, 1982). A rubric functions as a scoring guide that communicates performance expectations and quality standards through clearly defined levels of achievement. According to Evans & Eller (1982:32), competencies involve several elements: task skills, task management skills, contingency management skills, and environmental or job-related skills. Mulyasa (2003:23) adds that competence must not only be demonstrable but also measurable against established standards and proven through satisfactory performance in actual tasks. In this context, rubrics help both educators and learners understand what constitutes quality work, encourage self-assessment, and streamline evaluation processes.

One of the key dimensions of 21CLD is collaboration, which, according to Chairul Saleh in Modul Konsep, Pengertian, dan Tujuan Kolaborasi, is derived from the words *co* and *labor*, meaning “working together” or “combining efforts” to achieve shared goals. In the learning process, collaboration represents a form of partnership and compromise among individuals, groups, or institutions that support and complement one another in completing tasks. Collaborative skills include the ability to work effectively in groups, adapt to various roles and responsibilities, show empathy, respect differing perspectives, and make joint decisions to achieve common objectives.

In higher education, lecturers hold a strategic role in designing learning processes that align with these principles. Their pedagogical competence is crucial in shaping learning that fosters interaction, creativity, and innovation. According to the Ministry of Education and Culture (Kemendikbud, 2015), the development of education relies on three main strategies: empowering teachers as agents of change, strengthening the role of parents, and engaging students to create an enjoyable and meaningful learning environment. Lecturers, as educators, must therefore continually enhance their pedagogical competencies through approaches that integrate the principles of 21CLD—particularly collaboration—to ensure effective knowledge transfer and student engagement.

This community service initiative aims to provide lecturers at Sekolah Tinggi Ilmu Ekonomi (STIE) Pancasetia Banjarmasin with an in-depth understanding of the Rubric of Collaboration, one of the key elements of 21st Century Learning Design. By mastering this rubric, lecturers can improve their pedagogical design, apply collaborative learning principles in classroom practices, and contribute to the overall improvement of educational quality in higher education. Through such initiatives, educators not only strengthen their teaching competencies but also play a significant role in developing human resources capable of adapting to the challenges of Society 5.0.

2. Community Service Design and Method

The community service activity titled “Developing 21st Century Learning Design via Rubric Collaboration in STIE Pancasetia Banjarmasin” was designed to enhance lecturers’ understanding and

implementation of collaborative learning within the 21st Century Learning Design (21CLD) framework. The target participants of this program were lecturers from Sekolah Tinggi Ilmu Ekonomi (STIE) Pancasetia, who play a vital role in shaping effective, student-centered learning environments. This activity aimed to strengthen their pedagogical competencies, particularly in applying the Rubric of Collaboration to design innovative and engaging learning experiences that align with 21st-century educational standards.

The method used in this community service was a socialization and interactive workshop approach, consisting of several structured stages. The session began with an opening segment to introduce the objectives and importance of the activity, followed by the registration of participants to document attendance. The main part of the activity involved the delivery of material through a presentation session, sharing discussions, and an interactive question-and-answer segment. These activities provided opportunities for participants to exchange ideas and reflect on their current teaching practices in relation to the 21CLD principles. The session concluded with a closing segment that summarized key insights and encouraged lecturers to integrate collaborative rubrics into their teaching design.

The activity was conducted at STIE Pancasetia Campus, located on Jalan Trikora, Banjarbaru. The presentation materials were delivered using PowerPoint slides to facilitate understanding and engagement, with detailed content provided in the attached training materials. Through this approach, participants were not only introduced to theoretical aspects of the 21CLD framework but also guided on how to apply the Rubric of Collaboration effectively in their classrooms to promote teamwork, creativity, and active learning among students.

3. Results and Discussion

The implementation of the 21st Century Learning Design (21CLD) framework, particularly through the Collaboration Rubric, has provided significant insights into how lecturers can design learning activities that foster cooperative engagement among students. During the community service program, the participants—lecturers of STIE Pancasetia Banjarmasin—were introduced to the key components of the Collaboration Rubric, which emphasize the importance of teamwork, shared responsibility, substantive decision-making, and interdependence in achieving collective learning outcomes.

The main concept of Collaboration within the 21CLD framework, known as The Big Ideas – Collaboration, focuses on working together, where learners are required to engage in group or pair activities to discuss issues, solve problems, and create products collaboratively. This approach aligns with 21st-century pedagogical goals that encourage active learning, critical thinking, and mutual accountability. Through interactive discussions and material presentations, lecturers were guided on how to integrate collaborative elements into their course design to ensure that learning activities move beyond individual effort toward shared contribution and responsibility.

The first element, Shared Responsibility, was emphasized as a crucial aspect of effective collaboration. In this context, learners are expected to jointly develop products, designs, or responses, with each member accountable for both individual and group contributions. The participants discussed how shared responsibility goes beyond merely helping one another; it requires all members to be actively engaged in the completion of a collective task and to take ownership of the final outcome. Lecturers reflected on how this principle could be applied in classroom settings, for example, by assigning projects where group grades are determined by both individual participation and collective achievement.

The second element, Substantive Decisions, was introduced as another vital component of collaborative learning. Substantive decision-making occurs when students make meaningful choices together that shape the content, process, or outcome of their work. During the session, lecturers learned how to design classroom activities that require learners to engage in decision-making processes—such as selecting problem-solving strategies or defining roles within a project team. This encourages critical



Figure 1. Implementation of Collaboration Rubric at STIE Pancasetia

thinking and reinforces the value of diverse perspectives in achieving effective group outcomes.

Another key aspect discussed was Interdependence, which occurs when all group members must actively participate for the team to succeed. It was noted that in many classroom settings, collaborative tasks often fall into the trap of uneven participation, where only one or two students complete most of the work. The workshop highlighted strategies to overcome this issue, such as assigning specific roles to each member, using peer evaluation systems, and setting clear expectations for individual accountability. By applying these strategies, lecturers can ensure that each student contributes meaningfully to the group process and that collaboration becomes a genuinely shared experience.

Overall, the discussion revealed that understanding and applying the Collaboration Rubric within the 21CLD framework can significantly enhance the quality of teaching and learning. The lecturers at STIE Pancasetia demonstrated enthusiasm in exploring ways to adapt these concepts to their respective courses. They recognized that fostering collaborative learning not only develops students' teamwork and communication skills but also prepares them to navigate real-world challenges that demand cooperation, adaptability, and collective problem-solving. This initiative successfully deepened lecturers' awareness of how the principles of shared responsibility, substantive decision-making, and interdependence can transform traditional classroom dynamics into interactive, learner-centered environments aligned with the demands of the 21st century.

4. Conclusions

The community service activity on Developing 21st Century Learning Design via Rubric Collaboration in STIE Pancasetia Banjarmasin concluded successfully and received positive responses from the participants. The lecturers demonstrated great enthusiasm throughout the session, actively engaging in discussions and showing genuine interest in the materials presented. As a result of this activity, participants gained a deeper understanding of the concept of 21st Century Learning Design (21CLD) and its relevance to modern educational practices. They were able to comprehend the structure and purpose of the Collaboration Rubric as one of the key components within the 21CLD framework and learned how to apply

it effectively in the teaching and learning process. Moreover, participants developed an awareness of how collaborative learning fosters teamwork, shared responsibility, and collective problem-solving among students, aligning with the demands of 21st-century education.

For future community service activities, it is recommended that similar programs be continued and expanded through seminars, workshops, or training sessions that cover other rubrics within the 21st Century Learning Design framework. Such initiatives would further enhance lecturers' pedagogical competence and encourage the integration of innovative teaching practices in higher education. Additionally, active participation in programs organized by the Institute for Research and Community Service (LPPM) is encouraged to strengthen academic collaboration and promote sustainable professional development among educators.

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