

Project module for strengthening the profile of Pancasila students in the perspective of 21st-century learning design microsoft

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Abstract: The objective of this study is to identify and evaluate the content of the module in terms of 21st-century learning design (21 CLD) dimensions. This study adopts a qualitative approach by applying the content analysis method of Krippendorff's model. The object of content analysis is the project module for strengthening the profile of Pancasila students with the theme of local wisdom for phase A of elementary school. The researcher is the primary tool employed in this study. The content analysis instrument uses a rubric that microsoft developed to determine the dimension level of each learning activity in the module. The data is collected using six phases to analyze the content, explicitly unitizing, sampling, recording, reducing, abductively inferring, and narrating. The project module for strengthening the profile of Pancasila students was identified as containing 5 of the six dimensions of microsoft's 21 CLD.

Keywords: 21st-century learning design, content analysis, profile of pancasila students, project module

Modul proyek penguatan profil pelajar Pancasila ditinjau dari 21-century learning design microsoft

Abstrak: Tujuan dari analisis konten modul ini adalah untuk mengidentifikasi dan mengevaluasi kegiatan pembelajaran yang ada di dalam modul dalam kaitannya dengan dimensi 21 CLD. Penelitian ini mengadopsi pendekatan kualitatif dengan menerapkan metode analisis konten model Krippendorff. Objek analisis konten adalah modul proyek penguatan profil pelajar Pancasila dengan tema kearifan lokal untuk sekolah dasar fase A. Instrumen utama yang digunakan dalam penelitian ini adalah peneliti sendiri (human agency). Instrumen analisis konten menggunakan rubrik yang dikembangkan Microsoft untuk menentukan tingkat dimensi setiap kegiatan belajar dalam modul. Pengumpulan data dilakukan dengan enam langkah dalam analisis isi, yaitu menyatukan, mengambil sampel, mencatat, mereduksi, menyimpulkan, dan menarasikan. Modul proyek penguatan profil mahasiswa Pancasila diidentifikasi mengandung lima dari enam dimensi dari 21 dimensi CLD Microsoft.

Kata Kunci: 21st-century learning design, analisis konten, modul proyek, profil pelajar Pancasila

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INTRODUCTION

The curriculum can be articulated as an educational policy priority that shapes the education system, in its capacity as a political document that sets a paradigm in educational practice (Sholeh et al., 2023). The birth of the independent curriculum policy is a political document that adopts a more flexible curriculum framework, emphasizing basic knowledge while assisting students in developing character and competence. The main mandate of the Merdeka curriculum is a project-based learning system for cultivating soft skills and character in line with the profile of Pancasila Students (Damayanti et al., 2023). Profile of Pancasila Students acts as a guiding direction that guides all policies and updates to the Indonesian education system, including project-based learning (Fitriyani et al., 2023).

The *Merdeka* Curriculum mandate also describes the necessity of expanding 21st century skills (Fitriyani et al. 2023), including thinking critically and solve the problem, communication and team work, ingenuity and innovation (Trilling & Fadel, 2009), which are integrated into the project of strengthening the profile of Pancasila students. From the four 21st-century skills, Indonesia added six skill standards with the term Indonesian Partnership for 21st-Century Skill Standard (IP-21CSS). The six IP-21 CSS are creativity thinking and innovation, critical thinking and problem-solving, communication and collaboration, ICT, character building, and spiritual values (Ariyana et al., 2018). Based on the skill standard, Microsoft developed rubrics as an instrument to measure the 21st century-based learning process with the term 21st-century learning design (21 CLD). 21 CLD includes six dimensions, namely knowledge construction (KC), collaboration (CB), real-world problem solving and innovation (RWPSI), skilled communication (SC), self-regulation (SR), and ICT for learning (ICT) (Microsoft, 2023a). The six dimensions of 21 CLD are important to be used as a learning orientation to prepare students as the golden generation in 2045 according to Indonesia's vision (Anggraena et al., 2020).

The 21CLD principles recommend that learning to prepare generations to live successfully in the 21st century requires more than just knowing the subject content. In this era, critical thinking is crucial for individuals to develop the ability to sift through the noise and extract meaningful insights (Park et al., 2023), adapting knowledge to new contexts, interpreting information, perceiving new ideas, sharing of ideas, cooperating, solving problems, and establishing decisions (Alismail, 2023; Taar & Palojoki, 2022). To respond to this recommendation, the Ministry of Education Policy in Indonesia established a project learning policy to strengthen the profile of Pancasila students in the independent curriculum platform.

The learning mandate of the *Merdeka* curriculum that must be implemented in schools is project-based learning for strengthening the profile of Pancasila students. This policy is based on the view that project-based learning (PjBL) is a practical and fun learning model to provide children with the knowledge and skills needed to face problems in life. Through PjBL, students play an active role in building knowledge, solving problems, taking responsibility, building self-confidence, working collaboratively, learning to communicate ideas and becoming creative innovators (Kusumadewi & Kusmaryono, 2022; Makaramani, 2015; Seo et al., 2023). The policy responds to 21st-century learning that integrates the knowledge domain with thinking critically, ingenuity, solving the problem, sharing of ideas, and cooperation (Iwan et al., 2023; Peña-Ayala, 2021), character building, and spiritual values (Ariyana et al., 2018).

Putting into practice the project module for strengthening the profile of Pancasila Students, aims to form a profile of students who have personalities that reflect the character of the survival of their country in the era of globalization. The profile of Pancasila student has a character that is reflected in six competencies, specifically: believing, fearing God almighty, and having noble character, independently, mutual cooperation, globalized diversity, critical reasoning, and creative.

Modules need to be developed as a tool to put into practice of project for strengthening the profile of Pancasila students. Although the Ministry of Education and Culture facilitates schools with the project module, which can be accessed on the independent teaching platform web page. The module facility is an example for teachers in schools, and in its implementation, schools are authorized to develop modules as an independent teaching platform (Regulation of the Minister of Education, Culture, Research and Technology of the Republic of Indonesia Number 56 of 2022, 2022). This shows that schools are given the authority to develop modules independently as a manifestation of the flexibility characteristic of the Merdeka curriculum. Therefore, schools can integrate the values of local wisdom in the project module. Without developing students' skills towards 21 CLD and the content of local wisdom, the gap between Pancasila's ideals and students' actions highlights the need for a more holistic approach to education that nurtures global citizenship. Thus, profile of Pancasila students can serve as a guide and reflection for students to cultivate Pancasila's character (Sabon et al., 2022).

Modules are an innovative teaching strategy to facilitate improved student learning outcomes (Lee & Catling, 2016; Logan et al., 2021). Modules are structured teaching materials, including learning objectives, 21CLD skill-oriented learning activities, learning materials, and self-assessment. Thus, modules can be used independently by students (Fisnani et al., 2020). By using modules, students can learn independently so that they are trained in self-regulation skills. This shows that the use of modules can form a profile of Pancasila student that has 21 CLD skills.

Therefore, to provide provisions for students to have 21st-century skills, learning activities in the project module for strengthening the profile of Pancasila students should be directed at strengthening 21st-century skills. The content analysis of the project module for strengthening the profile of Pancasila students is focused on the learning activity components contained in the module. The objective of the module content analysis in this study is to identify and evaluate the learning activities included in the module in terms of 21 CLD dimensions.

METHOD

Research design

This study adopts a qualitative approach by applying the content analysis method of Krippendorff's model. Content analysis method of Krippendorff's model is used to extract the meaning of a text through a process that is trustworthy, repeatable or applicable in a variety of different and valid contexts (Krippendorff, 2004). The document analyzed was the project module for strengthening the profile of Pancasila students with the theme of local wisdom for phase a of elementary school.

Research procedure

The procedure taken in this study adopted the opinion of (Sugiyono, 2007), which is through three phases: 1) initial phase. In this phase, researcher find out problems from phenomena in learning modules of elementary schools related to 21st-century skills. Researcher listed the information in the project module for strengthening the profile of Pancasila students that contained 21st-century skills; 2) simplification phase, means that the information was reduced to obtain and focus on the first phase. The project module has various components: objectives, learning material, activities, assessments, and references. This research focuses on the activities component of the module; 3) the last phase is selective phase. In this phase, make summarization about the objective of the study more elaborately for the six dimensions of 21 CLD Microsoft.

Subject and object of research

In this study, the researcher becomes the subject of identifier and evaluator study. The data was analyzed to evaluate predicated on theoretical foundations related to the six dimensions of 21CLD Microsoft. The object used in this study is the Project module for strengthening the profile of Pancasila students with the theme local wisdom phase A.

Research instruments

The researcher himself serves as the primary instrument for this research. The researcher's role as an astute observer in investigating the document analysis-based study, which delved into the project module. The secondary instrument are journals, articles, and previous research that contribute to the credibility of arguments and enhance the comprehensiveness of research findings. The content analysis instrument for the project module activity component uses a rubric that microsoft has developed to determine the dimension level of each learning activity (Microsoft, 2023a).

Data analysis

The collected data was identified and evaluated to describe qualitatively using the content analysis method. In collecting data, implemented several steps, specifically unitizing, sampling, recording, reducing, abductively inferring, narrating (Krippendorff 2013). The content analysis phase applying the Krippendorff model is illustrated in Figure 1.

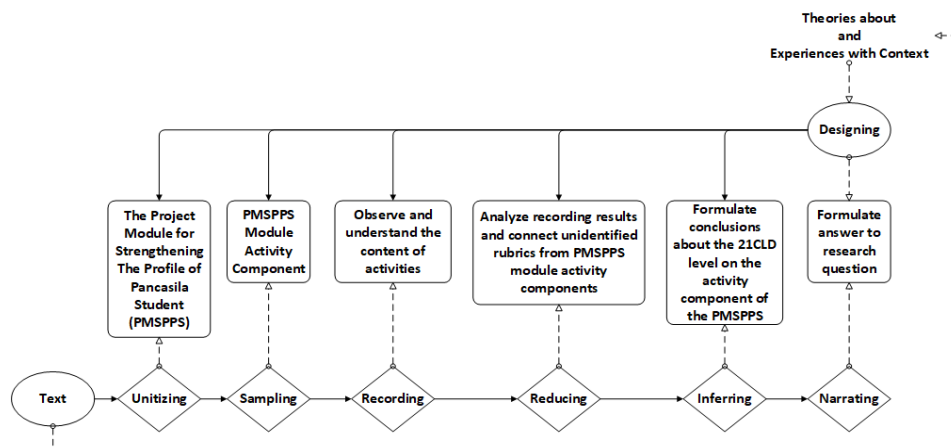


Fig 1. Phase modification of content analysis

RESULTS

The components of learning activities in the project module for strengthening the profile of Pancasila students were analyzed for content from a review of level 21 CLD to identify whether the design of project learning activities has met level 21 CLD microsoft and what level is dominant in project learning activities. Analysis of module content on the microsoft 21 CLD dimension-level activity component is shown in Table 1.

Table 1. 21 CLD dimension level identified in the project module

Activities Topic in the Project Module	Skill Dimensions Level of 21 Microsoft CLD				
	KC	CB	RWPSI	SC	SR
1. My favorite food	5	-	-	-	-
2. Issue Exploration	3	3	3	4	-
3. Comparing modern food with traditional food	2	-	3	-	-
4. Early reflection	-	-	-	-	-
5. Stories about traditional food	5	3	3	4	-
6. Planning	2	4	3	-	3
7. Develop basic skills	5	-	-	-	-
8. Interviewees	5	-	3	-	-
9. Draft a poster	4	4	-	-	-
10. Finalize posters	5	-	-	4	4
11. Making traditional food	4	4	-	4	-
12. Draft a presentation	4	-	-	-	-
13. Meeting to try taste	-	-	-	-	4
14. Simulated traditional food festival	2	2	-	4	4
15. Traditional food festivals	-	-	-	4	-
16. Reflection and follow-up	-	-	-	-	-
Total occurrences	12	6	5	6	4

Information:

- KC = Knowledge construction dimension
- CB = Collaboration dimension
- RWPSI = Real world problem solving and innovation dimension
- SC = Skilled communication dimension
- SR = Self-regulation dimension
- ICG = ICT for learning dimension

DISCUSSION

Project module needs to be developed oriented to microsoft's 21st CLD perspective, meaning that the activities in the module contain 21st-century skills according to the 21 CLD dimension rubric. The 21 CLD dimension rubric consisting of six dimensions is an instrument to measure 21st-century skills developed in the learning process.

To understand the urgency of 21 CLD as a 21st-century learning orientation, it is necessary to compare the skills required of the 20th and 21st centuries. The skills of the 20th century are known as the 3Rs orientation of "reading," "writing," and "arithmetic," called academic abilities (Malone et al., 2022). The 3Rs are replacing the 21st-century paradigm in a new context of 21 CLD as a learning framework that blends domain knowledge with creativity, communication, critical thinking, and workgroup trials to give students the means to succeed in work and life (Andersen & Rustad, 2022; Peña-Ayala, 2021).

The project of strengthening the profile of Pancasila students by using modules is appropriate because modules can facilitate learning that makes students active, reflective, and effective in achieving learning objectives, and provides a wide of learning experiences (Churchill et al., 2013; Logan et al., 2021; Soltura, 2022). The activities designed in the project module for strengthening the profile of Pancasila students not only contain the stages of activities that are schematic but also contain 21st-century skills according to microsoft's dimensions and 21 CLD rubrics so that students are cultivating soft skills to succeed in life and adapt to the demands of the 21st-century (Bayley, 2022; Teo, 2019; Trilling & Fadel, 2009). The idea of microsoft company about 21 CLD has developed a complete skill dimension with rubrics to be developed by teachers in equipping students' skills.

The interrelation between the profile of Pancasila students and the six dimensions of the 21st-century learning design by microsoft can be seen in Figure 2 below.

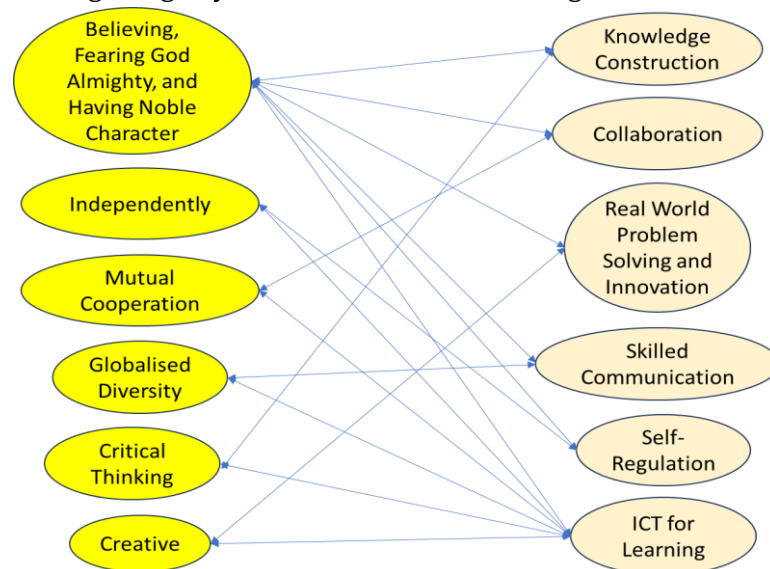


Fig 2. Interrelation between the six profiles of Pancasila students with the six dimensions of the 21st-century learning design microsoft

The analysis results (Table 1) identified the activity component of the project module for the dimension of knowledge construction (KC), known as critical thinking. Critical thinking identified student activities as required to filter, process, and apply information beyond reproducing information during the learning process (Microsoft, 2023a). In activity one, "My favorite food", students were asked to infer the name of the most preferred food to create a picture graph of their favorite food. The process of concluding involves critical

thinking skills such as connecting existing facts, drawing conclusions, and making summaries in charts of favorite food images. It can be said that the skill of inferring a phenomenon is to train students' interpretative thinking skills to think effectively in certain situations (Zain, 2017). Students at 21CLD need knowledge construction because they need knowledge practiced in genuine and authentic contexts (Stehle & Peters-Burton, 2019). Knowledge construction occurs when students independently reproduce or consume expertise and create new knowledge (Stehle & Peters-Burton, 2019). The knowledge construction dimension has the same meaning as the critical reasoning dimension (Karaca-Atik et al., 2023). However, it is not explicitly listed in the module but can be identified in activities corresponding to the rubric and level 21CLD.

The knowledge construction dimension in the project module for strengthening the profile of Pancasila students was identified at level 2 to level 5 based on 21 CLD. Level 5 is the highest in the 21CLD rubric of the knowledge construction Dimension. It can be placed in activity 5, where learning is interdisciplinary (Seo et al., 2023). Students analyze phenomena regarding traditional food stories passed down from ancestors by finding as much information as possible. The results of the research are located in the form of a mind map. It connects knowledge from Indonesian subjects about texts and social studies about local wisdom.

The collaboration dimension (CB) in 21 CLD aims to train students to work in teams. Collaboration skills can encourage children to help each other, appreciate friends' work, and take responsibility for completing tasks together (Seo et al., 2023; Stehle & Peters-Burton, 2019). Collaboration occurs if, in learning activities, students are allowed to take roles and interact with each other in groups during group work to produce a group work product. In Collaboration, trained students take leadership roles, construct descriptions, build trust, communicate, reflect, and manage conflict (Stehle & Peters-Burton, 2019). The collaboration dimension in the project module was identified as meeting level 2 to level 4 based on 21 CLD. Level 1 to level 4 is the highest level in the 21 CLD rubric of the collaboration dimension. It can be identified in the sixth activity, where learning leads students to make crucial decisions together, but students' work does not depend on each other. Students choose traditional foods to be studied and make essential decisions about creating a timeline for project activity planning and are encouraged to share roles in completing tasks. Students determine who is a group representative to present the discussion results to the class.

Real-world problem-solving and innovation (RWPSI) can occur through project-based learning. Real-world problem-solving can be realized if students work to solve problems that do not have current solutions, and students can apply problem-solving approaches with the creativity of their thinking (Aslan, 2021). In real-world problem solving, students work to identify problems, propose solutions to specific issues, test solutions, and implement sharing their ideas in groups. Learning activities to equip RWPSI are designed to develop real-world problem-solving skills in students by modelling actual scientists' investigations and research using real-life databases and evaluating evidence from current events (Stehle & Peters-Burton, 2019). The RWPSI dimension in the project module was identified as level 3 based on 21CLD. Level 3 is below the highest level in the 21CLD rubric of the RWPSI Dimension. One of them can be placed in activity two, which directs students to solve problems in the real world, but students need to innovate. The real-

life problem that students must solve is the problem of food consumption by children today. The results of the discussion are presented in front of the class. Therefore, students only innovate if they communicate their ideas to others in an academic context.

Skill communication (SC), according to the 21 CLD view, is the type of communication used to present or explain information. Communication skills are demonstrated by offering ideas and showing how a person uses relevant supporting evidence (Poláková et al., 2023). Communicating successfully requires the ability to connect a product with audience needs; it is necessary to use media to convey the ideas communicated to increase audience attention and 4i audiences (Stehle & Peters-Burton, 2019; Teo, 2019). The SC dimension in the project module was identified as meeting level 4 based on 21 CLD. Level 4 is the highest in the SC Dimension 21 CLD rubric. One can be placed in activity 11, which directs students to do extended communication or multimodal, which requires students to demonstrate and explain how to cook the traditional food they choose. The demonstration was accompanied by supporting evidence, such as examples, pictures, and physical proof of ingredients and equipment needed to process traditional food. Therefore, students communicate the results of their discussions with audio and visual media in front of the class, with the audience being teachers and students.

Self-regulation (SR) is a critical 21st-century skill for independent learners (Kuhn, 2016; Yani, 2014). This is following the vision of strengthening the profile of Pancasila students. Students who have self-regulation can self-organize, plan a job with a problem-solving approach (Faulkner & Latham, 2016; Stehle & Peters-Burton, 2019), monitor the progress of their work, and reflect on work based on feedback provided by others. In self-regulation, the student motivates himself to control the impulse to solve problems well. These skills can be taught to students through learning activities, but students need time to complete tasks, organization, and guidance for the reflection and revision process. Thus, project-based learning can provide a time frame for completing tasks to train self-regulation skills (Alias & Siraj, 2012; Nisa & Hikmah, 2023; Stehle & Peters-Burton, 2019). The SR dimension in the project module for strengthening the profile of Pancasila students was identified as meeting level 4 based on 21 CLD. Level 4 is the highest in the 21 CLD rubric of the SR Dimension. One of them can be placed in activity 10, where students can revise their work based on input given by the teacher regarding poster drafts made by students in groups.

ICT for learning (ICT). The advancement and development of ICTs is changing how we live and work. Adopting new advances in technology has become essential to living and working today. Training students' skills using digital technology is necessary, including how to design and create further digital-based information and ideas (Microsoft, 2023b; Valtonen et al., 2021). However, in The Project Module for Strengthening the profile of Pancasila students, no activities that motivate students to use ICT were identified.

CONCLUSION

Based on content analysis, the project module for strengthening the profile of Pancasila students was identified as containing 5 of the six dimensions of microsoft's 21 CLD. The five dimensions include knowledge construction (KC), collaboration (CB), real-world problem-solving and innovation (RWPSI), skilled communication (SC), and self-regulation (SR). Each dimension shows a different level. The KC dimension is at the highest

level, which is level 5. The CB dimension is at level 4. The RWPSI dimension is at level 4. The SC dimension is at level 4. The SR dimension is at level 4. Thus, the 21 CLD dimension in the project module for strengthening the profile of Pancasila students' learning activities is dominated by level 4. The ICT dimension needs to be identified in The project module for learning activities.

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