



The Role of Cocurricular Activities in Developing Students' 4C Skills in the Implementation of the Independent Curriculum

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Abstrak

The implementation of the Independent Curriculum emphasizes the development of 21st-century competencies known as the 4C skills: critical thinking, creativity, communication, and collaboration. These skills can be strengthened through co-curricular activities as a form of contextual learning outside of extracurricular activities. This study aims to describe the role of co-curricular activities in developing students' 4C skills during the implementation of the Independent Curriculum at SMA Negeri 1 Banjar. The study used a qualitative approach with descriptive methods. The research subjects included students, co-curricular activity supervisors, and school officials. Data collection techniques were carried out through observation, interviews, and documentation. The results showed that co-curricular activities were able to provide meaningful learning experiences that supported the development of students' critical thinking, creativity, communication, and collaboration skills. Before the co-curricular activities were optimally implemented, students tended to be passive and lacked confidence in expressing their opinions. However, after the implementation of co-curricular activities based on direct experience, students' social and academic skills improved. Thus, co-curricular activities have a strategic role in supporting the successful implementation of the Independent Curriculum by strengthening students' 4C skills.

Keywords: *Co-curricular Activities, 4C Skills, Independent Curriculum, 21st Century Learning*

1. INTRODUCTION

The development of globalization, accompanied by advances in digital transformation, has had a significant impact on various aspects of life, including education. This situation demands that the education system be able to produce human resources who are able to adapt to change, think creatively, and solve complex problems. Today's education no longer emphasizes solely the mastery of theoretical learning materials but also focuses on the development of 21st-century skills relevant to the needs of the global community and the development of the modern workplace (OECD, 2023). The 21st-century skills that are the primary focus in educational development include critical thinking, creativity, communication, and collaboration, known as the 4C skills (Care., et al., 2021). These four skills play a crucial role in preparing students to face the challenges of an increasingly dynamic and competitive social and professional life. Through mastery of the 4C skills, students are expected to not only understand learning concepts but also be able to apply their knowledge effectively in real-life situations.

To address these challenges, the government introduced the Independent Curriculum as a form of transformation of the national education system. This curriculum emphasizes flexible, student-centered learning, and integrates the development of academic and character competencies comprehensively (Ministry of Education, Culture, Research, and Technology,

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2022). The Independent Curriculum provides educational units with the opportunity to develop various contextual, innovative learning activities tailored to the needs and potential of students.

One implementation of the Independent Curriculum that plays a role in supporting the strengthening of student competencies is co-curricular activities. Co-curricular activities serve as learning support tools that provide students with direct learning experiences. Through these activities, students have the opportunity to develop their potential through activities related to real-life situations, making the learning process more meaningful and applicable (Nurhayati & Kartini, 2023). In line with this, various recent studies have shown that co-curricular activities have a significant contribution to improving students' social skills, fostering creativity, and optimally developing critical thinking skills. The implementation of co-curricular activities that are systematically designed and oriented towards learning experiences has been proven to be able to increase student engagement in the learning process and encourage the formation of 21st-century skills in a sustainable manner (Wahyuni, et al., 2022)

2. METHOD

This study used a qualitative approach with descriptive methods to gain a deeper understanding of the implementation of co-curricular activities in developing students' 4C skills. A qualitative approach was chosen because it can describe the experiences, perceptions, and dynamics that occur during learning activities in a more comprehensive and contextual manner. Through this approach, researchers were able to obtain in-depth information regarding student involvement in co-curricular activities and their impact on their skill development (Creswell & Poth, 2021). The data analysis process in this study was conducted through several stages: data reduction, data presentation, and drawing conclusions. Data reduction was carried out by selecting and simplifying data relevant to the research objectives. Next, the data was presented systematically to facilitate interpretation. The final stage was drawing conclusions based on patterns and relationships among data discovered during the study. These analysis stages refer to the interactive analysis model widely used in qualitative research in education (Miles, et al., 2022)

3. RESULTS AND DISCUSSION

Implementation of Co-curricular Activities in the Independent Curriculum

Research results indicate that co-curricular activities at SMA Negeri 1 Banjar are implemented through a variety of learning programs that adopt a project-based approach and are directly integrated with the subject's students' study in class. These programs are designed to provide opportunities for students to actively engage in various learning activities, such as conducting simple research activities, participating in group discussions, presenting their work, and producing various learning products relevant to the material being studied. Through this involvement, students not only gain a theoretical understanding of concepts but also are able to apply their knowledge in real-world situations.

The implementation of these co-curricular activities provides a more contextual and meaningful learning experience for students because the learning process is linked to problems occurring in their environment and everyday life. This learning approach, which places students at the centre of learning activities, encourages them to participate actively, independently, and take responsibility for the learning process. This environment provides space for students to develop higher-order thinking skills, such as the ability to analyse, evaluate, and solve problems systematically.

Furthermore, the transformation of learning that focuses on student engagement has been proven to foster the development of 21st-century skills, particularly the 4Cs, which include

critical thinking, creativity, communication, and collaboration. Authentic and collaborative learning experiences enable students to work together in groups, exchange ideas, and effectively convey their thoughts. Thus, co-curricular activities not only complement intracurricular learning but also serve as a strategic tool in developing students' competencies and character, in line with the demands of the Independent Curriculum.



Figure 1. Documentation of co-curricular activities.

Developing 4C Skills (Critical Thinking, Creativity, Communication, Collaboration)

Research results indicate that the development of 4C skills in students at SMA Negeri 1 Banjar is implemented through co-curricular activities designed within various project-based learning programs integrated with the subject matter. These co-curricular activities are systematically structured to provide a more applicable and relevant learning experience to meet the needs of students in the 21st-century learning era. The program actively engages students in various learning activities, such as simple research activities, group discussions, presenting work results, and creating learning products related to the material being studied. Student involvement in these various activities demonstrates that co-curricular activities not only complement classroom learning but also serve as learning tools that strengthen conceptual mastery and develop 21st-century skills. The implementation of co-curricular activities provides contextual and meaningful learning experiences for students because the learning process is linked to real-life situations in the surrounding environment and in students' daily lives. Learning that places students at the center of learning activities provides opportunities for students to play an active role in the learning process, both individually and in groups. This environment encourages students to be more independent and responsible, and to develop higher-order thinking skills, including the ability to analyze, evaluate, and solve problems systematically. Learning transformations oriented toward student activity have been proven to enhance the 4C skills through authentic, collaborative learning experiences that focus on developing student potential (Mahendra, Y., et al., 2024).

Co-curricular activities contribute significantly to developing students' critical thinking skills. Critical thinking skills are developed through various learning activities that require students to solve real-world problems related to the learning material. In these activities, students are trained to identify problems, gather information from various sources, analyze the data obtained, and formulate appropriate solutions based on the results of their studies. This learning process encourages students to not only passively receive information but also to process it logically and systematically. Various studies have shown that critical thinking skills can be developed through the application of project-based learning models, problem-based

learning, and inquiry learning, which require students to analyze problems in depth and seek relevant solutions. Co-curricular activities involving simple research and group discussions provide students with opportunities to evaluate the information they obtain and make decisions based on valid data. This demonstrates that co-curricular activities play a strategic role in enhancing students' critical thinking skills by providing them with the opportunity to develop analytical skills more effectively (Alsyabi, A. F., et al., 2022).

In addition to critical thinking, co-curricular activities also play a role in fostering student creativity. Creativity is developed through learning activities that require students to produce innovative products or works related to the learning material. In these activities, students are given the freedom to explore ideas, develop new concepts, and express their thoughts through various learning media. This freedom to develop ideas allows students to think flexibly and generate innovative solutions to various problems they face. 21st-century learning demands innovation in the learning process to optimally develop student creativity. Creativity is an essential skill for students, enabling them to generate new ideas, find alternative solutions, and develop products with useful value. Research shows that co-curricular activities can enhance student creativity through the creation of learning projects, innovative works, and products based on the exploration of students' ideas and thinking (Nurhayati, I., et al., 2024).

Co-curricular activities also play a crucial role in improving students' communication skills. Communication skills are developed through various learning activities, such as group discussions, presentations of work results, and the preparation of activity reports. Through these activities, students are trained to convey ideas systematically, clearly, and in a way that is easily understood by others. Furthermore, group communication activities provide opportunities for students to learn to respect the opinions of others and build positive social interactions. Communication skills are crucial in 21st-century learning because they enable students to convey information effectively and build harmonious social relationships. Research shows that group discussions and presentations significantly improve students' communication skills because they provide opportunities for students to practice expressing ideas, providing arguments, and responding constructively to others' opinions.

In addition to communication skills, co-curricular activities also play a role in developing students' collaboration skills. Collaboration is fostered through group work activities that require students to work together to complete learning tasks. In these activities, students are trained to share tasks, respect differences of opinion, and take responsibility for the results of group work. The collaborative learning process allows students to learn to interact with peers, build mutual trust, and enhance teamwork skills. Developing collaborative skills through co-curricular activities demonstrates that learning is not solely oriented toward academic achievement, but also toward developing the social skills necessary for social life. Collaborative skills are a crucial competency that students must possess to be able to work effectively in the workplace and in their future social lives (Sumarni, M., et al., 2023).

Overall, co-curricular activities at SMA Negeri 1 Banjar play a crucial role in developing students' 4C skills. Through contextual, collaborative, and student-centered project-based learning activities, students gain learning experiences that enhance critical thinking, creativity, communication, and collaboration skills in an integrated manner. Therefore, co-curricular activities can be an effective learning strategy to support the successful implementation of the Independent Curriculum and prepare students to face the challenges of 21st-century education.

Challenges in Implementing Co-curricular Activities

Although co-curricular activities play a crucial role in developing 4C skills, their implementation still faces several challenges. One major obstacle is limited learning time, as co-curricular activities must be integrated into a busy intracurricular schedule. This situation prevents project-based activities from running optimally. Furthermore, limited facilities and infrastructure also pose a challenge to implementing co-curricular activities. Project-based learning requires adequate facilities and learning media to support students' collaborative and exploratory activities. Without adequate facilities, students' 4C skill development will be less than optimal. Another challenge relates to teacher readiness in designing project-based learning activities. Teachers play a crucial role in integrating 4C skills through innovative, student-centered learning designs. The successful implementation of 4C skills is greatly influenced by the quality of lesson planning, evaluation strategies, and teachers' ability to manage collaborative learning. Overall, the implementation of co-curricular activities requires careful planning, adequate facilities, and teacher competency development to ensure optimal development of students' 4C skills (Romero, M. 2026).

4. CONCLUSION

Research results indicate that co-curricular activities play a strategic role in supporting the development of 21st-century skills, particularly the 4Cs (critical thinking, creativity, communication, and collaboration) in the implementation of the Independent Curriculum. Co-curricular activities, implemented through project-based learning and contextual learning experiences, have been shown to encourage active student engagement in the learning process. Through these activities, students have the opportunity to develop critical thinking skills in analysing and solving problems, enhance creativity in producing innovative work, strengthen communication skills in conveying ideas systematically, and develop collaboration skills through group work.

However, the implementation of co-curricular activities still faces several obstacles, including limited learning time allocation, limited supporting facilities and infrastructure, and the readiness of educators to design project-based learning integrated with the development of the 4Cs. The findings of this study indicate that optimizing co-curricular activities requires systematic learning planning, strengthening teacher competencies, and ongoing school policy support. Thus, co-curricular activities can function as an integral part of the implementation of the Independent Curriculum, which focuses on the holistic development of student competencies.

5. SUGGESTION

Based on the findings and conclusions of this study, the following suggestions are proposed: For Pancasila Education Teachers: Civics teachers are advised to integrate co-curricular activities into their lessons through the application of project-based learning models, collaborative learning, and contextual learning relevant to community life. Furthermore, teachers need to improve their pedagogical and professional competencies through ongoing professional development activities to support the implementation of learning oriented toward 21st-century skills development.

For Students: Students are expected to actively participate in co-curricular activities as a means of developing their potential and 4C skills. Active involvement in collaborative learning activities is expected to enhance critical thinking, creativity, communication, and attitudes of responsibility and cooperation. For Future Researchers: Further researchers are advised to develop studies related to the implementation of co-curricular activities using more varied research approaches, such as experimental or developmental research. Furthermore, future research can expand the scope of the study to different educational levels and subject areas to

obtain a more comprehensive picture of the effectiveness of co-curricular activities in supporting the implementation of the Independent Curriculum.

REFERENCE

Alsyabi, A. F., et al., (2022). Penerapan keterampilan 4C abad 21 dalam pembelajaran pendidikan dasar.

Care, E., Kim, H., & Vista, A. (2021). Education System Alignment for 21st Century Skills: Focus on Assessment. Brookings Institution.

Creswell, J. W., & Poth, C. N. (2021). Qualitative Inquiry and Research Design: Choosing Among Five Approaches (5th ed.). Sage Publications.

Damayanti, E., & Putri, N. (2024). SNOWBALL THROWING: STRATEGI AKTIF DALAM PEMBELAJARAN BAHASA INDONESIA JENJANG SEKOLAH DASAR. *Journal of Innovative Research*, 01, 32–42.

Kemendikbudristek. (2022). Panduan Implementasi Kurikulum Merdeka. Jakarta: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.

Mahendra, Y., et al., (2024). Transformasi pembelajaran sosiologi melalui keterampilan 4C abad 21.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2022). Qualitative Data Analysis: A Methods Sourcebook (4th ed.). Sage Publications.

Nurhayati, I., et al., (2024). Keterampilan 4C dalam pembelajaran IPS untuk menjawab tantangan abad 21. *Jurnal Basicedu*.

Nurhayati, S., & Kartini, T. (2023). Implementasi Kegiatan Kokurikuler dalam Mendukung Penguatan Kompetensi Siswa. *Jurnal Pendidikan Indonesia*, 12(2), 145–156.

OECD. (2023). Future of Education and Skills 2030: Curriculum Reform for 21st Century Learning. OECD Publishing.

Romero, M. (2026). Evaluating the evolution of 4C skills in education.

Sumarni, M., et al., (2023). Pendampingan keterampilan 4C abad 21 dalam pembelajaran di sekolah dasar.

Wahyuni, D., Sari, R., & Prasetyo, A. (2022). Pengaruh Pembelajaran Berbasis Proyek terhadap Kreativitas dan Kolaborasi Siswa. *Jurnal Inovasi Pendidikan*, 8(1), 34–45.