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The Development of 6Cs Skills through Project-Based Learning '*Masyarakat Belajar Sejarah*' (History Learning Society)

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Abstract: This study aims to develop students' 6Cs skills—critical thinking, creativity, communication, collaboration, character/compassion, and citizenship/culture—through the implementation of Project-Based Learning (PjBL) in a program titled *Masyarakat Belajar Sejarah* (History Learning Society). The research responds to the relatively low competitiveness of students in East Kalimantan amid the challenges of the 21st-century VUCA world, Indonesia's demographic bonus, and the development of the new national capital (IKN) in East Kalimantan. Using Kemmis & McTaggart's action research model, the study involved students from the History Education Program, FKIP, Mulawarman University, across three cohorts (2020–2022). Data was collected through observation, documentation, questionnaires, and interviews in March and June 2023. Students collaborated with schools, nonformal institutions, professionals, and local communities in Samarinda to design creative, contextual historical learning products. The findings show significant improvements across all 6Cs indicators. The project enhanced students' academic and social competencies and bridged the gap between classroom learning and real-life community engagement. The results highlight the potential of PjBL as a transformative learning strategy for equipping future educators with essential 21st-century skills. This research contributes to history education innovation by positioning students as agents of change within their communities.

Abstrak: Penelitian ini bertujuan untuk mengembangkan keterampilan 6Cs mahasiswa—berpikir kritis, kreativitas, komunikasi, kolaborasi, karakter/kepedulian, dan kewargaan/budaya—melalui penerapan model Project-Based Learning (PjBL) dalam program Masyarakat Belajar Sejarah. Penelitian ini dilatarbelakangi oleh rendahnya daya saing mahasiswa di Kalimantan Timur di tengah tantangan dunia abad ke-21 yang ditandai dengan kondisi VUCA (Volatility, Uncertainty, Complexity, Ambiguity), bonus demografi Indonesia, serta pembangunan Ibu Kota Negara (IKN) baru di Kalimantan Timur. Menggunakan model penelitian tindakan Kemmis & McTaggart, subjek penelitian adalah mahasiswa Program Studi Pendidikan Sejarah FKIP Universitas Mulawarman dari angkatan 2020–2022. Pengumpulan data dilakukan melalui observasi, dokumentasi, angket, dan wawancara pada Maret dan Juni 2023. Mahasiswa bekerja sama dengan sekolah, lembaga nonformal, profesional, dan masyarakat Kota Samarinda untuk merancang produk pembelajaran sejarah yang kreatif dan kontekstual. Hasil penelitian menunjukkan peningkatan signifikan pada seluruh indikator 6Cs. Proyek ini tidak hanya meningkatkan kompetensi akademik dan sosial mahasiswa, tetapi juga menjembatani pembelajaran di kelas dengan keterlibatan nyata di masyarakat. Penelitian ini menunjukkan potensi PjBL sebagai strategi pembelajaran transformatif yang relevan untuk membekali calon pendidik dengan keterampilan abad ke-21.

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INTRODUCTION

East Kalimantan faces unique challenges compared to other regions in Indonesia and worldwide. The first challenge is the complexity of the 21st Century World, characterized by VUCA (Volatility, Uncertainty, Complexity, Ambiguity). The second challenge is the demographic bonus for the Indonesian population. Finally, East Kalimantan's unique challenge is establishing a new National Capital City

(IKN) called Nusantara. The location for the new capital city has been decided to be in the Sepaku District of the North Penajam Paser Regency in the East Kalimantan Province. This research addresses three issues by enhancing the younger generation's 6Cs abilities through a Project-Based Learning (PjBL) program called 'History Learning Society'.

The first is the 21st Century World, characterized by the VUCA World. The appearance of the 21st Century World is that changes and problems are rapid and certain. On May 20, 2023, 350 Artificial Intelligence (AI) activists, including Sam Altman (OpenAI), Demis Hassabis (DeepMind Google), Dario Amodei (AI Anthropic), Geoffrey Hinton, and Yoshua Bengio (Turing Award 2018), issued a joint statement on the threat of global extinction due to AI. According to the Centre for AI Safety (Center for AI Safety, 2023), mitigating the risk of extinction from AI should be a global priority, alongside other societal-scale risks such as pandemics and nuclear war. In a pessimistic and dystopian prediction, Yuval Noah Harari (2018) envisions a future where Homo Deus represents the triumph of the Science Revolution and its partner, capitalism. Homo Deus is a group of elites who have widened social class distances through their wealth and mastery of science, potentially rendering humans irrelevant.

The 21st-century world is characterized by the VUCA (Volatility, Uncertainty, Complexity, Ambiguity) World, which emerged after the end of the Cold War and the collapse of common bonds that fueled the complexity of relations between countries (Glaser, 2023). According to Francis Fukuyama (2006), the world since then has been characterized by the triumph of capitalism and the end of world history. However, Harari (2018) warns that capitalism aims to grow bigger. According to Joshua Ramo in George W Casey (2019), the post-Cold War world is characterized by constant competition and rapid change, making it an inherently unstable environment. It is important to note that this evaluation is subjective and should be marked as such. Ramo describes this as the VUCA World, comparing it to a dune where each grain of sand forms a fragile bond, leaving it vulnerable to destruction at any moment.

The second. Indonesia's Demographic Bonus refers to the period between 2020 and 2040 when 70% of the country's productive population (aged 15-64) is expected to contribute to the economy (Badan Pusat Statistik, 2022). While abundant labor may lead to economic growth, low-quality labor can result in unemployment and other social problems. Furthermore, the development of Industrial Revolution 5.0 in Indonesia may replace many jobs with AI and robots. The Population Demographic Bonus presents a significant challenge.

The third point concerns establishing the New Capital City (IKN) in East Kalimantan (Kaltim). The alleged impact of IKN on East Kalimantan's population has altered the initial prediction. According to the 2015-2025 population projection for East Kalimantan by the Central Statistics Agency (Badan Pusat Statistik, 2018), the total population in 2025 was predicted to be 3,879,508 people. However, as of 2021, the population has already reached 3,849,832 people (Badan Pusat Statistik, 2023; Pemprov Kaltim, 2022). The population of East Kalimantan is predicted to increase even further if the legal instruments for the new IKN are put in place and the development of IKN takes place. According to Circular Letter (Kepala Otorita IKN, 2022) No. 1/SE/Kepala-Otorita IKN/X/2022, the population of IKN will increase from 1,423,579 people in 2022 to 1,911,988 people in 2045, with an increase of 488,409 people. In 2024, 70% of the migrants to East Kalimantan are expected to come from outside the region (Indraswari, 2022).

The competition map for Human Resources (HR) in Indonesia shows a favorable position for East Kalimantan. According to the Human Development Index (HDI), East Kalimantan ranks third out of 38 provinces with a score of 77.44, following Jakarta and Yogyakarta (Badan Pusat Statistik, 2023). East Kalimantan's Labor Development Index (IPK) is ranked 10th with a score of 61.61 (Kemnaker, 2021). However, with the introduction of the new IKN that emphasizes smart, green, sustainable, and environmentally friendly concepts, it appears that the most challenging competition will occur in more forward-thinking areas. Historically, professional groups and graduates of higher education have carried this responsibility. Problems arise when Mulawarman University, a reputable higher education institution in East Kalimantan, is ranked 38/100 by Webometrics 2023, 43/100 by Edurank 2023, and 51/100 by the Ministry of Education and Culture 2021. Efforts are required to enhance the quality of students as future professionals.

These three issues, the 21st Century World characterized by VUCA, the Demographic Bonus of the Indonesian Population, and the new IKN era in East Kalimantan, are real problems that must be addressed immediately by various parties. This research is a scientific endeavor to improve the quality of highly educated human resources in East Kalimantan. This research focuses on developing the

6Cs skills of students enrolled in the History Education Study Program at the Faculty of Teacher Training and Education, Mulawarman University.

Initially, the 6Cs skills lacked organization. Bernie Trilling & Charles Fadel (2009) classified three skills necessary to confront the challenges of the 21st Century: (1) Critical thinking and problem -solving; (2) Communication and collaboration; (3) Creativity and innovation. Marilyn Binkley (Care et al., 2012), Patrick Griffin, and Esther Care (2014) categorised ten skills necessary to face the challenges of the 21st Century, namely: creativity and innovation, critical thinking, learning to learn (metacognition), communication, collaboration, information literacy, ICT literacy, citizenship (local and global), life and career, and personal and social responsibility. Until 2015, these skills were collectively known as the 4Cs. The term 6CS refers to six skills that are considered important in various fields: critical thinking, creativity, collaboration, communication, character/compassion, and citizenship/culture. In 2015, Brian S Miller suggested adding two more skills, culture and connectivity, to deal with cross-cultural interactions. However, not all scholars agree with these additional skills.

The Ministry of Education and Culture (Kemendikbud) in Indonesia has adopted the 6Cs skills in a seminar titled 'From 4Cs to 6Cs: What Teachers Should Know and Prepare for Successful Learning in the 21st Century.' According to the Kemendikbud, developing 6Cs skills is the most appropriate approach to address the demands of the 21st century (Kemendikbud, 2022). In their 2019 study, Mitchel Vinco, Nana Supriatna, and Agus Mulyana incorporated the opinions of Griffin (Care et al., 2012) and Ang & Dyne (2015) to supplement 21st Century Skills in Indonesia. They also added Cultural Intelligence to cross-cultural history learning in West Kalimantan. The study compiled the 6Cs ability indicators, which can be found in Table 2.

Meanwhile, Project-Based Learning (PjBL) is a teaching approach highly recommended by the Ministry of Education and Culture to foster independence, collaboration, and creativity (Kasih, 2021). PjBL is based on John Dewey's philosophy of 'Learning by doing', which emphasizes that education is not just preparation for life, but life itself (Boss, 2011). This approach is rooted in constructivist education, which includes the works of Jean Piaget, Lev Vygotsky, and Jerome Bruner. These scholars have shifted the focus from viewing learners as behavioristic research objects to constructivist research subjects (Olson, 2015; Schunk, 2012; Suyono & Hariyanto, 2017). The project, referred to as 'History Learning Society', involves students inviting community members to engage in history learning. In this study, hundreds of students will teach history to the community in Samarinda City, East Kalimantan, using various creative methods.

Research has been conducted on using Project-Based Learning (PjBL) to prepare students for the 21st Century World. The use of PjBL in History Education or Social Science Education to develop 21st Century Skills is also easily found, especially at the Indonesian national level. However, the specific use of PjBL to develop 6Cs skills in History Education has not been found nationally or internationally. Additionally, history education projects involving the wider community have not been found.

Ramos and Paz (2014) employed Project-based Learning (PjBL) in history education to cultivate skills akin to those outlined in the US K-12 curriculum for 21st Century Skills. In the eighth grade, PjBL was utilized to create multimedia learning materials, such as pictorial presentations or infographics. The outcome was that PjBL can foster varied interpretations of historical events, enhance analytical skills, and promote source criticism.

Lim, Jawawi, Jaidin, and Roslan (2023) employed Project-based Learning (PjBL) in history education to cultivate 21st Century Skills. The study involved Grade 10 students in Brunei conducting historical research. Although the results were unsatisfactory, the authors identified potential for future skill development.

Several studies have been conducted on applying Project-Based Learning (PjBL) in history education in Indonesia. Sumiyati & Sutimin (2017), Matitaputty (2023), Salam & Wahyuni (2021), Samsiyah, Musadad, and Pelu (2020), Sulistiyo et al (2022), and Sumaludin (2022) have all contributed to this area of research. However, only Salam & Wahyuni (2021) focused on developing 21st Century Skills, specifically creative and critical thinking. Their research successfully developed these skills. While other studies have also shown that PjBL can improve learning motivation, learning outcomes, historical awareness, and historical research methods.

There has been extensive research on Project-based Learning (PjBL) in various scientific fields to enhance 21st Century Skills, 4Cs, and 6Cs. Harris et al (2015) conducted a study on the impact of PjBL in 42 schools across the United States and found that it effectively helped achieve the K-12 curriculum objectives for Science Education. Ahern (2010) implemented PjBL with third and fourth-year Civil

Engineering students at the University of Dublin. The students could conduct independent research using various sources, generate new ideas, and debate ideas. However, a negative consequence of this research is that students may misinterpret much information.

Research conducted by Mutakinati, Anwari, and Yoshisuke (2018) in Japan, and Lin, Wu, Hsu, and Williams (2021) in Taiwan, applied PjBL in the field of STEM (Science, Technology, Engineering, and Mathematics). The results showed that PjBL successfully developed critical thinking, contextual thinking, problem-solving, communication, and modeling skills. However, Lin, Wu, Hsu, and Williams noted that some projects could not be implemented in real-world scenarios.

Jin, Hwang, and Kim's (2020) research in Korea did not use Project-based Learning (PjBL), but instead used a similar approach called Collaboration Education (Cooperative Learning). They conducted their research in an architecture class where students, architects, project owners, mechanical architects, and contractors collaborated on an architectural design project. The study found that collaboration increased the participants' satisfaction, comfort, attention, relevance, and confidence.

Almulla (2023) did not use PjBL, but employed a similar Constructivism Learning method to foster creativity and critical thinking in line with 21st Century Skills. The study's results, which involved 297 participants from four faculties at King Faisal University in Saudi Arabia, indicated significant relationships among all variables. This suggests that the method effectively promotes the development of 21st Century Skills.

The success of PjBL and similar methods in developing 21st Century Skills has been well-documented. This research aims to develop the 6Cs skills of students through the use of Project-Based Learning (PjBL), specifically in the context of 'History Learning Society'. The goal is to equip students with the necessary abilities to compete in a world characterized by VUCA, leverage the Demographic Bonus of the Indonesian Population, and adapt to the new National Capital in East Kalimantan.

This research is important because the challenges posed by the three problems are increasingly pressing. Developing 6Cs skills in students of the History Education Study Program at Mulawarman University is an effort to benefit the young generation of East Kalimantan. The research results will be disseminated to the education community and policymakers at Mulawarman University and East Kalimantan. Project-based Based Learning with a community focus can prepare East Kalimantan to face the challenges of the 21st century, the demographic bonus of the Indonesian population, and the new state capital (IKN) in East Kalimantan. This research aims to address the following question: How do students develop their 6Cs skills in Project-Based Learning (PjBL) "Masyarakat Belajar Sejarah (History Learning Society)?

METHOD

This research follows the Kemmis & Taggart action research model (Creswell, 2012; Denzin & Lincoln, 2011), which involves four stages: planning, implementation, evaluation, and reflection. In February 2023, a project planning discussion took place (see chart 2, action 1), followed by the project proposal presentation in February-March 2023 (action 2). The third action involved practice or simulation in March-April 2023. Following this, the fourth action will be project implementation in April-May 2023. The fifth action will involve reporting the project results in June 2023.

The study involved 151 students divided into 30 groups, including 27 regular and 3 repeated groups. The students were from the 2020, 2021, and 2022 batches and attended courses taught by lecturers or researchers in Global Perspectives, Intellectual History, and European History. The groups were purposefully divided, with each class nominating 5-6 students with leadership qualities. The students elected the group leaders, and then, together

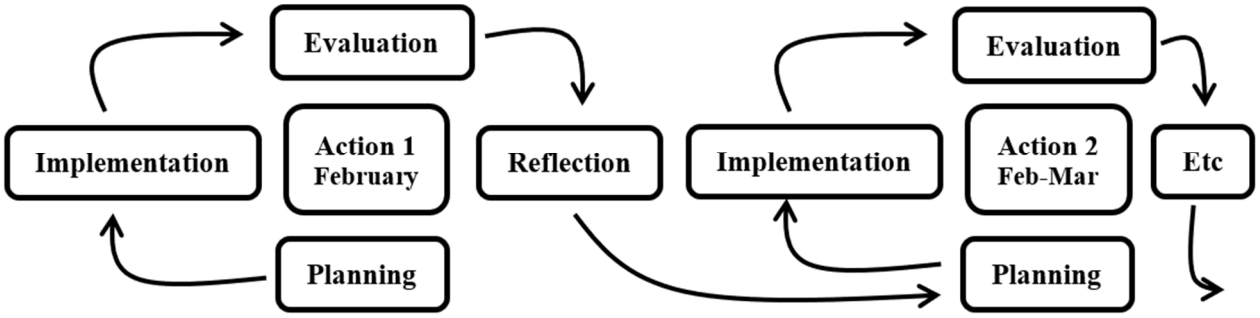

Figure 1. Action Research Framework

with the lecturer, they chose the other members. The project's success relies on the emotional bond within each group. Table 1 shows the results of the PjBL *'Masyarakat Belajar Sejarah'* (History Learning Society).

The data collection techniques included observation, documentation, questionnaires, and interviews. Questionnaires and interviews were distributed in two stages: one before the project implementation in March 2023 and another after the implementation in June 2023. Observations and documentation were conducted throughout the project. Research instruments were prepared to measure the 6Cs skills, based on the frameworks of Miller (2015), Binkley et al (Care et al., 2012), Trilling & Fadel (2009), and information from the Ministry of Education and Culture (Kemendikbud).

The study employed data analysis techniques that followed the stages of data collection, data reduction, data presentation, and conclusion drawing. The results of observations, documentation, and interviews were reduced through focus group discussions among researchers, as shown in the research findings. The questionnaire results were presented as information tables (see Table 2). After obtaining saturated results, the data was analysed using learning theories such as constructivism, 21st Century Skills, 6Cs ability, and Project-Based Learning (PjBL).

RESULTS

Action 1. The initial step was a discussion on project planning, which occurred in February 2023. Each group presented three proposals for developing a learning product that engages or can be utilised by the community. The product should be distinct from those of other groups. Group 1-22A was the most frequently consulted group, with 15 consultations. On average, groups consulted with the lecturer five times. In this first step, students are expected to think critically and creatively.

Action 2. The second step involves presenting the project proposal, which took place in February-March 2023. Each group was required to demonstrate the feasibility of their proposal to the lecturer. The presentation should include the best product idea, budget plan, division of tasks, and product suitability with the technical capabilities of group members. It is not uncommon for proposals to be rejected during this stage, leading to changes in ideas. Group 5-22B, comprising solely male members, encountered difficulties devising rules for a football -quiz hybrid game. On the other hand, Group 4-22A exhausted the largest budget plan of 1 million rupiah, while the average group expenditure was 200 thousand rupiah. Students must develop communication and collaboration skills, which can be achieved through practice or simulation.

Action 3. This action was carried out between March and April 2023. Once the lecturer approves the proposal, students should prepare to carry out the project on a limited basis. This can be achieved through speaking practice, action practice, presentation of tools and materials, scenario maturation, and simulation or rehearsal. The earliest groups to simulate were Groups 3-22A and 4-21. These two groups simulated teaching, playing, singing, and interacting with elementary school children. Implementing the project's fourth action is contingent upon receiving positive feedback from the lecturer regarding the third action. During this phase, the observation of the 6Cs skills commenced.

The fourth action involved executing the project in Samarinda City between April and May 2023. A total of 27 groups participated, each with unique products, although some similarities were inevitable. Incidentally, three special groups were formed to commemorate Kartini Day, National Awakening Day, and the Birth of Pancasila. Groups 1-20 A, 1-20B, and 3-20 A successfully collaborated with external parties and received high appreciation. Group 1-20 A collaborated with the National Narcotics Agency to organise a seminar on the History of Narcotics, while Group 1-20B conducted a radio broadcast on RRI Pro2. Group 3-20 A hosted an online seminar on the History of Feminism with a resource person from Bandung. Hundreds of participants attended the seminar.

Action 5. The project results were reported in June 2023. Each group presented their final product in the form of YouTube and behind-the-scenes videos, which were uploaded to the @HMPSFKIPUNMUL account. The project results were presented in front of the classroom to allow students to compare and appreciate each other's work. The report of work results should include initial ideas, changes in ideas, challenges faced before and during implementation, community responses, and potential future learning products. It is worth noting that groups 6-22 A, 6-22B, and 6-21 failed to implement the project within the deadline, but they were able to complete it before the end of the lecture. Group 1-21, 2-20 A, 5-20 A, and 4-20 B received a good grade (B) despite having mediocre final packaging, as indicated by various assessment criteria.

The sixth action was remedial. The lecturer assessed the project based on affective criteria

Table 1. Various PjBL learning products

No	Group	Project Type	Location
1.	1-22A	Learning, animation creation, games.	SMAN 6 Palaran (Senior High School)
2.	2-22A	Social experiment, knowledge test.	Public Place
3.	3-22A	Learning, games, painting, paper puppets.	Kampung Ketupat
4.	4-22A	Music video making, public reaction.	Public Place
5.	5-22A	Video parody making, public reaction.	Public Place
6.	6-22A	Learning, exhibition, quiz.	SMA Katolik WR Supratman (Senior High School)
7.	1-22B	Learning, culinary.	Public Place
8.	2-22B	Learning, video making, games.	Panti Asuhan Al-Huda Rifa'i. (Orphanage)
9.	3-22B	Learning, games.	SMKN 5 Samarinda (Vocational High School)
10.	4-22B	Social experiment, game.	Public Place
11.	5-22B	Social experiments, quizzes, sports.	Public Place, HMPS PAI UIN Sultan Aji Muhammad Idris.
	6-22B	Social experiment, games.	Public Place
12.	1-21	Learning, storytelling, and coloring.	Public Place
13.	2-21	Video making, public reaction.	Public Place
14.	3-21	Learning, games, storytelling.	SMP Cendana Samarinda (Junior High School)
15.	4-21	Learning, watching movies, quizzes.	TPA Walimuddin Bukuan (Childhood Al Quran learning)
16.	5-21	Social experiment, quiz, challenge.	Public Place
17.	6-21	Public reaction, parody video making.	Public Place and SMPIT Cordova (Junior High School)
18.	1-20A	Seminars, talk show.	Badan Narkotika Nasional (BNN)/ National Narcotics Agency
19.	2-20A	Social experiment, knowledge test	Public Place
20.	3-20A	Organizing online seminars	Teacher SMAN1 Bojongsoang, Bandung
21.	4-20A	Video making, public reaction.	Public Place
22.	5-20A	Video making, public reaction.	Public Place
23.	1-20B	Organizing talk shows, radio broadcasts	RRI Pro 2 Samarinda
24.	2-20B	Organizing podcast talk shows, live streaming.	Aminah Amin Clinic
25.	3-20B	Learning, quizzes, coloring, games.	TPA Al Hijrah (Childhood Al Quran learning)
26.	4-20B	Social experiment, knowledge test.	Public Place
27.	5-20B	Documentary video making.	Various resource persons, experts and preachers.
28.	HMPS-K	Short movie making.	Public Place
29.	HMPS-KN	Short movie making	Public Place
30.	HMPS-P	Music cover.	Public Place

(20/100), individual activities in support of the project (25/100), project preparation (25/100), and final project results (30/100). Students who received grades of C or D were allowed to submit improvements in the agreed-upon aspects within one week. Groups 2-21 and 4-20 A received a grade of C and

were offered remedial support. Group 4-20 A completed the remedial, while Group 2-21 did not.

Table 2 shows the abilities of the 6Cs before and after Project-Based Learning (PjBL). Before the project, the participants who submitted the questionnaire were 151 students, while after the project, the number decreased to 140 students. Nevertheless, the data obtained is saturated enough, and can be analyzed.

This research includes interviews from post-project data for practical reasons. These interviews can already describe the conditions before project implementation. The names of the interviewees are abbreviated to ensure straightforward information, as agreed upon by the researcher and interviewees.

Based on interviews conducted with participants regarding developing 21st-century skills, specifically the 4Cs (Critical Thinking, Creativity, Communication, Collaboration) and Character and Citizenship. The interview data reveal how these competencies were manifested through real project experiences, group dynamics, and interactions with the wider community. Each paragraph below highlights one of the core competencies observed during the interviews.

Table 1. 6Cs proficiency before and after PjBL

No	Indicator	151 / 140 Respondent Before - After (%)			
		Very Deficient	Deficient	Good	Excellent
1.	Critical thinking				
1.1.	I was able to connect the information in the discussion.	2 - ▼0	29.8 - ▼4.3	63.6 - ▲69.3	4.6 - ▲26.4
1.2.	I can compare the positive and negative impacts of different ideas.	0.7 - ▼0	21,9 - ▼0.7	64,3 - ▲65.6	11.9 - ▲35
1.3.	I can find reasons and predict the consequences of my ideas.	2.6 - ▼0	37.7 - ▼2.1	51 - ▲72.1	9.3 - ▲25.7
2.	Creativity				
2.1.	I was able to come up with ideas and ways to realize them.	2 - ▼0	37.7 - ▼9.3	51 - ▲64.3	9.3 - ▲26.4
2.2.	I am critical of ideas and able to innovate.	4 - ▼0	40.4 - ▼16.4	48.3 - ▲60.7	7.3 - ▲22.9
2.3.	I was able to explore ideas from the local culture.	2 - ▼0	47 - ▼10.7	44.4 - ▲74.3	6.6 - ▲15
3.	Communication				
3.1.	I was able to present the information thoroughly and correctly.	2.6 - ▼0	39.7 - ▼10	51.7 - ▲69.3	6 - ▲20.7
3.2.	I can communicate without multiple interpretations.	2.6 - ▼0	44.4 - ▼10	49.7 - ▲73.6	3.3 - ▲16.4
3.3	I was able to create a conducive atmosphere during group work.	2 - ▼0.7	20.5 - ▼5.7	58.3 - ▼56.4	19.2 - ▲37.1
4.	Collaboration				
4.1	I was able to create an atmosphere of togetherness and cooperation.	0.7 - ▼0.7	19.9 - ▼5	58,9 - ▼50.7	20.5 - ▲43.6
4.2	I was able to maximize the strengths of the group members.	1.3 - ▼0.7	27.2 - ▼8.6	60.3 - ▼56.4	11.3 - ▲34.3
4.3	I was able to complete the work that we appreciated together.	2.6 - ▼0.7	13.9 - ▼2.9	64.9 - ▼52.1	18.5 - ▲44.3
5.	Character/compassion				
5.1.	I can take responsibility for collective decisions.	2 - ▼0.7	8.6 - ▼2.9	69.5 - ▼49.3	19.9 - ▲47.1
5.2.	My coworkers can trust me.	1.3 - ▲2.1	13.2 - ▼2.9	58.9 - ▼48.6	26.5 - ▲46.4
5.3.	I can demonstrate an optimistic attitude at work.	2 - ▼0.7	18.5 - ▼4.3	58.3 - ▼52.9	21.2 - ▲42.1
6.	Citizenship/culture				
6.1.	I behave according to local customs.	0.7 - ▼ 0	5.3 - ▼2.9	65.6 - ▼55.7	28.5 - ▲41.4
6.2.	I can appreciate the different beliefs that exist.	0.7 - ▼0	2.6 - ▼1.4	50.3 - ▼42.1	46.4 - ▲56.4
6.3.	I know the community/society background.	2.6 - ▼0.7	36,4 - ▼5	51 - ▲54.3	9.9 - ▲40

Critical thinking reflected how participants filtered and adjusted feedback from lecturers and real-life conditions. They carefully selected which suggestions to apply based on feasibility and relevance to their project context. In designing learning materials, they deliberately simplified content to suit high school students, ensuring it remained accessible and easy to understand.

Creativity emerged through various innovative approaches. Participants produced animated content using dubbing techniques, even overcoming technical challenges like noise by recording in closets. They learned independently through online tutorials and enriched their videos with current humor to make the learning experience more engaging. Their ideas expanded from visiting orphanages and creating posters to incorporating storytelling, ultimately integrating these elements into a comprehensive project.

Communication skills were demonstrated through group dynamics, including managing conflicts and emotional responses. Participants emphasized inclusive discussion by inviting every member's input. Some showed strong initiative, even visiting group members personally to ensure participation. Their communication ability extended to fieldwork interactions with unfamiliar individuals, highlighting their adaptability in real-world situations.

Collaboration was evident in strategic task divisions aligned with members' strengths, such as leveraging a multimedia background to ease project execution. They expanded collaboration beyond their university by engaging student organizations from other institutions and high school clubs to co-create programs and historical exhibitions. This demonstrated their capacity to build inter-institutional partnerships effectively.

Character and compassion were revealed through a deep sense of responsibility and emotional growth during the project. Participants gained insights into leadership and teamwork, especially under pressure. They were driven by the desire not to lag behind other groups, showing resilience and determination to revise their work after setbacks. Encouragement from lecturers served as an emotional reset and motivation booster.

Citizenship and cultural sensitivity appeared in their community engagement efforts and adaptability to social contexts. They dealt with challenges in the field, such as managing disruptive children and working with local residents for support. Moreover, they showed awareness of sensitive cultural-political content, such as modifying jokes that could be offensive, demonstrating respect for diverse perspectives, and ethical communication.

DISCUSSION

The first ability of the 6Cs is Critical Thinking. According to Table 2, the Good and Excellent indicators increased significantly in indicators 1.1, 1.2, and 1.3, with an acquisition rate of around 95% compared to before PjBL, which was around 60%. During the interview, critical thinking was demonstrated when the participants considered various pieces of information by comparing their positive and negative impacts. Additionally, they were able to make decisions based on these considerations. According to Trilling & Fadel (2009). Griffin et al (Care et al., 2012; 2014), Miller (2015), and Asman et al (2022), critical thinking involves evaluating different reasons and culminates in decision-making to solve problems. Al Lateef & Al Yakin (Muliati et al., 2020) also agree that critical thinking involves linking personal experiences with the current reality.

PjBL consistently fosters the development of critical thinking, as demonstrated by research conducted by Ramos & Paz (2014), Almulla (2023), Mutakinati et al (2018), and Salam & Wahyuni (2021). However, Lin et al (2021) criticized PjBL, which is solely focused on internal student activities, stating that some projects may not be applicable in real-world scenarios. This study conducted a project directly involving the Samarinda City community.

The second 6Cs ability is Creativity. Table 2 shows that before PjBL *'Masyarakat Belajar Sejarah'* (History Learning Society), the acquisition of Good and Excellent predicates for indicators 2.1, 2.2, and 2.3 was 50-60%. After PjBL, it increased to around 80-90%. However, there is still a lack of acquisition in the creativity indicator, which is 10-16 percent. Further research can improve this aspect.

During the interviews, creativity was observed when participants generated unconventional ideas, particularly by utilizing their surroundings, such as creating humor from being in a closet. Trilling & Fadel (2009), Griffin et al (Care et al., 2012; 2014), and Miller (2015) argue that creative individuals are receptive to new ideas and view failure as a learning opportunity. The three interviewees did not present novel ideas. However, according to Maya Bialik and Charles Fadel's (2015) perspective on creativity, they have achieved at least three or four out of the five levels: imitation, variation, combination, transformation, and original creation.

It is important to note that many studies

often equate creative thinking with critical thinking. Project-based learning (PjBL) has consistently been shown to foster creativity. Ahern (2010) found that the desire to complete the project led to the use of various sources of knowledge, and the debate of ideas encouraged the emergence of new ideas. Similarly, Almulla (2023) and Salam & Wahyuni (2021) demonstrated the development of creativity. However, Ahern also found that learners often filter information incorrectly due to the overwhelming amount of information available.

The third ability of the 6Cs is Communication. According to Table 2, the Good and Excellent ratings for indicators 3.1 and 3.2 before implementing PjBL '*Masyarakat Belajar Sejarah*' were around 50%, while indicator 3.3 was much higher at almost 80%. After implementing PjBL, indicators 3.1 and 3.2 increased to around 90%, while indicator 3.3 rose to over 90%. The high increase in indicator 3.3 prior to PjBL could be attributed to the peaceful situation facilitating student communication.

During the interviews, some communication issues were identified. However, by the end of the PjBL, 90% of the respondents reported improved communication. The various communication problems that arose during PjBL helped students realize the importance of this skill. This study's interviewees' experiences align with the findings of Trilling & Fadel (2009), Griffin et al (Care et al., 2012; 2014), and Miller (2015), who also reported communication difficulties. However, according to Binkley in (Care et al., 2012), the interviewees either had or desired to develop attitudes such as appreciating cultural differences in communication, being open-minded in discussions, and using appropriate communication channels.

Project-Based Learning (PjBL) initially presented communication problems in various studies. The nature of PjBL, which prioritizes project success over time, necessitates communication among various parties. As a result, communication skills are consistently improved. PjBL fosters the development of diverse interpretations (Ramos & Paz, 2014), idea debate (Ahern, 2010), and attention Jin, Hwang, Kim, (2020)

Collaboration is the fourth 6Cs ability. Table 2 displays the achievement of indicators 4.1, 4.2, and 4.3 before and after PjBL. The communication indicator 3.3 aligns with the collaboration indicator, which also showed high acquisition rates before and after PjBL. Prior to PjBL, the achievement rate was 70-80%, which increased to over 90% after PjBL. This increase in collaboration may be attributed to the strong friendships formed during PjBL and an increased willingness to cooperate with various parties.

During the interviews, collaboration was observed in line with the views of Al Lateef & Al Yakin (Muliati et al., 2020), which enabled students to utilize their full potential, talents, and knowledge to work together. Additionally, Trilling & Fadel (2009) and Asman et al (2022) suggest that collaboration facilitates the achievement of common goals among individuals or groups. In this case, the common goal between the groups is evident in MU and RG. Additionally, this study involved collaboration between the National Narcotics Agency, Radio Republik Indonesia, several schools, orphanages, Quranic recitation centers (TPA), and the general public. Collaboration, for MR, refers to each group member's ability to contribute.

In other studies, collaboration skills are often given less emphasis than other skills, possibly due to the nature of PjBL, which does involve collaboration. Jin, Hwang, and Kim (2020) involved multiple parties in students' architecture projects, increasing satisfaction among all parties involved. Although other studies may not explicitly focus on collaboration, communication, creativity, and critical thinking, they implicitly involve collaboration.

The fifth ability of the 6Cs is Character/ Compassion. According to Table 2, indicators 5.1, 5.2, and 5.3 were achieved between 80% and 90% before PjBL. After PjBL, the achievement increased to above 90%. A similar pattern between the collaboration, character/compassion, and later citizenship/culture indicators can be observed. These three indicators were already high even before the project, suggesting that they may be typical character traits of the students. Further research is needed to provide a scientific explanation.

Scholars do not agree on the last two abilities of Character/Compassion and Citizenship/Culture. Trilling and Fadel (2009) do not discuss these skills. Binkley in(Griffin et al, 2012) describes Character/ Compassion as the ninth (Life and career) and tenth (Personal and social responsibility) abilities. These abilities include adapting to change, self-regulating, respecting others, and controlling prejudice. Miller (2015) describes cultural ability as a commitment to shared values. This research does not reject various opinions but summarizes them as an important individual ability, namely Character/ Compassion. Interviewees AU, Al, Nh, and RG demonstrated good character by being responsible, trustworthy, and optimistic. The success of the group depends on individuals who have compassion.

The sixth skill in the 6Cs framework is Citizenship/Culture. This skill had a high achievement rate before the implementation of PjBL (as shown in Table 2), with a rate of around 90% for both indicators 6.1 and 6.2. After the implementation of PjBL, both indicators increased to around 95%. This increase is likely due to the typical character of students who have already been exposed to local customs and can appreciate the differences in beliefs. Indicator 6.3 shows a significant increase in acquisition, from 60% before PjBL to 90% after. This increase can be attributed to the students' exposure to new cultural experiences during the project.

The interviews reveal that the students demonstrate indicators of citizenship/culture by respecting local customs and beliefs and knowing the community. Miller (2015) includes Culture and Connectivity skills, which also discuss citizenship as a typical form of culture. Vinco, Supriatna, and Mulyana (2019) consider Griffin (2012) and Ang (2015) using a similar, broader indicator called Cultural Intelligence. If Character/Compassion is a personal ability that focuses inward, then Citizenship/Culture is a form of kindness that extends to others, society, and the world. The interviewees have demonstrated this character trait.

Previous research did not find the development of the fifth and sixth skills. The titles of the studies did not include Character/Compassion and Citizenship/Culture skills. This study differs from previous research in this regard. However, the last two skills can be found implicitly upon closer examination. The success of several projects, including Ahern (2010), Ramos & Paz (2014), Mutakinati et al (2018), Lin et al (2021), Jin et al (2020), and Almulla (2023), demonstrates the existence of Character/Compassion abilities. Specifically, Jin et al (2020) developed Citizenship/Culture abilities through community projects involving students, architects, mechanical architects, contractors, and project owners, as evidenced by the project's success. An exception is given to Lim et al (2023), who did not obtain satisfactory results when implementing PjBL. However, they concluded that there is potential for skill development in the future.

The *'Masyarakat Belajar Sejarah'* (History Learning Society) project, which utilises Project-Based Learning (PjBL), has successfully enhanced students' 6Cs skills. This is due to PjBL's constructivist approach, which regards learners as independent individuals. The project draws on the works of Dewey, Piaget, Bruner, and Vygotsky, who emphasise the importance of direct experience in learning (Schunk, 2012; Hergenhahn & Olson, 2015; Suyono & Hariyanto, 2017). Suto and Eccles (2014) argue that projects can increase learners' enthusiasm for learning and participation in group work, significantly impacting their lives. Similarly, Priyatni and Asari (2019), Asman et al (2022), and Anggraeni et al (2023) have also emphasised the importance of Project-based Learning (PjBL) in developing 21st-century skills such as the 4Cs and 6Cs. In the field of history education, Salam and Wahyuni (2021) have also employed PjBL to develop critical thinking and creative skills

The Ministry of Education and Culture of the Republic of Indonesia (Kemendikbud), through Minister Nadiem Makarim, has requested the use of PjBL for learning. The request is intended to trigger independence, collaboration, and creativity in college and school projects. This request aims to foster the profile of Pancasila students who are faithful and devoted to God Almighty, have noble character, embrace global diversity, engage in cooperation, exercise independent and critical reasoning, and demonstrate creativity. In the United States, PjBL has been applied to achieve curriculum objectives. Previous research by Ramos & Paz (2014) andHarris et al (2015) utilized this method to achieve K-12 curriculum goals. PjBL *'Masyarakat Belajar Sejarah'* can develop 6Cs abilities for this research. This will enable the young generation of East Kalimantan to compete in the 21st Century World, characterised by the VUCA World and the Demographic Bonus of the Indonesian Population 2020-2040, leading to the New IKN Era

CONCLUSION

The problems of the 21st Century World, characterized by VUCA World (Volatility, Uncertainty, Complexity, Ambiguity), add to the complexity of Indonesia's problems that must face the Population Demographic Bonus. East Kalimantan (Kaltim) faces an additional problem: the arrival of the new National Capital City (IKN). These three problems, if not addressed, will cause the burden of the Indonesian state to pile up. East Kalimantan's human resources, led by highly educated young people, must be able to face these three challenges. East Kalimantan students must possess 21st Century Skills known as 6Cs (critical thinking, creativity, collaboration, communication, character/compassion, and citizenship/culture). It is hoped that students will eventually become a visionary generation capable of facing the challenges of the 21st-century world, the Population Demographic Bonus, and the new IKN era.

This research successfully developed the 6Cs

skills of students in the History Education Study Program, Faculty of Teacher Training and Education, Mulawarman University. Project-Based Learning (PjBL) under the name *'Masyarakat Belajar Sejarah'* (History Learning Society) successfully conditioned students to develop the ability of 6Cs independently. This PjBL also reduces the symbol of an imaginary society in the classroom by bringing students into direct contact with real society. Various historical learning products produced by students also show suitability with the character of the 21st Century World, which is creative and interesting. Practical efforts to develop students' abilities must continue. This is considering the challenges of a world always changing steadily and quickly.

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